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Title 40

PART 421 - NONFERROUS METALS MANUFACTURING POINT SOURCE CATEGORY

Authority: Secs. 301, 304 (b), (c), (e), and (g), 306 (b) and (c), 307 (b) and (c), 308 and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, as amended by the Clean Water Act of 1977) and the Water Quality Act of 1987 (the "Act"); 33 U.S.C. 1311, 1314 (b), (c), (e), and (g), 1316 (b) and (c), 1317 (b) and (c), 1318 and 1361; 86 Stat. 816, Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217; 101 Stat. 7, Pub. L. 100-4.

Source: 49 FR 8790, Mar. 8, 1984, unless otherwise noted.

General Provisions

§ 421.1 Applicability.

This part applies to facilities producing primary metals from ore concentrates and recovering secondary metals from recycle wastes which discharge or may discharge pollutants to waters of the United States or which introduce or may introduce pollutants into a publicly owned treatment works. The applicability of this part to alloying or casting of nonferrous metals is limited to alloying or casting of hot metal directly from the nonferrous metals manufacturing process without cooling. Remelting followed by alloying or cooling is included in the aluminum forming, nonferrous metals forming, or metal molding and casting point source categories.

§ 421.2 [Reserved]

§ 421.3 Monitoring and reporting requirements.

The following special monitoring requirements apply to all facilities controlled by this regulation:

(a) The *monthly average* regulatory values shall be the basis for the monthly average discharge in direct discharge permits and for pretreatment standards. Compliance with the monthly discharge limit is required regardless of the number of samples analyzed and averaged.

(b) Periodic analysis for cyanide are not required for a facility in the primary beryllium subcategory (subpart O of this part) when both of the following conditions are met:

(1) The first wastewater sample taken in each calandar year has been analyzed and found to contain less than 0.07 mg/1 cyanide.

(2) The owner or operator of the primary beryllium manufacturing facility certifies in writing to the POTW authority or permit issuing authority that cyanide is neither generated nor used in the beryllium manufacturing process employed at that facility.

[49 FR 8790, Mar. 8, 1984, as amended at 55 FR 31697, Aug. 3, 1990]

§ 421.4 Compliance date for pretreatment standards for existing sources (PSES).

The PSES compliance deadline in subparts A through M is March 8, 1987. The PSES compliance deadline for plants in subparts N through AE is September 20, 1988.

[50 FR 52776, Dec. 26, 1985]

§ 421.5 Removal allowances for pretreatment standards.

Removal allowances pursuant to 40 CFR 403.7(a) may be granted for the toxic metals limited in 40 CFR part 421 when used as indicator pollutants.

Subpart A - Bauxite Refining Subcategory

§ 421.10 Applicability; description of the bauxite refining subcategory.

The provisions of this subpart are applicable to discharges resulting from the refining of bauxite to alumina by the Bayer process or by the combination process.

[39 FR 12825, Apr. 8, 1974]

§ 421.11 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in part 401 of this chapter shall apply to this subpart.

(b) The term *bauxite* shall mean ore containing alumina monohydrate or alumina trihydrate which serves as the principal raw material for the production of alumina by the Bayer process or by the combination process.

(c) The term *product* shall mean alumina.

(d) For all impoundments the term *within the impoundment* for purposes of calculating the volume of process wastewater which may be discharged, shall mean the surface area within the impoundment at the maximum capacity plus the area of the inside and outside slopes of the impoundment dam and the surface area between the outside edge of the impoundment dam and seepage ditches upon which rain falls and is returned to the impoundment. For the purpose of such calculations, the surface area allowance for external appurtenances to the impoundment shall not be more than 30 percent of the water surface area within the impoundment dam at maximum capacity.

(e) The term *pond water surface area* for the purpose of calculating the volume of waste water shall mean the area within the impoundment for rainfall and the actual water surface area for evaporation.

[39 FR 12825, Apr. 8, 1974, as amended at 40 FR 48348, Oct. 15, 1975]

§ 421.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart, shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: There shall be no discharge of process waste water pollutants to navigable waters.

(b) During any calendar month there may be discharged from the overflow of a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation within the impoundment for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

[39 FR 12825, Apr. 8, 1974, as amended at 50 FR 38342, Sept. 20, 1985]

§ 421.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: There shall be no discharge of process waste water pollutants to navigable waters.

(b) During any calendar month there may be discharged from the overflow of a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation within the impoundment for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

[39 FR 12825, Apr. 8, 1974, as amended at 50 FR 38342, Sept. 20, 1985]

§ 421.14 [Reserved]

§ 421.15 Standards of performance for new sources.

(a) Subject to the provisions of paragraph (b) of this section, the following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart: There shall be no discharge of process waste water pollutants to navigable waters.

(b) During any calendar month there may be discharged from the overflow of a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation within the impoundment for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

[39 FR 12825, Apr. 8, 1974]

§ 421.16 Pretreatment standards for new sources.

Any new sources subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

[50 FR 38342, Sept. 20, 1985]

Subpart B - Primary Aluminum Smelting Subcategory

§ 421.20 Applicability: description of the primary aluminum smelting subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of aluminum from alumina in the Hall-Heroult process.

§ 421.21 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in part 401 of this chapter, shall apply to this subpart.

(b) The term *product* shall mean hot aluminum metal.

(c) If a permittee chooses to analyze for benzo(a)pyrene using any EPA-approved method, any “non-detected” measurements shall be considered zeroes for the purpose of determining compliance with this regulation.

[49 FR 8792, Mar. 8, 1984, as amended at 52 FR 25556, July 7, 1987]

§ 421.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available (BPT):

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units - kg/kkg of product	
	English units - lbs/thousand lbs of product	
Fluoride	2.0	1.0
Total Suspended solids	3.0	1.5
pH	([1])	([1])

[1] Within the range of 6 to 9 at all times.

[49 FR 8792, Mar. 8, 1984; 49 FR 29794, July 24, 1984]

§ 421.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart B - Anode and Cathode Paste Plant Wet Air Pollution Control

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of paste produced	
Benzo(a)pyrene	0.005	0.002
Antimony	.263	.117
Nickel	.075	.050
Aluminum	.831	.369
Fluoride	8.092	3.591

(b) Subpart (B) - Anode Contact Cooling and Briquette Quenching.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes cast	
Benzo(a)pyrene	0.007	0.003
Antimony	.403	.180
Nickel	.115	.077
Aluminum	1.277	.566
Fluoride	12.440	5.518

(c) Subpart (B) - Anode Bake Plant Wet Air Pollution Control (Closed Top Ring Furnace).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes baked	
Benzo(a)pyrene	0.146	0.067
Antimony	8.346	3.719
Nickel	2.378	1.600
Aluminum	26.420	11.720

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	257.300	114.200

(d) Subpart B - Anode Bake Plant Wet Air Pollution Control (Open Top Ring Furnace With Spray Tower Only).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes baked	
Benzo(a)pyrene	0.002	0.001
Antimony	.097	.043
Nickel	.028	.019
Aluminum	.306	.136
Fluoride	2.975	1.320

(e) Subpart B - Anode Bake Plant Wet Air Pollution Control (Open Top Ring Furnace With Wet Electrostatic Precipitator and Spray Tower).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes baked	
Benzo(a)pyrene	0.025	0.011
Antimony	1.409	.628
Nickel	.402	.270
Aluminum	4.461	1.979
Fluoride	43.440	19.270

(f) Subpart B - Anode Bake Plant Wet Air Pollution Control (Tunnel Kiln).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes baked	
Benzo(a)pyrene	0.038	0.018
Antimony	2.197	.979
Nickel	.626	.421

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Aluminum	6.953	3.084
Fluoride	67.710	30.050

(g) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Antimony	420.400	189.200
Cyanide	157.600	70.060
Nickel	80.570	35.030
Aluminum	273.200	122.600
Fluoride	29,430.000	13,310.000

(h) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Antimony	67.610	30.120
Cyanide	157.600	70.060
Nickel	19.270	12.960
Aluminum	214.000	94.930
Fluoride	2,084.000	924.800

(i) Subpart B - Cathode Reprocessing (Operated With Wet Potline Scrubbing).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of cryolite recovered	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Benzo(a)pyrene	.000	
Antimony	.000	.000
Cyanide	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000

(j) Subpart B - Potline Wet Air Pollution Control (Operated Without Cathode Reprocessing).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.028	0.013
Antimony	1.618	.721
Nickel	.461	.310
Aluminum	5.120	2.271
Fluoride	49.860	22.130

(k) Subpart B - Potline Wet Air Pollution Control (Operated With Cathode Reprocessing and Not Commingled With Other Process or Nonprocess Waters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.028	0.013
Antimony	10.060	4.525
Cyanide	3.771	1.676
Nickel	1.928	.838
Aluminum	6.537	2.933
Fluoride	703.900	318.500

(l) Potline Wet Air Pollution Control Cooperated With Cathode Reprocessing and Commingled With Other Process or Nonprocess Wastewaters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.028	0.013
Antimony	1.618	.721
Cyanide	3.771	1.676
Nickel	0.461	.310
Aluminum	5.120	2.271
Fluoride	49.860	22.130

(m) Subpart B - Potroom Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.056	0.026
Antimony	3.204	1.428
Nickel	.913	.614
Aluminum	10.140	4.499
Fluoride	98.770	43.830

(n) Subpart B - Potline SO_2 Emissions Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.045	0.021

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Antimony	2.588	1.153
Nickel	.738	.496
Aluminum	8.194	3.634
Fluoride	79.790	35.400

(o) Subpart B - Degassing Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	([1])	([1])
Antimony	5.036	2.244
Nickel	1.435	.965
Aluminum	15.940	7.071
Fluoride	155.300	68.880

[1] There shall be no discharge allowance for this pollutant.

(p) Subpart B - Pot Repair and Pot Soaking.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000

(q) Subpart B - Direct Chill Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from direct chill casting	
Benzo(a)pyrene	([1])	([1])
Antimony	2.565	1.143
Nickel	.731	.492
Aluminum	8.120	3.602
Fluoride	79.080	35.090

[1] There shall be no discharge allowance for this pollutant.

(r) Subpart B - Continuous Rod Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from rod casting	
Benzo(a)pyrene	([1])	([1])
Antimony	.201	.089
Nickel	.057	.038
Aluminum	.636	.282
Fluoride	6.188	2.746

[1] There shall be no discharge allowance for this pollutant.

(s) Subpart B - Stationary Casting or Shot Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from stationary casting or shot casting	
Benzo(a)pyrene	.000	
Antimony	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000

[49 FR 8792, Mar. 8, 1984, as amended at 52 FR 25556, July 7, 1987]

§ 421.24 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart B - Anode and Cathode Paste Plant Wet Air.

Pollution Control - NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of paste produced	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(b) Subpart B - Anode Contact Cooling and Briquette Quenching.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of anodes cast	
Benzo(a)pyrene	0.007	0.003
Antimony	.403	.180
Nickel	.115	.077
Aluminum	1.277	.566

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	12.440	5.518
Oil and grease	2.090	2.090
Total suspended solids	3.135	2.508
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(c) Subpart B - Anode Bake Plant Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of anodes baked	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(d) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Antimony	420.400	189.200
Cyanide	157.600	70.060
Nickel	80.570	35.030
Aluminum	273.200	122.600

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	29,430.000	13,310.000
Oil and grease	350.300	350.300
Total suspended solids	2,172.000	945.800
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(e) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Antimony	67.610	30.120
Cyanide	157.600	70.060
Nickel	19.270	12.960
Aluminum	214.000	94.930
Fluoride	2,084.000	924.800
Oil and grease	350.300	350.300
Total suspended solids	2,172.000	945.800
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(f) Subpart B - Potline Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(g) Subpart B - Potroom Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(h) Subpart B - Potline SO_2 Emissions Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.045	0.021
Antimony	2.588	1.153

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	.738	.496
Aluminum	8.194	3.634
Fluoride	79.790	35.400
Oil and grease	13.410	13.410
Total suspended solids	20.120	16.090
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(i) Subpart B - Degassing Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(j) Subpart B - Pot Repair and Pot Soaking.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(k) Subpart B - Direct Chill Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from direct chill casting	
Benzo(a)pyrene	([1])	([1])
Antimony	2.565	1.143
Nickel	.731	.492
Aluminum	8.120	3.602
Fluoride	79.080	35.090
Oil and grease	13.290	13.290
Total suspended solids	19.940	15.950
pH	([2])	([2])

[1] There shall be no discharge allowance for this pollutant.

[2] The pH shall be maintained within the range of 7.0 to 10.0 at all times except for those situations when this waste is discharged separately and without commingling with any other waste-water in which case the pH shall be within the range of 6.0 to 10.0 at all times.

(l) Subpart B - Continuous Rod Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from rod casting	
Benzo(a)pyrene	([1])	([1])
Antimony	.201	.089
Nickel	.057	.038
Aluminum	.636	.282
Fluoride	6.188	2.746
Oil and grease	1.040	1.040
Total suspended solids	1.560	1.248
pH	([2])	([2])

[1] There shall be no discharge allowance for this pollutant.

[2] Within the range of 7.0 to 10.0 at all times.

(m) Subpart B - Stationary Casting or Shot Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum product from stationary casting or shot casting	
Benzo(a)pyrene	.000	
Antimony	.000	.000
Nickel	.000	.000
Aluminum	.000	.000
Fluoride	.000	.000
Oil and grease	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

[49 FR 8792, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 52 FR 25558, July 7, 1987]

§ 421.25 [Reserved]

§ 421.26 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary aluminum process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart B - Anode and Cathode Paste Plant Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of paste produced	
Benzo(a)pyrene	.000	
Nickel	.000	.000
Fluoride	.000	.000

(b) Subpart B - Anode Contact Cooling and Briquette Quenching.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes cast	
Benzo(a)pyrene	0.007	0.003
Nickel	.115	.077
Fluoride	12.440	5.518

(c) Subpart B - Anode Bake Plant Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of anodes baked	
Benzo(a)pyrene	.000	
Nickel	.000	.000
Fluoride	.000	.000

(d) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters).

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Cyanide	157.600	70.060
Nickel	80.570	35.030
Fluoride	29,430.000	13,310.000

(e) Subpart B - Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters).

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cryolite recovered	
Benzo(a)pyrene	1.181	0.547
Cyanide	157.600	70.060
Nickel	19.270	12.960
Fluoride	2,084.000	924.800

(f) Subpart B - Potline Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Nickel	.000	.000
Fluoride	.000	.000

(g) Subpart B - Potroom Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum produced from electrolytic reduction	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Benzo(a)pyrene	.000	
Nickel	.000	.000
Fluoride	.000	.000

(h) Subpart B - Potline SO_2 Emissions Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	0.045	0.021
Nickel	.738	.496
Fluoride	79.790	35.400

(i) Subpart B - Degassing Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Nickel	.000	.000
Fluoride	.000	.000

(j) Subpart B - Pot Repair and Pot Soaking.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum produced from electrolytic reduction	
Benzo(a)pyrene	.000	
Nickel	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	.000	.000

(k) Subpart B - Direct Chill Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum product from direct chill casting	
Benzo(a)pyrene	([1])	([1])
Nickel	.731	.492
Fluoride	79.080	35.090

[1] There shall be no discharge allowance for this pollutant.

(l) Subpart B - Continuous Rod Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from rod casting	
Benzo(a)pyrene	([1])	([1])
Nickel	.057	.038
Fluoride	6.188	2.746

[1] There shall be no discharge allowance for this pollutant.

(m) Subpart B - Stationary Casting or Shot Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of aluminum product from stationary casting or shot casting	
Benzo(a)pyrene	.000	
Nickel	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	.000	.000

[49 FR 8792, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 52 FR 25559, July 7, 1987]

§ 421.27 [Reserved]

Subpart C - Secondary Aluminum Smelting Subcategory

Source: 49 FR 8796, Mar. 8, 1984, unless otherwise noted.

§ 421.30 Applicability: Description of the secondary aluminum smelting subcategory.

The provisions of this subpart are applicable to discharges resulting from the recovery, processing, and remelting of aluminum scrap to produce metallic aluminum alloys.

§ 421.31 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in part 401 of this chapter shall apply to this subpart.

(b) The term *product* shall mean hot aluminum metal.

(c) ***At-the-source*** means at or before the commingling of delacquering scrubber liquor blowdown with other process or nonprocess wastewaters.

§ 421.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, which may be discharged by a point source subject to the provisions of this subpart and which uses water for metal cooling, after application of the best practicable control technology currently available: There shall be no discharge of process wastewater pollutants to navigable waters.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart and which uses aluminum fluoride in its magnesium removal process (“demagging process”), after application of the best practicable control technology currently available: There shall be no discharge of process wastewater pollutants to navigable waters.

(c) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section, which may be discharged by a point source subject to the provisions of this subpart and which uses chlorine in its magnesium removal process, after application of the best practicable control technology currently available:

Effluent Limitations

Effluent characteristic	Average of daily values for 30 consecutive days shall not exceed -
	Metric units (kilograms per 1,000 kg magnesium removed)

Effluent characteristic	Average of daily values for 30 consecutive days shall not exceed -
TSS	175
COD	6.5
pH	([1])

[1] Within the range of 7.5 to 9.0.

(d) The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart and which processes residues by wet methods, after application of the best practical control technology currently available:

Effluent Limitations

Effluent characteristic	Average of daily values for 30 consecutive days shall not exceed -
	Metric units (kilograms per 1,000 kg of product)
TSS	1.5
Fluoride	0.4
Ammonia (as N)	0.01
Aluminum	1.0
Copper	0.003
COD	1.0
pH	([1])

[1] Within the range of 7.5 to 9.0.

§ 421.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart C - Scrap Drying Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound's per million pounds) of aluminum scrap dried	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000

(b) Subpart C - Scrap Screening and Milling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound's per million pounds) of aluminum scrap screened and milled	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000

(c) Subpart C - Dross Washing.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound's per million pounds) of dross washed	
Lead	3.043	1.413
Zinc	11.090	4.565
Aluminum	66.410	29.450
Ammonia (as N)	1,449.000	636.900

(d) Subpart C - Demagging Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum demagged	
Lead	0.216	0.100
Zinc	0.786	0.324
Aluminum	4.711	2.090
Ammonia (as N)	102.800	45.180

(e) Subpart C - Delacquering Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound's per million pounds) of aluminum delacquered	
Lead	0.093	0.043
Zinc	0.340	0.140
Aluminum	2.035	0.903
Ammonia (as N)	44.389	19.514
Total phenolics (4-AAP method)[1]	0.004	

[1] At the source.

(f) Subpart C - Direct Chill Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.372	.173
Zinc	1.356	.558
Aluminum	8.120	3.602
Ammonia (as N)	177.200	77.880

(g) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum cast	
Lead	0.019	0.009
Zinc	0.068	0.028
Aluminum	0.409	0.182
Ammonia (as N)	8.931	3.926

(h) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chloride Demagging Wet Air Pollution Control is Practiced On Site).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart C - Stationary Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000

(j) Subpart C - Shot Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000

[49 FR 8796, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 49 FR 29794, July 24, 1984; 52 FR 25559, July 7, 1987]

§ 421.34 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart C - Scrap Drying Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average.
	mg/kg (pounds per million pounds) of aluminum scrap dried	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times

(b) Subpart C - Scrap Screening and Milling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum scrap screened and milled	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(c) Subpart C - Dross Washing.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dross washed	
Lead	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(d) Subpart C - Demagging Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum demagged	
Lead	0.216	0.100
Zinc	0.786	0.324
Aluminum	4.711	2.090
Ammonia (as N)	102.800	45.180
Total suspended solids	11.570	9.252
Oil and grease	7.710	7.710
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(e) Subpart C - Delacquering Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum delacquered	
Lead	0.093	0.043
Zinc	0.340	0.140
Aluminum	2.035	0.903
Ammonia (as N)	44.389	19.514

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total phenolics (4-AAP method)[1]	0.004	
Total suspended solids	4.995	3.996
Oil and grease	3.330	3.330
pH	([2])	([2])

[1] At the source.

[2] Within the range of 7.0 to 10.0 at all times.

(f) Subpart C - Direct Chill Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.372	.173
Zinc	1.356	.558
Aluminum	8.120	3.602
Ammonia (as N)	177.200	77.880
Total suspended solids	19.940	15.950
Oil and grease	13.290	13.290
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(g) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum cast	
Lead	0.019	0.009
Zinc	0.068	0.028
Aluminum	0.409	0.182
Ammonia (as N)	8.931	3.926
Total suspended solids	1.005	0.804

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Oil and grease	0.670	0.670
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(h) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Practiced On Site).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

(i) Subpart C - Stationary Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

(j) Subpart C - Shot Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Aluminum	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
Oil and grease	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

[49 FR 8796, Mar. 8, 1984, as amended at 49 FR 29794, July 24, 1984; 52 FR 25559, July 7, 1987]

§ 421.35 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary aluminum process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart C - Scrap Drying Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum scrap dried	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(b) Subpart C - Scrap Screening and Milling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum scrap screened and milled	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(c) Subpart C - Dross Washing.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dross washed	
Lead	3.043	1.413
Zinc	11.090	4.565
Ammonia (as N)	1,449.000	636.000

(d) Subpart C - Demagging Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum demagged	
Lead	0.216	0.100
Zinc	0.786	0.324
Amomonia (as N)	102.800	45.180

(e) Subpart C - Delacquering Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum delacquered	
Lead	0.093	0.043
Zinc	0.340	0.140
Ammonia (as N)	44.389	19.514

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total phenolics (4-AAP) method)[1]	0.004	

[1] At the source.

(f) Subpart C - Direct Chill Casting Contact Cooling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.372	.173
Zinc	1.356	.558
Ammonia (as N)	177.200	77.800

(g) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum cast	
Lead	0.019	0.009
Zinc	0.068	0.028
Amomonia (as N)	8.931	3.926

(h) Subpart C - Ingot Conveyor Casting Contact Cooling. (When Chlorine Demagging Wet Air Pollution Control is Practiced On Site.)

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart C - Stationary Casting Contact Cooling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(j) Subpart C - Shot Casting Contact Cooling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

[49 FR 8796, Mar. 8, 1984, as amended at 49 FR 29794, July 24, 1984; 52 FR 25560, July 7, 1987]

§ 421.36 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants introduced in secondary aluminum process wastewater into a POTW shall not exceed the following values:

(a) Subpart C - Scrap Drying Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum scrap dried	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(b) Subpart C - Scrap Screening and Milling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum scrap screened and milled	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(c) Subpart C - Dross Washing.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dross washed	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(d) Subpart C - Demagging Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum demagged	
Lead	0.216	0.100
Zinc	0.786	0.324
Amomonia (as N)	102.800	45.180

(e) Subpart C - Delacquering Wet Air Pollution Control

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum delacquered	
Lead	0.093	0.043
Zinc	0.340	0.140
Ammonia (as N)	44.389	19.514
Total phenolics (4-AAP method)[1]	0.004	

[1] At the source.

(f) Subpart C - Direct Chill Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.372	.173
Zinc	1.356	.558
Ammonia (as N)	177.200	77.880

(g) Subpart C - Ingot Conveyor Casting Control Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (lb/million lbs) of aluminum cast	
Lead	0.019	0.009
Zinc	0.068	0.028
Amomonia (as N)	8.931	3.926

(h) Subpart C - Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control Is Practiced on Site).

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart C - Stationary Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000
Ammonia (as N)	.000	.000

(j) Subpart C - Shot Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of aluminum cast	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

[49 FR 8796, Mar. 8, 1984, as amended at 49 FR 29794, July 24, 1984; 52 FR 25560, July 7, 1987]

§ 421.37 [Reserved]

Subpart D - Primary Copper Smelting Subcategory

Source: 49 FR 8800, Mar. 8, 1984, unless otherwise noted.

§ 421.40 Applicability: Description of the primary copper smelting subcategory.

The provisions of this subpart apply to process wastewater discharges resulting from the primary smelting of copper from ore or ore concentrates. Primary copper smelting includes, but is not limited to, roasting, converting, leaching if preceded by a pyrometallurgical step, slag granulation and dumping, fire refining, and the casting of products from these operations.

§ 421.41 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 apply to this subpart.

(b) In the event that the waste streams covered by this subpart are combined for treatment or discharge with waste streams covered by Subparts E - Primary Electrolytic Copper Refining and/or Subpart I - Metallurgical Acid Plants, the quantity of each pollutant or pollutant property discharged shall not exceed the quantity of each pollutant or pollutant property which could be discharged if each waste stream were discharged separately.

(c) For all impoundments constructed prior to the effective date of the interim final regulation (40 FR 8513), the term “within the impoundment,” when used to calculate the volume of process wastewater which may be discharged, means the water surface area within the impoundment at maximum capacity plus the surface area of the inside and outside slopes of the impoundment dam as well as the surface area between the outside edge of the impoundment dam and any seepage ditch adjacent to the dam upon which rain falls and is returned to the impoundment. For the purpose of such calculations, the surface area allowances set forth above shall not exceed more than 30 percent of the water surface area within the impoundment dam at maximum capacity.

(d) For all impoundments constructed on or after the effective date of the interim final regulation (the interim regulation was effective February 27, 1975; 40 FR 8513, February 27, 1975), the term "within the impoundment," for purposes of calculating the volume of process wastewater which may be discharged, means the water surface area within the impoundment at maximum capacity.

§ 421.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) Except as provided in 40 CFR 125.30 through 125.32 and paragraph (b) of this section, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT): There shall be no discharge of process wastewater pollutants to navigable waters.

(b) A process wastewater impoundment which is designed, constructed, and operated so as to contain the precipitation from the 10-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located may discharge that volume of process wastewater which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10-year, 24-hour rainfall event, when such event occurs.

§ 421.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section, there shall be no discharge of process wastewater pollutants into navigable waters.

(b) A process wastewater impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located may discharge that volume of process wastewater which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25-year, 24-hour rainfall event, when such event occurs.

[49 FR 8800, Mar. 8, 1984; 49 FR 26739, June 29, 1984]

§ 421.44 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards: There shall be discharge of process wastewater pollutants into navigable waters.

§ 421.45 [Reserved]

§ 421.46 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary copper smelting process wastewater introduced into a POTW shall not exceed the following values: There shall be no discharge of process wastewater pollutants into a publicly owned treatment works.

§ 421.47 [Reserved]

Subpart E - Primary Electrolytic Copper Refining Subcategory

Source: 49 FR 8801, Mar. 8, 1984, unless otherwise noted.

§ 421.50 Applicability: Description of the primary electrolytic copper refining subcategory.

The provisions of this subpart apply to process wastewater discharges resulting from the electrolytic refining of primary copper, including, but not limited to, anode casting performed at refineries which are not located on-site with a smelter, product casting, and by-product recovery.

§ 421.51 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 apply to this subpart.

(b) The term *product* means electrolytically refined copper.

§ 421.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent Limitations

Effluent characteristic	Maximum for any 1 day	Average of Daily values for 30 consecutive days shall not exceed
	(Metric units, kg/kkg of product; English units, pounds per 1,000 lb of product)	
Total suspended solids	0.100	0.050
Copper	0.0017	0.0008
Cadmium	0.00006	0.00003
Lead	0.0006	0.0026
Zinc	0.0012	0.0003
pH	([1])	([1])

[1] Within the range of 6.0 to 9.0.

§ 421.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart E - Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper cast	
Arsenic	.692	.309
Copper	.638	.304
Nickel	.274	.184

(b) Subpart E - Anode and Cathode Rinse.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode copper production	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000

(c) Subpart E - Spent Electrolyte.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper cathode production	
Arsenic	.068	.031
Copper	.063	.030
Nickel	.027	.018

(d) Subpart E - Casting Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of casting production	
Arsenic	.000	.000
Copper	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	.000	.000

(e) Subpart E - By-Product Recovery.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of product recovered from electrolytic slimes processing	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000

[49 FR 8801, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.54 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart E - Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper cast	
Arsenic	.692	.309
Copper	.638	.304
Nickel	.274	.184
Total suspended solids	7.470	5.976
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart E - Anode and Cathode Rinse.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode copper production	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart E - Spent Electrolyte.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper cathode production	
Arsenic	.068	.031
Copper	.063	.030
Nickel	.027	.018
Total suspended solids	.735	.588
pH	([1])	([1])

[1] Within the range 7.5 to 10.0 at all times.

(d) Subpart E - Casting Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of casting production	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000
Total suspended solids	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart E - By-Product Recovery.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of product recovered from electrolytic slimes processing	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8801, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.55 [Reserved]

§ 421.56 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary electrolytic copper refining process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart E - Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper cast	
Arsenic	.692	.309
Copper	.638	.304
Nickel	.274	.184

(b) Subpart E - Anode and Cathode Rinse.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode copper production	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000

(c) Subpart E - Spent Electrolyte.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode copper production	
Arsenic	.068	.031
Copper	.063	.030
Nickel	.027	.018

(d) Subpart E - Casting Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of casting production	
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000

(e) Subpart E - By-Product Recovery.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of product recovered from electrolytic slimes processing	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	.000	.000
Copper	.000	.000
Nickel	.000	.000

[49 FR 8801, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.57 [Reserved]

Subpart F - Secondary Copper Subcategory

Source: 49 FR 8802, Mar. 8, 1984, unless otherwise noted.

§ 421.60 Applicability: Description of the secondary copper subcategory.

The provisions of this subpart are applicable to discharges resulting from the recovery, processing, and remelting of new and used copper scrap and residues to produce copper metal and copper alloys, but are not applicable to continuous rod casting.

§ 421.61 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) For all impoundments constructed prior to the effective date of this regulation the term “within the impoundment” when used for purposes of calculating the volume of process wastewater which may be discharged shall mean the water surface area within the impoundment at maximum capacity plus the surface area of the inside and outside slopes of the impoundment dam as well as the surface area between the outside edge of the impoundment dam and any seepage ditch immediately adjacent to the dam upon which rain falls and is returned to the impoundment. For the purpose of such calculations, the surface area allowances set forth above shall not be more than 30 percent of the water surface area within the impoundment dam at maximum capacity.

(c) For all impoundments constructed on or after the effective date of this regulation, the term “within the impoundment” for purposes of calculating the volume of process wastewater which may be discharged shall mean the water surface area within the impoundment at maximum capacity.

(d) The term *pond water surface area* when used for the purpose of calculating the volume of wastewater which may be discharged shall mean the water surface area of the pond created by the impoundment for storage of process wastewater at normal operating level. This surface shall in no case be less than one-third of the surface area of the maximum amount of water which could be contained by the impoundment. The normal operating level shall be the average level of the pond during the preceding calendar month.

