Environmental Protection Agency

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 million Sm³ (pounds per billion SCF) of air scrubbed	
Copper (T)	0.231 0.237 0.343 0.258 0.613	0.126 0.117 0.129 0.09 0.2
Oil and grease (for alter- nate monitoring)	9.01	3.0

- (e) Grinding Scrubber Operations. No discharge of process wastewater pollutants to a POTW.
 - (f) Investment Casting.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per m lion pounds) of met poured	
Copper (T)	8.48	4.63
Lead (T)	8.7	4.3
Zinc (T)	12.6	4.74
TTO	18.1	5.91
Oil and grease (for alternate monitoring)	330	110

(g) Melting Furnace Scrubber Operations.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 million per billion scrubbed	Sm³ (pounds SCF) of air
Copper (T)	3.01	1.64
Lead (T)	3.09	1.52
Zinc (T)	4.45	1.68
Total Phenols	3.36	1.17
TTO	7.97	2.6
Oil and grease (for alternate		
monitoring)	117	39.1

(h) Mold Cooling Operations.

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per million pounds) of metal poured	
Copper (T)	0.297 0.305 0.44 0.935	0.162 0.151 0.166 0.304
nate monitoring)	11.6	3.86

§ 464.17 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. [Reserved]

Subpart B—Copper Casting Subcategory

§ 464.20 Applicability; description of the copper casting subcategory.

The provisions of this subpart are applicable to discharges to waters of the United States and to the introduction of pollutants into publicly owned treatment works resulting from copper casting operations as defined in §464.02(b).

§ 464.21 Specialized definitions.

For the purpose of this subpart:

- (a) Total Toxic Organics (TTO). TTO is a regulated parameter under PSES (§464.25) and PSNS (§464.26) for the copper subcategory and is comprised of a discrete list of toxic organic pollutants for each process segment where it is regulated, as follows:
- (1) Casting Quench (§464.25(a) and §464.26(a)):
- 23. chloroform (trichloromethane)
- 64. pentachlorophenol
- 66. bis(2-ethylhexyl)phthalate
- 71. dimethyl phthalate
- Dust Collection Scrubbers (§464.25(c) and 464.26(c)):
- 1. acenaphthene
- 22. para-chloro meta-cresol
- 23. chloroform (trichloromethane)
- 34. 2,4-dimethylphenol
- 55. naphthalene
- 58. 4-nitrophenol 64. pentachlorophenol
- 65. phenol
- 66. bis(2-ethylhexyl)phthalate
- 67. butyl benzyl phthalate
- 68. di-n-butyl phthalate
- 70. diethyl phthalate

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- 71. dimethyl phthalate
- 72. benzo(a)anthracene (1,2-benzanthracene)
- 74. 3,4-benzofluoranthene
- 75. benzo(k) fluoranthene
- 76. chrysene
- 77. acenaphthylene
- 78. anthracene
- 81. phenanthrene
- 84. pyrene

(3) Investment Casting ($\S464.25(e)$ and $\S464.26(e)$):

- 1. acenaphthene
- 22. para-chloro meta-cresol
- 23. chloroform (trichloromethane)
- 34. 2,4-dimethylphenol
- 55. naphthalene
- 58. 4-nitrophenol
- 64. pentachlorophenol
- 65 phenol
- 66. bis (2-ethylhexyl)phthalate
- 67. butyl benzyl phthalate
- 68. di-n-butyl phthalate
- 70. diethyl phthalate
- 71. dimethyl phthalate
- 72. benzo(a)anthracene (1,2-benzanthracene)
- 74. 3,4-benzofluoranthene
- 75. benzo(k) fluoranthene
- 76. chrysene
- 77. acenaphthylene
- 78. anthracene
- 81. Phenanthrene
- 84. pyrene

(4) Melting Furnace Scrubber (§ 464.25(f) and § 464.26(f)):

- 1. acenaphthene
- 22. para-chloro meta-cresol
- $23.\ chloroform\ (trichloromethane)$
- 34. 2,4-dimethylphenol
- 55. naphthalene
- 58. 4-nitrophenol
- 64. pentachlorophenol
- 65. phenol
- 66. bis (2-ethylhexyl) phthalate
- 67. butyl benzyl phthalate
- 68. di-n-butyl phthalate
- 70. diethyl phthalate
- 71. dimethyl phthalate
- 72. benzo(a)anthracene (1,2-benzanthracene)
- 74. 3,4-benzoflouranthene
- 75. benzo(k) flouranthene
- 76. chrysene
- 77. acenaphthylene
- 78. anthracene
- 81. phenanthrene
- 84. pyrene

(5) Mold Cooling ($\S464.25(g)$ and $\S464.26(g)$):

- 23. chloroform (trichloromethane)
- 64. pentachlorophenol
- $66.\ bis (2-ethylhexyl) phthalate$
- 71. dimethyl phthalate

§ 464.22 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 must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available, except that non-continuous dischargers shall not be subject to the maximum day and maximum for monthly average mass (kg/1,000 kkg or lb/million lb of metal poured; kg/62.3 million Sm3 or lb/ billion SCF of air scrubbed) effluent limitations for copper, lead, zinc, total phenols, oil and grease, and TSS. For non-continuous dischargers, annual average mass limitations and maximum day and maximum for monthly average concentration (mg/l) limitations shall apply. Concentration limitations and annual average mass limitations shall only apply to non-continuous dischargers.

(a) Casting Quench Operations.

BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for	Maximum for monthly average	
· · · · · · · · · · · · · · · · · · ·	any 1 day		
	kg/1,000 kkg (pounds per mil lion pounds) of meta poured		
Copper (T)	0.0307	0.0168	
Lead (T)	0.0315	0.0156	
Zinc (T)	0.0455	0.0171	
Oil and grease	1.2	0.399	
TSS	1.52	0.598	
pH	(1)	(1)	

 $^{^{\}mbox{\scriptsize 1}}\mbox{\ensuremath{\mbox{Within}}}$ the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average 1
	(mg/l) ²	(mg/l) ²	
Copper (T)	0.77	0.42	0.0068
Lead (T)	0.79	0.39	0.0088
Zinc (T)	1.14	0.43	0.0108
Oil and grease	30	10	0.199
TSS	38	15	0.399
pH	(3)	(3)	(3)

¹kg/1000 kkg (pounds per million pounds) of metal poured ²These concentrations must be multiplied by the ratio of (4.8/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

cific plant.

³ Within the range of 7.0 to 10.0 at all times.