

Environmental Protection Agency

§ 421.264

[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 | ..... |
| Ammonia (as N) | 133.300 | 58.600 |
| Total suspended solids | 15.000 | 12.000 |

NSPS FOR THE SECONDARY PRECIOUS METALS SUBCATEGORY—Continued

| 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.

(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.

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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 |
| 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.

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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 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 |
| 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 31708-31710, Aug. 3, 1990]

§ 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 treat-

ment 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

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| | 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 |
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| | 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.