§ 421.62 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available: Subject to the provisions of paragraphs (b), (c), and (d) of this section, there shall be no discharge of process wastewater pollutants into navigable waters.

(b) A process wastewater impoundment which is designed, constructed, and operated so as to contain the precipitation from the 10-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the areas in which such impoundment is located may discharge that volume of process

wastewater which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10-year, 24-hour rainfall event, when such event occurs.

(c) During any calendar month there may be discharged from a process wastewater impoundment either a volume of process wastewater equal to the difference between the precipitation for the month that falls within the impoundment and either the evaporation from the pond water surface area for that month, or a volume of process wastewater equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation from the pond water surface area as establsihed by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center), whichever is greater.

(d) Any process wastewater discharged pursuant to paragraph (c) of this section shall comply with each of the following requirements:

Effluent limitations	Effluent characteristic	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric Units (mg/l)	
	English Units (ppm)	
TSS	50	25
Cu	0.5	0.25
Zn	10	5
Oil and grease	20	10
pH	([1])	([1])

[1] Within the range of 6.0 to 9.0.

[49 FR 8802, Mar. 8, 1984; 49 FR 26739, June 29, 1984]

§ 421.63 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section, there shall be no discharge of process wastewater pollutants into navigable waters.

(b) a process wastewater impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located may discharge that volume of process wastewater which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25-year, 24-hour rainfall event, when such event occurs.

§ 421.64 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards: There shall be no discharge of process wastewater pollutants into navigable waters.

§ 421.65 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary copper process wastewater introduced into a POTW shall not exceed the following values:

(a) There shall be no discharge of process wastewater pollutants into a publicly owned treatment works subject to the provisions of paragraph (b) of this section.

(b) A process wastewater impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration, for the area in which such impoundment is located may discharge that volume of process wastewater equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25-year, 24-hour rainfall event, when such event occurs.

§ 421.66 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7 any new 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 new sources. The mass of wastewater pollutants in secondary copper process wastewater introduced into a POTW shall not exceed the following values: There shall be no discharge of process wastewater pollutants into a publicly owned treatment works.

§ 421.67 [Reserved]

Subpart G - Primary Lead Subcategory

Source: 49 FR 8803, Mar. 8, 1984, unless otherwise noted.

§ 421.70 Applicability: Description of the primary lead subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of lead at primary lead smelters and refineries.

§ 421.71 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.72 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

(a) Subpart G - Sinter Plant Materials Handling Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of sinter production	
Lead	594.000	270.000
Zinc	525.000	219.600

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	14,760.000	7,020.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart G - Blast Furnace Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furance lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart G - Blast Furnace Slag Granulation.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furance lead bullion produced	
Lead	6,155.000	2,798.000
Zinc	5,446.000	2,276.000
Total suspended solids	153,000.000	72,740.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart G - Dross Reverberatory Slag Granulation.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of slag, speiss, or matte granulated	
Lead	9,499.000	4,318.000
Zinc	8,405.000	3,512.000
Total suspended solids	236,000.000	112,300.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart G - Dross Reverberatory Furnace Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of dross reverberatory furnace production	
Lead	15,920.000	7,235.000
Zinc	14,080.000	5,884.000
Total suspended solids	395,500.000	188,100.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart G - Zinc Fuming Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furance lead bullion produced	
Lead	702.900	319.500
Zinc	622.000	259.900
Total suspended solids	17,470.000	8,307.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart G - Hard Lead Refining Slag Granulation.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart G - Hard Lead Refining Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	32,730.000	14,880.000
Zinc	28,960.000	12,100.000
Total suspended solids	813,300.000	386,800.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart G - Facility Washdown.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart G - Employee Handwash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	5.445	2.475
Zinc	4.818	2.013
Total suspended solids	135.300	64.350
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart G - Respirator Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	8.745	3.975
Zinc	7.738	3.233
Total suspended solids	217.300	103.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Subpart G - Laundering of Uniforms.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	25.580	11.630
Zinc	22.630	9.455
Total suspended solids	635.500	302.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8803, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.73 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart G - Sinter Plant Materials Handling Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of sinter production	
Lead	100.800	46.800
Zinc	367.200	151.200

(b) Subpart G - Blast Furnace Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(c) Subpart G - Blast Furnace Slag Granulation.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(d) Subpart G - Dross Reverberatory Slag Granulation.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of slag, speiss, or matte granulated	
Lead	1,612.000	748.400
Zinc	5,872.000	2,418.000

(e) Subpart G - Dross Reverberatory Furnace Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of dross reverberatory furnace production	
Lead	.000	.000
Zinc	.000	.000

(f) Subpart G - Zinc Fuming Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnance lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(g) Subpart G - Hard Lead Refining Slag Granulation.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(h) Subpart G - Hard Lead Refining Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(i) Subpart G - Facility Washdown.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(j) Subpart G - Employee Handwash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.924	.429
Zinc	3.366	1.386

(k) Subpart G - Respirator Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	1.484	.689
Zinc	5.406	2.226

(l) Subpart G - Laundering of Uniforms.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produce	
Lead	4.340	2.015

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	15.810	6.510

§ 421.74 Standards of performance for new sources.

Any new source subject to this subpart must achieve the following performance standards:

(a) Subpart G - Sinter Plant Materials Handling Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of sinter production	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(b) Subpart G - Blast Furnace Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(c) Subpart G - Blast Furnace Slag Granulation.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnance lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(d) Subpart G - Dross Reverberatory Slag Granulation.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of slag, speiss, or matte granulated	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(e) Subpart G - Dross Reverberatory Furnace Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of dross reverberatory furnace production	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(f) Subpart G - Zinc Fuming Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(g) Subpart G - Hard Lead Refining Slag Granulation.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(h) Subpart G - Hard Lead Refining Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.5 to 10.0 at all times.

(i) Subpart G - Facility Washdown.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.000	.000
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

Within the range of 7.5 to 10.0 at all times.

(j) Subpart G - Employee Handwash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.924	.429
Zinc	3.366	1.386
Total suspended solids	49.500	39.600
pH	([1])	([1])

Within the range of 7.5 to 10.0 at all times.

(k) Subpart G - Respirator Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	1.484	.689
Zinc	5.406	2.226
Total suspended solids	79.500	63.600
pH	([1])	([1])

Within the range of 7.5 to 10.0 at all times.

(l) Subpart G - Laundering of Uniforms.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	4.340	2.015
Zinc	15.810	6.510
Total suspended solids	232.500	186.000
pH	([1])	([1])

Within the range of 7.5 to 10.0 at all times.

[49 FR 8803, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.75 Pretreatment standards for existing sources.

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 mut comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources. The mass of wastewater pollutants in primary lead process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart G - Sinter Plant Materials Handling Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of sinter production	
Lead	100.800	46.800
Zinc	367.200	151.200

(b) Subpart G - Blast Furnace Wet Air Pollution Control.

PSES

Pollutant or polluntant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pound per billion pounds) of blast furnance lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(c) Subpart G - Blast Furnace Slag Granulation.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pound per billion pounds) of blast furance lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(d) Subpart G - Dross Reverberatory Slag Granulation.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of slag, speiss, or matte granulated	
Lead	1,612.000	748.400
Zinc	5,872.000	2,418.000

(e) Subpart G - Dross Reverberatory Furnance Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of dross reverberatory furnace production	
Lead	.000	.000
Zinc	.000	.000

(f) Subpart G - Zinc Fuming Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(g) Subpart G - Hard Lead Refining Slag Granulation.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(h) Subpart G - Hard Lead Refining Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(i) Subpart G - Facility Washdown.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced.	
Lead	.000	.000
Zinc	.000	.000

(j) Subpart G - Employee Handwash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.924	.429
Zinc	3.366	1.386

(k) Subpart G - Respirator Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	1.484	.689
Zinc	5.406	2.226

(l) Subpart G - Laundering of Uniforms.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	4.340	2.015
Zinc	15.810	6.510

§ 421.76 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary lead process wastewaters introduced into a POTW shall not exceed the following values.

(a) Subpart G - Sinter Plant Materials Handling Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of sinter production	
Lead	.000	.000
Zinc	.000	.000

(b) Subpart G - Blast Furnace Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(c) Subpart G - Blast Furnace Slag Granulation.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(d) Subpart G - Dross Reverberatory Slag Granulation.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of slag, speiss, or matte granulated	
Lead	.000	.000
Zinc	.000	.000

(e) Subpart G - Dross Reverberatory Furnace Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of dross reverberatory furnace production	
Lead	.000	.000
Zinc	.000	.000

(f) Subpart G - Zinc Fuming Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of blast furnace lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(g) Subpart G - Hard Lead Refining Slag Granulation.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(h) Subpart G - Hard Lead Refining Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of hard lead produced	
Lead	.000	.000
Zinc	.000	.000

(i) Subpart G - Facility Washdown.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.000	.000
Zinc	.000	.000

(j) Subpart G - Employee Handwash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	.924	.429
Zinc	3.366	1.386

(k) Subpart G - Respirator Wash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	1.484	.689
Zinc	5.406	2.226

(l) Subpart G - Laundering of Uniforms.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kkg (pounds per billion pounds) of lead bullion produced	
Lead	4.340	2.015
Zinc	15.810	6.510

§ 421.77 [Reserved]

Subpart H - Primary Zinc Subcategory

Source: 49 FR 8808, Mar. 8, 1984, unless otherwise noted.

§ 421.80 Applicability: Description of the primary zinc subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of primary zinc by either electrolytic or pyrolytic means.

§ 421.81 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) The term *product* shall mean zinc metal.

§ 421.82 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

Effluent Limitations

Effluent characteristics	Maximum for any 1 day	Average of Daily values for 30 consecutive days shall not exceed
	(1) Metric Units (kg/kkg of product)	
	(1) English Units (pounds per 1,000 pounds of product)	

Effluent characteristics	Maximum for any 1 day	Average of Daily values for 30 consecutive days shall not exceed
TSS	0.42	0.21
As	0.0016	0.0008
Cd	0.008	0.004
Se	0.08	0.04
Zn	0.08	0.04
pH	([1])	([1])

Within the range of 6.0 to 9.0.

[49 FR 8808, Mar. 8, 1984; 49 FR 26739, June 29, 1984]

§ 421.83 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart H - Zinc Reduction Furnace Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc reduced	
Cadmium	.334	.134
Copper	2.135	1.018
Lead	.467	.217
Zinc	1.702	.701

(b) Subpart H - Preleach of Zinc Concentrates.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate leached	
Cadmium	.180	.072
Copper	1.153	.550
Lead	.252	.117

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.919	.378

(c) Subpart H - Leaching Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc processed through leaching	
Cadmium	.000	.000
Copper	.000	.000
Lead	.000	.000
Zinc	.000	.000

(d) Subpart H - Electrolyte Bleed Wastewater.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.086	.035
Copper	.553	.264
Lead	.121	.056
Zinc	.441	.182

(e) Subpart H - Cathode and Anode Wash Wastewater.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.150	.060
Copper	.961	.458
Lead	.210	.098
Zinc	.766	.315

(f) Subpart H - Casting Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.051	.021
Copper	.329	.157
Lead	.072	.033
Zinc	.262	.108

(g) Subpart H - Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.036	.014
Copper	.232	.110
Lead	.051	.024
Zinc	.185	.076

(h) Subpart H - Cadmium Plant Wastewater.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cadmium produced	
Cadmium	1.234	.494
Copper	7.899	3.765
Lead	1.728	.802
Zinc	6.295	2.592

§ 421.84 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart H - Zinc Reduction Furnace Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc reduced	
Cadmium	.334	.134
Copper	2.135	1.018
Lead	.467	.217
Zinc	1.702	.701
Total suspended solids	25.020	20.020
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart H - Preleach of Zinc Concentrates.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate leached	
Cadmium	.180	.072
Copper	1.153	.550
Lead	.252	.117
Zinc	.919	.378
Total suspended solids	13.520	10.810
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart H - Leaching Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc processed through leaching	
Cadmium	.000	.000
Copper	.000	.000
Lead	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart H - Electrolyte Bleed Wastewater.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.086	.035
Copper	.553	.264
Lead	.121	.056
Zinc	.441	.182
Total suspended solids	6.480	5.184
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart H - Cathode and Anode Wash Wastewater.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.150	.060
Copper	.961	.458
Lead	.210	.098
Zinc	.766	.315
Total suspended solids	11.270	9.012
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart H - Casting Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.051	.021
Copper	.329	.157
Lead	.072	.033
Zinc	.262	.108
Total suspended solids	3.855	3.084
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart H - Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.036	.014
Copper	.232	.110
Lead	.051	.024
Zinc	.185	.076
Total suspended solids	2.715	2.172
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart H - Cadmium Plant Wastewater.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cadmium produced	
Cadmium	1.234	.494
Copper	7.899	3.765
Lead	1.728	.802

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	6.295	2.592
Total suspended solids	92.570	74.050
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8808, Mar. 8, 1984; 49 FR 26739, June 29, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.85 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary zinc process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart H - Zinc Reduction Furnace Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc reduced	
Cadmium	.334	.134
Zinc	1.702	.701

(b) Subpart H - Preleach of Zinc Concentrates.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate leached	
Cadmium	.180	.072
Zinc	.919	.378

(c) Subpart H - Leaching Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc processed through leaching	
Cadmium	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000

(d) Subpart H - Electrolyte Bleed Wastewater.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.086	.035
Zinc	.441	.182

(e) Subpart H - Cathode and Anode Wash Wastewater.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.150	.060
Zinc	.766	.315

(f) Subpart H - Casting Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.051	.021
Zinc	.262	.108

(g) Subpart H - Casting Contact Cooling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.036	.014
Zinc	.185	.076

(h) Subpart H - Cadmium Plant Wastewater.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cadmium produced	
Cadmium	1.234	.494
Zinc	6.295	2.592

§ 421.86 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary zinc process wastewaters introduced into a POTW shall not exceed the following values:

(a) Subpart H - Zinc Reduction Furnace Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc reduced	
Cadmium	.334	.134
Zinc	1.702	.701

(b) Subpart H - Preleach of Zinc Concentrates.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate leached	
Cadmium	.180	.072
Zinc	.919	.378

(c) Subpart H - Leaching Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc processed through leaching	
Cadmium	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000

(d) Subpart H - Electrolyte Bleed Wastewater.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.086	.035
Zinc	.441	.182

(e) Subpart H - Cathode and Anode Wash Wastewater.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode zinc produced	
Cadmium	.150	.060
Zinc	.766	.315

(f) Subpart H - Casting Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	.051	.021
Zinc	.262	.108

(g) Subpart H - Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zinc cast	
Cadmium	0.036	0.014
Zinc	0.185	0.076

(h) Subpart H - Cadmium Plant Wastewater.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cadmium produced	
Cadmium	1.234	0.494
Zinc	6.295	2.592

§ 421.87 [Reserved]

Subpart I - Metallurgical Acid Plants Subcategory

§ 421.90 Applicability: Description of the metallurgical acid plants subcategory.

The provisions of this subpart apply to process wastewater discharges resulting from or associated with the manufacture of by-product sulfuric acid at primary copper smelters, primary zinc facilities, primary lead facilities, and primary molybdenum facilities, including any associated air pollution control or gas-conditioning systems for sulfur dioxide off-gases from pyrometallurgical operations.

[49 FR 8811, Mar. 8, 1984, as amended at 50 FR 38342, Sept. 20, 1985]

§ 421.91 Specialized definitions.

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 apply to this subpart.

(b) The term *product* means 100 percent equivalent sulfuric acid, $H_2 SO_4$ capacity.

[50 FR 38342, Sept. 20, 1985]

§ 421.92 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Subpart I - Metallurgical Acid Plant

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds of 100% sulfuric acid capacity	
Cadmium	0.180	0.090
Copper	5.000	2.000
Lead	1.800	0.790
Zinc	3.600	0.900

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day	Maximum for monthly average
Fluoride[1]	212.800	121.000
Molybdenum[1]	40.180	20.790
Total suspended solids	304.000	152.000
pH	[2]	[2]

[1] For Molybdenum Acid Plants Only.

[2] Within the range of 6.0 to 9.0 at all times.

[50 FR 38342, Sept. 20, 1985; 50 FR 52776, Dec. 26, 1985]

§ 421.93 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

Subpart I - Metallurgical Acid Plant - BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of 100 pct sulfuric acid capacity	
Arsenic	3.550	1.584
Cadmium	0.511	0.204
Copper	3.269	1.558
Lead	0.715	0.332
Zinc	2.605	1.073
Fluoride[1]	89.390	50.820
Molybdenum[1]	[Reserved]	[Reserved].

[1] For Molybdenum acid plants only.

[50 FR 38343, Sept. 20, 1985, as amended at 55 FR 31697, Aug. 3, 1990]

§ 421.94 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

Subpart I - Metallurgical Acid Plant - NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of 100 pct sulfuric acid capacity	
Arsenic	3.550	1.584
Cadmium	0.511	0.204
Copper	3.269	1.558
Lead	0.715	0.332
Zinc	2.605	1.073
Fluoride[1]	89.390	50.820
Molybdenum[1]	[Reserved]	[Reserved].
Total suspended solids	38.310	30.650
pH	([2])	([2])

[1] For Molybdenum acid plants only.

[2] Within the range of 7.5 to 10.0 at all times.

[50 FR 38343, Sept. 20, 1985, as amended at 55 FR 31697, Aug. 3, 1990]

§ 421.95 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in metallurgical acid plant blowdown introduced into a POTW shall not exceed the following values:

Subpart I - Metallurgical Acid Plant - PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per/million pounds) of 100 pct sulfuric acid capacity	
Cadmium	0.511	0.204
Zinc	2.605	1.073

[50 FR 38343, Sept. 20, 1985]

§ 421.96 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in metallurgical acid plant blowdown introduced into a POTW shall not exceed the following values:

Subpart I - Metallurgical Acid Plant - PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of 100 pct sulfuric acid capacity	
Arsenic	3.550	1.584
Cadmium	0.511	0.204
Copper	3.269	1.558
Lead	0.715	0.332
Zinc	2.605	1.073
Fluoride[1]	89.390	50.820
Molybdenum[1]	[Reserved]	[Reserved].

[1] For Molybdenum acid plants only.

[50 FR 38343, Sept. 20, 1985, as amended at 55 FR 31697, Aug. 3, 1990]

§ 421.97 [Reserved]

Subpart J - Primary Tungsten Subcategory

§ 421.100 Applicability: Description of the primary tungsten subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of tungsten at primary tungsten facilities.

[49 FR 8812, Mar. 8, 1984]

§ 421.101 Specialized definitions.

For the purpose of this subpart the general information, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

[49 FR 8812, Mar. 8, 1984]

§ 421.102 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Subpart J - Tungstic Acid Rinse.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	17.230	8.205
Zinc	59.900	25.030
Ammonia (as N)	5,469.000	2,404.00
Total suspended solids	1,682.000	800.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(b) Subpart J - Acid Leach Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	15.040	7.162
Zinc	52.280	21.840
Ammonia (as N)	4,773.000	2,098.000
Total suspended solids	1,468.000	698.300
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(c) Subpart J - Alkali Leach Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(d) Subpart J - Alkali Leach Wash Condensate.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	8.057	3.837
Zinc	28.011	11.700
Ammonia (as N)	2,557.000	1,124.000
Total suspended solids	786.200	374.100
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(e) Subpart J - Ion Exchange Raffinate (Commingled With Other Process or Nonprocess Waters).

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	37.160	17.700
Zinc	129.200	53.970
Ammonia (as N)	11,790.000	5,185.000
Total Suspended solids	3,627.000	1,726.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(f) Subpart J - Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	37.160	17.700
Zinc	129.200	53.970
Ammonia (as N) ([2])	11,790.000	5,185.000
Total suspended solids	3,627.000	1,726.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

[2] The effluent limitation guideline for this pollutant does not apply if (a) the mother liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/l; (b) this mother liquor or raffinate is treated by ammonia steam stripping; and (c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J - Calcium Tungstate Precipitate Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of calcium tungstate (as W) produced	
Lead	31.000	14.760
Zinc	107.800	45.020
Ammonia (as N)	9,838.000	4,325.000
Total suspended solids	3,026.000	1,439.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(h) Subpart J - Crystallization and Drying of Ammonium Paratungstate.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium paratungstate (as W) produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(i) Subpart J - Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic oxide (as W) produced	
Lead	11.600	5.523
Zinc	40.320	16.850
Ammonia (as N)	3,681.000	1,618.000
Total suspended solids	1,132.000	538.500
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(j) Subpart J - Ammonium Paratungstate Conversion to Oxides Water of Formation.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic oxide (as W) produced	
Lead	0.026	0.013
Zinc	0.092	0.038
Ammonia (as N)	8.398	3.692
Total suspended solids	2.583	1.229
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(k) Subpart J - Reduction to Tungsten Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	12.940	6.161
Zinc	44.970	18.790
Ammonia (as N)	4,106.000	1,805.000
Total suspended solids	1,263.000	600.700
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(l) Subpart J - Reduction to Tungsten Water of Formation.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.205	.098
Zinc	.714	.298
Ammonia (as N)	65.190	28.660
Total suspended solids	20.050	9.536
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(m) Subpart J - Tungsten Powder Acid Leach and Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	1.008	0.48
Zinc	3.504	1.464
Ammonia (as N)	319.900	140.700

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	98.400	46.800
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(n) Subpart J - Molybdenum Sulfide Precipitation Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1706, Jan. 21, 1988]

§ 421.103 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart J - Tungstic Acid Rinse.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	11.490	5.333
Zinc	41.850	17.230
Ammonia (as N)	5,469.000	2,404.000

(b) Subpart J - Acid Leach Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	1.003	0.466
Zinc	3.653	1.504
Ammonia (as N)	477.400	209.900

(c) Subpart J - Alkali Leach Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(d) Subpart J - Alkali Leach Wash Condensate.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	5.372	2.494
Zinc	19.570	8.057
Ammonia (as N)	2,557.000	1,124.000

(e) Subpart J - Ion Exchange Raffinate (Commingled With Other Process or Nonprocess Waters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)	11,790.000	5,185.000

(f) Subpart J - Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)[1]	11,790.000	5,185.000

[1] The effluent limitation for this pollutant does not apply if a) the motor liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/1; b) this mother liquor or raffinate is treated by ammonia steam stripping; and c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J - Calcium Tungstate Precipitate Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of calcium tungstate (as W) produced	
Lead	20.670	9.594
Zinc	75.280	31.000
Ammonia (as N)	9,838.000	4,325.000

(h) Subpart J - Crystallization and Drying of Ammonium Paratungstate.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of ammonium paratungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(i) Subpart J - Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of tungstic oxide (as W) produced	
Lead	0.773	0.359
Zinc	2.817	1.160
Ammonia (as N)	368.200	161.900

(j) Subpart J - Ammonium Paratungstate Conversion to Oxides Water of Formation.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of tungstic oxide (as W) produced	
Lead	0.018	0.008
Zinc	0.064	0.026
Ammonia (as N)	8.398	3.692

(k) Subpart J - Reduction to Tungsten Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of tungsten metal produced	
Lead	0.862	0.400

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
Zinc	3.142	1.294
Ammonia (as N)	410.600	180.500

(l) Subpart J - Reduction to Tungsten Water of Formation.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of tungsten metal produced	
Lead	0.137	0.064
Zinc	0.499	0.205
Ammonia (as N)	65.190	28.660

(m) Subpart J - Tungsten Powder Acid Leach and Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	0.672	0.312
Zinc	2.448	1.008
Ammonia (as N)	319.900	140.700

(n) Subpart J - Molybdenum Sulfide Precipitation Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1708, Jan. 21, 1988]

§ 421.104 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart J - Tungstic Acid Rinse.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	11.490	5.333
Zinc	41.850	17.230
Ammonia (as N)	5,469.000	2,404.000
Total suspended solids	615.400	492.300
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(b) Subpart J - Acid Leach Wet Air Pollution

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	1.003	0.466
Zinc	3.653	1.504
Ammonia (as N)	477.400	209.900
Total suspended solids	53.720	42.970
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(c) Subpart J - Alkali Leach Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(d) Subpart J - Alkali Leach Wash Condensate.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	5.372	2.494
Zinc	19.570	8.057
Ammonia (as N)	2,557.000	1,124.000
Total suspended solids	287.800	229.600
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(e) Subpart J - Ion Exchange Raffinate (Commingled With Other Process or Nonprocess Waters).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)	11,790.000	5,185.000
Total suspended solids	1,327.000	1,062.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(f) Subpart J - Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N) ([2])	11,790.000	5,185.000
Total suspended solids	1,327.000	1,062.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

[2] The new source standard for this pollutant does not apply if (a) the mother liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/l; (b) this mother liquor or raffinate is treated by ammonia steam stripping; and (c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J - Calcium Tungstate Precipitate Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of calcium tungstate (as W) produced	
Lead	20.670	9.594
Zinc	75.280	31.000
Ammonia (as N)	9,838.000	4,325.000
Total suspended solids	1,107.000	885.600
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(h) Subpart J - Crystallization and Drying of Ammonium Paratungstate.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium paratungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(i) Subpart J - Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of tungstic oxide (as W) produced	
Lead	0.773	0.359
Zinc	2.817	1.160
Ammonia (as N)	368.200	161.900
Total suspended solids	41.430	33.150
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(j) Subpart J - Ammonium Paratungstate Conversion to Oxides Water of Formation.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic oxide (as W) produced	
Lead	0.018	0.008
Zinc	0.064	0.026
Ammonia (as N)	8.398	3.692

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	0.945	0.756
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(k) Subpart J - Reduction to Tungsten Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.862	.400
Zinc	3.142	1.294
Ammonia (as N)	410.600	180.500
Total suspended solids	46.200	36.960
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

(l) Subpart J - Reduction to Tungsten Water of Formation.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.137	.064
Zinc	.499	.205
Ammonia (as N)	65.190	28.660
Total suspended solids	7.335	5.868
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

(m) Subpart J - Tungsten Power Acid Leach and Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.672	.312
Zinc	2.448	1.008
Ammonia (as N)	319.900	140.700
Total suspended solids	36.000	28.800
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

(n) Subpart J - Molybdenum Sulfide Precipitation Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.00	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1]Within the range of 7.0 to 10.0 at all times.

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1709, Jan. 21, 1988]

§ 421.105 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary tungsten process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart J - Tungstic Acid Rinse.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	11.490	5.333

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	41.850	17.230
Ammonia (as N)	5,469.000	2,404.000

(b) Subpart J - Acid Leach Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	1.003	0.466
Zinc	3.653	1.504
Ammonia (as N)	477.400	209.900

(c) Subpart J - Alkali Leach Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(d) Subpart J - Alkali Leach Wash Condensate.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of sodium tungstate (as W) produced	
Lead	5.372	2.494
Zinc	19.570	8.057
Ammonia (as N)	2,557.000	1,124.000

(e) Subpart J - Ion Exchange Raffinate (Commingled With Other Process or Nonprocess Waters).

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)	11,790.000	5,185.000

(f) Subpart J - Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)[1]	11,790.000	5,185.000

[1] The pretreatment standard for this pollutant does not apply if (a) the mother liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/l; (b) this mother liquor or raffinate is treated by ammonia steam stripping; and (c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J - Calcium Tungstate Precipitate Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of calcium tungstate (as W) produced	
Lead	20.670	9.594
Zinc	75.280	31.000
Ammonia (as N)	9,838.000	4,325.000

(h) Subpart J - Crystallization and Drying of Ammonium Paratungstate.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of ammonium paratungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(i) Subpart J - Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic oxide (as W) produced	
Lead	0.773	0.359
Zinc	2.817	1.160
Ammonia (as N)	368.200	161.900

(j) Subpart J - Ammonium Paratungstate Conversion to Oxides Water of Formation.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic oxide (as W) produced	
Lead	0.018	0.008
Zinc	0.064	0.026
Ammonia (as N)	8.398	3.692

(k) Subpart J - Reduction to Tungsten Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	.862	.400
Zinc	3.142	1.294
Ammonia (as N)	410.600	180.500

(l) Subpart J - Reduction to Tungsten Water of Formation.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.137	.064
Zinc	.499	.205
Ammonia (as N)	65.190	28.660

(m) Subpart J - Tungsten Powder Acid Leach and Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten metal produced	
Lead	.672	.312
Zinc	2.448	1.008
Ammonia (as N)	319.900	140.700

(n) Subpart J - Molybdenum Sulfide Precipitation Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds of tungsten metal produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1711, Jan. 21, 1988]

§ 421.106 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary tungsten process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart J - Tungstic Acid Rinse.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungstic acid (as W) produced	
Lead	11.490	5.333
Zinc	41.850	17.230
Ammonia (as N)	5,469.000	2,404.000

(b) Subpart J - Acid Leach Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of tungstic acid (as W) produced	
Lead	1.003	0.466
Zinc	3.653	1.504
Ammonia (as N)	477.400	209.900

(c) Subpart J - Alkali Leach Wash.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of sodium tungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(d) Subpart J - Alkali Leach Wash Condensate.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of sodium tungstate (as W) produced	
Lead	5.372	2.494
Zinc	19.570	8.057
Ammonia (as N)	2,557.000	1,124.000

(e) Subpart J - Ion Exchange Raffinate (Commingled With Other Process or Nonprocess Waters).

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)	11,790.000	5,185.000

(f) Subpart J - Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of ammonium tungstate (as W) produced	
Lead	24.780	11.500
Zinc	90.240	37.160
Ammonia (as N)([1])	11,790.000	5,185.000

[1] The pretreatment standard for this pollutant does not apply if a) the mother liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/l; b) this mother liquor or raffinate is treated by ammonia steam stripping; and c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J - Calcium Tungstate Precipitate Wash.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of calcium tungstate (as W) produced	
Lead	20.670	9.594
Zinc	75.280	31.000
Ammonia (as N)	9,838.000	4,325.000

(h) Subpart J - Crystallization and Drying of Ammonium Paratungstate.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of ammonium paratungstate (as W) produced	
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

(i) Subpart J - Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of tungstic oxide (as W) produced	
Lead	0.773	0.359
Zinc	2.817	1.160
Ammonia (as N)	368.200	161.900

(j) Subpart J - Ammonium Paratungstate Conversion to Oxides Water of Formation.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of tungstic oxide (as W) produced	
Lead	0.018	0.008
Zinc	0.064	0.026

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
Ammonia (as N)	8.398	3.692

(k) Subpart J - Reduction to Tungsten Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (pounds per million) of tungsten metal produced	
Lead	.862	.400
Zinc	3.142	1.294
Ammonia (as N)	410.600	180.500

(l) Subpart J - Reduction to Tungsten Water of Formation.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (lb/ million lbs) of tungsten metal produced	
Lead	.137	.064
Zinc	.499	.205
Ammonia (as N)	65.190	28.660

(m) Subpart J - Tungsten Powder Acid Leach and Wash.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (parts per million) of tungsten metal produced	
Lead	.672	.312
Zinc	2.448	1.008
Ammonia (as N)	319.900	140.700

(n) Subpart J - Molybdenum Sulfide Precipitation Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
	mg/kg (parts per million) of tungsten metal produced	

Pollutant or pollutant property	Maximum for any one day	Maximum for monthly average
Lead	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1712, Jan. 21, 1988]

§ 421.107 [Reserved]

Subpart K - Primary Columbium-Tantalum Subcategory

§ 421.110 Applicability: Description of the primary columbium-tantalum subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of columbium or tantalum by primary columbium-tantalum facilities.

