

## Environmental Protection Agency

## § 468.11

(r) The term "Total Toxic Organics (TTO)" shall mean the sum of the masses or concentrations of each of the following toxic organic compounds which is found at a concentration greater than 0.010 mg/l.

Benzene

1,1,1-Trichloroethane chloroform

2,6-Dinitrotoluene ethylbenzene methylene chloride naphthalene

N-nitrosodiphenylamine anthracene phenanthrene toluene trichloroethylene

(s) The term "alkaline cleaning rinse for forged parts" shall mean a rinse following an alkaline cleaning bath through which a forged part is processed. A rinse consisting of a series of rinse tanks is considered as a single rinse.

(t) The term "pickling rinse for forged parts" shall mean a rinse, other than an alkaline cleaning rinse, through which forged parts are processed. A rinse consisting of a series of rinse tanks is considered as a single rinse.

(u) The term "tumbling or bur-nishing" shall mean the process of polishing, deburring, removing sharp corners, and generally smoothing parts for both cosmetic and functional purposes, as well as the process of washing the finished parts and cleaning the abrasion media.

(v) The term "surface coating" shall mean the process of coating a copper workpiece as well as the associated surface finishing and flattening.

(w) The term "miscellaneous waste stream" shall mean the following additional waste streams related to forming copper: hydrotesting, sawing, surface milling, and maintenance.

(x) The term "precious metals" shall mean gold, platinum, palladium and silver and their alloys. Any alloy containing 30 or greater percent by weight of precious metals is considered a precious metal.

(y) The term "beryllium copper alloy" shall mean any copper alloy that is alloyed to contain 0.10 percent or greater beryllium.

[48 FR 36957, Aug. 15, 1983; 48 FR 50718, Nov. 3, 1983, as amended at 50 FR 34334, Aug. 23, 1985; 51 FR 7571, Mar. 5, 1986]

### § 468.03 Monitoring and reporting requirements.

The following special monitoring requirements apply to all facilities controlled by this regulation.

(a) The "monthly average" regulatory values shall be the basis for the monthly average discharge in direct discharge permits and for pretreatment standards. Compliance with the monthly discharge limit is required regardless of the number of samples analyzed and averaged.

(b) As an alternate monitoring procedure for TTO, indirect dischargers may monitor for oil and grease and meet the alternate monitoring standards for oil and grease established for PSES and PSNS. Any indirect discharger meeting the alternate monitoring oil and grease standards shall be considered to meet the TTO standard.

### § 468.04 Compliance date for PSES.

The compliance date for pretreatment standards for existing sources is August 15, 1986.

[48 FR 36957, Aug. 15, 1983, as amended at 48 FR 41410, Sept. 15, 1983]

## Subpart A—Copper Forming Subcategory

### § 468.10 Applicability; description of the copper forming subcategory.

This subpart applies to discharges of pollutants to waters of the United States, and introduction of pollutants into publicly owned treatment works from the forming of copper and copper alloys except beryllium copper alloys.

[51 FR 7571, Mar. 5, 1986]

### § 468.11 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 representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

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(a) Subpart A—Hot Rolling Spent Lubricant BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy hot rolled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy hot rolled	
Chromium .....	0.045	0.018
Copper .....	0.195	0.103
Lead .....	0.015	0.013
Nickel .....	0.197	0.130
Zinc .....	0.150	0.062
Oil and grease .....	2.060	1.236
TSS .....	4.223	2.008
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(b) Subpart A—Cold Rolling Spent Lubricant BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy cold rolled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy cold rolled	
Chromium .....	0.166	0.068
Copper .....	0.720	0.379
Lead .....	0.056	0.049
Nickel .....	0.727	0.481
Zinc .....	0.553	0.231
Oil and grease .....	7.580	4.548
TSS .....	15.539	7.390
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(c) Subpart A—Drawing Spent Lubricant BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy drawn	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy drawn	
Chromium .....	0.037	0.015
Copper .....	0.161	0.085
Lead .....	0.012	0.011
Nickel .....	0.163	0.107
Zinc .....	0.124	0.051
Oil and grease .....	1.700	1.020
TSS .....	3.485	1.657
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(d) Subpart A—Solution Heat Treatment BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy heat treated	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy heat treated	
Chromium .....	1.118	0.457
Copper .....	4.827	2.541
Lead .....	0.381	0.330
Nickel .....	4.878	3.227
Zinc .....	3.709	1.550
Oil and grease .....	50.820	30.492
TSS .....	104.181	49.549
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(e) Subpart A—Extrusion Heat Treatment BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy heat treated on an extrusion press	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy heat treated on an extrusion press	
Chromium .....	0.00088	0.00036
Copper .....	0.003	0.002
Lead .....	0.0003	0.00026
Nickel .....	0.003	0.002
Zinc .....	0.002	0.001
Oil and grease .....	0.040	0.024
TSS .....	0.082	0.039
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(f) Subpart A—Annealing With Water BPT Effluent Limitations.

