

Environmental Protection Agency

§ 421.302

PNNS 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.

PNNS 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.

PNNS 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 re-

covery 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 |
| Total suspended solids | 38.380 | 18.250 |
| pH | (¹) | (¹) |

AA¹Within 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 |

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BPT LIMITATIONS FOR THE PRIMARY AND SECONDARY TITANIUM SUBCATEGORY—Continued

| Pollutant or pollutant property | Maximum for any 1 day | Maximum for monthly average |
|---------------------------------|-----------------------|-----------------------------|
| pH | (¹) | (¹) |

AA¹Within the range of 7.5 to 10.0 at all times.

(c) TiCl₄ 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) |

AA¹Within 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) |

AA¹Within 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 |

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BPT LIMITATIONS FOR THE PRIMARY AND SECONDARY TITANIUM SUBCATEGORY—Continued

| Pollutant or pollutant property | Maximum for any 1 day | Maximum for monthly average |
|---------------------------------|-----------------------|-----------------------------|
| 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 |
|---------------------------------|--|-----------------------------|
| | 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 re-conditioning 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 |

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BPT LIMITATIONS FOR THE PRIMARY AND SECONDARY TITANIUM SUBCATEGORY—Continued

| Pollutant or pollutant property | Maximum for any 1 day | Maximum for monthly average |
|---------------------------------|-----------------------|-----------------------------|
| Lead | 9.627 | 4.584 |
| 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 |
| 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 |

BPT LIMITATIONS FOR THE PRIMARY AND SECONDARY TITANIUM SUBCATEGORY—Continued

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

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BPT LIMITATIONS FOR THE PRIMARY AND SECONDARY TITANIUM SUBCATEGORY—Continued

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

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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) TiCl₄ 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.