[49 FR 8817, Mar. 8, 1984]

§ 421.111 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

[49 FR 8817, Mar. 8, 1984]

§ 421.112 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Subpart K - Concentrate Digestion Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	2.612	1.244
Zinc	9.080	3.794
Ammonia (as N)	829.000	364.500
Fluoride	217.700	124.400
Total suspended solids	255.000	121.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart K - Solvent Extraction Raffinate.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	3.888	1.851
Zinc	13.520	5.647
Ammonia (as N)	1,233.000	542.500
Fluoride	324.000	185.100
Total Suspended Solids	379.500	189.500
pH	([1])	([1])

Within the range of 7.5 to 10.0 at all times.

(c) Subpart K - Solvent Extraction Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	1.032	.491
Zinc	3.586	1.498
Ammonia (as N)	327.400	143.900
Fluoride	85.960	49.120
Total suspended solids	100.700	47.890
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart K - Precipitation and Filtration.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	5.750	2.738
Zinc	19.990	8.350

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	1,825.000	802.200
Fluoride	479.100	273.800
Total suspended solids	561.300	267.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart K - Precipitation and Filtration Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	26.680	12.700
Zinc	92.730	38.740
Ammonia (as N)	8,466.000	3,722.000
Fluoride	2,223.000	1,270.000
Total suspended solids	2,604.000	1,239.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart K - Tantalum Salt Drying.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt dried	
Lead	25.430	12.110
Zinc	88.390	36.930
Ammonia (as N)	8,070.000	3,548.000
Fluoride	2,119.000	1,211.000
Total suspended solids	2,482.000	1,181.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart K - Oxides Calcining Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium-tantalum oxide dried	
Lead	16.140	7.685
Zinc	56.100	23.440
Ammonia (as N)	5,122.000	2,252.000
Fluoride	1,345.000	768.500
Total suspended solids	1,576.000	749.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart K - Reduction of Tantalum Salt to Metal.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	69.750	33.220
Zinc	242.500	101.300
Ammonia (as N)	22,140.000	9,732.000
Fluoride	5,813.000	3,322.000
Total suspended solids	6,809.000	3,239.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart K - Reduction of Tantalum Salt to Metal Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	.858	.409

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	2.983	1.246
Ammonia (as N)	272.400	119.700
Fluoride	71.510	40.860
Total suspended solids	83.770	39.840
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart K - Tantalum Powder Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum power washed	
Lead	8.582	4.087
Zinc	29.830	12.470
Ammonia (as N)	2,724.000	1,198.000
Fluoride	715.200	408.700
Total suspended solids	837.800	398.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart K - Consolidation and Casting Contact Cooling.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium or tantalum cast or consolidated	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Fluoride	.000	.000
Total suspended solids	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8817, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984; 50 FR 12253, Mar. 28, 1985]

§ 421.113 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart K - Concentrate Digestion Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.174	.081
Zinc	.635	.261
Ammonia (as N)	82.910	36.450
Fluoride	21.770	12.440

(b) Subpart K - Solvent Extraction Raffinate.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/Kg (pounds per million pounds) of concentrate digested	
Lead	2.592	1.203
Zinc	9.442	3.888
Ammonia (as N)	1,233.000	542.5000
Fluoride	324.000	185.100

(c) Subpart K - Solvent Extraction Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.069	.032
Zinc	.251	.103
Ammonia (as N)	32.790	14.420
Fluoride	8.610	4.920

(d) Subpart K - Precipitation and Filtration.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	3.833	1.780
Zinc	13.960	5.750
Ammonia (as N)	1,825.000	802.200
Fluoride	479.100	273.800

(e) Subpart K - Precipitation and Filtration Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	1.778	.826
Zinc	6.478	2.668
Ammonia (as N)	846.600	372.200
Fluoride	222.300	127.000

(f) Subpart K - Tantalum Salt Drying.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt dried	
Lead	16.950	7.871
Zinc	61.750	25.430

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	8,070.000	3,548.000
Fluoride	2,119.000	1,211.000

(g) Subpart K - Oxides Calcining Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium-tantalum oxide	
Lead	1.076	.500
Zinc	3.919	1.614
Ammonia (as N)	512.200	225.200
Fluoride	134.500	76.840

(h) Subpart K - Reduction of Tantalum Salt to Metal.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	46.500	21.590
Zinc	169.400	69.750
Ammonia (as N)	22,140.000	9,732.000
Fluoride	5,813.000	3,322.000

(i) Subpart K - Reduction of Tantalum Salt to Metal Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	.572	.266
Zinc	2.084	.858
Fluoride	71.510	40.860

(j) Subpart K - Tantalum Powder Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder washed	
Lead	5.721	2.656
Zinc	20.840	8.582
Ammonia (as N)	2,724.000	1,198.000
Fluoride	715.200	408.700

(k) Subpart K - Consolidation and Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium or tantalum cast or consolidated	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Fluoride	.000	.000

[49 FR 8817, Mar. 8, 1984, as amended at 50 FR 12253, Mar. 28, 1985]

§ 421.114 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart K - Concentrate Digestion Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.174	.081
Zinc	.635	.261
Ammonia (as N)	82.910	36.450
Fluoride	21.770	12.440
Total suspended solids	9.330	7.464

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart K - Solvent Extraction Raffinate.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	2.592	1.203
Zinc	9.442	3.888
Ammonia (as N)	1,233.000	542.5000
Fluoride	324.000	185.100
Total Suspended Solids	138.900	111.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart K - Solvent Extraction Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.069	.032
Zinc	.251	.103
Ammonia (as N)	32.790	14.420
Fluoride	8.610	4.920
Total suspended solids	3.690	2.952
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart K - Precipitation and Filtration.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	3.833	1.780
Zinc	13.960	5.750
Ammonia (as N)	1,825.000	802.200
Fluoride	479.100	273.800
Total suspended solids	205.400	164.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart K - Precipitation and Filtration Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	1.778	.826
Zinc	6.478	2.668
Ammonia (as N)	846.600	372.200
Fluoride	222.300	127.000
Total suspended solids	95.270	76.210
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart K - Tantalum Salt Drying.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt dried	
Lead	16.950	7.871
Zinc	61.750	25.430
Ammonia (as N)	8,070.000	3,548.000
Fluoride	2,119.000	1,211.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	908.200	726.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart K - Oxides Calcining Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium-tantalum oxide dried	
Lead	1.076	.500
Zinc	3.919	1.614
Ammonia (as N)	512.200	225.200
Fluoride	134.500	76.840
Total suspended solids	57.630	46.110
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart K - Reduction of Tantalum Salt to Metal.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	46.500	21.590
Zinc	169.400	69.750
Ammonia (as N)	22,140.000	9,732.000
Fluoride	5,813.000	3,322.000
Total suspended solids	2,491.000	1,993.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart K - Reduction of Tantalum Salt to Metal Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	.572	.266
Zinc	2.084	.858
Ammonia (as N)	272.400	119.700
Fluoride	71.510	40.860
Total suspended solids	30.650	24.520
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart K - Tantalum Powder Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder washed	
Lead	5.721	2.656
Zinc	20.840	8.582
Ammonia (as N)	2,724.000	1,198.000
Fluoride	715.200	408.700
Total suspended solids	306.500	245.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart K - Consolidation and Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium or tantalum cast or consolidated	
Lead	.000	.000
Zinc	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000
Fluoride	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8817, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984; 50 FR 12253, Mar. 28, 1985]

§ 421.115 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary columbium-tantalum process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart K - Concentrate Digestion Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.174	.081
Zinc	.635	.261
Ammonia (as N)	82.910	36.450
Fluoride	21.770	12.440

(b) Subpart K - Solvent Extraction Raffinate.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	2.592	1.203
Zinc	9.442	3.888
Ammonia (as N)	1,233.000	542.5000
Fluoride	324.000	185.100

(c) Subpart K - Solvent Extraction Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.069	.032
Zinc	.251	.103
Ammonia (as N)	32.790	14.420
Fluoride	8.610	4.920

(d) Subpart K - Precipitation and Filtration.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	3.833	1.780
Zinc	13.960	5.750
Ammonia (as N)	1,825.000	802.200
Fluoride	479.100	273.800

(e) Subpart K - Precipitation and Filtration Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	1.778	.826
Zinc	6.478	2.668
Ammonia (as N)	846.600	372.200
Fluoride	222.300	127.000

(f) Subpart K - Tantalum Salt Drying.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt dried	
Lead	16.950	7.871

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	61.750	25.430
Ammonia (as N)	8,070.000	3,548.000
Fluoride	2,119.000	1,211.000

(g) Subpart K - Oxides Calcining Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium-tantalum oxide dried	
Lead	1.076	.500
Zinc	3.919	1.614
Ammonia (as N)	512.200	225.200
Fluoride	134.500	76.840

(h) Subpart K - Reduction of Tantalum Salt to Metal.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	46.500	21.590
Zinc	169.400	69.750
Ammonia (as N)	22,140.000	9,732.000
Fluoride	5,813.000	3,322.000

(i) Subpart K - Reduction of Tantalum Salt to Metal Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	.572	.266
Zinc	2.084	.858
Ammonia (as N)	272.400	119.700

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	71.510	40.860

(j) Subpart K - Tantalum Powder Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder washed	
Lead	5.721	2.656
Zinc	20.840	8.582
Ammonia (as N)	2,724.000	1,198.000
Fluoride	715.200	408.700

(k) Subpart K - Consolidation and Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium or tantalum cast or consolidated	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Fluoride	.000	.000

[49 FR 8817, Mar. 8, 1984, as amended at 50 FR 12253, Mar. 28, 1985]

§ 421.116 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary columbium-tantalum process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart K - Concentrate Digestion Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	.174	.081
Zinc	.635	.261
Ammonia (as N)	82.910	36.450
Fluoride	21.770	12.440

(b) Subpart K - Solvent Extraction Raffinate.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	2.592	1.203
Zinc	9.442	3.888
Ammonia (as N)	1,233.000	542.5000
Fluoride	324.000	185.100

(c) Subpart K - Solvent Extraction Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	.069	.032
Zinc	.251	.103
Ammonia (as N)	32.790	14.420
Fluoride	8.610	4.920

(d) Subpart K - Precipitation and Filtration.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	3.833	1.780
Zinc	13.960	5.750
Ammonia (as N)	1,825.000	802.200

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	479.100	273.800

(e) Subpart K - Precipitation and Filtration Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of concentrate digested	
Lead	1.778	.826
Zinc	6.478	2.668
Ammonia (as N)	846.600	372.200
Fluoride	222.300	127.000

(f) Subpart K - Tantalum Salt Drying.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt dried	
Lead	16.950	7.871
Zinc	61.750	25.430
Ammonia (as N)	8,070.000	3,548.000
Fluoride	2,119.000	1,211.000

(g) Subpart K - Oxides Calcining Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium-tantalum oxide dried	
Lead	1.076	.500
Zinc	3.919	1.614
Ammonia (as N)	512.200	225.200
Fluoride	134.500	76.840

(h) Subpart K - Reduction of Tantalum Salt to Metal.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	46.500	21.590
Zinc	169.400	69.750
Ammonia (as N)	22,140.000	9,732.000
Fluoride	5,813.000	3,322.000

(i) Subpart K - Reduction of Tantalum Salt to Metal Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum salt reduced	
Lead	.572	.266
Zinc	2.084	.858
Ammonia (as N)	272.400	119.700
Fluoride	71.510	40.860

(j) Subpart K - Tantalum Powder Wash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder washed	
Lead	5.721	2.656
Zinc	20.840	8.582
Ammonia (as N)	2,724.000	1,198.000
Fluoride	715.200	408.700

(k) Subpart K - Consolidation and Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of columbium or tantalum cast or consolidated	
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Fluoride	.000	.000

[49 FR 8817, Mar. 8, 1984, as amended at 50 FR 12253, Mar. 28, 1985]

§ 421.117 [Reserved]

Subpart L - Secondary Silver Subcategory

Source: 49 FR 8821, Mar. 8, 1984, unless otherwise noted.

§ 421.120 Applicability: Description of the secondary silver subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of silver from secondary silver facilities processing photographic and nonphotographic raw materials.

[49 FR 8821, Mar. 8, 1984; 49 FR 26739, June 29, 1984]

§ 421.121 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.122 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Subpart L - Film Stripping.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from film stripping	
Copper	95.670	50.350
Zinc	73.510	30.720
Ammonia (as N)	6,712.000	2,951.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	2,065.000	981.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart L - Film Stripping Wet Air Pollution Control and Precipitation and Filtration of Film Stripping Solutions Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of film stripping solutions	
Copper	1.843	.970
Zinc	1.416	.592
Ammonia (as N)	129.300	56.840
Total suspended solids	39.770	18.920
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart L - Precipitation and Filtration of Film Stripping Solutions.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	109.400	57.570
Zinc	84.050	35.120
Ammonia (as N)	7,674.000	3,374.000
Total suspended solids	2,361.000	1,123.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart L - Precipitation and Filtration of Photographic Solutions.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	50.540	26.600
Zinc	38.836	16.226
Ammonia (as N)	3,545.000	1,559.000
Total suspended solids	1,090.600	518.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart L - Precipitation and Filtration of Photographic Solutions Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of photographic solutions	
Copper	23.070	12.140
Zinc	17.730	7.406
Ammonia (as N)	1,618.000	711.400
Total suspended solids	497.800	236.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart L - Electrolytic Refining.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from electrolytic refining	
Copper	1.444	.760
Zinc	1.110	.464
Ammonia (as N)	101.300	44.540
Total suspended solids	31.160	14.820
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart L - Furnace Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver roasted, smelted, or dried	
Copper	1.273	.670
Zinc	.978	.409
Ammonia (as N)	89.310	39.260
Total suspended solids	27.470	13.070
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart L - Leaching.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching	
Copper	.164	.086
Zinc	.126	.053
Ammonia (as N)	11.470	5.040
Total suspended solids	3.526	1.677
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart L - Leaching Wet Air Pollution Control and Precipitation of Nonphotographic Solutions Wet Air Pollution Control.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching or silver precipitated	
Copper	8.417	4.430
Zinc	6.468	2.703

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	590.500	259.600
Total suspended solids	181.700	86.390
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart L - Precipitation and Filtration of Nonphotographic Solutions.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	5.833	3.070
Zinc	4.482	1.873
Ammonia (as N)	409.300	179.900
Total suspended solids	125.900	59.870
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart L - Floor and Equipment Washdown.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver production	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8821, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.123 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart L - Film Stripping.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from film stripping	
Copper	64.450	30.720
Zinc	51.360	21.150
Ammonia (as N)	6,712.000	2,951.000

(b) Subpart L - Film Stripping Wet Air Pollution Control and Precipitation and Filtration of Film Stripping Solutions Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of film stripping solutions	
Copper	1.242	.592
Zinc	.990	.408
Ammonia (as N)	129.300	56.840

(c) Subpart L - Precipitation and Filtration of Film Stripping Solutions.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	73.690	35.120
Zinc	58.720	24.180
Ammonia (as N)	7,674.000	3,374.000

(d) Subpart L - Precipitation and Filtration of Photographic Solutions.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	34.048	16.226
Zinc	27.132	11.172
Ammonia (as N)	3,545.000	1,559.000

(e) Subpart L - Precipitation and Filtration of Photographic Solutions Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of photographic solutions	
Copper	15.540	7.406
Zinc	12.380	5.099
Ammonia (as N)	1,618.000	711.400

(f) Subpart L - Electrolytic Refining.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from electrolytic refining	
Copper	.973	.464
Zinc	.775	.319
Ammonia (as N)	101.300	44.540

(g) Subpart L - Furnace Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver roasted, smelted, or dried	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(h) Subpart L - Leaching.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching	
Copper	.110	.053
Zinc	.088	.036
Ammonia (as N)	11.470	5.040

(i) Subpart L - Leaching Wet Air Pollution Control and Precipitation of Nonphotographic Solutions Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching or silver precipitated	
Copper	5.671	2.703
Zinc	4.519	1.861
Ammonia (as N)	590.500	259.600

(j) Subpart L - Precipitation and Filtration of Nonphotographic Solutions.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	3.930	1.873
Zinc	3.132	1.290
Ammonia (as N)	409.300	179.900

(k) Subpart L - Floor and Equipment Washdown.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver production	
Copper	.000	.000
Zinc	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000

§ 421.124 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart L - Film Stripping.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from film stripping	
Copper	64.450	30.720
Zinc	51.360	21.150
Ammonia (as N)	6,712.000	2,951.000
Total suspended solids	755.300	604.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart L - Film Stripping Wet Air Pollution Control and Precipitation and Filtration of Film Stripping Solutions Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of film stripping solutions	
Copper	1.242	.592
Zinc	.990	.408
Ammonia (as N)	129.300	56.840
Total suspended solids	14.550	11.640
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart L - Precipitation and Filtration of Film Stripping Solutions.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	73.690	35.120
Zinc	58.720	24.180
Ammonia (as N)	7,674.000	3,374.000
Total suspended solids	863.600	690.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart L - Precipitation and Filtration of Photographic Solutions.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	34.048	16.226
Zinc	27.132	11.172
Ammonia (as N)	3,545.000	1,559.000
Total suspended solids	399.000	319.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart L - Precipitation and Filtration of Photographic Solutions Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of photographic solutions	
Copper	15.540	7.406
Zinc	12.380	5.099
Ammonia (as N)	1,618.000	711.400
Total suspended solids	182.100	145.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart L - Electrolytic Refining.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from electrolytic refining	
Copper	.973	.464
Zinc	.775	.319
Ammonia (as N)	101.300	44.540
Total suspended solids	11.400	9.120
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart L - Furnace Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver roasted, smelted, or dried	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart L - Leaching.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching	
Copper	.110	.053
Zinc	.088	.036
Ammonia (as N)	11.470	5.040

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	1.290	1.032
pH	(1)	(1)

1 Within the range of 7.5 to 10.0 at all times.

(i) Subpart L - Leaching Wet Air Pollution Control and Precipitation of Nonphotographic Solutions Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching or silver precipitated	
Copper	5.671	2.703
Zinc	4.519	1.861
Ammonia (as N)	590.500	259.600
Total suspended solids	66.450	53.160
pH	(1)	(1)

1 Within the range of 7.5 to 10.0 at all times.

(j) Subpart L - Precipitation and Filtration of Nonphotograhic Solutions.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	3.930	1.873
Zinc	3.132	1.290
Ammonia (as N)	409.300	179.900
Total suspended solids	46.050	36.840
pH	(1)	(1)

1 Within the range of 7.5 to 10.0 at all times.

(k) Subpart L - Floor and Equipment Washdown.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver production	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8821, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.125 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary silver process wastewater introduced into a POTW must not exceed the following values.

(a) Subpart L - Film Stripping.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from film stripping	
Copper	64.450	30.720
Zinc	51.360	21.150
Ammonia (as N)	6,712.000	2,951.000

(b) Subpart L - Film Stripping Wet Air Pollution Control and Precipitation and Filtration of Film Stripping Solutions Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of film stripping solutions	
Copper	1.242	.592
Zinc	.990	.408
Ammonia (as N)	129.300	56.840

(c) Subpart L - Precipitation and Filtration of Film Stripping Solutions.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	73.690	35.120
Zinc	58.720	24.180
Ammonia (as N)	7,674.000	3,374.000

(d) Subpart L - Precipitation and Filtration of Photographic Solutions.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	34.048	16.226
Zinc	27.132	11.172
Ammonia (as N)	3,545.000	1,559.000

(e) Subpart L - Precipitation and Filtration of Photographic Solutions Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of photographic solutions	
Copper	15.540	7.406
Zinc	12.380	5.099
Ammonia (as N)	1,618.000	711.400

(f) Subpart L - Electrolytic Refining.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from electrolytic refining	
Copper	.973	.464

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.775	.319
Ammonia (as N)	101.300	44.540

(g) Subpart L - Furnace Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver roasted, smelted, or dried	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(h) Subpart L - Leaching.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching	
Copper	.110	.053
Zinc	.088	.036
Ammonia (as N)	11.470	5.040

(i) Subpart L - Leaching Wet Air Pollution Control and Precipitation of Nonphotographic Solutions Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching or silver precipitated	
Copper	5.671	2.703
Zinc	4.519	1.861
Ammonia (as N)	590.500	259.600

(j) Subpart L - Precipitation and Filtration of Nonphotographic Solutions.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	3.930	1.873
Zinc	3.132	1.290
Ammonia (as N)	409.300	179.900

(k) Subpart L - Floor and Equipment Washdown.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver production	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

§ 421.126 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary silver process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart L - Film Stripping.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from film stripping	
Copper	64.450	30.720
Zinc	51.360	21.150
Ammonia (as N)	6,712.000	2,951.000

(b) Subpart L - Film Stripping Wet Air Pollution Control and Precipitation and Filtration of Film Stripping Solutions Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of film stripping solutions	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	1.242	.592
Zinc	.990	.408
Ammonia (as N)	129.300	56.840

(c) Subpart L - Precipitation and Filtration of Film Stripping Solutions.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	73.690	35.120
Zinc	58.720	24.180
Ammonia (as N)	7,674.000	3,374.000

(d) Subpart L - Precipitation and Filtration of Photographic Solutions.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	34.048	16.226
Zinc	27.132	11.172
Ammonia (as N)	3,545.000	1,559.000

(e) Subpart L - Precipitation and Filtration of Photographic Solutions Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from precipitation and filtration of photographic solutions	
Copper	15.540	7.406
Zinc	12.380	5.099
Ammonia (as N)	1,618.000	711.400

(f) Subpart L - Electrolytic Refining.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver from electrolytic refining	
Copper	.973	.464
Zinc	.775	.319
Ammonia (as N)	101.300	44.540

(g) Subpart L - Furnace Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver roasted, smelted or dried	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(h) Subpart L - Leaching.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching	
Copper	.110	.053
Zinc	.088	.036
Ammonia (as N)	11.470	5.040

(i) Subpart L - Leaching Wet Air Pollution Control and Precipitation of Nonphotographic Solutions Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver produced from leaching or silver precipitated	
Copper	5.671	2.703
Zinc	4.519	1.861

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	590.500	259.600

(j) Subpart L - Precipitation and Filtration of Nonphotographic Solutions.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver precipitated	
Copper	3.930	1.873
Zinc	3.132	1.290
Ammonia (as N)	409.300	179.900

(k) Subpart L - Floor and Equipment Washdown.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver production	
Copper	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

[49 FR 8821, Mar. 8, 1984; 49 FR 26739, June 29, 1984]

§ 421.127 [Reserved]

Subpart M - Secondary Lead Subcategory

Source: 49 FR 8826, Mar. 8, 1984, unless otherwise noted.

§ 421.130 Applicability: Description of the secondary lead subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of lead by secondary lead facilities.

§ 421.131 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.132 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Subpart M - Battery Cracking

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	1.932	.862
Arsenic	1.407	.579
Lead	.283	.135
Zinc	.983	.411
Ammonia (as N)	.000	.000
Total suspended solids	27.600	13.130
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart M - Blast, Reverberatory, or Rotary Furnace Wet Air Pollution Control

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	7.491	3.341
Arsenic	5.455	2.245
Lead	1.096	.522
Zinc	3.811	1.592
Ammonia (as N)	.000	.000
Total suspended solids	107.000	50.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart M - Kettle Wet Air Pollution Control

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from refining	
Antimony	.129	.058
Arsenic	.094	.039
Lead	.019	.009
Zinc	.066	.027
Ammonia (as N)	.000	.000
Total suspended solids	1.845	.878
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart M - Lead Paste Desulfurization

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead processed through desulfurization	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart M - Casting Contact Cooling

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead cast	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Antimony	.634	.283
Arsenic	.462	.190
Lead	.093	.044
Zinc	.323	.135
Ammonia (as N)	.000	.000
Total suspended solids	9.061	4.310
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart M - Truck Wash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.060	.027
Arsenic	.044	.018
Lead	.009	.004
Zinc	.031	.013
Ammonia (as N)	.000	.000
Total suspended solids	.861	.410
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart M - Facility Washdown

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart M - Battery Case Classification.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart M - Employee Handwash.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.077	.035
Arsenic	.056	.023
Lead	.011	.005

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.039	.016
Ammonia (as N)	.000	.000
Total suspended solids	1.107	.527
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart M - Employee Respirator Wash.

BPT Effulent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.126	.056
Arsenic	.092	.038
Lead	.018	.009
Zinc	.064	.027
Ammonia (as N)	.000	.000
Total suspended solids	1.804	.858
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart M - Laundering of Uniforms.

BPT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.367	.164
Arsenic	.268	.110
Lead	.054	.026
Zinc	.187	.078
Ammonia (as N)	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	5.248	2.496
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8826, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.133 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart M - Battery Cracking.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	1.299	.579
Arsenic	.936	.384
Lead	.189	.087
Zinc	.687	.283
Ammonia (as N)	.000	.000

(b) Subpart M - Blast, Reverberatory, or Rotary Furnace Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	5.038	2.245
Arsenic	3.628	1.488
Lead	.731	.339
Zinc	2.662	1.096
Ammonia (as N)	0.000	0.000

(c) Subpart M - Kettle Wet Air Pollution Control.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from refining	
Antimony	.087	.039
Arsenic	.063	.026
Lead	.013	.006
Zinc	.046	.019
Ammonia (as N)	.000	.000

(d) Subpart M - Lead Paste Desulfurization.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead processed through desulfurization	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(e) Subpart M - Casting Contact Cooling.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead cast	
Antimony	.042	.019
Arsenic	.031	.013
Lead	.006	.003
Zinc	.022	.009

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000

(f) Subpart M - Truck Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.041	.018
Arsenic	.029	.012
Lead	.006	.003
Zinc	.021	.009
Ammonia (as N)	.000	.000

(g) Subpart M - Facility Washdown.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(h) Subpart M - Battery Case Classification.

BAT Effluent Limitations

Pollutant pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	.000	.000

Pollutant pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart M - Employee Handwash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.052	.023
Arsenic	.038	.015
Lead	.008	.004
Zinc	.028	.011
Ammonia (as N)	.000	.000

(j) Subpart M - Employee Respirator Wash.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.085	.038
Arsenic	.061	.025
Lead	.012	.006
Zinc	.045	.018
Ammonia (as N)	.000	.000

(k) Subpart M - Laundering of Uniforms.

BAT Effluent Limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.247	.110
Arsenic	.178	.073
Lead	.036	.017
Zinc	.131	.054
Ammonia (as N)	.000	.000

§ 421.134 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Subpart M - Battery Cracking.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	1.299	.579
Arsenic	.936	.384
Lead	.189	.087
Zinc	.687	.283
Ammonia (as N)	.000	.000
Total suspended solids	10.100	8.076
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Subpart M - Blast, Reverberatory, or Rotary Furnace Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	5.038	2.245
Arsenic	3.628	1.488

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	.731	.339
Zinc	2.662	1.096
Ammonia (as N)	0.000	0.000
Total suspended solids	39.150	31.320
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Subpart M - Kettle Wet Air Pollution Control.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from refining	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Subpart M - Lead Paste Desulfurization.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead processed through desulfurization	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Subpart M - Casting Contact Cooling.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead cast	
Antimony	.042	.019
Arsenic	.031	.013
Lead	.006	.003
Zinc	.022	.009
Ammonia (as N)	.000	.000
Total suspended solids	.330	.264
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Subpart M - Truck Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.041	.018
Arsenic	.029	.012
Lead	.006	.003
Zinc	.021	.009
Ammonia (as N)	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	.315	.252
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Subpart M - Facility Washdown.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Subpart M - Battery Case Classification.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000
Total suspended solids	.000	.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Subpart M - Employee Handwash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.052	.023
Arsenic	.038	.015
Lead	.008	.004
Zinc	.028	.011
Ammonia (as N)	.000	.000
Total suspended solids	.405	.324
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Subpart M - Employee Respirator Wash.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.085	.038
Arsenic	.061	.025
Lead	.012	.006
Zinc	.045	.018
Ammonia (as N)	.000	.000
Total suspended solids	.660	.528
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Subpart M - Laundering of Uniforms.

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.247	.110
Arsenic	.178	.073
Lead	.036	.017
Zinc	.131	.054
Ammonia (as N)	.000	.000
Total suspended solids	1.920	1.536
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[49 FR 8826, Mar. 8, 1984, as amended at 49 FR 29795, July 24, 1984]

§ 421.135 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary lead process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart M - Battery Cracking.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	1.299	.579
Arsenic	.936	.384
Lead	.189	.087
Zinc	.687	.283
Ammonia (as N)	.000	.000

(b) Subpart M - Blast, Reverberatory, or Rotary Furnace Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	5.038	2.245
Arsenic	3.628	1.488
Lead	.731	.339
Zinc	2.662	1.096
Ammonia (as N)	.000	.000

(c) Subpart M - Kettle Wet Air Pollution Control.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from refining	
Antimony	.087	.039
Arsenic	.063	.026
Lead	.013	.006
Zinc	.046	.019
Ammonia (as N)	.000	.000

(d) Subpart M - Lead Paste Desulfurization.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead processed through desulfurization	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(e) Subpart M - Casting Contact Cooling.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead cast	
Animony	.042	.019
Arsenic	.031	.013
Lead	.006	.003
Zinc	.022	.009
Ammonia (as N)	.000	.000

(f) Subpart M - Truck Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.041	.018
Arsenic	.029	.012
Lead	.006	.003
Zinc	.021	.009
Ammonia (as N)	.000	.000

(g) Subpart M - Facility Washdown.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000

(h) Subpart M - Battery Case Classification.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart M - Employee Handwash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.052	.023
Arsenic	.038	.015
Lead	.008	.004
Zinc	.028	.011
Ammonia (as N)	.000	.000

(j) Subpart M - Employee Respirator Wash.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.085	.038

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	.061	.025
Lead	.012	.006
Zinc	.045	.018
Ammonia (as N)	.000	.000

(k) Subpart M - Laundering of Uniforms.