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Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy annealed with water	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy annealed with water	
Chromium .....	2.493	1.020
Copper .....	10.767	5.667
Lead .....	0.850	0.736
Nickel .....	10.880	7.197
Zinc .....	8.273	3.456
Oil and grease .....	113.340	68.004
TSS .....	232.347	110.506
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(g) Subpart A—Annealing With Oil BPT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy annealed with oil	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy annealed with oil	
Chromium .....	0	0
Copper .....	0	0
Lead .....	0	0
Nickel .....	0	0
Zinc .....	0	0
Oil and grease .....	0	0
TSS .....	0	0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(h) Subpart A—Alkaline Cleaning Rinse BPT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy alkaline cleaned	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy alkaline cleaned	
Chromium .....	1.854	0.758
Copper .....	8.006	4.214
Lead .....	0.632	0.547
Nickel .....	8.090	5.351
Zinc .....	6.152	2.570
Oil and grease .....	84.280	50.568
TSS .....	172.774	82.173
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(i) Subpart A—Alkaline Cleaning Rinse for Forged Parts BPT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy forged parts alkaline cleaned	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy forged parts alkaline cleaned	
Chromium .....	5.562	2.275
Copper .....	24.019	12.642
Lead .....	1.896	1.643
Nickel .....	24.272	16.055
Zinc .....	18.457	7.711
Oil and grease .....	252.840	151.704
TSS .....	518.322	246.519
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(j) Subpart A—Alkaline Cleaning Bath BPT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy parts alkaline cleaned	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy forged parts alkaline cleaned	
Chromium .....	0.020	0.0084
Copper .....	0.089	0.046
Lead .....	0.0070	0.0060
Nickel .....	0.089	0.059
Zinc .....	0.068	0.028
Oil and grease .....	0.93	0.56
TSS .....	1.91	0.91
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(k) Subpart A—Pickling Rinse BPT Effluent Limitations.**

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Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy pickled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy pickled	
Chromium .....	1.593	0.651
Copper .....	6.881	3.622
Lead .....	0.543	0.470
Nickel .....	6.954	4.599
Zinc .....	5.288	2.209
Oil and grease .....	72.440	43.464
TSS .....	148.502	70.629
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(l) Subpart A—Pickling Rinse for Forged Parts BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy forged parts pickled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy forged parts pickled	
Chromium .....	1.723	0.705
Copper .....	7.444	3.918
Lead .....	0.587	0.509
Nickel .....	7.522	4.975
Zinc .....	5.720	2.389
Oil and grease .....	78.360	47.016
TSS .....	160.638	76.401
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(m) Subpart A—Pickling Bath BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy pickled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy pickle	
Chromium .....	0.051	0.020
Copper .....	0.220	0.116
Lead .....	0.017	0.015
Nickel .....	0.222	0.147
Zinc .....	0.169	0.070
Oil and grease .....	2.320	1.392
TSS .....	4.756	2.262
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(n) Subpart A—Pickling Fume Scrubber BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy pickled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy pickled	
Chromium .....	0.275	0.112
Copper .....	1.189	0.626
Lead .....	0.093	0.081
Nickel .....	1.201	0.795
Zinc .....	0.913	0.381
Oil and grease .....	12.520	7.512
TSS .....	25.666	12.207
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(o) Subpart A—Tumbling or Bur- nishing BPT Effluent Limitations.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy tumbled or burnished	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy tumbled or burnished	
Chromium .....	0.256	0.104
Copper .....	1.107	0.583
Lead .....	0.087	0.075
Nickel .....	1.119	0.740
Zinc .....	0.851	0.355
Oil and grease .....	11.660	6.996
TSS .....	23.903	11.368
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

(p) Subpart A—Surface Coating BPT Effluent Limitations.

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Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy surface coated	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy surface coated	
Chromium .....	0.326	0.133
Copper .....	1.411	0.743
Lead .....	0.111	0.096
Nickel .....	1.426	0.943
Zinc .....	1.084	0.453
Oil and grease .....	14.680	8.916
TSS .....	30.463	14.488
ph .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**(q) Subpart A—Miscellaneous Waste Streams BPT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy formed	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy formed	
Chromium .....	0.009	0.003
Copper .....	0.041	0.021
Lead .....	0.003	0.002
Nickel .....	0.041	0.027
Zinc .....	0.031	0.013
Oil and grease .....	0.436	0.261
TSS .....	0.893	0.425
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

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

**§ 468.12 Effluent limitations 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 must achieve the following effluent reduction attainable by the application of the best available technology economically achievable (BAT):

**(a) Subpart A—Hot Rolling Spent Lubricant BAT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy hot rolled	
	English Units—pounds per 1,000,000 off-pounds of copper or copper alloy hot rolled	
Chromium .....	0.045	0.018
Copper .....	0.195	0.103
Lead .....	0.015	0.013
Nickel .....	0.197	0.130
Zinc .....	0.150	0.062

**(b) Subpart A—Cold Rolling Spent Lubricant BAT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy cold rolled	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy cold rolled	
Chromium .....	0.166	0.068
Copper .....	0.720	0.379
Lead .....	0.056	0.049
Nickel .....	0.727	0.481
Zinc .....	0.553	0.231

**(c) Subpart A—Drawing Spent Lubricant BAT Effluent Limitations.**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/off-kg of copper or copper alloy drawn	
	English units—pounds per 1,000,000 off-pounds of copper or copper alloy drawn	
Chromium .....	0.037	0.015
Copper .....	0.161	0.085
Lead .....	0.012	0.011
Nickel .....	0.163	0.107
Zinc .....	0.124	0.051

**(d) Subpart A—Solution Heat Treatment BAT Effluent Limitations.**