

Environmental Protection Agency

§ 471.41

SUBPART C—PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of nickel-cobalt formed	
Chromium	0.091	0.037
Nickel	0.136	0.091
Fluoride	14.7	6.50

[50 FR 34270, Aug. 23, 1985; 51 FR 2886, Jan. 22, 1986, as amended at 54 FR 11350, Mar. 17, 1989]

§ 471.36 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). [Reserved]

Subpart D—Precious Metals Forming Subcategory

§ 471.40 Applicability; description of the precious metals forming subcategory.

This subpart applies to discharges of pollutants to waters of the United States, and introductions of pollutants into publicly owned treatment works from the process operations of the precious metals forming subcategory.

§ 471.41 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations for the process operations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

(a) *Rolling spent neat oils—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

(b) *Rolling spent emulsions.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals rolled with emulsions	
Chromium	0.026	0.012
Copper	0.147	0.077
Cyanide	0.023	0.010
Silver	0.032	0.013
Oil and grease	1.54	0.925
TSS	3.16	1.51
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(c) *Drawing spent neat oils—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

(d) *Drawing spent emulsions.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals drawn with emulsions	
Cadmium	0.016	0.007
Copper	0.091	0.048
Cyanide	0.014	0.006
Silver	0.020	0.008
Oil and grease	0.950	0.570
TSS	1.95	0.926
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(e) *Drawing spent soap solutions.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals drawn with soap solutions	
Cadmium	0.001	0.0005
Copper	0.006	0.003
Cyanide	0.0009	0.0004
Silver	0.001	0.0006
Oil and grease	0.063	0.038
TSS	0.128	0.061
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(f) *Metal powder production wet atomization wastewater.*

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SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals powder wet atomized	
Cadmium	2.27	1.00
Copper	12.7	6.70
Cyanide	1.94	0.802
Silver	2.70	1.14
Oil and grease	134	80.2
TSS	274	130
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(g) *Heat treatment contact cooling water.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of extruded precious metals heat treated	
Cadmium	1.42	0.626
Copper	7.93	4.17
Cyanide	1.21	0.501
Silver	1.71	0.709
Oil and grease	83.4	50.1
TSS	171	81.3
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(h) *Semi-continuous or continuous casting contact cooling water.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals cast by the semi-continuous or continuous method	
Cadmium	3.50	1.55
Copper	19.6	10.3
Cyanide	2.99	1.24
Silver	4.23	1.75
Oil and grease	206	124
TSS	423	209
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(i) *Stationary casting contact cooling water—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

(j) *Direct chill casting contact cooling water.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals cast by the direct chill method	
Cadmium	3.67	1.62
Copper	20.5	10.8
Cyanide	3.13	1.30
Silver	4.43	1.84
Oil and grease	216	130
TSS	443	211
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(k) *Shot casting contact cooling water.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals shot cast	
Cadmium	1.25	0.551
Copper	6.98	3.67
Cyanide	1.07	0.441
Silver	1.51	0.624
Oil and grease	73.4	44.1
TSS	151	71.6
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(l) *Wet air pollution control scrubber blowdown—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

(m) *Pressure bonding contact cooling water.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals and base metal pressure bonded	
Cadmium	0.029	0.013
Copper	0.159	0.084
Cyanide	0.024	0.010
Silver	0.034	0.014
Oil and grease	1.67	1.00
TSS	3.43	1.63
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(n) *Surface treatment spent baths.*

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SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals surface treated	
Cadmium	0.033	0.015
Copper	0.183	0.097
Cyanide	0.028	0.012
Silver	0.040	0.017
Oil and grease	1.93	1.16
TSS	3.95	1.88
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(o) *Surface treatment rinse.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals surface treated	
Cadmium	2.10	0.924
Copper	11.7	5.16
Cyanide	1.79	0.739
Silver	2.53	1.05
Oil and grease	123	73.9
TSS	253	120
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(p) *Alkaline cleaning spent baths.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals alkaline cleaned	
Cadmium	0.021	0.009
Copper	0.114	0.060
Cyanide	0.018	0.007
Silver	0.025	0.010
Oil and grease	1.20	0.720
TSS	2.46	1.170
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(q) *Alkaline cleaning rinse.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals alkaline cleaned	
Cadmium	3.81	1.68
Copper	21.3	11.2
Cyanide	3.25	1.35
Silver	4.59	1.91
Oil and grease	224	135
TSS	459	219
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(r) *Alkaline cleaning prebonding wastewater.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals and base metal cleaned prior to bonding	
Cadmium	3.95	1.74
Copper	22.1	11.6
Cyanide	3.37	1.39
Silver	4.76	1.97
Oil and grease	232	139
TSS	476	226
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(s) *Tumbling or burnishing wastewater.*

SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals tumbled or burnished	
Cadmium	4.12	1.82
Copper	23.0	12.1
Cyanide	3.51	1.45
Silver	4.96	2.06
Oil and grease	242	145
TSS	496	236
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(t) *Sawing or grinding spent neat oils—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

(u) *Sawing or grinding spent emulsions.*

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SUBPART D—BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals sawed or ground with emulsions	
Cadmium	0.032	0.014
Copper	0.178	0.094
Cyanide	0.027	0.011
Silver	0.039	0.016
Oil and grease	1.87	1.12
TSS	3.83	1.82
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(v) *Degreasing spent solvents—Subpart D—BPT.* There shall be no discharge of process wastewater pollutants.

[50 FR 34270, Aug. 23, 1985; 51 FR 2886, Jan. 22, 1986]

§ 471.42 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

(a) *Rolling spent neat oils—Subpart D—BAT.* There shall be no discharge of wastewater pollutants.

(b) *Rolling spent emulsions.*

SUBPART D—BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals rolled with emulsions	
Cadmium	0.026	0.012
Copper	0.147	0.077
Cyanide	0.023	0.010
Silver	0.032	0.013

(c) *Drawing spent neat oils—Subpart D—BAT.* There shall be no discharge of process wastewater pollutants.

(d) *Drawing spent emulsions.*

SUBPART D—BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals drawn with emulsions	
Cadmium	0.016	0.007
Copper	0.091	0.048
Cyanide	0.014	0.006
Silver	0.020	0.008

(e) *Drawing spent soap solutions.*

SUBPART D—BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals drawn with soap solutions	
Cadmium	0.001	0.0005
Copper	0.006	0.003
Cyanide	0.0009	0.0004
Silver	0.002	0.0006

(f) *Metal powder production wet atomization wastewater.*

SUBPART D—BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals powder wet atomized	
Cadmium	2.27	1.00
Copper	12.7	6.68
Cyanide	1.94	0.802
Silver	2.74	1.14

(g) *Heat treatment contact cooling water.*

SUBPART D—BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (pounds per million off-pounds) of precious metals heat treated	
Cadmium	0.142	0.063
Copper	0.793	0.417
Cyanide	0.121	0.050
Silver	0.171	0.071

(h) *Semi-continuous and continuous casting contact cooling water.*