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.247	.110
Arsenic	.178	.073
Lead	.036	.017
Zinc	.131	.054
Ammonia (as N)	.000	.000

§ 421.136 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary lead process wastewater introduced into a POTW shall not exceed the following values:

(a) Subpart M - Battery Cracking.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	1.299	.579
Arsenic	.936	.384
Lead	.189	.087
Zinc	.687	.283
Ammonia (as N)	.000	.000

(b) Subpart M - Blast, Reverberatory, or Rotary Furnace Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	5.038	2.245
Arsenic	3.628	1.488
Lead	.731	.339
Zinc	2.662	1.096
Ammonia (as N)	.000	.000

(c) Subpart M - Kettle Wet Air Pollution Control.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from refining	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(d) Subpart M - Lead Paste Desulfurization.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead processed through desulfurization	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(e) Subpart M - Casting Contact Cooling.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead cast	
Antimony	.042	.019
Arsenic	.031	.013
Lead	.006	.003
Zinc	.022	.009
Ammonia (as N)	.000	.000

(f) Subpart M - Truck Wash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.041	.018
Arsenic	.029	.012
Lead	.006	.003
Zinc	.021	.009
Ammonia (as N)	.000	.000

(g) Subpart M - Facility Washdown.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	.000	.000

(h) Subpart M - Battery Case Classification.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead scrap produced	
Antimony	.000	.000
Arsenic	.000	.000
Lead	.000	.000
Zinc	.000	.000
Ammonia (as N)	.000	.000

(i) Subpart M - Employee Handwash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.052	.023
Arsenic	.038	.015
Lead	.008	.004
Zinc	.028	.011
Ammonia (as N)	.000	.000

(j) Subpart M - Employee Respirator Wash.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.085	.038

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	.061	.025
Lead	.012	.006
Zinc	.045	.018
Ammonia (as N)	.000	.000

(k) Subpart M - Laundering of Uniforms.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of lead produced from smelting	
Antimony	.247	.110
Arsenic	.178	.073
Lead	.036	.017
Zinc	.131	.054
Ammonia (as N)	.000	.000

§ 421.137 [Reserved]

Subpart N - Primary Antimony Subcategory

Source: 50 FR 38345, Sept. 20, 1985, unless otherwise noted.

§ 421.140 Applicability: Description of the primary antimony subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of antimony at primary antimony facilities.

§ 421.141 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.142 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

(a) Sodium Antimonate Autoclave Wastewater.

BPT Limitations for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony contained in sodium antimonate product	
Antimony	44.840	20.000
Arsenic	32.650	14.530
Mercury	3.906	1.562
Total suspended solids	640.600	304.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Fouled anolyte.

BPT Limitations for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	44.840	20.000
Arsenic	32.650	14.530
Mercury	3.906	1.562
Total suspended solids	640.600	304.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Cathode Antimony Wash Water.

BPT Limitations for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	89.680	40.000
Arsenic	65.310	29.060

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Mercury	7.812	3.125
Total suspended solids	1,281.000	609.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.143 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Sodium Antimonate Autoclave Wastewater.

BAT Limitations for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony contained in sodium antimonate product	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937

(b) Fouled Anolyte.

BAT Limitations for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg pounds per million pounds of antimony metal produced by electrowinning	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937

(c) Cathode Antimony Wash Water

BAT Limitations for the Primary Antimony Subcategory

Pollutant of pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	60.310	26.870
Arsenic	43.430	19.370
Mercury	4.687	1.875

§ 421.144 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Sodium Antimonate Autoclave Wastewater.

NSPS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony contained in sodium antimonate product	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937
Total suspended solids	234.400	187.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Fouled Anolyte.

NSPS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937
Total suspended solids	234.400	187.500

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Cathode Antimony Wash Water.

NSPS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	60.310	26.870
Arsenic	43.430	19.370
Mercury	4.687	1.875
Total suspended solids	468.700	375.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.145 [Reserved]

§ 421.146 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary antimony process wastewater introduced into a POTW shall not exceed the following values:

(a) Sodium Antimonate Autoclave Wastewater.

PSNS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony contained in sodium antimonate product	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937

(b) Fouled Anolyte.

PSNS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	30.150	13.440
Arsenic	21.720	9.687
Mercury	2.344	0.937

(c) Cathode Antimony Washwater.

PSNS for the Primary Antimony Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of antimony metal produced by electrowinning	
Antimony	60.310	26.870
Arsenic	43.430	19.370
Mercury	4.687	1.875

§ 421.147 [Reserved]

Subpart O - Primary Beryllium Subcategory

Source: 50 FR 38346, Sept. 20, 1985, unless otherwise noted.

§ 421.150 Applicability: Description of the primary beryllium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of beryllium by primary beryllium facilities processing beryllium ore concentrates or beryllium hydroxide raw materials.

§ 421.151 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Solvent Extraction Raffinate from Bertrandite Ore.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from bertrandite ore as beryllium	
Beryllium	2,763.000	1,235.000
Chromium (total)	988.200	404.300
Copper	4,267.000	2,246.000
Cyanide (total)	651.300	269.500
Ammonia (as N)	299,400.000	131,600.000
Fluoride	78,610.000	44,700.000
Total suspended solids	92,090.000	43,800.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times

(b) Solvent Extraction Raffinate from Beryl Ore.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from beryl ore as beryllium	
Beryllium	270.6	121.0
Chromium (total)	96.8	39.6
Copper	418.0	220.0
Cyanide (total)	63.8	26.4
Ammonia (as N)	29,330.0	12,890.0
Fluoride	7,700.0	4,378.0
Total suspended solids	9,020.0	4,290.0
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Beryllium Carbonate Filtrate.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced as beryllium	
Beryllium	263.800	118.000
Chromium (total)	94.380	38.610
Copper	407.600	214.500
Cyanide (total)	62.210	25.740
Ammonia (as N)	28,590.000	12,570.000
Fluoride	7,508.000	4,269.000
Total suspended	8,795.000	4,183.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Beryllium Hydroxide Filtrate.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced as beryllium	
Beryllium	167.280	74.800
Chromium (Total)	59.840	24.480
Copper	258.400	136.000
Cyanide (Total)	39.440	16.320
Ammonia (as N)	18128.800	7969.600
Fluoride	4760.000	2706.400
Total Suspended Solids	5576.000	2652.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Beryllium Oxide Calcining Furnace Wet Air Pollution Control.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium oxide produced	
Beryllium	324.000	145.000
Chromium (total)	116.000	47.470
Copper	501.000	263.700
Cyanide (total)	76.470	31.640
Ammonia (as N)	35,150.000	15,450.000
Fluoride	9,230.000	5,248.000
Total suspended solids	10,810.000	5,142.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Beryllium hydroxide supernatant.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced from scrap and residues as beryllium	
Beryllium	282.9	126.5
Chromium (total)	101.2	41.4
Copper	437.0	230.0
Cyanide (total)	66.7	27.6
Ammonia (as N)	30,660.0	13,480.0
Fluoride	160,308.0	71,201.0
Total suspended solids	9,430.0	4,485.0
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Process water.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	215.00	96.14
Chromium (total)	76.91	31.46
Copper	332.10	174.80
Cyanide (total)	50.69	20.98
Ammonia (as N)	23,300.00	10,240.00
Fluoride	6,118.00	3,479.00
Total suspended solids	7,167.00	3,409.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Fluoride furnace scrubber.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Chip treatment wastewater.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium scrap chips treated	
Beryllium	9.533	4.263
Chromium (total)	3.410	1.395
Copper	14.730	7.750
Cyanide (total)	2.248	0.930
Ammonia (as N)	1,033.000	454.200
Fluoride	271.300	154.200
Total suspended solids	317.800	151.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Beryllium Pebble Plant Area Vent Wet Air Pollution Control.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	[1]	[1]

[1]Within the range of 7.5 to 10.0 at all times.

(k) Beryl Ore Gangue Dewatering.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	1.283	0.574
Chromium (Total)	0.459	0.188
Copper	1.982	1.043
Cyanide (Total)	0.302	0.125
Ammonia (as N)	139.032	61.120
Fluoride	36.505	20.756
Total Suspended Solids	42.763	20.339
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Bertrandite Ore Gangue Dewatering.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of bertrandite ore processed	
Beryllium	3.279	1.466
Chromium (Total)	1.173	0.480
Copper	5.064	2.665
Cyanide (Total)	0.773	0.320
Ammonia (as N)	355.245	156.169
Fluoride	93.275	53.034
Total Suspended Solids	109.265	51.968
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Beryl Ore Processing.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Beryllium	8.983	4.017
Chromium (Total)	3.213	1.315
Copper	13.876	7.303
Cyanide (Total)	2.118	0.876
Ammonia (as N)	973.490	427.956
Fluoride	255.605	145.330
Total Suspended Solids	299.423	142.409
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Aluminum Iron Sludge (AIS) Area Wastewater.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total beryllium carbonate produced as beryllium	
Beryllium	575.640	257.400
Chromium (Total)	205.920	84.240
Copper	889.200	468.000
Cyanide (Total)	135.720	56.160
Ammonia (as N)	62384.400	27424.800
Fluoride	16380.000	9313.200
Total Suspended Solids	19188.000	9126.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Bertrandite Ore Leaching Scrubber.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Beryllium	1.859	0.831
Chromium (Total)	0.665	0.272
Copper	2.871	1.511
Cyanide (Total)	0.438	0.181
Ammonia (as N)	201.416	88.545
Fluoride	52.885	30.069
Total Suspended Solids	61.951	29.465
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(p) Bertrandite Ore Countercurrent and Decantation (CCD) Scrubber.

BPT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	0.124	0.056
Chromium (Total)	0.044	0.018
Copper	0.192	0.101
Cyanide (Total)	0.029	0.012
Ammonia (as N)	13.463	5.919
Fluoride	3.535	2.010
Total Suspended Solids	4.141	1.970
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38346, Sept. 20, 1985, as amended at 55 FR 31697, Aug. 3, 1990; 55 FR 36932, Sept. 7, 1990]

§ 421.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Solvent extraction raffinate from bertrandite ore.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from bertrandite ore as beryllium	
Beryllium	1,842.000	831.000
Chromium (total)	831.000	336.900
Copper	2,875.000	1,370.000
Cyanide (total)	449.200	179.700
Ammonia (as N)	299,400.000	131,600.000
Fluoride	78,610.000	44,700.000

(b) Solvent extraction raffinate from beryl ore.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from beryl ore as beryllium	
Beryllium	180.4	81.4
Chromium (total)	81.4	33.0
Copper	281.6	134.2
Cyanide (total)	44.0	17.6
Ammonia (as N)	29,330.0	12,890.0
Fluoride	7,700.0	4,378.0

(c) Beryllium carbonate filtrate.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced as beryllium	
Beryllium	175.900	79.370
Chromium (total)	79.370	32.180

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	274.600	130.800
Cyanide (total)	42.900	17.160
Ammonia (as N)	28,590.000	12,570.000
Fluoride	7,508.000	4,269.000

(d) Beryllium Hydroxide Filtrate.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced as beryllium	
Beryllium	111.520	50.320
Chromium (Total)	50.320	20.400
Copper	174.080	82.960
Cyanide (Total)	27.200	10.880
Ammonia (as N)	18128.800	7969.600
Fluoride	4760.000	2706.400

(e) Beryllium oxide calcining furnace wet air pollution control.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium oxide produced	
Beryllium	216.20	97.57
Chromium (total)	97.57	39.56
Copper	337.50	160.90
Cyanide (total)	52.74	21.10
Ammonia (as N)	35,150.00	15,450.00
Fluoride	9,230.00	5,248.00

(f) Beryllium hydroxide supernatant.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced from scrap and residues as beryllium	
Beryllium	188.6	85.1
Chromium (total)	85.1	34.5
Copper	294.4	140.3
Cyanide (total)	46.0	18.4
Ammonia (as N)	30,660.0	13,480.0
Fluoride	160,308.0	71,201.0

(g) Process water.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	143.30	64.68
Chromium (total)	64.68	26.22
Copper	223.70	106.60
Cyanide (total)	34.96	13.98
Ammonia (as N)	23,300.00	10,240.00
Fluoride	6,118.00	3,479.00

(h) Fluoride furnace scrubber.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000

(i) Chip treatment wastewater.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium scrap chips treated	
Beryllium	6.355	2.868
Chromium (total)	2.868	1.163
Copper	9.920	4.728
Cyanide (total)	1.550	0.620
Ammonia (as N)	1,033.000	454.200
Fluoride	271.300	154.200

(j) Beryllium pebble plant area vent wet air pollution control.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000

(k) Beryl Ore Gangue Dewatering.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	0.855	0.386
Chromium (Total)	0.386	0.156
Copper	1.335	0.636
Cyanide (Total)	0.209	0.083
Ammonia (as N)	139.032	61.120
Fluoride	36.505	20.756

(l) Bertrandite Ore Gangue Dewatering.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of bertrandite ore processed	
Beryllium	2.185	0.986
Chromium (Total)	0.986	0.400
Copper	3.411	1.626
Cyanide (Total)	0.533	0.213
Ammonia (as N)	355.245	156.169
Fluoride	93.275	53.034

(m) Beryl Ore Processing.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	5.988	2.702
Chromium (Total)	2.702	1.095
Copper	9.348	4.455
Cyanide (Total)	1.461	0.584
Ammonia (as N)	973.490	427.956

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	255.605	145.330

(n) Alumium Iron Sludge (AIS) Area Wastewater.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total beryllium carbonate produced as beryllium	
Beryllium	383.760	173.160
Chromium (Total)	173.160	70.200
Copper	599.040	285.480
Cyanide (Total)	93.600	37.440
Ammonia (as N)	62384.400	27424.800
Fluoride	16380.000	9313.200

(o) Bertrandite Ore Leaching Scrubber.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	1.239	0.559
Chromium (Total)	0.559	0.227
Copper	1.934	0.922
Cyanide (Total)	0.302	0.121
Ammonia (as N)	201.416	88.545
Fluoride	52.885	30.069

(p) Bertrandite Ore Countercurrent and Decantation (CCD) Scrubber.

BAT Limitations for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	0.083	0.037

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (Total)	0.037	0.015
Copper	0.129	0.062
Cyanide (Total)	0.020	0.008
Ammonia (as N)	13.463	5.919
Fluoride	3.535	2.010

[50 FR 38346, Sept. 20, 1985, as amended at 55 FR 31698, Aug. 3, 1990]

§ 421.154 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Solvent extraction raffinate from bertrandite ore.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds million pounds) of beryllium carbonate produced from bertrandite ore as beryllium	
Beryllium	1,842.000	831.000
Chromium (total)	831.000	336.900
Copper	2,875.000	1,370.000
Cyanide (total)	449.200	179.700
Ammonia (as N)	299,400.000	131,600.000
Fluoride	78,610.000	44,700.000
Total Suspended solids	33,690.000	26,950.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Solvent extraction raffinate from beryl ore.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from beryl ore as beryllium	
Beryllium	180.4	81.4
Chromium (total)	81.4	33.0
Copper	281.6	134.2
Cyanide (total)	44.0	17.6
Ammonia (as N)	29,330.0	12,890.0
Fluoride	7,700.0	4,378.0
Total Suspended solids	3,300.0	2,640.0
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Beryllium carbonate filtrate.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced as beryllium	
Beryllium	175.900	79.370
Chromium (total)	79.370	32.180
Copper	274.600	130.800
Cyanide (total)	42.900	17.160
Ammonia (as N)	28,590.000	12,579.000
Fluoride	7,508.000	4,269.000
Total Suspended solids	3,218.000	2,574.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Beryllium hydroxide filtrate.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced as beryllium	
Beryllium	111.520	50.320
Chromium (Total)	50.320	20.400
Copper	174.080	82.960
Cyanide (Total)	27.200	10.880
Ammonia (as N)	18128.800	7969.600
Fluoride	4760.000	2706.400
Total Suspended Solids	2040.000	1632.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Beryllium oxide calcining furnace wet air pollution control.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium oxide produced	
Beryllium	216.20	97.57
Chromium (total)	95.57	39.56
Copper	337.50	160.90
Cyanide (total)	52.74	21.10
Ammonia (as N)	35,150.00	15,450.00
Fluoride	9,230.00	5,248.00
Total suspended solids	3,956.00	3,164.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Beryllium hydroxide supernatant.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced from scrap and residues as beryllium	
Beryllium	188.6	85.1
Chromium (total)	85.1	34.5
Copper	294.4	140.3
Cyanide (total)	46.0	18.4
Ammonia (as N)	30,660.0	13,480.0
Fluoride	160,308.0	71,201.0
Total Suspended solids	3,450.0	2,760.0
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Process water.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	143.30	64.68
Chromium (total)	64.68	26.22
Copper	223.70	106.60
Cyanide (total)	34.96	13.98
Ammonia (as N)	23,300.00	10,240.00
Fluoride	6,118.00	3,479.00
Total suspended solids	2,622.00	2,098.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Fluoride furnace scrubber.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Chip treatment wastewater.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium scrap chips treated	
Beryllium	6.355	2.868
Chromium (total)	2.868	1.163
Copper	9.920	4.728
Cyanide (total)	1.550	0.620
Ammonia (as N)	1,033.000	454.200
Fluoride	271.300	154.200
Total suspended solids	116.300	93.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Beryllium pebble plant area vent wet air pollution control.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Beryl Ore Gangue Dewatering.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	0.855	0.386
Chromium (Total)	0.386	0.156
Copper	1.335	0.636
Cyanide (Total)	0.209	0.083
Ammonia (as N)	139.032	61.120
Fluoride	36.505	20.756
Total Suspended Solids	15.645	12.516
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Bertrandite Ore Gangue Dewatering.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of bertrandite ore processed	
Beryllium	2.185	0.986
Chromium (Total)	0.986	0.400
Copper	3.411	1.626
Cyanide (Total)	0.533	0.213
Ammonia (as N)	355.245	156.169
Fluoride	93.275	53.034
Total Suspended Solids	39.975	31.980
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Beryl Ore Processing.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	5.988	2.702
Chromium (Total)	2.702	1.095
Copper	9.348	4.455
Cyanide (Total)	1.461	0.584
Ammonia (as N)	973.490	427.956
Fluoride	255.605	145.330
Total Suspended Solids	109.545	87.636
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Aluminum Iron Sludge (AIS) Area Wastewater.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total beryllium carbonate produced as beryllium	
Beryllium	383.760	173.160
Chromium (Total)	173.160	70.200
Copper	599.040	285.480
Cyanide (Total)	93.600	37.440
Ammonia (as N)	62384.400	27424.800
Fluoride	16380.000	9313.200
Total Suspended Solids	7020.000	5616.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Bertrandite Ore Leaching Scrubber.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	1.239	0.559
Chromium (Total)	0.559	0.227
Copper	1.934	0.922
Cyanide (Total)	0.302	0.121
Ammonia (as N)	201.416	88.545
Fluoride	52.885	30.069
Total Suspended Solids	22.665	18.132
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(p) Bertrandite Ore Countercurrent and Decantation (CCD) Scrubber.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	0.083	0.037
Chromium (Total)	0.037	0.015
Copper	0.129	0.062
Cyanide (Total)	0.020	0.008
Ammonia (as N)	13.463	5.919
Fluoride	3.535	2.010
Total Suspended Solids	1.515	1.212
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38346, Sept. 20, 1985, as amended at 55 FR 31699, Aug. 3, 1990]

§ 421.155 [Reserved]

§ 421.156 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary beryllium process wastewater introduced into a POTW shall not exceed the following values:

(a) Solvent extraction raffinate from bertrandite ore.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from bertrandite ore as beryllium	
Beryllium	1,842.000	831.000
Chromium (total)	831.000	336.900
Copper	2,875.000	1,370.000
Cyanide (total)	449.200	179.700
Ammonia (as N)	299,400.000	131.600.000
Fluoride	78,610.000	44,700.000

(b) Solvent extraction raffinate from beryl ore.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced from beryl ore as beryllium	
Beryllium	180.4	81.4
Chromium (total)	81.4	33.0
Copper	281.6	134.2
Cyanide (total)	44.0	17.6
Ammonia (as N)	29.330.0	12,890.0
Fluoride	7,700.0	4,378.0

(c) Beryllium carbonate filtrate.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium carbonate produced as beryllium	
Beryllium	175.900	79.370
Chromium (total)	79.370	32.180
Copper	274.600	130.800
Cyanide (total)	42.900	17.160
Ammonia (as N)	28,590.000	12,570.000
Fluoride	7,508.000	4,269,000

(d) Beryllium Hydroxide Filtrate.

NSPS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced as beryllium	
Beryllium	111.510	50.320
Chromium (Total)	50.320	20.400

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	174.080	82.960
Cyanide (Total)	27.200	10.880
Ammonia (as N)	18128.800	7969.600
Fluoride	4760.000	2706.400

(e) Beryllium oxide calcining furnace wet air pollution control.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium oxide produced	
Beryllium	216.20	97.57
Chromium (total)	97.57	39.56
Copper	337.50	160.90
Cyanide (total)	52.74	21.10
Ammonia (as N)	35,150.00	15,450.00
Fluoride	9,230.00	5,248.00

(f) Beryllium hydroxide supernatant

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryllium hydroxide produced from scrap and residues as beryllium	
Beryllium	188.6	85.1
Chromium (total)	85.1	34.5
Copper	294.4	140.3
Cyanide (total)	46.0	18.4
Ammonia (as N)	30,660.0	13,480.0
Fluoride	160,308.0	71,201.0

(g) Process water.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg pounds per million pounds of beryllium pebbles produced	
Beryllium	143.30	64.68
Chromium (total)	64.68	26.22
Copper	223.70	106.60
Cyanide (total)	34.96	13.98
Ammonia (as N)	23,300.00	10,240.00
Fluoride	6,118.00	3,479.00

(h) Fluoride furnace scrubber.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg pounds per million pounds of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000

(i) Chip treatment wastewater.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg pounds per million pounds of beryllium scrap chips treated	
Beryllium	6.355	2.868
Chromium (total)	2.868	1.163
Copper	9.920	4.728

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (total)	1.550	0.620
Ammonia (as N)	1,033.000	454.200
Fluoride	271.300	154.200

(j) Beryllium pebble plant area vent wet air pollution control

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg pounds per million pounds of beryllium pebbles produced	
Beryllium	0.000	0.000
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Ammonia (as N)	0.000	0.000
Fluoride	0.000	0.000

(k) Beryl Ore Gangue Dewatering.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	0.855	0.386
Chromium (Total)	0.386	0.156
Copper	1.335	0.636
Cyanide (Total)	0.209	0.083
Ammonia (as N)	139.032	61.120
Fluoride	36.505	20.756

(l) Bertrandite Ore Gangue Dewatering.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of bertrandite ore processed	
Beryllium	2.185	0.986
Chromium (Total)	0.986	0.400
Copper	3.411	1.626
Cyanide (Total)	0.533	0.213
Ammonia (as N)	355.245	156.169
Fluoride	93.275	53.034

(m) Beryl Ore Processing.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of beryl ore processed	
Beryllium	5.988	2.702
Chromium (Total)	2.702	1.095
Copper	9.348	4.455
Cyanide (Total)	1.461	0.584
Ammonia (as N)	973.490	427.956
Fluoride	255.605	145.330

(n) Aluminum Iron Sludge (AIS) Area Wastewater.

PSNS for the Primary Berryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total beryllium carbonate produced as beryllium	
Beryllium	383.760	173.160
Chromium (Total)	173.160	70.200
Copper	599.040	285.480
Cyanide (Total)	93.600	37.440
Ammonia (as N)	62384.400	27424.800

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	16380.000	9313.200

(o) Bertrandite Ore Leaching Scrubber.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	1.239	0.559
Chromium (Total)	0.559	0.227
Copper	1.934	0.922
Cyanide (Total)	0.302	0.121
Ammonia (as N)	201.416	88.545
Fluoride	52.885	30.069

(p) Bertrandite Ore Countercurrent and Decantation (CCD) Scrubber.

PSNS for the Primary Beryllium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg of bertrandite ore processed	
Beryllium	0.083	0.037
Chromium (Total)	0.037	0.015
Copper	0.129	0.062
Cyanide (Total)	0.020	0.008
Ammonia (as N)	13.463	5.919
Fluoride	3.535	2.010

[50 FR 38346, Sept. 20, 1985, as amended at 55 FR 31700, Aug. 3, 1990]

§ 421.157 [Reserved]

Subpart P - Primary and Secondary Germanium and Gallium Subcategory

Source: 50 FR 38350, Sept. 20, 1985, unless otherwise noted.

§ 421.180 Applicability: Description of the primary and secondary germanium and gallium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of germanium or gallium from primary and secondary germanium and gallium facilities.

§ 421.181 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Still liquor.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	131.700	58.590
Lead	26.460	12.600
Zinc	91.980	38.430
Fluoride	2,205.000	1,254.000
Total suspended solids	2,583.000	1,229.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Chlorinator wet air pollution control.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	27.530	12.250
Lead	5.531	2.634
Zinc	19.230	8.034
Fluoride	461.000	262.100
Total suspended solids	540.000	256.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Germanium hydrolysis filtrate.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium hydrolyzed	
Arsenic	39.440	17.550
Lead	7.925	3.774
Zinc	27.550	11.510
Fluoride	660.500	375.500
Total suspended solids	773.700	368.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Acid wash and rinse water.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium washed	
Arsenic	325.500	144.800
Lead	65.400	31.140
Zinc	227.400	94.990
Fluoride	5,450.000	3,099.000
Total suspended solids	6,385.000	3,037.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Gallium hydrolysis filtrate.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium hydrolyzed	
Arsenic	70.450	31.350

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	14.160	6.742
Zinc	49.220	20.560
Fluoride	1,180.000	670.800
Total suspended solids	1,382.000	657.300
pH	([1])	[1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Solvent extraction raffinate.

BPT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium produced by solvent extraction	
Arsenic	39.330	17.500
Lead	7.904	3.764
Zinc	27.480	11.480
Fluoride	658.700	374.500
Total suspended solids	771.600	367.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Still liquor.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	131.700	58.590
Lead	26.460	12.600

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	91.980	38.430
Fluoride	2,205.000	1,254.000

(b) Chlorinator wet air pollution control.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	27.530	12.250
Lead	5.531	2.634
Zinc	19.230	8.034
Fluoride	461.000	262.100

(c) Germanium hydrolysis filtrate.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium hydrolyzed	
Arsenic	39.440	17.550
Lead	7.925	3.774
Zinc	27.550	11.510
Fluoride	660.500	375.500

(d) Acid wash and rinse water.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium washed	
Arsenic	325.50	144.80
Lead	65.40	31.14
Zinc	227.40	94.99
Fluoride	5,450.00	3,099.00

(e) Gallium hydrolysis filtrate.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium hydrolyzed	
Arsenic	70.450	31.350
Lead	14.160	6.742
Zinc	49.220	20.560
Fluoride	1,180.000	670.800

(f) Solvent extraction raffinate.

BAT Limitations for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium produced by solvent extraction	
Arsenic	39.330	17.500
Lead	7.904	3.764
Zinc	27.480	11.480
Fluoride	658.700	374.500

§ 421.184 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Still liquor.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	131.70	58.59
Lead	26.46	12.60
Zinc	91.98	38.43
Fluoride	2,205.00	1,254.00
Total suspended solids	2,583.00	1,229.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Chlorinator wet air pollution control.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	27.530	12.250
Lead	5.531	2.634
Zinc	19.230	8.034
Fluoride	461.000	262.100
Total suspended solids	540.000	256.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Germanium hydrolysis filtrate.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for 1 one day	Maximum for monthly average
	mg/kg pounds per million pounds) of germanium hydrolyzed	
Arsenic	39.440	17.550
Lead	7.925	3.774
Zinc	27.550	11.510
Fluoride	660.500	375.500
Total suspended solids	773.700	368.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Acid wash and rinse water.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium washed	
Arsenic	325.50	144.80

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	65.40	31.14
Zinc	227.40	94.99
Fluoride	5,450.00	3,099.00
Total suspended solids	6,385.00	3,037.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Gallium hydrolysis filtrate.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium hydrolyzed	
Arsenic	70.450	31.350
Lead	14.160	6.742
Zinc	49.220	20.560
Fluoride	1,180.000	670.800
Total suspended solids	1,382.000	657.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Solvent extraction raffinate.

NSPS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium produced by solvent extraction	
Arsenic	39.330	17.500
Lead	7.904	3.764
Zinc	27.480	11.480
Fluoride	658.700	374.500
Total suspended solids	771.600	367.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.185 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary and secondary germanium and gallium process wastewater introduced into a POTW must not exceed the following values:

(a) Still liquor.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	131.70	58.59
Lead	26.46	12.60
Zinc	91.98	38.43
Fluoride	2,205.00	1,254.00

(b) Chlorinator wet air pollution control.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium chlorinated	
Arsenic	27.530	12.250
Lead	5.531	2.634
Zinc	19.230	8.034
Fluoride	461.000	262.100

(c) Germanium hydrolysis filtrate.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium hydrolyzed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	39.440	17.550
Lead	7.925	3.774
Zinc	27.550	11.510
Fluoride	660.500	375.500

(d) Acid wash and rinse water.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of germanium washed	
Arsenic	325.50	144.80
Lead	65.40	31.14
Zinc	227.40	94.99
Fluoride	5,450.00	3,099.00

(e) Gallium hydrolysis filtrate.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium hydrolyzed	
Arsenic	70.450	31.350
Lead	14.160	6.742
Zinc	49.220	20.560
Fluoride	1,180.000	670.800

(f) Solvent extraction raffinate.

