

Environmental Protection Agency

§ 421.263

**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
	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
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]

§ 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.

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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 .....	.....	.....
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

BAT LIMITATIONS FOR THE SECONDARY
PRECIOUS METALS SUBCATEGORY—Continued

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Combined metals	1.110	.....
Ammonia (as N)	493.200	216.800

(e) Refinery Wet Air Pollution Control²

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
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	.....

²This 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.

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**BAT LIMITATIONS FOR THE SECONDARY
PRECIOUS METALS SUBCATEGORY—Continued**

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

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[50 FR 38365, Sept. 20, 1985, as amended at 55 FR 31706-31708, Aug. 3, 1990; 55 FR 36932, Sept. 7, 1990]

§ 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

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NSPS FOR THE SECONDARY PRECIOUS METALS SUBCATEGORY—Continued

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
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 Control²

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
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.

²This 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.