

**§ 421.297**

**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.

**40 CFR Ch. I (7–1–08 Edition)**

**§ 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 <sub>4</sub> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

AA<sup>1</sup>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 <sub>4</sub> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

AA<sup>1</sup>Within the range of 7.5 to 10.0 at all times.

(c) TiCl<sub>4</sub> handling wet air pollution control.

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**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 <sub>4</sub> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

AA<sup>1</sup>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 .....	( <sup>1</sup> )	( <sup>1</sup> )

AA<sup>1</sup>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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>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
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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>Within the range of 7.5 to 10.0 at all times.

(i) Acid leachate and rinse water.

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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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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

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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 .....	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 .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> 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 <sub>4</sub> 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 <sub>4</sub> produced	
Chromium (total) .....	0.385	0.156
Lead .....	0.291	0.135
Nickel .....	0.572	0.385
Titanium .....	0.551	0.239

(c) TiCl<sub>4</sub> 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 <sub>4</sub> 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	
Chromium (total) .....	11.010	4.463
Lead .....	8.332	3.868
Nickel .....	16.370	11.010
Titanium .....	15.770	6.844