PSES for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium produced by solvent extraction	
Arsenic	39.330	17.500
Lead	7.904	3.764

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	27.480	11.480
Fluoride	658.700	374.500

§ 421.186 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary and secondary germanium and gallium process wastewater introduced into a POTW shall not exceed the following values:

(a) Still Liquor.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds of germanium chlorinated	
Arsenic	131.70	58.59
Lead	26.46	12.60
Zinc	91.98	38.43
Fluoride	2,205.00	1,254.00

(b) Chlorinator Wet Air Pollution Control.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds of germanium chlorinated	
Arsenic	27.530	12.250
Lead	5.531	2.634
Zinc	19.230	8.034
Fluoride	461.000	262.100

(c) Germanium Hydrolysis Filtrate.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds of germanium hydrolyzed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	39.440	17.550
Lead	7.925	3.774
Zinc	27.550	11.510
Fluoride	660.500	375.500

(d) Acid Wash and Rinse Water.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds of germanium washed	
Arsenic	325.50	144.80
Lead	65.40	31.14
Zinc	227.40	94.99
Fluoride	5,450.00	3,099.00

(e) Gallium Hydrolysis Filtrate.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium hydrolyzed	
Arsenic	70.450	31.350
Lead	14.160	6.742
Zinc	49.220	20.560
Fluoride	1,180.000	670.800

(f) Solvent Extraction Raffinate.

PSNS for the Primary and Secondary Germanium and Gallium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of gallium produced by solvent extraction	
Arsenic	39.330	17.500
Lead	7.904	3.764

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	27.480	11.480
Fluoride	658.700	374.500

§ 421.187 [Reserved]

Subpart Q - Secondary Indium Subcategory

Source: 50 FR 38353, Sept. 20, 1985, unless otherwise noted.

§ 421.190 Applicability: Description of the secondary indium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of indium at secondary indium facilities processing spent electrolyte solutions and scrap indium metal raw materials.

§ 421.191 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§§ 421.192-421.193 [Reserved]

§ 421.194 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Displacement Supernatant.

NSPS for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of indium metal produced	
Cadmium	2.105	0.929
Lead	2.600	1.238
Zinc	9.037	3.776
Indium	2.724	1.114
Total suspended solids	253.800	120.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Spent Electrolyte.

NSPS for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode indium produced	
Cadmium	12.170	5.370
Lead	15.040	7.160
Zinc	52.270	21.840
Indium	15.750	6.444
Total suspended solids	1,468.000	698.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.195 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary indium process wastewater introduced into a POTW must not exceed the following values:

(a) Displacement Supernatant.

PSES for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of indium metal produced	
Cadmium	2.105	0.929
Lead	2.600	1.238
Zinc	9.037	3.776
Indium	2.724	1.114

(b) Spent Electrolyte.

PSES for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode indium produced	
Cadmium	12.170	5.370
Lead	15.040	7.160
Zinc	52.270	21.840

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Indium	15.750	6.444

§ 421.196 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary indium process wastewater introduced into a POTW should not exceed the following values:

(a) Displacement Supernatant.

PSNS for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of indium metal produced	
Cadimum	2.105	0.929
Lead	2.600	1.238
Zinc	9.037	3.776
Indium	2.724	1.114

(b) Spent Electrolyte.

PSNS for the Secondary Indium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode indium produced	
Cadmium	12.170	5.370
Lead	15.040	7.160
Zinc	52.270	21.840
Indium	15.750	6.444

§ 421.197 [Reserved]

Subpart R - Secondary Mercury Subcategory

Source: 50 FR 38354, Sept. 20, 1985, unless otherwise noted.

§ 421.200 Applicability: Description of the secondary mercury subcategory.

The provision of this subpart are applicable to discharges resulting from the production of mercury from secondary mercury facilities processing recycled mercuric oxide batteries and other mercury containing scrap raw materials.

§ 421.201 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§§ 421.202-421.203 [Reserved]

§ 421.204 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Spent battery electrolyte.

NSPS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury produced from batteries	
Lead	0.030	0.014
Mercury	0.016	0.006
Total suspended solids	1.590	1.272
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Acid wash and rinse water.

NSPS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury washed and rinsed	
Lead	0.00056	0.00026
Mercury	0.00030	0.00012
Total suspended solids	0.03000	0.02400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Furnace wet air pollution control.

NSPS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury processed through furnace	
Lead	0.000	0.000
Mercury	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.205 [Reserved]

§ 421.206 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary mercury process wastewater introduced into a POTW shall not exceed the following values:

(a) Spent battery electrolyte.

PSNS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury produced from batteries	
Lead	0.030	0.014
Mercury	0.016	0.006

(b) Acid wash and rinse water.

PSNS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury washed and rinsed	
Lead	0.00056	0.00026
Mercury	0.00030	0.00012

(c) Furnance wet air pollution control.

PSNS for the Secondary Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds of mercury processed through furnace	
Lead	0.000	0.000
Mercury	0.000	0.000

§ 421.207 [Reserved]

Subpart S - Primary Molybdenum and Rhenium Subcategory

Source: 50 FR 38355, Sept. 20, 1985, unless otherwise noted.

§ 421.210 Applicability: Description of the primary molybdenum and rhenium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of molybdenum and rhenium facilities.

§ 421.211 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitation representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Molybdenum sulfide leachate.

BPT Limitations for the Primary Molybdenum Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide leached	
Arsenic	0.968	0.431
Lead	0.195	0.093
Nickle	0.889	0.588
Selenium	0.570	0.255
Molybdenum	[Reserved]	[Reserved].

Pollutant or pollutant property	Maximum for any 1 day	Maximum monthly average
Ammonia (as N)	61.720	27.130
Fluoride	16.210	9.214
Total suspended solids	18.980	9.029
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Roaster SO_2 scrubber.

BPT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant of pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	
Arsenic	3.509	1.561
Lead	0.705	0.336
Nickel	3.224	2.133
Selenium	2.065	0.924
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	223.800	98.390
Fluoride	58.770	33.410
Total suspended solids	68.840	32.740
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Molybdic oxide leachate.

BPT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum contained in molybdic oxide leached	
Arsenic	24.210	10.770
Lead	4.865	2.317

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	22.240	14.710
Selenium	14.250	6.371
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	1,544.000	678.800
Fluoride	405.400	230.500
Total suspended solids	474.900	225.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Hydrogen reduction furnace scrubber.

BPT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum metal powder produced	
Arsenic	47.860	21.300
Lead	9.617	4.580
Nickel	43.970	29.080
Selenium	28.170	12.600
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	3,052.000	1,342.000
Fluoride	801.400	455.700
Total suspended solids	938.800	446.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Depleted rhenium scrubbing solution.

BPT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	1.497	0.666
Lead	0.301	0.143
Nickel	1.375	0.909
Selenium	0.881	0.394
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	95.440	41.960
Fluoride	25.060	14.250
Total suspended solids	29.360	13.960
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38355, Sept. 20, 1985, as amended at 55 FR 31701, Aug. 3, 1990]

§ 421.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Molybdenum sulfide leachate.

BAT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds million pounds) of molybdenum sulfide leached	
Arsenic	0.644	0.287
Lead	0.130	0.060
Nickel	0.255	0.171
Selenium	0.380	0.171
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	61.720	27.130
Fluoride	16.210	9.214

(b) Roaster SO_2 scrubber.

BAT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of molybdenum sulfide roasted	
Arsenic	2.334	1.041
Lead	0.470	0.218
Nickel	0.924	0.621
Selenium	1.377	0.621
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	223.800	98.390
Fluoride	58.770	33.410

(c) Molybdic oxide leachate.

BAT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of molybdenum contained in molybdic oxide leached	
Arsenic	16.100	7.182
Lead	3.244	1.506
Nickel	6.371	4.286
Selenium	9.499	4.286
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	1,544.000	678.800
Fluoride	405.400	230.500

(d) Hydrogen reduction furnace scrubber.

BAT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of molybdenum metal powder produced	
Arsenic	3.183	1.420

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	0.641	0.298
Nickel	1.260	0.847
Selenium	1.878	0.847
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	305.300	134.200
Fluoride	80.150	45.570

(e) Depleted rhenium scrubbing solution.

BAT Limitations for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per/million pounds) of molybdenum sulfide roasted	
Arsenic	0.995	0.444
Lead	0.201	0.093
Nickel	0.394	0.265
Selenium	0.587	0.265
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	95.440	41.960
Fluoride	25.060	14.250

[50 FR 38355, Sept. 20, 1985, as amended at 55 FR 31701, 31702, Aug. 3, 1990]

§ 421.214 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Molybdenum sulfide leachate.

NSPS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide leached	
Arsenic	0.644	0.287
Lead	0.130	0.060

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	0.255	0.171
Selenium	0.380	0.171
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	61.720	27.130
Fluoride	16.210	9.214
Total suspended solids	6.945	5.556
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Roaster SO_2 scrubber.

NSPS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	
Arsenic	2.334	1.041
Lead	0.470	0.218
Nickel	0.924	0.621
Selenium	1.377	0.621
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	223.800	98.390
Fluoride	58.770	33.410
Total suspended solids	25.190	20.150
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Molybdic oxide leachate.

NSPS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum contained in molybdic oxide leached	
Arsenic	16.100	7.182
Lead	3.244	1.506
Nickel	6.371	4.286
Selenium	9.499	4.286
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	1,544.000	678.800
Fluoride	405.400	230.500
Total suspended solids	173.800	139.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Hydrogen reduction furnace scrubber.

NSPS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum metal powder produced	
Arsenic	3.183	1.420
Lead	0.641	0.298
Nickel	1.260	0.847
Selenium	1.878	0.847
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	305.300	134.200
Fluoride	80.150	45.570
Total suspended solids	34.350	27.480
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Depleted rhenium scrubbing solution.

NSPS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	
Arsenic	0.995	0.444
Lead	0.201	0.093
Nickel	0.394	0.265
Selenium	0.587	0.265
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	95.440	41.960
Fluoride	25.060	14.250
Total suspended solids	10.740	8.592
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38355, Sept. 20, 1985, as amended at 55 FR 31702, Aug. 3, 1990]

§ 421.215 [Reserved]

§ 421.216 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary molybdenum and rhenium process wastewater introduced into a POTW shall not exceed the following values:

(a) Molybdenum sulfide leachate.

PSNS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide leached	
Arsenic	0.644	0.287
Lead	0.130	0.060
Nickel	0.255	0.171
Selenium	0.380	0.171
Molybdenum	[Reserved]	[Reserved].

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	61.720	27.130
Fluoride	16.210	9.214

(b) Roaster SO_2 scrubber.

PSNS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	
Arsenic	2.334	1.041
Lead	0.470	0.218
Nickel	0.924	0.621
Selenium	1.377	0.621
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	223.800	98.390
Fluoride	58.770	33.410

(c) Molybdic oxide leachate.

PSNS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum contained in molybdic oxide leached	
Arsenic	16.100	7.182
Lead	3.244	1.506
Nickel	6.371	4.286
Selenium	9.499	4.286
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	1,544.000	678.800
Fluoride	405.400	230.500

(d) Hydrogen reduction furnace scrubber.

PSNS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum metal powder produced	
Arsenic	3.183	1.420
Lead	0.641	0.298
Nickel	1.260	0.847
Selenium	1.878	0.847
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	305.300	134.200
Fluoride	80.150	45.570

(e) Depleted rhenium scrubbing solution.

PSNS for the Primary Molybdenum and Rhenium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum sulfide roasted	
Arsenic	0.995	0.444
Lead	0.201	0.093
Nickel	0.394	0.265
Selenium	0.587	0.265
Molybdenum	[Reserved]	[Reserved].
Ammonia (as N)	95.440	41.960
Fluoride	25.060	14.250

[50 FR 38355, Sept. 20, 1985, as amended at 55 FR 31702, 31703, Aug. 3, 1990]

§ 421.217 [Reserved]

Subpart T - Secondary Molybdenum and Vanadium Subcategory

Source: 50 FR 38357, Sept. 20, 1985, unless otherwise noted.

§ 421.220 Applicability: Description of the secondary molybdenum and vanadium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of molybdenum or vanadium by secondary molybdenum and vanadium facilities.

§ 421.221 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.222 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Leach tailings.

BPT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	40.778	18.145
Chromium	8.585	3.512
Lead	8.195	3.902
Nickel	37.460	24.779
Iron	23.410	11.902
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	8078.000	3551.000
Total Suspended Solids	799.950	380.460
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Molybdenum filtrate solvent extraction raffinate.

BPT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Arsenic	121.720	54.162
Chromium	25.625	10.483
Lead	24.460	11.648
Nickel	111.819	73.964
Iron	69.887	35.526
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	24114.000	10600.000
Total Suspended Solids	2387.800	1135.660
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Vanadium decomposition wet air pollution control.

BPT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of vanadium produced by decomposition	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Molybdenum drying wet air pollution control.

BPT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum produced	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Pure Grade Molybdenum.

BPT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure molybdenum produced	
Arsenic	48.655	21.650
Chromium	10.243	4.190
Lead	9.778	4.656
Nickel	44.698	29.566
Iron	27.936	14.201
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	9638.000	4237.000
Total Suspended Solids	954.480	453.960
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38357, Sept. 20, 1985, as amended at 55 FR 31703, Aug. 3, 1990]

§ 421.223 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Leach Tailings.

BAT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	27.120	12.097
Chromium	7.219	2.927
Lead	5.463	2.536
Nickel	10.731	7.219
Iron	23.413	11.902
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	8078.000	3551.000

(b) Molybdenum filtrate solvent extraction raffinate.

BAT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	80.952	36.108
Chronium	21.548	8.736
Lead	16.306	7.571
Nickel	32.031	21.548
Iron	69.887	35.526
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	24114.000	10600.000

(c) Vanadium decomposition wet air pollution control.

BAT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of vanadium produced by decomposition	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000

(d) Molybdenum drying wet air pollution control.

BAT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum produced	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000

(e) Pure Grade Molybdenum.

BAT Limitations for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure molybdenum produced	
Arsenic	32.359	14.434
Chromium	8.614	3.492
Lead	6.518	3.026

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	12.804	8.614
Iron	27.936	14.201
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	9638.000	4237.000

[50 FR 38357, Sept. 20, 1985, as amended at 55 FR 31703, 31704, Aug. 3, 1990]

§ 421.224 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Leach tailings.

NSPS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	27.120	12.097
Chromium	7.219	2.927
Lead	5.463	2.536
Nickel	10.731	7.219
Iron	23.413	11.902
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	8078.000	3551.000
Total Suspended Solids	292.665	234.132
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Molybdenum filtrate solvent extraction raffinate.

NSPS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	80.952	36.108
Chromium	21.548	8.736
Lead	16.306	7.571
Nickel	32.031	21.548
Iron	69.887	35.526
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	24114.000	10600.000
Total Suspended Solids	873.585	698.868
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Vanadium decomposition wet air pollution control.

NSPS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum and vanadium produced	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Molybdenum drying wet air pollution control.

NSPS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum and vanadium produced	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Pure Grade Molybdenum.

NSPS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure molybdenum produced	
Arsenic	32.359	14.434
Chromium	8.614	3.492
Lead	6.518	3.026
Nickel	12.804	8.614
Iron	27.936	14.201
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	9638.000	4237.000
Total Suspended Solids	349.200	279.360
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38357, Sept. 20, 1985, as amended at 55 FR 31704, Aug. 3, 1990]

§ 421.225 [Reserved]

§ 421.226 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary molybdenum and vanadium process wastewater introduced into a POTW shall not exceed the following values:

(a) Leach tailings.

PSNS for the Secondary Molybdenum and Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	27.120	12.097
Chromium	7.219	2.927
Lead	5.463	2.536
Nickel	10.731	7.219
Iron	23.413	11.902
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	8078.000	3551.000

(b) Molybdenum filtrate solvent extraction raffinate.

PSNS for the Secondary Molybdenum And Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of technical grade molybdenum plus vanadium plus pure grade molybdenum produced	
Arsenic	80.952	36.108
Chromium	21.548	8.736
Lead	16.306	7.571
Nickel	32.031	21.548
Iron	69.887	35.526
Molybdenum	[Reserved]	[Reserved]

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	24114.000	10600.000

(c) Vanadium decomposition wet air pollution control.

PSNS for the Secondary Molybdenum and Vandadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) vanadium produced by decomposition	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000

(d) Molybdenum drying wet air pollution control.

PSNS for the Secondary Molybdenum and Vandadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of molybdenum produced	
Arsenic	0.000	0.000
Chromium	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Iron	0.000	0.000
Molybdenum	0.000	0.000
Ammonia (as N)	0.000	0.000

(e) Pure Grade Molybdenum.

PSNS for the Secondary Molybdenum And Vanadium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure molybdenum produced	
Arsenic	32.359	14.434
Chromium	8.614	3.492
Lead	6.518	3.026
Nickel	12.804	8.614
Iron	27.936	14.201
Molybdenum	[Reserved]	[Reserved]
Ammonia (as N)	9638.000	4237.000

[50 FR 38357, Sept. 20, 1985, as amended at 55 FR 31704, 31705 Aug. 3, 1990]

§ 421.227 [Reserved]

Subpart U - Primary Nickel and Cobalt Subcategory

Source: 50 FR 38359, Sept. 20, 1985, unless otherwise noted.

§ 421.230 Applicability: Description of the primary nickel and cobalt subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of nickel or cobalt by primary nickel and cobalt facilities processing ore concentrate raw materials.

§ 421.231 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.232 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Raw Material dust control.

BPT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper, nickel, and cobalt in the crushed raw material	
Copper	0.146	0.077

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	0.148	0.098
Ammonia (as N)	10.260	4.512
Cobalt	0.016	0.007
Total suspended solids	3.157	1.502
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Nickel wash water.

BPT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel powder washed	
Copper	0.064	0.034
Nickel	0.065	0.043
Ammonia (as N)	4.515	1.985
Cobalt	0.007	0.003
Total suspended solids	1.389	0.660
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Nickel reduction decant.

BPT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel produced	
Copper	24.120	12.700
Nickel	24.370	16.120
Ammonia (as N)	1,692.000	743.900
Cobalt	2.666	1.143
Total suspended solids	520.500	247.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Cobalt reduction decant.

BPT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	40.660	21.400
Nickel	41.080	27.180
Ammonia (as N)	2,852.000	1,254.000
Cobalt	4.494	1.926
Total suspended solids	877.300	417.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.233 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Raw material dust control.

BAT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper, nickel, and cobalt in the crushed raw material	
Copper	0.099	0.047
Nickel	0.042	0.028
Ammonia (as N)	10.260	4.512
Cobalt	0.011	0.005

(b) Nickel wash water.

BAT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel powder washed	
Copper	0.043	0.021
Nickel	0.019	0.013
Ammonia (as N)	4.515	1.985
Cobalt	0.005	0.002

(c) Nickel reduction decant.

BAT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel produced	
Copper	16.250	7.744
Nickel	6.982	4.697
Ammonia (as N)	1,692.000	743.900
Cobalt	1.777	0.889

(d) Cobalt reduction decant.

BAT Limitations for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	27.390	13.050
Nickel	11.770	7.917
Ammonia (as N)	2,852.000	1,254.000
Cobalt	2.996	1.498

[50 FR 38359, Sept. 20, 1985; 50 FR 41144, Oct. 9, 1985]

§ 421.234 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Raw Material Dust Control.

NSPS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper, nickel, and cobalt in the crushed raw material	
Copper	0.099	0.047
Nickel	0.042	0.028
Ammonia (as N)	10.260	4.512
Cobalt	0.011	0.005
Total suspended solids	1.155	0.924
pH	[1]	[1]

[1] Within the range of 7.5 to 10.0 at all times.

(b) Nickel wash water.

NSPS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel powder washed	
Copper	0.043	0.021
Nickel	0.019	0.013
Ammonia (as N)	4.515	1.985
Cobalt	0.005	0.002
Total suspended solids	0.508	0.406
pH	[1]	[1]

[1] Within the range of 7.5 to 10.0 at all times.

(c) Nickel reduction decant.

NSPS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel produced	
Copper	16.250	7.744
Nickel	6.982	4.697
Ammonia (as N)	1,692.000	743.900

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cobalt	1.777	0.889
Total suspended solids	190.400	152.300
pH	[1]	[1]

[1] Within the range of 7.5 to 10.0 at all times.

(d) Cobalt reduction decant.

NSPS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	27.390	13.050
Nickel	11.770	7.917
Ammonia (as N)	2,852.000	1,254.000
Cobalt	2.996	1.498
Total suspended solids	321.000	256.800
pH	[1]	[1]

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.235 [Reserved]

§ 421.236 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with a 40 CFR part 403 and achieve the following pretreatment standards for new sources. The mass of wastewater pollutants in primary nickel and cobalt process wastewater introduced into a POTW shall not exceed the following values:

(a) Raw material dust control.

PSNS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of copper, nickel, and cobalt in the crushed raw material	
Copper	0.099	0.047
Nickel	0.042	0.028

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	10.260	4.512
Cobalt	0.011	0.005

(b) Nickel wash water.

PSNS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of nickel powder washed	
Copper	0.043	0.021
Nickel	0.019	0.013
Ammonia (as N)	4.515	1.985
Cobalt	0.005	0.002

(c) Nickel reduction decant.

PSNS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) nickel produced	
Copper	16.250	7.744
Nickel	6.982	4.697
Ammonia (as N)	1,692.000	743.900
Cobalt	1.777	0.889

(d) Cobalt reduction decant.

PSNS for the Primary Nickel and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	27.390	13.050
Nickel	11.770	7.917
Ammonia (as N)	2,852.000	1,254.000
Cobalt	2.996	1.498

§ 421.237 [Reserved]

Subpart V - Secondary Nickel Subcategory

Source: 50 FR 38360, Sept. 20, 1985, unless otherwise noted.

§ 421.240 Applicability: Description of the secondary nickel subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of nickel by secondary nickel facilities processing slag, spent acids, or scrap metal raw materials.

§ 421.241 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§§ 421.242-421.243 [Reserved]

§ 421.244 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Slag reclaim tailings.

NSPS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of slag input to reclaim process	
Chromium (total)	5.653	2.313
Copper	24.410	12.850
Nickel	24.670	16.320
Total suspended solids	526.800	250.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Acid reclaim leaching filtrate.

NSPS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	2.198	0.899
Copper	9.491	4.995
Nickel	9.590	6.344
Total suspended solids	204.800	97.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Acid reclaim leaching belt filter backwash.

NSPS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	
Chromium (total)	0.528	0.216
Copper	2.278	1.199
Nickel	2.302	1.523
Total suspended solids	49.160	23.380
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.245 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary nickel process wastewater introduced into a POTW must not exceed the following values:

(a) Slag reclaim tailings.

PSES for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of slag input to reclaim process	
Chromium (total)	5.653	2.313
Copper	24.410	12.850

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	24.670	16.320

(b) Acid reclaim leaching filtrate.

PSES for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	
Chromium (total)	2.198	0.899
Copper	9.491	4.995
Nickel	9.590	6.344

(c) Acid reclaim leaching belt filter backwash

PSES for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	
Chromium (total)	0.528	0.216
Copper	2.278	1.199
Nickel	2.302	1.523

§ 421.246 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary nickel process wastewater introduced into a POTW shall not exceed the following values:

(a) Slag reclaim tailings.

PSNS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of slag input to reclaim process	
Chromium (total)	5.653	2.313
Copper	24.410	12.850

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	24.670	16.320

(b) Acid reclaim leaching filtrate.

PSNS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	
Chromium (total)	2.198	0.899
Copper	9.491	4.995
Nickel	9.590	6.344

(c) Acid reclaim leaching belt filter backwash.

PSNS for the Secondary Nickel Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of acid reclaim nickel produced	
Chromium (total)	0.528	0.216
Copper	2.278	1.199
Nickel	2.302	1.523

§ 421.247 [Reserved]

Subpart W - Primary Precious Metals and Mercury Subcategory

Source: 50 FR 38361, Sept. 20, 1985, unless otherwise noted.

§ 421.250 Applicability: Description of the primary precious metals and mercury subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of gold, silver, or mercury by primary precious metals and mercury facilities.

§ 421.251 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.252 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Smelter wet air pollution control.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold and silver smelted	
Lead	0.546	0.260
Mercury	0.325	0.130
Silver	0.533	0.221
Zinc	1.898	0.793
Gold	0.130	
Oil and grease	26.000	15.600
Total suspended solids	53.300	25.350
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Silver chloride reduction spent solution.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant of pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver reduced in solution	
Lead	0.168	0.080
Mercury	0.100	0.040
Silver	0.164	0.068
Zinc	0.584	0.244
Gold	0.040	
Oil and grease	8.000	4.800
Total suspended solids	16.400	7.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Electrolytic cells wet air pollution control.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold refined electrolytically	
Lead	83.160	39.600
Mercury	49.500	19.800
Silver	81.180	33.660
Zinc	289.100	120.800
Gold	19.800	
Oil and grease	3,960.000	2,376.000
Total suspended solids	8,118.000	3,861.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Electrolyte preparation wet air pollution control.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver in electrolyte produced	
Lead	0.021	0.010
Mercury	0.013	0.005
Silver	0.021	0.009
Zinc	0.073	0.031
Gold	0.005	
Oil and Grease	1.000	0.600
Total suspended solids	2.050	0.975
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Calciner wet air pollution control.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	78.200	37.240
Mercury	46.550	18.620
Silver	76.340	31.650
Zinc	271.900	113.600
Gold	18.600	
Oil and Grease	3,724.000	2,234.000
Total suspended solids	7,634.000	3,631.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Calcine quench water.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	7.392	3.520
Mercury	4.400	1.760
Silver	7.216	2.992
Zinc	25.700	10.740
Gold	1.760	
Oil and Grease	352.000	211.200
Total suspended solids	721.600	343.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Calciner stack gas contact cooling water.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	1.743	0.830
Mercury	1.038	0.415
Silver	1.702	0.706
Zinc	6.059	2.532
Gold	0.415	
Oil and Grease	83.000	49.800
Total suspended solids	170.200	80.930
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Condenser blowdown.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	5.796	2.760
Mercury	3.450	1.380
Silver	5.658	2.346
Zinc	20.150	8.418
Gold	1.380	
Oil and Grease	276.000	165.600
Total suspended solids	565.800	269.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Mercury cleaning bath water.

BPT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	0.588	0.280

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Mercury	0.350	0.140
Silver	0.574	0.238
Zinc	2.044	0.854
Gold	0.140	
Oil and Grease	28.000	16.800
Total suspended solids	57.400	27.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.253 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Smelter wet air pollution control.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold and silver smelted	
Lead	0.364	0.169
Mercury	0.195	0.078
Silver	0.377	0.156
Zinc	1.326	0.546
Gold	0.130	

(b) Silver chloride reduction spent solution.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver reduced in solution	
Lead	0.112	0.052
Mercury	0.060	0.024
Silver	0.116	0.048

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	0.408	0.168
Gold	0.040	

(c) Electrolytic cells wet air pollution control.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold refined electrolytically	
Lead	5.544	2.574
Mercury	2.970	1.188
Silver	5.742	2.376
Zinc	20.200	8.316
Gold	1.980	

(d) Electrolyte preparation wet air pollution control.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver in electrolyte produced	
Lead	0.014	0.007
Mercury	0.008	0.003
Silver	0.015	0.006
Zinc	0.051	0.021
Gold	0.005	

(e) Calciner Wet Air Pollution Control.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	6.160	2.860
Mercury	3.300	1.320
Silver	6.380	2.640

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	22.440	9.240
Gold	2.200	

(f) Calcine quench water.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	4.928	2.288
Mercury	2.640	1.056
Silver	5.104	2.112
Zinc	17.950	7.392
Gold	1.760	

(g) Calciner stack gas contact cooling water.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	1.162	0.540
Mercury	0.623	0.249
Silver	1.204	0.498
Zinc	4.233	1.743
Gold	0.415	

(h) Condenser blowdown.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	3.864	1.794
Mercury	2.070	0.828
Silver	4.002	1.656

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	14.080	5.796
Gold	1.380	

(i) Mercury cleaning bath water.

BAT Limitations for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	0.392	0.182
Mercury	0.210	0.084
Silver	0.406	0.168
Zinc	1.428	0.588
Gold	0.140	

§ 421.254 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Smelter wet air pollution control.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold and silver smelted	
Lead	0.364	0.169
Mercury	0.195	0.078
Silver	0.377	0.156
Zinc	1.326	0.546
Gold	0.130	
Oil and Grease	13.000	13.000
Total suspended solids	19.500	15.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Silver chloride reduction spent solution.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver reduced in solution	
Lead	0.112	0.052
Mercury	0.060	0.024
Silver	0.116	0.048
Zinc	0.408	0.168
Gold	0.040	
Oil and Grease	4.000	4.000
Total suspended solids	6.000	4.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Electrolytic cells wet air pollution control.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold refined electrolytically	
Lead	5.544	2.574
Mercury	2.970	1.188
Silver	5.742	2.376
Zinc	20.200	8.316
Gold	1.980	
Oil and Grease	198.000	198.000
Total suspended solids	297.000	237.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Electrolyte preparation wet air pollution control.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver in electrolyte produced	
Lead	0.014	0.007
Mercury	0.008	0.003
Silver	0.015	0.006
Zinc	0.051	0.021
Gold	0.005	
Oil and Grease	0.500	0.500
Total suspended solids	0.750	0.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Calciner wet air pollution control.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	6.160	2.860
Mercury	3.300	1.320
Silver	6.380	2.640
Zinc	22.440	9.240
Gold	2.200	
Oil and Grease	220.000	220.000
Total suspended solids	330.000	264.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Calcine quench water.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	4.928	2.288
Mercury	2.640	1.056
Silver	5.104	2.112
Zinc	17.950	7.392
Gold	1.760	
Oil and Grease	176.000	176.000
Total suspended solids	264.000	211.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Calciner stack gas contract cooling water.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) or mercury condensed	
Lead	1.162	0.540
Mercury	0.623	0.249
Silver	1.204	0.498
Zinc	4.233	1.743
Gold	0.415	
Oil and Grease	41.500	41.500
Total suspended solids	62.250	49.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Condenser blowdown.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	3.864	1.794

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Mercury	2.070	0.828
Silver	4.002	1.656
Zinc	14.080	5.796
Gold	1.380	
Oil and Grease	138.000	138.000
Total suspended solids	207.000	165.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Mercury cleaning bath water.

