

Environmental Protection Agency

§ 421.154

BAT LIMITATIONS FOR THE PRIMARY BERYLLIUM SUBCATEGORY—Continued

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

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NSPS FOR THE PRIMARY BERYLLIUM
SUBCATEGORY—Continued

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

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**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
	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
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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)

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(n) Aluminum Iron Sludge (AIS) Area Wastewater.

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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)

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(o) Bertrandite Ore Leaching Scrubber.

NSPS FOR THE PRIMARY BERYLLIUM
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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.

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