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(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 napthalene
- 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 burnishing" 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 pollut- ant 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	(1)	(1)	

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

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

Pollutant or pollut- ant property	Maximum for any 1 day	Maximum for monthly average	
	Metric units—mg/off-kg of copper or copper alloy cold rolled		
		nds per 1,000,000 oper or copper alloy	
Chromium	0.166	0.068	
Copper	0.720	0.379	
Lead	0.056	0.049	
Nickel	0.727	0.481	
Zinc	0.553 0.23		
Oil and grease	7.580 4.54		
TSS	15.539 7.39		
pH	(1)		

¹ 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
		mg/off-kg of copper alloy
	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	(1)	(1)

¹ 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
		mg/off-kg of copper alloy
	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	(1)	(1)

¹ 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 het treated on an extrusion press	
	copper or co	—pounds per off-pounds of pper alloy heat an extrusion
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	(1)	(¹)

¹ 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- copper or nealed with	copper an-
	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	(1)	(1)

¹ 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	
		mg/off-kg of copper alloy rith 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	(1)	(1)	

¹Within 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
		-mg/off-kg of copper alloy aned
	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	(1)	(1)

¹ 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
	copper or	-mg/off-kg of copper alloy arts alkaline
	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	(1)	(1)

¹ 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	
	,		
		-mg/off-kg of copper alloy ne 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	(1)	(1)	

¹ 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
	copper or pickled English units- 1,000,000	-mg/off-kg of copper alloy -pounds per/ off-pounds of copper alloy
Chromium Copper Lead Nickel Zinc Oll and grease TSS pH	1.593 6.881 0.543 6.954 5.288 72.440 148.502 (¹)	0.651 3.622 0.470 4.599 2.209 43.464 70.629

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

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

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

¹ 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	(1)	(1)

¹ 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
<u>pH</u>	(1)	(1)

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

(o) Subpart A—Tumbling or Burnishing 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	(1)	(1)

¹ 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	(¹)	(¹)

¹ 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
		mg/off-kg of copper alloy
	1,000,000	—pounds per off-pounds of copper alloy
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	(1)	(1)

¹ 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 o copper or copper alloy hot rolled	
	English Units—pounds pe 1,000,000 off-pounds o 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 allo cold rolled English units—pounds of copper or copper allo 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
		mg/off-kg of copper alloy
	English units—pounds pe 1,000,000 off-pounds of copper or copper allo 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.