NSPS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of Mercury condensed	
Lead	0.392	0.182
Mercury	0.210	0.084
Silver	0.406	0.168
Zinc	1.428	0.588
Gold	0.140	
Oil and Grease	14.000	14.000
Total suspended solids	21.000	16.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38361, Sept. 20, 1985; 50 FR 41144, Oct. 9, 1985]

§ 421.255 [Reserved]

§ 421.256 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary precious metals and mercury process wastewater introduced into a POTW shall not exceed the following values:

(a) Smelter wet air pollution control.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold and silver smelted	
Lead	0.364	0.169
Mercury	0.195	0.078
Silver	0.377	0.156
Zinc	1.326	0.546
Gold	0.130	

(b) Silver chloride reduction spent solution.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver reduced in solution	
Lead	0.112	0.052
Mercury	0.060	0.024
Silver	0.116	0.048
Zinc	0.408	0.168
Gold	0.040	

(c) Electrolytic cells wet air pollution control.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold refined electrolytically	
Lead	5.544	2.574
Mercury	2.970	1.188
Silver	5.742	2.376
Zinc	20.200	8.316
Gold	1.980	

(d) Electrolyte preparation wet air pollution control.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of silver in electrolyte produced	
Lead	0.014	0.007
Mercury	0.008	0.003
Silver	0.015	0.006
Zinc	0.051	0.021
Gold	0.005	

(e) Calciner wet air pollution control.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	6.160	2.860
Mercury	3.300	1.320
Silver	6.380	2.640
Zinc	22.440	9.240
Gold	2.200	

(f) Calcine quench water.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	4.928	2.288
Mercury	2.640	1.056
Silver	5.104	2.112
Zinc	17.950	7.392
Gold	1.760	

(g) Calciner stack gas contact cooling water.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	1.162	0.540
Mercury	0.623	0.249
Silver	1.204	0.498
Zinc	4.233	1,743
Gold	0.415	

(h) Condenser blowdown.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	3.864	1.794
Mercury	2.070	0.828
Silver	4.002	1.656
Zinc	14.080	5.656
Gold	1.380	

(i) Mercury cleaning bath water.

PSNS for the Primary Precious Metals and Mercury Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mercury condensed	
Lead	0.392	0.182
Mercury	0.210	0.084
Silver	0.406	0.168
Zinc	1.428	0.588
Gold	0.140	

§ 421.257 [Reserved]

Subpart X - Secondary Precious Metals Subcategory

Source: 50 FR 38365, Sept. 20, 1985, unless otherwise noted.

§ 421.260 Applicability: Description of the secondary precious metals subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of precious metals at secondary precious metals facilities.

§ 421.261 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) The term *precious metals* shall mean gold, platinum, palladium, rhodium, iridium, osmium, and ruthenium.

(c) The term *Combined Metals,* shall mean the total of gold, platinum and palladium.

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31705, Aug. 3, 1990]

§ 421.262 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Furnace wet air pollution control.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, incinerated or smelted	
Copper	136.400	71.800
Cyanide (total)	20.820	8.616
Zinc	104.800	43.800
Ammonia (as N)	9,571.000	4,207.000
Combined metals	21.54	
Total suspended solids	2,944.000	1,400.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Raw material granulation.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metal in the granulated raw material	
Copper	12.050	6.340
Cyanide (total)	1.839	0.761
Zinc	9.256	3.867
Ammonia (as N)	845.100	371.500
Combined metals	1.902	
Total suspended solids	259.900	123.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Spent plating solutions.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/liter of spent plating solution used as a raw material	
Copper	1.900	1.000
Cyanide (total)	0.290	0.120
Zinc	1.460	0.610
Ammonia (as N)	133.300	58.600
Combined metals	0.300	
Total suspended solids	41.000	19.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Spent cyanide stripping solutions.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by cyanide stripping	
Copper	7.030	3.700
Cyanide (total)	1.073	0.444

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	5.402	2.257
Ammonia (as N)	493.200	216.800
Combined metals	1.110	
Total suspended solids	151.700	72.150
pH	(1)	(1)

1 Within the range of 7.5 to 10.0 at all times.

(e) Refinery wet air pollution control.[2]

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	39.900	21.000
Cyanide (total)	6.090	2.520
Zinc	30.660	12.810
Ammonia (as N)	2,799.000	1,231.000
Combined metals	6.300	
Total suspended solids	861.000	409.500
pH	(1)	(1)

1 Within the range of 7.5 to 10.0 at alltimes.

(f) Gold solvent extraction raffinate and wash water.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by solvent extraction	
Copper	1.197	0.630
Cyanide (total)	0.183	0.076
Zinc	0.920	0.384
Ammonia (as N)	83.980	36.920

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Combined metals	0.189	
Total suspended solids	25.830	12.290
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Gold spent electrolyte.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by electrolysis	
Copper	0.017	0.009
Cyanide (total)	0.003	0.001
Zinc	0.103	0.005
Ammonia (as N)	1.160	0.510
Combined metals	0.003	
Total suspended solids	0.357	0.170
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Gold precipitation and filtration.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold precipitated	
Copper	8.360	4.400
Cyanide (total)	1.276	0.528
Zinc	6.424	2.684
Ammonia (as N)	586.500	257.800
Combined metals	1.320	
Total suspended solids	180.400	85.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Platinum precipitation and filtration.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	9.880	5.200
Cyanide (total)	1.508	0.624
Zinc	7.592	3.172
Ammonia (as N)	693.200	304.700
Combined metals	1.560	
Total suspended solids	213.200	101.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Palladium precipitation and filtration.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of palladium precipitated	
Copper	11.400	6.000
Cyanide (total)	1.740	0.720
Zinc	8.760	3.660
Ammonia (as N)	799.800	351.600
Combined metals	1.800	
Total suspended solids	246.000	117.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Other platinum group metals precipitation and filtration.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of other platinum group metals precipitated	
Copper	9.880	5.200
Cyanide (total)	1.508	0.624
Zinc	7.592	3.172
Ammonia (as N)	693.200	304.700
Combined metals	1.560	
Total suspended solids	213.200	101.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Spent solution from PGC salt production.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold contained in PGC product	
Copper	1.710	0.900
Cyanide (total)	0.261	0.108
Zinc	1.314	0.549
Ammonia (as N)	120.000	52.740
Combined metals	0.270	
Total suspended solids	36.900	17.550
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Equipment and floor wash.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (total)	0.000	0.000
Zinc	0.000	0.000
Ammonia (as N)	0.000	0.000
Combined metals	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Preliminary treatment.

BPT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of total precious metals produced through this operation	
Copper	95.000	50.000
Cyanide (Total)	14.500	6.000
Zinc	73.000	30.500
Ammonia (as N)	6665.000	2930.000
Combined Metals	15.000	
Total Suspended Solids	2050.000	975.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31705, 31706, Aug. 3, 1990]

FOOTNOTES - 421.262

[2] This allowance applies to either acid or alkaline wet air pollution control scrubbers. If both acid and alkaline wet air pollution control scrubbers are present in a particular facility the same allowance applies to each.

§ 421.263 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Furnace wet air pollution control.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, incinerated or smelted	
Copper	5.760	2.745
Cyanide (total)	0.900	0.360
Zinc	4.590	1.890
Combined metals	1.350	
Ammonia (as N)	599.900	263.700

(b) Raw material granulation.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals in the granulated raw material	
Copper	0.819	0.390
Cyanide (total)	0.128	0.051
Zinc	0.653	0.269
Combined metals	0.192	
Palladium	0.064	
Platinum	0.064	
Ammonia (as N)	85.310	37.500

(c) Spent plating solutions.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/liter of spent plating solution used as a raw material	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Gold		

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(d) Spent cyanide stripping solutions.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by cyanide stripping	
Copper	4.736	2.257
Cyanide (total)	0.740	0.296
Zinc	3.774	1.554
Combined metals	1.110	
Ammonia (as N)	493.200	216.800

(e) Refinery wet air pollution control[2].

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(f) Gold solvent extraction raffinate and wash water.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by solvent extraction	
Copper	0.806	0.384
Cyanide (total)	0.126	0.050

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	0.643	0.265
Combined metals	0.189	
Ammonia (as N)	83.980	36.920

(g) Gold spent electrolyte.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by electrolysis	
Copper	0.0111	0.0053
Cyanide (total)	0.0017	0.0007
Zinc	0.0089	0.0037
Combined metals	0.0030	
Ammonia (as N)	1.1600	0.5100

(h) Gold precipitation and filtration.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold precipitated	
Copper	5.632	2.684
Cyanide (total)	0.880	0.352
Zinc	4.488	1.848
Combined metals	1.320	
Ammonia (as N)	586.500	257.800

(i) Platinum precipitation and filtration.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	5.304	2.184
Combined metals	0.560	
Ammonia (as N)	693.200	304.700

(j) Palladium precipitation and filtration.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of palladium precipitated	
Copper	7.680	3.660
Cyanide (total)	1.200	.480
Zinc	6.120	2.520
Combined metals	1.800	
Ammonia (as N)	799.800	351.600

(k) Other platinum group metals precipitation and filtration.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of other platinum group metals precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700

(l) Spent solutions from PGC salt production.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold contained in PGC product	
Copper	1.152	0.549
Cyanide (total)	0.180	0.072

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	0.918	0.378
Combined metals	0.270	
Ammonia (as N)	120.000	52.740

(m) Equipment and floor wash.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Zinc	0.000	0.000
Combined metals	0.000	
Ammonia (as N)	0.000	0.000

(n) Preliminary treatment.

BAT Limitations for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Mg/troy ounce of total precious metals produced through this operation	
Copper	64.000	30.500
Cyanide (Total)	10.000	4.000
Zinc	51.000	21.000
Combined metals	15.000	
Ammonia (as N)	6665.000	2930.000

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31706, Aug. 3, 1990; 55 FR 36932, Sept. 7, 1990]

FOOTNOTES - 421.263

[2] This allowance applies to either acid or alkaline wet air pollution control scrubbers. If both acid and alkaline wet air pollution control scrubbers are present in a particular facility the same allowance applies to each.

§ 421.264 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Furnace wet air pollution control.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, incinerated or smelted	
Copper	5.760	2.745
Cyanide (total)	0.900	0.360
Zinc	4.590	1.890
Combined metals	1.350	
Ammonia (as N)	599.900	263.700
Total suspended solids	67.500	54.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Raw material granulation.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals in the granulated raw material	
Copper	0.819	0.390
Cyanide (total)	0.128	0.051
Zinc	0.653	0.269
Combined metals	0.192	
Ammonia (as N)	85.310	37.500
Total suspended solids	9.600	7.680
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Spent plating solutions.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/liter of spent plating solution used as a raw material	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600
Total suspended solids	15.000	12.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Spent cyanide stripping solutions.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by cyanide stripping	
Copper	4.736	2.257
Cyanide (total)	0.740	0.296
Zinc	3.774	1.554
Combined metals	1.11	
Ammonia (as N)	493.200	216.800
Total suspended solids	55.500	44.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Refinery wet air pollution control[2].

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	1.280	0.610

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600
Total suspended solids	15.000	12.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Gold solvent extraction raffinate and wash water.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by solvent extraction	
Copper	0.806	0.384
Cyanide (total)	0.126	0.050
Zinc	0.643	0.265
Combined metals	0.189	
Ammonia (as N)	83.980	36.920
Total suspended solids	9.450	7.560
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Gold spent electrolyte.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by electrolysis	
Copper	0.011	0.005
Cyanide (total)	0.002	0.001
Combined metals	0.003	
Zinc	0.009	0.004

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	1.160	0.510
Total suspended solids	0.131	0.104
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Gold precipitation and filtration.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold precipitated	
Copper	5.632	2.684
Cyanide (total)	0.880	0.352
Zinc	4.488	1.848
Combined metals	1.320	
Ammonia (as N)	586.500	257.800
Total suspended solids	66.00	52.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Platinum precipitation and filtration.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700
Total suspended solids	78.000	62.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Palladium precipitation and filtration.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of palladium precipitated	
Copper	7.680	3.660
Cyanide (total)	1.200	0.480
Zinc	6.1200	2.520
Combined metals	1.800	
Ammonia (as N)	799.800	351.600
Total suspended solids	90.000	72.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.00 at all times.

(k) Other platinum group metals precipitation and filtration.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of other platinum group metals precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700
Total suspended solids	78.000	62.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Spent solution from PGC salt production.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold contained in PGC product	
Copper	1.152	0.549
Cyanide (total)	0.180	0.072
Zinc	0.918	0.378
Combined metals	0.270	
Ammonia (as N)	120.000	52.740
Total suspended solids	13.500	10.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Equipment and floor wash.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Zinc	0.000	0.000
Combined metals	0.000	
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Preliminary treatment.

NSPS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of total precious metals produced through this operation	
Copper	64.000	30.500

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (Total)	10.000	4.000
Zinc	51.000	21.000
Combined metals	15.000	
Ammonia (as N)	6665.000	2930.000
Total Suspended Solids	750.000	600.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31708, Aug. 3, 1990]

FOOTNOTES - 421.264

[2] This allowance applies to either acid or alkaline wet air pollution control scrubbers. If both acid and alkaline wet air pollution control scrubbers are present in a particular facility the same allowance applies to each.

§ 421.265 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary precious metals process wastewater introduced into a POTW must not exceed the following values:

(a) Furnace wet air pollution control.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, incinerated or smelted	
Copper	5.760	2.745
Cyanide (total)	0.900	0.360
Zinc	4.590	1.890
Combined metals	1.350	
Ammonia (as N)	599.900	263.700

(b) Raw material granulation.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals in the granulated raw material	
Copper	0.819	0.390
Cyanide (total)	0.128	0.051
Zinc	0.653	0.269
Combined metals	0.192	
Ammonia (as N)	85.310	37.500

(c) Spent plating solutions.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/liter of spent plating solution used as a raw material	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(d) Spent Cyanide stripping solutions.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by cyanide stripping	
Copper	4.736	2.257
Cyanide (total)	0.740	0.296
Zinc	3.774	1.554
Combined metals	1.110	
Ammonia (as N)	493.200	216.800

(e) Refinery wet air pollution control.[1]

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(f) Gold solvent extraction raffinate and wash water.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by solvent extraction	
Copper	0.806	0.384
Cyanide (total)	0.126	0.050
Zinc	0.643	0.265
Combined metals	0.189	
Ammonia (as N)	83.980	36.920

(g) Gold spent electrolyte.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by electrolysis	
Copper	0.011	0.005
Cyanide (total)	0.002	0.001
Zinc	0.009	0.004
Combined metals	0.003	
Ammonia (as N)	1.160	0.510

(h) Gold precipitation and filtration.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold precipitated	
Copper	5.632	2.684
Cyanide (total)	0.880	0.352
Zinc	4.488	1.848
Combined metals	1.320	
Ammonia (as N)	586.500	257.800

(i) Platinum precipitation and filtration.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700

(j) Palladium precipitation and filtration.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of palladium precipitated	
Copper	7.680	3.660
Cyanide (total)	1.200	0.480
Zinc	6.120	2.520
Combined metals	1.800	
Ammonia (as N)	799.800	351.600

(k) Other platinum group metals precipitation and filtration.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of other platinum group metals precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700

(l) Spent solution from PGC salt production.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold contained in PGC product	
Copper	1.152	0.549
Cyanide (total)	0.180	0.072
Zinc	0.918	0.378
Combined metals	0.270	
Ammonia (as N)	120.000	52.740

(m) Equipment and floor wash.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Zinc	0.000	0.000
Combined metals	0.000	
Ammonia (as N)	0.000	0.000

(n) Preliminary Treatment.

PSES for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Mg/troy ounce of total precious metals produced through this operation	
Copper	64.000	30.500
Cyanide (Total)	10.000	4.000
Zinc	51.000	21.000
Combined Metals	15.000	
Ammonia (as N)	6665.000	2930.000

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31710, 31711, Aug. 3, 1990]

FOOTNOTES - 421.265

[1] This allowance applies to either acid or alkaline wet air pollution control scrubbers. If both acid and alkaline wet air pollution control scrubbers are present in a particular facility the same allowance applies to each.

§ 421.266 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary precious metals process wastewater introduced into a POTW shall not exceed the following values:

(a) Furnace wet air pollution control.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, incinerated or smelted	
Copper	5.760	2.745
Cyanide (total)	0.900	0.360
Zinc	4.590	1.890
Combined metals	1.350	
Ammonia (as N)	599.900	263.700

(b) Raw material granulation.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, in the granulated raw material	
Copper	0.819	0.390
Cyanide (total)	0.128	0.051
Zinc	0.653	0.269
Combined metals	0.192	
Ammonia	85.310	37.500

(c) Spent plating solutions.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/liter of spent plating solution used as a raw materail	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(d) Spent cyanide stripping solutions.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by cyanide stripping	
Copper	4.736	2.257
Cyanide (total)	0.740	0.296
Zinc	3.774	1.554
Combined metals	1.110	
Ammonia (as N)	493.200	216.800

(e) Refinery Wet Air Pollution Control.[1]

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	1.280	0.610
Cyanide (total)	0.200	0.080
Zinc	1.020	0.420
Combined metals	0.300	
Ammonia (as N)	133.300	58.600

(f) Gold solvent extraction raffinate and wash water.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by solvent extraction	
Copper	0.806	0.384
Cyanide (total)	0.126	0.050
Zinc	0.643	0.265
Combined metals	0.189	
Ammonia (as N)	83.980	36.920

(g) Gold spent electrolyte.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold produced by electrolysis	
Copper	0.011	0.005
Cyanide (total)	0.002	0.001
Zinc	0.009	0.004
Combined metals	0.300	
Ammonia (as N)	1.160	0.510

(h) Gold precipitation and filtration.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold precipitated	
Copper	5.632	2.684
Cyanide (total)	0.880	0.352
Zinc	4.488	1.848
Combined metals	1.320	
Ammonia (as N)	586.500	257.800

(i) Platinum precipitation and filtration.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700

(j) Palladium precipitation and filtration.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of platinum precipitated	
Copper	7.680	3.660
Cyanide (Total)	1.200	0.480
Zinc	6.120	2.520
Combined Metals	1.800	
Ammonia (as N)	799.800	351.600

(k) Other platinum group metals precipitation and filtration.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of other platinum group metals precipitated	
Copper	6.656	3.172
Cyanide (total)	1.040	0.416
Zinc	5.304	2.184
Combined metals	1.560	
Ammonia (as N)	693.200	304.700

(l) Spent solution from PGC salt production.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of gold contained in PGC product	
Copper	1.152	0.549
Cyanide (total)	0.180	0.072
Zinc	0.918	0.378
Combined metals	0.270	
Ammonia (as N)	120.000	52.740

(m) Equipment and floor wash.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/troy ounce of precious metals, including silver, produced in refinery	
Copper	0.000	0.000
Cyanide (total)	0.000	0.000
Zinc	0.000	0.000
Combined metals	0.000	
Ammonia (as N)	0.000	0.000

(n) Preliminary treatment.

PSNS for the Secondary Precious Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly averge
	mg/troy ounce of total precious metals produced through this operation	
Copper	64.000	30.500
Cyanide (Total)	10.000	4.000
Zinc	51.000	21.000
Combined Metals	15.000	
Ammonia (as N)	6665.000	2930.000

[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31711, Aug. 3, 1990]

FOOTNOTES - 421.266

[1] This allowance applies to either acid or alkaline wet air pollution control scrubbers. If both acid and alkaline wet air pollution control scrubbers are present in a particular facility the same allowance applies to each.

§ 421.267 [Reserved]

Subpart Y - Primary Rare Earth Metals Subcategory

Source: 50 FR 38371, Sept. 20, 1985, unless otherwise noted.

§ 421.270 Applicability: Description of the primary rare earth metals subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of rare earth metals and mischmetal by primary rare earth metals facilities processing rare earth metal oxides, chlorides, and fluorides.

§ 421.271 Specialized definitions.

In addition to what is provided below:

(a) The general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) The term *rare earth metals* refers to the elements scandium, yttrium, and lanthanum to lutetium, inclusive.

(c) The term *mischmetal* refers to a rare earth metal alloy comprised of the natural mixture of rare earths to about 94-99 percent. The balance of tha alloy includes traces of other elements and one to two percent iron.

§§ 421.272-421.273 [Reserved]

§ 421.274 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Dryer Vent Water Quench and Scrubber.

NSPS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.042	0.042
Chromium (total)	1.544	0.626
Lead	1.168	0.542
Nickel	2.295	1.544
Total suspended solids	62.600	50.080
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Dryer vent caustic wet air pollution control.

NSPS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.007	0.007
Chromium (total)	0.272	0.110
Lead	0.206	0.095
Nickel	0.404	0.272
Total suspended solids	11.010	8.808
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Electrolytic cell water quench and scrubber.

NSPS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.094	0.094

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	3.474	1.409
Lead	2.629	1.221
Nickel	5.165	3.474
Total suspended solids	140.900	112.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Electrolytic cell caustic wet air pollution control.

NSPS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.000	0.000
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Sodium hypochlorite filter backwash.

NSPS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.004	0.004
Chromium (total)	0.134	0.054
Lead	0.101	0.047
Nickel	0.199	0.134
Total suspended solids	5.430	4.334

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.275 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary rare earth metals process wastewater introduced into a POTW must not exceed the following values:

(a) Dryer vent water quench scrubber.

PSES for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.042	0.042
Chromium (total)	1.544	0.626
Lead	1.168	0.542
Nickel	2.295	1.544

(b) Dryer vent caustic wet air pollution control.

PSES for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.007	0.007
Chromium (total)	0.272	0.110
Lead	0.206	0.095
Nickel	0.404	0.272

(c) Electrolytic cell water quench and scrubber.

PSES for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.094	0.094
Chromium (total)	3.474	1.409
Lead	2.629	1.221
Nickel	5.165	3.474

(d) Electrolytic cell caustic wet air pollution control.

PSES for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.000	0.000
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000

(e) Sodium hypochlorite filter backwash.

PSES for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.004	0.004
Chromium (total)	0.134	0.054
Lead	0.101	0.047
Nickel	0.199	0.134

§ 421.276 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary rare earth metals process wastewater introduced into a POTW shall not exceed the following values:

(a) Dryer vent water quench and scrubber.

PSNS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.042	0.042
Chromium (total)	1.544	0.626
Lead	1.168	0.542
Nickel	2.295	1.544

(b) Dryer vent caustic wet air pollution control.

PSNS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of mischmetal produced from wet rare earth chlorides	
Hexachlorobenzene	0.007	0.007
Chromium (total)	0.272	0.110
Lead	0.206	0.095
Nickel	0.404	0.272

(c) Electrolytic cell water quench and scrubber.

PSNS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.094	0.094
Chromium (total)	3.474	1.409
Lead	2.629	1.221
Nickel	5.165	3.474

(d) Electrolytic cell caustic wet air pollution control.

PSNS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.000	0.000
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000

(e) Sodium hypochlorite filter backwash.

PSNS for the Primary Rare Earth Metals Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of total mischmetal produced	
Hexachlorobenzene	0.004	0.004
Chromium (total)	0.134	0.054
Lead	0.101	0.047
Nickel	0.199	0.134

§ 421.277 [Reserved]

Subpart Z - Secondary Tantalum Subcategory

Source: 50 FR 38374, Sept. 20, 1985, unless otherwise noted.

§ 421.280 Applicability: Description of the secondary tantalum subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of tantalum at secondary tantalum facilities.

§ 421.281 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.282 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Tantalum alloy leach and rinse.

BPT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	438.100	230.600
Lead	96.850	46.120
Nickel	442.800	292.900
Zinc	336.700	140.700
Tantalum	103.800	
Total suspended solids	9,455.000	4,497.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Capacitor leach and rinse.

BPT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced from leaching	
Copper	38.380	20.200
Lead	8.484	4.040
Nickel	38.780	25.650
Zinc	29.490	12.320
Tantalum	9.090	
Total suspended solids	828.200	393.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tantalum sludge leach and rinse.

BPT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	390.100	205.300
Lead	86.230	41.060
Nickel	394.200	260.700
Zinc	299.700	125.200
Tantalum	92.390	
Total suspended solids	8,417.000	4,003.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Tantalum powder acid wash and rinse.

BPT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	0.665	0.350
Lead	0.147	0.070
Nickel	0.672	0.445
Zinc	0.511	0.214
Tantalum	0.158	
Total suspended solids	14.350	6.825
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Leaching wet air pollution control.

BPT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	9.272	4.880
Lead	2.050	0.976
Nickel	9.370	6.198
Zinc	7.125	2.977
Tantalum	2.196	
Total suspended solids	200.100	95.160
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.283 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Tantalum alloy leach and rinse.

BAT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	295.200	140.700
Lead	64.570	29.980
Nickel	126.800	85.320
Zinc	235.200	96.850
Tantalum	103.800	

(b) Capacitor leach and rinse.

BAT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced from leaching	
Copper	25.860	12.320
Lead	5.656	2.626
Nickel	11.110	7.474
Zinc	20.600	8.484
Tantalum	9.090	

(c) Tantalum sludge leach and rinse.

BAT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	262.800	125.200
Lead	57.480	26.690
Nickel	112.900	75.960
Zinc	209.400	86.230
Tantalum	92.390	

(d) Tantalum powder acid wash and rinse.

BAT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	0.448	0.214
Lead	0.098	0.046
Nickel	0.193	0.130
Zinc	0.357	0.147
Tantalum	0.158	

(e) Leaching wet air pollution control.

BAT Limitations for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	6.246	2.977
Lead	1.366	0.634
Nickel	2.684	1.806
Zinc	4.978	2.050
Tantalum	2.196	

§ 421.284 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Tantalum alloy leach and rinse.

NSPS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	295.200	140.700
Lead	64.570	29.980
Nickel	126.800	85.320
Zinc	235.200	96.850
Tantalum	103.800	
Total suspended solids	3,459.000	2,767.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Capacitor leach and rinse.

NSPS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced from leaching	
Copper	25.860	12.320
Lead	5.656	2.626
Nickel	11.110	7.474
Zinc	20.600	8.484
Tantalum	9.090	
Total suspended solids	303.000	242.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tantalum sludge leach and rinse.

NSPS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	262.800	125.200
Lead	57.480	26.690
Nickel	112.900	75.960
Zinc	209.400	86.230
Tantalum	92.390	
Total suspended solids	3,080.000	2,464.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Tantalum powder acid wash and rinse.

NSPS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	0.448	0.214
Lead	0.098	0.046
Nickel	0.193	0.130
Zinc	0.357	0.147
Tantalum	0.158	
Total suspended solids	5.250	4.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Leaching wet air pollution control.

NSPS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	6.246	2.977
Lead	1.366	0.634
Nickel	2.684	1.806
Zinc	4.978	2.050
Tantalum	2.196	
Total suspended solids	73.200	58.560
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.285 [Reserved]

§ 421.286 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary tantalum process wastewater introduced into a POTW shall not exceed the following values:

(a) Tantalum alloy leach and rinse.

PSNS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	295.200	140.700
Lead	64.570	29.980
Nickel	126.800	85.320
Zinc	235.200	96.850
Tantalum	103.800	

(b) Capacitor leach and rinse.

PSNS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced from leaching	
Copper	25.860	12.320
Lead	5.656	2.626
Nickel	11.110	7.474
Zinc	20.600	8.484
Tantalum	9.090	

(c) Tantalum sludge leach and rinse.

PSNS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	262.800	125.200
Lead	57.480	26.690
Nickel	112.900	75.960

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Zinc	209.400	86.230
Tantalum	92.390	

(d) Tantalum powder acid wash and rinse.

PSNS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tantalum powder produced	
Copper	0.448	0.214
Lead	0.098	0.046
Nickel	0.193	0.130
Zinc	0.357	0.147
Tantalum	0.158	

(e) Leaching wet air pollution control.

PSNS for the Secondary Tantalum Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of equivalent pure tantalum powder produced	
Copper	6.246	2.977
Lead	1.366	0.634
Nickel	2.684	1.806
Zinc	4.978	2.050
Tantalum	2.196	

§ 421.287 [Reserved]

Subpart AA - Secondary Tin Subcategory

Source: 50 FR 38376, Sept. 20, 1985, unless otherwise noted.

§ 421.290 Applicability: Description of the secondary tin subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of tin at secondary tin facilities utilizing either pyrometallurgical or hydrometallurgical processes to recover tin from secondary materials.

§ 421.291 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.292 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Tin smelter SO_2 scrubber.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of crude tapped tin metal produced	
Arsenic	19.220	8.554
Lead	3.863	1.840
Iron	11.040	5.611
Tin	3.495	2.024
Total suspended solids	377.100	179.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Dealuminizing rinse.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dealuminized scrap produced	
Lead	0.015	0.007
Cyanide (total)	0.010	0.004

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	1.225	0.700
Tin	0.013	0.008
Total suspended solids	1.435	0.683
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tin mud acid neutralization filtrate.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Minimum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of neutralized, dewatered tin mud produced	
Lead	2.120	1.009
Cyanide (total)	1.464	0.606
Fluoride	176.600	100.400
Tin	1.918	1.110
Total suspended solids	206.900	98.420
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Tin hydroxide wash.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Minimum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin hydroxide washed	
Lead	5.020	2.391
Cyanide (total)	3.466	1.434
Fluoride	418.400	237.900
Tin	4.542	2.630
Total suspended solids	490.100	233.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Spent electrowinning solution from new scrap.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Minimum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode tin produced	
Lead	7.056	3.360
Cyanide (total)	4.872	2.016
Fluoride	588.000	334.300
Tin	6.384	3.696
Total suspended solids	688.800	327.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Spent electrowinning solution from municipal solid waste.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Minimum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of MSW scrap used as raw material	
Lead	0.050	0.024
Cyanide (total)	0.035	0.014
Fluoride	4.165	2.368
Tin	0.045	0.026
Total suspended solids	4.879	2.321
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Tin hydroxide supernatant from scrap.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from scrap	
Lead	23.370	11.130
Cyanide (total)	16.140	6.677
Fluoride	1,947.000	1,107.000
Tin	21.140	12.240
Total suspended solids	2,281.000	1,085.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Tin hydroxide supernatant from plating solutions and sludges.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from plating solutions and sludges	
Lead	48.30	23.00
Cyanide (total)	33.35	13.80
Fluoride	4,025.00	2,289.00
Tin	43.70	25.30
Total suspended solids	4,715.00	2,243.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Tin hydroxide filtrate.

BPT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal produced	
Lead	10.520	5.009
Cyanide (total)	7.263	3.005

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Fluoride	876.500	498.400
Tin	9.517	5.510
Total suspended solids	1,027.000	488.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.293 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Tin smelter SO_2 scrubber.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of crude tapped tin produced	
Arsenic	12.790	5.703
Lead	2.575	1.196
Iron	11.040	5.611
Tin	3.495	2.024

(b) Dealuminizing rinse.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dealuminized scrap produced	
Lead	0.010	0.005
Cyanide (total)	0.007	0.003
Fluoride	1.225	0.697
Tin	0.013	0.008

(c) Tin mud acid neutralization filtrate.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of neutralized dewatered tin mud produced	
Lead	1.413	0.656
Cyanide (total)	1.009	0.404
Fluoride	176.600	100.400
Tin	1.918	1.110

(d) Tin hydroxide wash.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin hydroxide washed	
Lead	3.347	1.554
Cyanide (total)	2.391	0.956
Fluoride	418.400	237.900
Tin	4.542	2.630

(e) Spent electrowinning solution from new scrap.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode tin produced	
Lead	4.704	2.184
Cyanide (total)	3.360	1.344
Fluoride	588.000	334.300
Tin	6.384	3.696

(f) Spent electrowinning solution from municipal solid waste.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of MSW scrap used as raw material	
Lead	0.033	0.015
Cyanide (total)	0.024	0.010
Fluoride	4.165	2.368
Tin	0.045	0.026

(g) Tin hydroxide supernatant from scrap.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from scrap	
Lead	15.580	7.233
Cyanide (total)	11.130	4.451
Fluoride	1,947.000	1,107.000
Tin	21.140	21.240

(h) Tin hydroxide supernatant from plating solutions and sludges.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from plating solutions and sludges	
Lead	32.20	14.95
Cyanide (total)	23.00	9.20
Fluoride	4,025.00	2,289.00
Tin	43.70	25.30

(i) Tin hydroxide filtrate.

BAT Limitations for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal produced	
Lead	7.012	3.256
Cyanide (total)	5.009	2.004
Fluoride	876.500	498.400
Tin	9.517	5.510

§ 421.294 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Tin smelter SO_2 scrubber.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of crude tapped tin produced	
Arsenic	12.790	5.703
Lead	2.575	1.196
Iron	11.040	5.611
Tin	3.495	2.024
Total suspended solids	138.000	110.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Dealuminizing rinse.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dealuminized scrap produced	
Lead	0.010	0.005
Cyanide (total)	0.007	0.003
Fluoride	1.225	0.697

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Tin	0.013	0.008
Total suspended solids	0.525	0.420
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tin mud acid neutralization filtrate.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of neutralized dewatered tin mud produced	
Lead	1.413	0.656
Cyanide (total)	1.009	0.404
Fluoride	176.600	100.400
Tin	1.918	1.110
Total suspended solids	75.710	60.560
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Tin hydroxide wash.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin hydroxide washed	
Lead	3.347	1.554
Cyanide (total)	2.391	0.956
Fluoride	418.400	237.900
Tin	4.542	2.630
Total suspended solids	179.300	143.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Spent electrowinning solution from new scrap.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode tin produced	
Lead	4.704	2.184
Cyanide (total)	3.360	1.344
Fluoride	588.000	334.300
Tin	6.384	3.696
Total suspended solids	252.000	201.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Spent electrowinning solution from municipal solid waste.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of MSW scrap used as raw material	
Lead	0.033	0.015
Cyanide (total)	0.024	0.010
Fluoride	4.165	2.368
Tin	0.045	0.026
Total suspended solids	1.785	1.428
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Tin hydroxide supernatant from scrap.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from scrap	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	15.580	7.233
Cyanide (total)	11.130	4.451
Fluoride	1,947.000	1,107.000
Tin	21.140	12.240
Total suspended solids	834.600	667.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Tin hydroxide supernatant from plating solutions and sludges.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from plating solutions and sludges	
Lead	32.20	14.95
Cyanide (total)	23.00	9.20
Fluoride	4,025.00	2,289.00
Tin	43.70	25.30
Total suspended solids	1,725.00	1,380.00
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Tin hydroxide filtrate.

NSPS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal produced	
Lead	7.012	3.256
Cyanide (total)	5.009	2.004
Fluoride	876.500	498.400
Tin	9.517	5.510

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	375.700	300.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.295 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in secondary tin process wastewater introduced into a POTW must not exceed the following values:

(a) Tin smelter SO_2 scrubber.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of crude tapped tin produced	
Arsenic	12.790	5.703
Lead	2.575	1.196
Iron	11.040	5.611
Tin	3.495	2.024

(b) Dealuminizing rinse.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dealuminized scrap produced	
Lead	0.010	0.005
Cyanide (total)	0.007	0.003
Fluoride	1.225	0.697
Tin	0.013	0.008

(c) Tin mud acid neutralization filtrate.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of neutralized dewatered tin mud produced	
Lead	1.413	0.656
Cyanide (total)	1.009	0.404
Fluoride	176.600	100.400
Tin	1.918	1.110

(d) Tin hydroxide wash.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin hydroxide washed	
Lead	3.347	1.554
Cyanide (total)	2.391	0.956
Fluoride	418.400	237.900
Tin	4.542	2.630

(e) Spent electrowinning solution from new scrap.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode tin produced	
Lead	4.704	2.184
Cyanide (total)	3.360	1.344
Fluoride	588.000	334.300
Tin	6.384	3.696

(f) Spent electrowinning solution from municipal solid waste.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of MSW scrap used as raw material	
Lead	0.033	0.015
Cyanide (total)	0.024	0.010
Fluoride	4.165	2.368
Tin	0.045	0.026

(g) Tin hydroxide supernatant from scrap.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from scrap	
Lead	15.580	7.233
Cyanide (total)	11.130	4.451
Fluoride	1,947.000	1,107.000
Tin	21.140	12.240

(h) Tin hydroxide supernatant from plating solutions and sludges.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from plating solutions and sludges	
Lead	32.20	14.95
Cyanide (total)	23.00	9.20
Fluoride	4,025.00	2,289.00
Tin	43.70	25.30

(i) Tin hydroxide filtrate.

PSES for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal produced	
Lead	7.012	3.256
Cyanide (total)	5.009	2.004
Fluoride	876.500	498.400
Tin	9.517	5.510

§ 421.296 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary tin process wastewater introduced into a POTW shall not exceed the following values:

(a) Tin smelter SO_2 scrubber.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of crude tapped tin produced	
Arsenic	12.790	5.703
Lead	2.575	1.196
Iron	11.040	5.611
Tin	3.495	2.024

(b) Dealuminizing rinse.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of dealuminized scrap produced	
Lead	0.010	0.005
Cyanide (total)	0.007	0.003
Fluoride	1.225	0.697
Tin	0.013	0.008

(c) Tin mud acid neutralization filtrate.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million of pounds) of neutralized dewatered tin mud produced	
Lead	1.413	0.656
Cyanide (total)	1.009	0.404
Fluoride	176.600	100.400
Tin	1.918	1.110

(d) Tin hydroxide wash.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin hydroxide washed	
Lead	3.347	1.554
Cyanide (total)	2.391	0.956
Fluoride	418.400	237.900
Tin	4.542	2.630

(e) Spent electrowinning solution from new scrap.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cathode tin produced	
Lead	4.704	2.184
Cyanide (total)	3.360	1.344
Fluoride	588.000	334.300
Tin	6.384	3.696

(f) Spent electrowinning solution from municipal solid waste.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of MSW scrap used as raw material	
Lead	0.033	0.015
Cyanide (total)	0.024	0.010
Fluoride	4.165	2.368
Tin	0.045	0.026

(g) Tin hydroxide supernatant from scrap.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from scrap	
Lead	15.580	7.233
Cyanide (total)	11.130	4.451
Fluoride	1,947.000	1,107.000
Tin	21.140	12.240

(h) Tin hydroxide supernatant from plating solutions and ludges.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal recovered from plating solutions and sludges	
Lead	32.20	14.95
Cyanide (total)	23.00	9.20
Fluoride	4,025.00	2,289.00
Tin	43.70	25.30

(i) Tin hydroxide filtrate.

PSNS for the Secondary Tin Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tin metal produced	
Lead	7.012	3.256
Cyanide (total)	5.009	2.004
Fluoride	876.500	498.400
Tin	9.517	5.510

§ 421.297 [Reserved]

Subpart AB - Primary and Secondary Titanium Subcategory

Source: 50 FR 38380, Sept. 20, 1985, unless otherwise noted.

§ 421.300 Applicability: Description of the primary and secondary titanium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of titanium at primary and secondary titanium facilities. Facilities which only practice vacuum distillation for sponge purification and which do not practice electrolytic recovery of magnesium are exempt from regulations. All other primary and secondary titanium facilities are covered by these regulations.

§ 421.301 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.302 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Chlorination off-gas wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.412	0.168
Lead	0.393	0.187
Nickel	1.797	1.189
Titanium	0.880	0.384
Oil and grease	18.720	11.230

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	38.380	18.250
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Chlorination area-vent wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.412	0.168
Chromium (total)	0.458	0.187
Lead	0.437	0.208
Nickel	1.997	1.321
Titanium	0.978	0.426
Oil and grease	20.800	12.480
Total suspended solids	42.640	20.280
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) $TiCl_4$ handling wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ handled	
Chromium (total)	0.082	0.034
Lead	0.079	0.037
Nickel	0.359	0.237
Titanium	0.176	0.077
Oil and grease	3.740	2.244
Total suspended solids	7.667	3.647
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Reduction area wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	18.170	7.435
Lead	17.350	8.261
Nickel	79.300	52.450
Titanium	38.820	16.930
Oil and grease	826.100	495.600
Total suspended solids	1,693.000	805.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Melt cell wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	9.352	3.826
Lead	8.927	4.251
Nickel	40.810	26.990
Titanium	19.980	8.714
Oil and grease	425.100	255.000
Total suspended solids	871.400	414.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Chlorine liquefaction wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	130.900	53.560
Lead	125.000	59.510
Nickel	571.300	377.900
Titanium	279.700	122.000
Oil and grease	5,951.000	3,571.000
Total suspended solids	12,200.000	5,702.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Sodium reduction container reconditioning wash water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.564	0.231
Lead	0.538	0.256
Nickel	2.461	1.628
Titanium	1.205	0.526
Oil and grease	25.640	15.380
Total suspended solids	52.560	25.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Chip crushing wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	10.090	4.126
Lead	9.627	4.584

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	44.010	29.110
Titanium	21.550	9.398
Oil and grease	458.400	275.100
Total suspended solids	939.800	447.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Acid leachate and rinse water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	5.210	2.131
Lead	4.973	2.368
Nickel	22.730	15.040
Titanium	11.130	4.854
Oil and grease	236.800	142.100
Total suspended solids	485.400	230.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Sponge crushing and screening wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	2.847	1.165
Lead	2.717	1.294
Nickel	12.420	8.217
Titanium	6.082	2.653
Oil and grease	129.400	77.640

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	265.300	126.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Acid pickle and wash water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium pickled	
Chromium (total)	0.027	0.011
Lead	0.026	0.012
Nickel	0.117	0.077
Titanium	0.057	0.025
Oil and grease	1.220	0.732
Total suspended solids	2.501	1.190
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Scrap milling wet air pollution control.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap milled	
Chromium (total)	0.995	0.407
Lead	0.950	0.452
Nickel	4.341	2.871
Titanium	2.125	0.927
Oil and grease	45.220	27.130
Total suspended solids	92.700	44.090
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Scrap detergent wash water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap washed	
Chromium (total)	7.948	3.252
Lead	7.587	3.613
Nickel	34.680	22.940
Titanium	16.980	7.406
Oil and grease	361.300	216.800
Total suspended solids	740.600	352.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Casting crucible wash water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	0.210	0.086
Lead	0.200	0.095
Nickel	0.916	0.606
Titanium	0.448	0.196
Oil and grease	9.540	5.724
Total suspended solids	19.560	9.302
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Casting contact cooling water.

BPT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	321.100	131.400
Lead	306.500	145.900
Nickel	1,401.000	926.800
Titanium	685.900	299.200
Oil and grease	14,590.000	8,757.000
Total suspended solids	29,920.000	14,230.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.303 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Chlorination off-gas wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.346	0.140
Lead	0.262	0.122
Nickel	0.515	0.346
Titanium	0.496	0.215

(b) Chlorination area-vent wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.385	0.156
Lead	0.291	0.135
Nickel	0.572	0.385
Titanium	0.551	0.239

(c) $TiCl_4$ handling wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ handled	
Chromium (total)	0.069	0.028
Lead	0.052	0.024
Nickel	0.103	0.069
Titanium	0.099	0.043

(d) Reduction area wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	1.528	0.620
Lead	1.156	0.537
Nickel	2.272	1.528
Titanium	2.189	0.950

(e) Melt cell wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.787	0.319
Lead	0.595	0.276
Nickel	1.169	0.787
Titanium	1.127	0.489

(f) Chlorine liquefaction wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	11.010	4.463
Lead	8.332	3.868
Nickel	16.370	11.010
Titanium	15.770	6.844

(g) Sodium reduction container reconditioning wash water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.474	0.192
Lead	0.359	0.167
Nickel	0.705	0.474
Titanium	0.679	0.295

(h) Chip crushing wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.848	0.344
Lead	0.642	0.298
Nickel	1.261	0.848
Titanium	1.215	0.527

(i) Acid leachate and rinse water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	4.381	1.776
Lead	3.315	1.539
Nickel	6.512	4.381

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Titanium	6.275	2.723

(j) Sponge crushing and screening wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.239	0.097
Lead	0.181	0.084
Nickel	0.356	0.239
Titanium	0.343	0.149

(k) Acid pickle and wash water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium pickled	
Chromium (total)	0.023	0.009
Lead	0.017	0.008
Nickel	0.034	0.023
Titanium	0.032	0.014

(l) Scrap milling wet air pollution control.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap milled	
Chromium (total)	0.084	0.034
Lead	0.064	0.030
Nickel	0.125	0.084
Titanium	0.120	0.052

(m) Scrap detergent wash water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap washed	
Chromium (total)	6.684	2.710
Lead	5.058	2.348
Nickel	9.935	6.684
Titanium	9.574	4.155

(n) Casting crucible wash water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	0.176	0.072
Lead	0.134	0.062
Nickel	0.262	0.176
Titanium	0.253	0.110

(o) Casting contact cooling water.

BAT Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	27.000	10.950
Lead	20.430	9.486
Nickel	40.140	27.000
Titanium	38.68	16.78

§ 421.304 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Chlorination off-gas wet air pollution control.

NSPS Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	0.346	0.140
Lead	0.262	0.122
Nickel	0.515	0.346
Titanium	0.496	0.215
Oil and grease	9.360	9.360
Total suspended solids	14.040	11.230
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Chlorination area-vent wet air pollution control.

NSPS Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.385	0.156
Lead	0.291	0.135
Nickel	0.572	0.385
Titanium	0.551	0.239
Oil and grease	10.400	10.400
Total suspended solids	15.600	12.480
pH	([1])	([1])

[1] Within the range of 7.0 to 10.0 at all times.

(c) $TiCl_4$ handling wet air pollution control.

NSPS Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ handled	
Chromium (total)	0.069	0.028
Lead	0.052	0.024
Nickel	0.103	0.069

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Titanium	0.099	0.043
Oil and grease	1.870	1.870
Total suspended solids	2.805	2.244
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Reduction area wet air pollution control.

NSPS Limitations for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	1.528	0.620
Lead	1.156	0.537
Nickel	2.272	1.528
Titanium	2.189	0.950
Oil and grease	41.300	41.300
Total suspended solids	61.950	49.560
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Melt cell wet air pollution control.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.787	0.319
Lead	0.595	0.276
Nickel	1.169	0.787
Titanium	1.127	0.489
Oil and grease	21.260	21.260
Total suspended solids	31.890	25.510

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Chlorine liquefaction wet air pollution control.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of titanium produced	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000
Oil and grease	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Sodium reduction container reconditioning wash.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of titanium produced	
Chromium (total)	0.474	0.192
Lead	0.359	0.167
Nickel	0.705	0.474
Titanium	0.679	0.295
Oil and grease	12.820	12.820
Total suspended solids	19.230	15.380
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Chip crushing wet air pollution control.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of titanium produced	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000
Oil and grease	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Acid leachate and rinse water.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pound per million pounds) of titanium produced	
Chromium (total)	4.381	1.776
Lead	3.315	1.539
Nickel	6.512	4.381
Titanium	6.275	2.723
Oil and grease	118.400	118.400
Total suspended solids	177.600	142.100
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Sponge crushing and screening wet air pollution control.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000
Oil and grease	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Acid pickle and wash water.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium pickled	
Chromium (total)	0.023	0.009
Lead	0.017	0.008
Nickel	0.034	0.023
Titanium	0.032	0.014
Oil and grease	0.610	0.610
Total suspended solids	0.915	0.732
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Scrap milling wet air pollution control.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap milled	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Oil and grease	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Scrap detergent wash water.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap washed	
Chromium (total)	6.684	2.710
Lead	5.058	2.348
Nickel	9.935	6.684
Titanium	9.574	4.155
Oil and grease	180.600	180.600
Total suspended solids	271.000	216.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Casting crucible wash water.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	0.176	0.072
Lead	0.134	0.062
Nickel	0.262	0.176
Titanium	0.253	0.110
Oil and grease	4.770	4.770
Total suspended solids	7.155	5.724
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Casting contact cooling water.

NSPS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	27.000	10.950
Lead	20.430	9.486
Nickel	40.140	27.000
Titanium	38.680	16.780
Oil and grease	729.700	729.700
Total suspended solids	1,095.000	875.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.305 Pretreatment standards for existing sources.

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. The mass of wastewater pollutants in primary and secondary titanium process wastewater introduced into a POTW must not exceed the following values:

(a) Chlorination off-gas wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.346	0.140
Lead	0.262	0.122
Nickel	0.515	0.346
Titanium	0.496	0.215

(b) Chlorination Area-vent wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	0.385	0.156
Lead	0.291	0.135
Nickel	0.572	0.385
Titanium	0.551	0.239

(c) $TiCl_4$ handling wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ handled	
Chromium (total)	0.069	0.028
Lead	0.052	0.024
Nickel	0.103	0.069
Titanium	0.099	0.043

(d) Reduction area wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	1.528	0.620
Lead	1.156	0.537
Nickel	2.272	1.528
Titanium	2.189	0.950

(e) Melt cell wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.787	0.319
Lead	0.595	0.276
Nickel	1.169	0.787

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Titanium	1.127	0.489

(f) Chlorine liquefaction wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	11.010	4.463
Lead	8.332	3.868
Nickel	16.370	11.010
Titanium	15.770	6.844

(g) Sodium reduction container reconditioning wash water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.474	0.192
Lead	0.359	0.167
Nickel	0.705	0.474
Titanium	0.679	0.295

(h) Chip crushing wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.848	0.344
Lead	0.642	0.298
Nickel	1.261	0.848
Titanium	1.215	0.527

(i) Acid leachate and rinse water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	4.381	1.776
Lead	3.315	1.539
Nickel	6.512	4.381
Titanium	6.275	2.723

(j) Sponge crushing and screening wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.239	0.097
Lead	0.181	0.084
Nickel	0.356	0.239
Titanium	0.343	0.149

(k) Acid pickle and wash water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium pickled	
Chromium (total)	0.023	0.009
Lead	0.017	0.008
Nickel	0.034	0.023
Titanium	0.032	0.014

(l) Scrap milling wet air pollution control.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap milled	
Chromium (total)	0.084	0.034
Lead	0.064	0.030

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	0.125	0.084
Titanium	0.120	0.052

(m) Scrap detergent wash water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap washed	
Chromium (total)	6.684	2.710
Lead	5.058	2.348
Nickel	9.935	6.684
Titanium	9.574	4.155

(n) Casting crucible wash water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	0.176	0.072
Lead	0.134	0.062
Nickel	0.262	0.176
Titanium	0.253	0.110

(o) Casting contact cooling water.

PSES for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	27.000	10.950
Lead	20.430	9.486
Nickel	40.140	27.000
Titanium	38.680	16.780

§ 421.306 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary and secondary titanium process wastewater introduced into a POTW shall not exceed the following values:

(a) Chlorination off-gas wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.346	0.140
Lead	0.262	0.122
Nickel	0.515	0.346
Titanium	0.496	0.215

(b) Chlorination area-vent wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ produced	
Chromium (total)	0.385	0.156
Lead	0.291	0.135
Nickel	0.572	0.385
Titanium	0.551	0.239

(c) $TiCl_4$ handling wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of $TiCl_4$ handled	
Chromium (total)	0.069	0.028
Lead	0.052	0.024
Nickel	0.103	0.069
Titanium	0.099	0.043

(d) Reduction area wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	1.528	0.620
Lead	1.156	0.537
Nickel	2.272	1.528
Titanium	2.189	0.950

(e) Melt cell wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.787	0.319
Lead	0.595	0.276
Nickel	1.169	0.787
Titanium	1.127	0.489

(f) Chlorine liquefaction wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000

(g) Sodium reduction container reconditioning wash water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.474	0.192

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	0.359	0.167
Nickel	0.705	0.474
Titanium	0.679	0.295

(h) Chip crushing wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000

(i) Acid leachate and rinse water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	4.381	1.776
Lead	3.315	1.539
Nickel	6.512	4.381
Titanium	6.275	2.723

(j) Sponge crushing and screening wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium produced	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000

(k) Acid pickle and wash water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium pickled	
Chromium (total)	0.023	0.009
Lead	0.017	0.008
Nickel	0.034	0.023
Titanium	0.032	0.014

(l) Scrap milling wet air pollution control.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap milled	
Chromium (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Titanium	0.000	0.000

(m) Scrap detergent wash water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of scrap washed	
Chromium (total)	6.684	2.710
Lead	5.058	2.348
Nickel	9.935	6.684
Titanium	9.574	4.155

(n) Casting crucible wash water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	0.176	0.072
Lead	0.134	0.062
Nickel	0.262	0.176
Titanium	0.253	0.110

(o) Casting contact cooling water.

PSNS for the Primary and Secondary Titanium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of titanium cast	
Chromium (total)	27.000	10.950
Lead	20.430	9.486
Nickel	40.140	27.000
Titanium	38.680	16.780

§ 421.307 [Reserved]

Subpart AC - Secondary Tungsten and Cobalt Subcategory

Source: 50 FR 38386, Sept. 20, 1985, unless otherwise noted.

§ 421.310 Applicability: Description of the secondary tungsten and cobalt subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of tungsten or cobalt at secondary tungsten and cobalt facilities processing tungsten or tungsten carbide scrap raw materials.

§ 421.311 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.312 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Tungsten detergent wash and rinse.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten scrap washed	
Copper	0.371	0.195
Nickel	0.374	0.248
Ammonia (as N)	25.990	11.430
Cobalt	0.768	0.337
Tungsten	1.357	0.542
Oil and grease	3.900	2.340
Total suspended solids	7.995	3.803
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Tungsten leaching acid.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	4.885	2.571
Nickel	4.937	3.265
Ammonia (as N)	342.700	150.700
Cobalt	10.130	4.448
Tungsten	17.890	7.147
Oil and grease	51.420	30.850
Total suspended solids	105.400	50.140
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tungsten post-leaching wash and rinse.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	9.772	5.143
Nickel	9.875	6.532
Ammonia (as N)	685.600	301.400
Cobalt	20.263	8.897
Tungsten	35.800	14.300
Oil and grease	102.900	61.720
Total suspended solids	210.900	100.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Synthetic scheelite filtrate.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of synthetic scheelite produced	
Copper	31.660	16.660
Nickel	31.990	21.160
Ammonia (as N)	2,221.000	976.300
Cobalt	65.644	28.824
Tungsten	116.000	46.320
Oil and grease	333.200	200.000
Total suspended solids	683.100	324.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Tungsten carbide leaching wet air pollution control.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide scrap leached	
Copper	3.327	1.751
Nickel	3.362	2.224
Ammonia (as N)	233.400	102.600
Cobalt	6.899	3.029
Tungsten	12.190	4.868
Oil and grease	35.020	21.010
Total suspended solids	71.790	34.150
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Tungsten carbide wash water.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide produced	
Copper	15.830	8.333
Nickel	16.000	10.580
Ammonia (as N)	1,111.000	488.300
Cobalt	32.832	14.416
Tungsten	58.000	23.170
Oil and grease	166.700	100.000
Total suspended solids	341.700	162.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Cobalt sludge leaching wet air pollution control.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced from cobalt sludge	
Copper	67.990	35.780
Nickel	68.700	45.440
Ammonia (as N)	4,770.000	2,097.000
Cobalt	140.977	61.901
Tungsten	249.000	99.470
Oil and grease	715.600	429.400
Total suspended solids	1,467.000	697.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Crystallization decant.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	79.140	41.650
Nickel	79.970	52.900
Ammonia (as N)	5,552.000	2,441.000
Cobalt	164.101	72.055
Tungsten	289.900	115.800
Oil and grease	833.000	499.800
Total suspended solids	1,708.000	812.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Acid wash decant.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	36.220	19.060
Nickel	36.600	24.210
Ammonia (as N)	2,541.000	1,117.000
Cobalt	75.104	32.977
Tungsten	132.700	52.990
Oil and grease	381.300	228.800
Total suspended solids	781.600	371.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Cobalt hydroxide filtrate.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	107.600	56.650
Nickel	108.800	71.940
Ammonia (as N)	7,551.000	3,320.000
Cobalt	223.189	97.999
Tungsten	394.300	157.500
Oil and grease	1,133.000	679.800
Total suspended solids	2,323.000	1,105.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Cobalt hydroxide filter cake wash.

BPT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	207.200	109.100
Nickel	209.400	138.500
Ammonia (as N)	14,530.000	6,389.000
Cobalt	429.598	188.631
Tungsten	758.900	303.100
Oil and grease	2,181.000	1,309.000
Total suspended solids	4,471.000	2,126.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38386, Sept. 20, 1985, as amended at 55 FR 31713, 31714, Aug. 3, 1990]

§ 421.313 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Tungsten detergent wash and rinse.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten scrap washed	
Copper	0.250	0.119
Nickel	0.107	0.072
Ammonia (as N)	25.990	11.430
Cobalt	0.538	0.236
Tungsten	0.679	0.302

(b) Tungsten leaching acid.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	3.291	1.569

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	1.414	0.951
Ammonia (as N)	342.700	150.700
Cobalt	7.096	3.111
Tungsten	8.947	3.985

(c) Tungsten post-leaching wash and rinse.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	6.583	3.137
Nickel	2.829	1.903
Ammonia (as N)	685.600	301.400
Cobalt	14.194	6.223
Tungsten	17.900	7.972

(d) Synthetic scheelite filtrate.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of synthetic scheelite produced	
Copper	21.330	10.170
Nickel	9.164	6.165
Ammonia (as N)	2,221.000	976.300
Cobalt	45.984	20.160
Tungsten	57.980	25.820

(e) Tungsten carbide leaching wet air pollution control.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide scrap leached	
Copper	2.241	1.068
Nickel	0.963	0.648
Ammonia (as N)	233.400	102.600
Cobalt	4.833	2.119
Tungsten	6.093	2.714

(f) Tungsten carbide wash water.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide produced	
Copper	10.670	5.083
Nickel	4.583	3.083
Ammonia (as N)	1,111.000	488.300
Cobalt	22.999	10.083
Tungsten	29.000	12.920

(g) Cobalt sludge leaching wet air pollution control.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced from cobalt sludge	
Copper	45.80	21.83
Nickel	19.68	13.24
Ammonia (as N)	4,770.00	2,097.00
Cobalt	98.756	43.295
Tungsten	124.50	55.46

(h) Crystallization decant.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	53,310	25.410
Nickel	22.910	15.410
Ammonia (as N)	5,552.000	2,441.000
Cobalt	114.954	50.397
Tungsten	144.900	64.560

(i) Acid wash decant.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	24.400	11.630
Nickel	10.490	7.053
Ammonia (as N)	2,541.000	1,117.000
Cobalt	52.611	23.065
Tungsten	66.340	29.550

(j) Cobalt hydroxide filtrate.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	72.510	34.560
Nickel	31.160	20.960
Ammonia (as N)	7,551.000	3,320.000
Cobalt	156.346	68.543
Tungsten	197.100	87.800

(k) Cobalt hydroxide filter cake wash.

BAT Limitations for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	139.600	66.510
Nickel	59.970	40.340
Ammonia (as N)	14,530.000	6,389.000
Cobalt	300.094	131.932
Tungsten	379.400	169.000

[50 FR 38386, Sept. 20, 1985, as amended at 55 FR 31714, 31715, Aug. 3, 1990]

§ 421.314 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Tungsten detergent wash and rinse.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten scrap washed	
Copper	0.250	0.119
Nickel	0.107	0.072
Ammonia (as N)	25.990	11.430
Cobalt	0.538	0.236
Tungsten	0.679	0.302
Oil and grease	1.950	1.950
Total suspended solids	2.925	2.340
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Tungsten leaching acid.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	3.291	1.569
Nickel	1.414	0.951
Ammonia (as N)	342.700	150.700
Cobalt	7.096	3.111
Tungsten	8.947	3.985
Oil and grease	25.710	25.710
Total suspended solids	38.570	30.850
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Tungsten post-leaching wash and rinse.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	6.583	3.137
Nickel	2.829	1.903
Ammonia (as N)	685.600	301.400
Tungsten	17.900	7.972
Cobalt	14.194	6.223
Oil and grease	51.430	51.430
Total suspended solids	77.150	61.720
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Synthetic scheelite filtrate.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of synthetic scheelite produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	21.330	10.170
Nickel	9.164	6.165
Ammonia (as N)	2,221.000	976.300
Cobalt	45.984	20.160
Tungsten	57.980	25.820
Oil and grease	166.600	166.600
Total suspended solids	249.900	199.900
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Tungsten carbide leaching wet air pollution control.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide scrap leached	
Copper	2.241	1.068
Nickel	0.963	0.648
Ammonia (as N)	233.400	102.600
Cobalt	4.833	2.119
Tungsten	6.093	2.714
Oil and grease	17.510	17.510
Total suspended solids	26.270	21.010
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Tungsten carbide wash water.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide produced	
Copper	10.670	5.083
Nickel	4.583	3.083
Ammonia (as N)	1,111.000	488.300
Cobalt	22.999	10.083
Tungsten	29.000	12.920
Oil and grease	83.330	83.330
Total suspended solids	125.000	100.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Cobalt sludge leaching wet air pollution control.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced from cobalt sludge	
Copper	45.80	21.83
Nickel	19.68	13.24
Ammonia (as N)	4,770.00	2,097.00
Cobalt	98.756	43.295
Tungsten	124.50	55.46
Oil and grease	357.80	357.80
Total suspended solids	536.70	429.40
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Crystallization decant.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	53.310	25.410
Nickel	22.910	15.410
Ammonia (as N)	5,552.000	2,441.000
Cobalt	114.954	50.397
Tungsten	144.900	64.560
Oil and grease	416.500	416.500
Total suspended solids	624.800	499.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Acid wash decant.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	24.400	11.630
Nickel	10.490	7.053
Ammonia (as N)	2,541.000	1,117.000
Cobalt	52.611	23.065
Tungsten	66.340	29.550
Oil and grease	190.600	190.600
Total suspended solids	285.900	228.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Cobalt hydroxide filtrate.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	72.510	34.560
Nickel	31.160	20.960
Ammonia (as N)	7,551.000	3,320.000
Cobalt	156.346	68.543
Tungsten	197.100	87.800
Oil and grease	566.500	566.500
Total suspended solids	849.700	679.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Cobalt hydroxide filter cake wash.

NSPS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	139.600	66.510
Nickel	59.970	40.340
Ammonia (as N)	14,530.000	6,389.000
Cobalt	300.094	131.932
Tungsten	379.400	169.000
Oil and grease	1,090.000	1,090.000
Total suspended solids	1,636,000	1,308.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

[50 FR 38386, Sept. 20, 1985, as amended at 55 FR 31715, 31716, Aug. 3, 1990]

§ 421.315 Pretreatment standards for existing sources.

Except as provided in 40 CFR 403.7, any existing source subject to this subpart which introduces polutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources. The mass of wastewater pollutants in secondary tungsten and cobalt process wastewater introduced into a POTW shall not exceed the following values:

(a) Tungsten detergent wash and rinse.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten scrap washed	
Copper	0.250	0.119
Nickel	0.107	0.072
Ammonia (as N)	25.990	11.430
Cobalt	0.538	0.236
Tungsten	0.679	0.302

(b) Tungsten leaching acid.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	3.291	1.569
Nickel	1.414	0.951
Ammonia (as N)	342.700	150.700
Cobalt	7.096	3.111
Tungsten	8.947	3.985

(c) Tungsten post-leaching wash and rinse.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	6.583	3.137
Nickel	2.829	1.903
Ammonia (as N)	685.600	301.400
Cobalt	14.194	6.223
Tungsten	17.900	7.972

(d) Synthetic scheelite filtrate.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of synthetic scheelite produced	
Copper	21.330	10.170
Nickel	9.164	6.165
Ammonia (as N)	2,221.000	976.300
Cobalt	45.984	20.160
Tungsten	57.980	25.820

(e) Tungsten carbide leaching wet air pollution control.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide scrap	
Copper	2.241	1.068
Nickel	0.963	0.648
Ammonia (as N)	233.400	102.600
Cobalt	4.833	2.119
Tungsten	6.093	2.714

(f) Tungsten carbide wash water.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide produced	
Copper	10.670	5.083
Nickel	4.583	3.083
Ammonia (as N)	1,111.000	488.300
Cobalt	22.999	10.083
Tungsten	29.000	12.920

(g) Cobalt sludge leaching wet air pollution control.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced from cobalt sludge	
Copper	45.800	21.830
Nickel	19.680	13.240
Ammonia (as N)	4,770.000	2,097.000
Cobalt	98.756	43.295
Tungsten	124.500	55.460

(h) Crystallization decant.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	53.310	25.410
Nickel	22.910	15.410
Ammonia (as N)	5,552.000	2,441.000
Cobalt	114.954	50.397
Tungsten	144.9	64.56

(i) Acid wash decant.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	24.400	11.630
Nickel	10.490	7.053
Ammonia (as N)	2,541.000	1,117.000
Cobalt	52.611	23.065
Tungsten	66.34	29.55

(j) Cobalt hydroxide filtrate.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	72.510	34.560
Nickel	31.160	20.960
Ammonia (as N)	7,551.000	3,320.000
Cobalt	156.346	68.543
Tungsten	197.1	87.8

(k) Cobalt hydroxide filter cake wash.

PSES for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	139.600	66.510
Nickel	59.970	40.340
Ammonia (as N)	14,530.000	6,389.000
Cobalt	300.094	131.932
Tungsten	379.400	169.000

[50 FR 38386, Sept. 20, 1985, as amended at 55 FR 31717, 31718, Aug. 3, 1990]

§ 421.316 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary tungsten and cobalt process wastewater introduced into a POTW shall not exceed the following values:

(a) Tungsten detergent wash and rinse.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten scrap washed	
Copper	0.250	0.119
Nickel	0.107	0.072
Ammonia (as N)	25.990	11.430

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cobalt	0.538	0.236
Tungsten	0.679	0.302

(b) Tungsten leaching acid.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	3.291	1.569
Nickel	1.414	0.951
Ammonia (as N)	342.700	150.700
Cobalt	7.096	3.111
Tungsten	8.947	3.985

(c) Tungsten post-leaching wash and rinse.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten produced	
Copper	6.583	3.137
Nickel	2.829	1.903
Ammonia (as N)	685.600	301.400
Cobalt	14.194	6.223
Tungsten	17.900	7.792

(d) Synthetic scheelite filtrate.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of synthetic scheelite produced	
Copper	21.330	10.170
Nickel	9.164	6.165

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	2,221.000	976.300
Cobalt	45.984	20.160
Tungsten	57.980	25.820

(e) Tungsten carbide leaching wet air pollution control.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide scrap leached	
Copper	2.241	1.068
Nickel	0.963	0.648
Ammonia (as N)	233.400	102.600
Cobalt	4.833	2.119
Tungsten	6.093	2.714

(f) Tungsten carbide wash water.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of tungsten carbide produced	
Copper	10.670	5.083
Nickel	4.583	3.083
Ammonia (as N)	1,111.000	488.300
Cobalt	22.999	10.083
Tungsten	29.000	12.920

(g) Cobalt sludge leaching wet air pollution control.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced from cobalt sludge	
Copper	45.800	21.830
Nickel	19.680	13.240
Ammonia (as N)	4,770.000	2,097.000
Cobalt	98.756	43.295
Tungsten	124.500	55.460

(h) Crystallization decant.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	53.310	25.410
Nickel	22.910	15.410
Ammonia (as N)	5,552,000	2,441.000
Cobalt	114.954	50.397
Tungsten	144.900	64.560

(i) Acid wash decant.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	24.400	11.630
Nickel	10.490	7.053
Ammonia (as N)	2,541.000	1,117.000
Cobalt	52.611	23.065
Tungsten	66.340	29.550

(j) Cobalt hydroxide filtrate.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	72.510	34.560
Nickel	31.160	20.960
Ammonia (as N)	7,551.000	3,320.000
Cobalt	156.346	68.543
Tungsten	197.100	87.800

(k) Cobalt hydroxide filter cake wash.

PSNS for the Secondary Tungsten and Cobalt Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of cobalt produced	
Copper	139.600	66.510
Nickel	59.970	40.430
Ammonia (as N)	14,530.000	6,389.000
Cobalt	300.094	131.932
Tungsten	379.400	169.000

[50 FR 38386, Sept. 20, 1985, as amended at 55 FR 31718, 31719, Aug. 3, 1990]

§ 421.317 [Reserved]

Subpart AD - Secondary Uranium Subcategory

Source: 50 FR 38392, Sept. 20, 1985, unless otherwise noted.

§ 421.320 Applicability: Description of the secondary uranium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of uranium (including depleted uranium) by secondary uranium facilities.

§ 421.321 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.322 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practiacable technology currently available:

(a) Refinery sump filtrate.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium	32.270	13.200
Copper	139.300	73.340
Nickel	140.800	93.140
Fluoride	2,567.000	1,459.000
Total suspended solids	3,007.000	1,430.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Slag leach reslurry.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	2.009	0.822
Copper	8.675	4.566
Nickel	8.767	5.799
Fluoride	159.800	90.860
Total suspended solids	187.200	89.040
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Solvent extraction raffinate filtrate.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	2.802	1.146
Copper	12.100	6.369
Nickel	12.230	8.089
Fluoride	222.900	126.700
Total suspended solids	261.100	124.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Digestion wet air pollution control.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Evaporation and denitration wet air pollution control.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium trioxide produced	
Chromium (total)	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Hydrofluorination alkaline scrubber.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.009	0.004
Copper	0.038	0.020
Nickel	0.038	0.025
Fluoride	0.700	0.398
Total suspended solids	0.820	0.390
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Hydrofluorination water scrubber.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Magnesium reduction and casting floor wash.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.013	0.005
Copper	0.057	0.030
Nickel	0.058	0.038
Fluoride	1.054	0.599
Total suspended solids	1.234	0.587
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Laundry wastewater.

BPT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.084	0.035
Copper	0.365	0.192
Nickel	0.369	0.244
Fluoride	6.720	3.821
Total suspended solids	7.872	3.744
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.323 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Refinery sump filtrate.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	27.14	11.00
Copper	93.88	44.74
Nickel	40.34	27.14
Fluoride	2,567.00	1,459.00

(b) Slag leach reslurry.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	1.689	0.685
Copper	5.844	2.785
Nickel	2.511	1.689
Fluoride	159.800	90.860

(c) Solvent extraction raffinate filtrate.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	2.357	0.955
Copper	8.152	3.885
Nickel	3.503	2.357
Fluoride	222.900	126.700

(d) Digestion wet air pollution control.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(e) Evaporation and denitration wet air pollution control.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium trioxide produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(f) Hydrofluorination alkaline scrubber.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.007	0.003
Copper	0.026	0.012
Nickel	0.011	0.007
Fluoride	0.700	0.398

(g) Hydrofluorination water scrubber.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(h) Magnesium reduction and casting floor wash.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.011	0.005
Copper	0.039	0.018
Nickel	0.017	0.011
Fluoride	1.054	0.599

(i) Laundry wastewater.

BAT Limitations for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.036	0.014
Copper	0.123	0.059
Nickel	0.053	0.036
Fluoride	3.360	1.910

§ 421.324 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Refinery sump filtrate.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	27.14	11.00
Copper	93.88	44.74
Nickel	40.34	27.14
Fluoride	2,567.00	1,459.00
Total suspended solids	1,100.00	880.10
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Slag leach reslurry.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	1.689	0.685
Copper	5.844	2.785

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	2.511	1.689
Fluoride	159.800	90.860
Total suspended solids	68.490	54.790
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Solvent extraction raffinate filtrate.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	2.357	0.955
Copper	8.152	3.885
Nickel	3.503	2.357
Fluoride	222.900	126.700
Total suspended solids	95.540	76.430
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) Digestion wet air pollution control.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Evaporation and denitration wet air pollution control

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium trioxide produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Hydrofluorination alkaline scrubber.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.007	0.003
Copper	0.026	0.012
Nickel	0.011	0.007
Fluoride	0.700	0.398
Total suspended solids	0.300	0.240
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Hydrofluorination water scrubber.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Magnesium reduction and casting floor wash.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.011	0.005
Copper	0.039	0.018
Nickel	0.017	0.011
Fluoride	1.054	0.599
Total suspended solids	0.452	0.361
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Laundry wastewater.

NSPS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.036	0.014
Copper	0.123	0.059
Nickel	0.053	0.036
Fluoride	3.360	1.910
Total suspended solids	1.440	1.152
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.325 [Reserved]

§ 421.326 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in secondary uranium process wastewater introduced into a POTW shall not exceed the following values:

(a) Refinery sump filtrate.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	27.14	11.00
Copper	93.88	44.74
Nickel	40.34	27.14
Fluoride	2,567.00	1,459.00

(b) Slag leach reslurry.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	1.689	0.685
Copper	5.844	2.785
Nickel	2.511	1.689
Fluoride	159.800	90.860

(c) Solvent extraction raffinate filtrate.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	2.357	0.955
Copper	8.152	3.885
Nickel	3.503	2.357
Fluoride	222.900	126.700

(d) Digestion wet air pollution control.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium processed in the refinery	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(e) Evaporation and denitration wet air pollution control.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium trioxide produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(f) Hydrofluorination alkaline scrubber.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.007	0.003
Copper	0.026	0.012
Nickel	0.011	0.007
Fluoride	0.700	0.398

(g) Hydrofluorination water scrubber.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium tetrafluoride produced	
Chromium (total)	0.000	0.000
Copper	0.000	0.000
Nickel	0.000	0.000
Fluoride	0.000	0.000

(h) Magnesium reduction and casting floor wash.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium trioxide produced	
Chromium (total)	0.011	0.005
Copper	0.039	0.018
Nickel	0.017	0.011
Fluoride	1.054	0.599

(i) Laundry wastewater.

PSNS for the Secondary Uranium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of uranium produced by magnesium reduction	
Chromium (total)	0.036	0.014
Copper	0.123	0.059
Nickel	0.053	0.036
Fluoride	3.360	1.910

§ 421.327 [Reserved]

Subpart AE - Primary Zirconium and Hafnium Subcategory

Source: 50 FR 38395, Sept. 20, 1985, unless otherwise noted.

§ 421.330 Applicability: Description of the primary zirconium and hafnium subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of zirconium or hafnium at primary zirconium and hafnium facilities. There are two levels of BPT, BAT, NSPS, PSES and PSNS provisions for this subpart. Facilities which only produce zirconium or zirconium/nickel alloys by magnesium reduction of zirconium dioxide are exempt from regulations. All other facilities are subject to these regulations.

§ 421.331 Specialized definitions.

For the purpose of this subpart the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

§ 421.332 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Sand drying wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.250	0.102
Cyanide (total)	0.165	0.068
Lead	0.239	0.114
Nickel	1.091	0.721
Ammonia (as N)	75.710	33.280
Total suspended solids	23.290	11.080
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Sand chlorination off-gas wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zironium dioxide and hafnium dioxide produced	
Chromium (total)	19.130	7.825
Cyanide (total)	12.610	5.216
Lead	18.260	8.694
Nickel	83.460	55.210
Ammonia (as N)	5,795.000	2,547.000
Total suspended solids	1,782.000	847.700
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Sand chlorination area-vent wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.751	1.534
Cyanide (total)	2.472	1.023
Lead	3.580	1.705
Nickel	16.370	10.830
Ammonia (as N)	1,136.000	449.500
Total suspended solids	349.500	166.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) $SiCl_4$ purification wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.299	1.350
Cyanide (total)	2.174	0.900
Lead	3.149	1.500
Nickel	14.400	9.522
Ammonia (as N)	999.500	439.400
Total suspended solids	307.400	146.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Feed makeup wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.501	1.023
Cyanide (total)	1.648	0.682
Lead	2.387	1.137
Nickel	10.910	7.217
Ammonia (as N)	757.500	333.000
Total suspended solids	233.000	110.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Iron extraction (MIBK) steam stripper bottoms.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.987	0.404
Cyanide (total)	0.651	0.269
Lead	0.942	0.449
Nickel	4.308	2.850
Ammonia (as N)	299.100	131.500
Total suspended solids	92.000	43.760
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Zirconium filtrate.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	17.070	6.982
Cyanide (total)	11.250	4.655
Lead	16.290	7.758
Nickel	74.480	49.260
Ammonia (as N)	5,171.000	2,273.000
Total suspended solids	1,590.000	756.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Hafnium filtrate.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Calcining caustic wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.959	1.619
Cyanide (total)	2.609	1.080
Lead	3.779	1.799
Nickel	17.270	11.430
Ammonia (as N)	1,199.000	527.200
Total suspended solids	368.900	175.400
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Pure chlorination wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	16.860	6.897
Cyanide (total)	11.110	4.598
Lead	16.090	7.663
Nickel	73.570	48.660
Ammonia (as N)	5,108.000	2,245.000
Total suspended solids	1,571.000	747.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Reduction area-vent wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	1.622	0.663
Cyanide (total)	1.069	0.442
Lead	1.548	0.737
Nickel	7.077	4.681
Ammonia (as N)	491.300	216.000
Total suspended solids	151.100	71.880
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Magnesium recovery off-gas wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	9.123	3.732
Cyanide (total)	6.013	2.488
Lead	8.708	4.147
Nickel	39.810	26.330
Ammonia (as N)	2,764.000	1,215.000
Total suspended solids	850.100	404.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Magnesium recovery area-vent wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	5.068	2.073
Cyanide (total)	3.340	1.382
Lead	4.838	2.304
Nickel	22.110	14.630
Ammonia (as N)	1,535.000	675.000
Total suspended solids	472.200	224.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0. .

(n) Zirconium chip crushing wet air pollution control.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Acid leachate from zirconium metal production.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	12.970	5.304
Cyanide (total-	8.545	3.536
Lead	12.380	5.893
Nickel	56.570	37.420
Ammonia (as N)	3,928.000	1,727.000
Total suspended solids	1,208.000	574.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(p) Acid leachate from zirconium alloy production.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	6.939	2.839
Cyanide (total)	4.574	1.893
Lead	6.624	3.154
Nickel	30.280	20.030
Ammonia (as N)	2,102.000	924.200
Total suspended solids	646.600	307.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(q) Leaching rinse water from zirconium metal production.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium produced	
Chromium (total)	25.930	10.610
Cyanide (total)	17.090	7.072

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	24.750	11.790
Nickel	113.200	74.840
Ammonia (as N)	7,856.000	3,453.000
Total suspended solids	2,416.000	1,149.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0.

(r) Leaching rinse water from zirconium alloy production.

BPT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium in alloys produced	
Chromium (total)	0.347	0.142
Cyanide (total)	0.229	0.095
Lead	0.331	0.158
Nickel	1.515	1.002
Ammonia (as N)	105.200	46.240
Total suspended solids	32.350	15.390
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.333 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Sand drying wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.210	0.085

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Cyanide (total)	0.114	0.045
Lead	0.159	0.074
Nickel	0.312	0.210
Ammonia (as N)	75.710	33.280

(b) Sand chlorination off-gas wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	16.080	6.521
Cyanide (total)	8.694	3.478
Lead	12.170	5.651
Nickel	23.910	16.080
Ammonia (as N)	5,795.000	2,547.000

(c) Sand chlorination area-vent wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.154	1.279
Cyanide (total)	1.705	0.682
Lead	2.387	1.108
Nickel	4.688	3.154
Ammonia (as N)	1,136.000	499.500

(d) $SiCl_4$ purification wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.774	1.125
Cyanide (total)	1.500	0.600
Lead	2.099	0.975
Nickel	4.124	2.774
Ammonia (as N)	999.500	439.400

(e) Feed makeup wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.103	0.852
Cyanide (total)	1.137	0.455
Lead	1.591	0.739
Nickel	3.126	2.103
Ammonia (as N)	757.500	333.000

(f) Iron extraction (MIBK) steam stripper bottoms.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.830	0.337
Cyanide (total)	0.449	0.180
Lead	0.628	0.292
Nickel	1.234	0.830
Ammonia (as N)	299.100	131.500

(g) Zirconium filtrate.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	14.350	5.819
Cyanide (total)	7.758	3.103
Lead	10.860	5.043
Nickel	21.330	14.350
Ammonia (as N)	5,171.000	2,273.00

(h) Hafnium filtrate.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000

(i) Calcining caustic wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.329	1.350
Cyanide (total)	1.799	0.720
Lead	2.519	1.170

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Nickel	4.948	3.329
Ammonia (as N)	1,199.000	527.200

(j) Pure chlorination wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	14.180	5.748
Cyanide (total)	7.663	3.065
Lead	10.730	4.981
Nickel	21.070	14.180
Ammonia (as N)	5,108.000	2,245.000

(k) Reduction area-vent wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	1.364	0.553
Cyanide (total)	0.737	0.295
Lead	1.032	0.479
Nickel	2.027	1.364
Ammonia (as N)	491.300	216.000

(l) Magnesium recovery off-gas wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	7.671	3.110
Cyanide (total)	4.147	1.659
Lead	5.805	2.695
Nickel	11.400	7.671
Ammonia (as N)	2,764.000	1,215.000

(m) Magnesium recovery area-vent wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	4.262	1.728
Cyanide (total)	2.304	0.921
Lead	3.225	1.497
Nickel	6.335	4.262
Ammonia (as N)	1,535.000	675.000

(n) Zirconium chip crushing wet air pollution control.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000

(o) Acid leachate from zirconium metal production.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	10.900	4.420
Cyanide (total)	5.893	2.357
Lead	8.250	3.831
Nickel	16.210	10.900
Ammonia (as N)	3,928.000	1,674.000

(p) Acid leachate from zirconium alloy production.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	5.835	2.366
Cyanide (total)	3.154	1.262
Lead	4.416	2.050
Nickel	8.674	5.835
Ammonia (as N)	2,102.000	895.000

(q) Leaching rinse water from zirconium metal production.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	21.810	8.840
Cyanide (total)	11.790	4.715
Lead	16.500	7.661
Nickel	32.410	21.810
Ammonia (as N)	7,856.000	3,453.000

(r) Leaching rinse water from zirconium alloy production.

BAT Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	0.292	0.118
Cyanide (total)	0.158	0.063
Lead	0.221	0.103
Nickel	0.434	0.292
Ammonia (as N)	105.200	46.240

§ 421.334 Standards of performance for new sources.

Any new source subject to this subpart shall achieve the following new source performance standards:

(a) Sand drying wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.210	0.085
Cyanide (total)	0.114	0.045
Lead	0.159	0.074
Nickel	0.312	0.210
Ammonia (as N)	75.710	33.280
Total suspended solids	8.520	6.816
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(b) Sand chlorination off-gas wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	16.080	6.521
Cyanide (total)	8.694	3.478
Lead	12.170	5.651
Nickel	23.910	16.080
Ammonia (as N)	5,795.000	2,547.000
Total suspended solids	652.100	521.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(c) Sand chlorination area-vent wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.154	1.279
Cyanide (total)	1.705	0.682
Lead	2.387	1.108
Nickel	4.688	3.154
Ammonia (as N)	1,136.000	499.500
Total suspended solids	127.900	102.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(d) SiC_{14} purification wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.774	1.125
Cyanide (total)	1.500	0.600
Lead	2.099	0.975
Nickel	4.124	2.774
Ammonia (as N)	999.500	439.400
Total suspended solids	112.500	89.980
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(e) Feed makeup wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.103	0.852
Cyanide (total)	1.137	0.455
Lead	1.591	0.739
Nickel	3.126	2.103
Ammonia (as N)	757.500	333.000
Total suspended solids	85.250	68.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(f) Iron extraction (MIBK) steam stripper bottoms.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.830	0.337
Cyanide (total)	0.449	0.180
Lead	0.628	0.292
Nickel	1.234	0.830
Ammonia (as N)	299.100	131.500
Total suspended solids	33.660	26.930
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(g) Zirconium filtrate.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	14.350	5.819
Cyanide (total)	7.758	3.103
Lead	10.860	5.043
Nickel	21.330	14.350
Ammonia (as N)	5,171.000	2,273.000
Total suspended solids	581.900	465.500
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(h) Hafnium filtrate.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(i) Calcining caustic wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.329	1.350
Cyanide (total)	1.799	0.720
Lead	2.519	1.170
Nickel	4.948	3.329
Ammonia (as N)	1,199.000	527.200
Total suspended solids	135.000	108.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(j) Pure chlorination wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	14.180	5.748
Cyanide (total)	7.663	3.065
Lead	10.730	4.981
Nickel	21.070	14.180
Ammonia (as N)	5,108.000	2,245.000
Total suspended solids	574.800	459.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(k) Reduction area-vent wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	1.364	0.553
Cyanide (total)	0.737	0.295
Lead	1.032	0.479
Nickel	2.027	1.364
Ammonia (as N)	491.300	216.000
Total suspended solids	55.290	44.230
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(l) Magnesium recovery off-gas wet air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	7.671	3.110
Cyanide (total)	4.147	1.659
Lead	5.805	2.695
Nickel	11.400	7.671
Ammonia (as N)	2,764.000	1,215.000
Total suspended solids	404.300	248.800
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(m) Magnesium recovery area-vent wet air pollution control.

NSPS Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	4.262	1.728
Cyanide (total)	2.304	0.921
Lead	3.225	1.497
Nickel	6.335	4.262
Ammonia (as N)	1,535.000	675.000
Total suspended solids	172.800	138.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(n) Zirconium chip crushing west air pollution control.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000
Total suspended solids	0.000	0.000
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(o) Acid leachate from zirconium metal production.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	10.900	4.420
Cyanide (total)	5.893	2.357
Lead	8.250	3.831
Nickel	16.210	10.900
Ammonia (as N)	3,928.000	1,674.000
Total suspended solids	442.000	353.600
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(p) Acid leachate from zirconium alloy production.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	5.835	2.366
Cyanide (total)	3.154	1.262
Lead	4.416	2.050
Nickel	8.674	5.835
Ammonia (as N)	2,102.000	895.800
Total suspended solids	236.600	189.300
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(q) Leaching rinse water from zirconium metal production.

NSPS Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	21.810	8.840
Cyanide (total)	11.790	4.715
Lead	16.500	7.661
Nickel	32.410	21.810
Ammonia (as N)	7,856.000	3,453.000
Total suspended solids	884.000	707.200
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

(r) Leaching rinse water from zirconium alloy production.

NSPS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	0.292	0.118
Cyanide (total)	0.158	0.063

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Lead	0.221	0.103
Nickel	0.434	0.292
Ammonia (as N)	105.200	46.240
Total suspended solids	11.840	9.468
pH	([1])	([1])

[1] Within the range of 7.5 to 10.0 at all times.

§ 421.335 [Reserved]

§ 421.336 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new 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 new sources. The mass of wastewater pollutants in primary zirconium and hafnium process wastewater introduced into a POTW shall not exceed the following values:

(a) Sand drying wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.210	0.085
Cyanide (total)	0.114	0.045
Lead	0.159	0.074
Nickel	0.312	0.210
Ammonia (as N)	75.710	33.280

(b) Sand chlorination off-gas wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	16.080	6.521
Cyanide (total)	8.690	3.478
Lead	12.170	5.651
Nickel	23.910	16.080
Ammonia (as N)	5,795.000	2,547.000

(c) Sand chlorination area vent wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.154	1.279
Cyanide (total)	1.705	0.682
Lead	2.387	1.108
Nickel	4.688	3.154
Ammonia (as N)	1,136.000	499.500

(d) $SiCl_4$ purification wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.774	1.125
Cyanide (total)	1.500	0.600
Lead	2.099	0.975
Nickel	4.124	2.774
Ammonia (as N)	999.500	439.400

(e) Feed makeup wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	2.103	0.852
Cyanide (total)	1.137	0.455
Lead	1.591	0.739
Nickel	3.126	2.103
Ammonia (as N)	757.500	333.000

(f) Iron extraction (MIBK) steam stripper bottoms.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.830	0.337
Cyanide (total)	0.449	0.180
Lead	0.628	0.292
Nickel	1.234	0.830
Ammonia (as N)	299.100	131.500

(g) Zirconium filtrate.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	14.350	5.819
Cyanide (total)	7.758	3.103
Lead	10.860	5.043
Nickel	21.340	14.350

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	5,171.000	2,273.000

(h) Hafnium filtrate.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000

(i) Calcining caustic wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium dioxide and hafnium dioxide produced	
Chromium (total)	3.329	1.350
Cyanide (total)	1.799	0.720
Lead	2.519	1.170
Nickel	4.948	3.329
Ammonia (as N)	1,199.000	527.200

(j) Pure chlorination wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Chromium (total)	14.180	5.748
Cyanide (total)	7.663	3.065
Lead	10.730	4.981
Nickel	21.007	14.180
Ammonia (as N)	5,108.000	2,245,000

(k) Reduction area-vent wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of Zirconium and hafnium produced	
Chromium (total)	1.364	0.553
Cyanide (total)	0.737	0.295
Lead	1.032	0.479
Nickel	2.027	1.364
Ammonia (as N)	491.300	216.000

(l) Magnesium recovery off-gas wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	7.671	3.110
Cyanide (total)	4.147	1.659
Lead	5.805	2.695
Nickel	11.400	7.671
Ammonia (as N)	2,764.000	1,215.000

(m) Magnesium recovery area-vent wet air pollution control.

PSNS Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	4.262	1.728
Cyanide (total)	2.304	0.921
Lead	3.225	1.497
Nickel	6.335	4.262
Ammonia (as N)	1,535,000	675.00

(n) Zirconium chip crushing wet air pollution control.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium and hafnium produced	
Chromium (total)	0.000	0.000
Cyanide (total)	0.000	0.000
Lead	0.000	0.000
Nickel	0.000	0.000
Ammonia (as N)	0.000	0.000

(o) Acid leachate from zirconium metal production.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	10.900	4.420
Cyanide (total)	5.893	2.357
Lead	8.250	3.831
Nickel	16.210	10.900
Ammonia (as N)	3,928.000	1,674.00

(p) Acid leachate from zirconium alloy production.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	5.835	2.366
Cyanide (total)	3.154	1.262
Lead	4.416	2.050
Nickel	8.674	5.835
Ammonia (as N)	2,102.000	895.800

(q) Leaching rinse water from zirconium metal production.

PSNS Limitations for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of pure zirconium produced	
Chromium (total)	21.810	8.840
Cyanide (total)	11.790	4.715
Lead	16.500	7.661
Nickel	32.410	21.810
Ammonia (as N)	7,856.000	3,453.000

(r) Leaching rinse water from zirconium alloy production.

PSNS for the Primary Zirconium and Hafnium Subcategory

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/kg (pounds per million pounds) of zirconium contained in alloys produced	
Chromium (total)	0.292	0.118
Cyanide (total)	0.158	0.063
Lead	0.221	0.103
Nickel	0.434	0.292

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Ammonia (as N)	105.200	46.240

§ 421.337 [Reserved]