PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 Million Sm^3 (pounds per billion SCF) of air scrubbed	
Copper (T)	0.552	0.301
Lead (T)	0.38	0.187
Zinc (T)	0.545	0.208
Total Phenols	0.617	0.215
TTO	1.65	0.54
Oil and Grease (for alternate monitoring	21.5	7.18

(d) *Grinding Scrubber Operations.* No discharge of process wastewater pollutants to a POTW.

(e) *Investment Casting.*

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)	8.48	4.63
Lead (T)	5.84	2.86
Zinc (T)	8.37	3.19
TTO	25.4	8.29
Oil and Grease (for alternate monitoring	330	110

(f) *Melting Furnace Scrubber Operations.*

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 million Sm^3 (pounds per billion SCF) of air scrubbed	
Copper (T)	1.81	0.988
Lead (T)	1.25	0.612
Zinc (T)	1.79	0.673
Total Phenols	2.02	0.706
TTO	5.41	1.77
Oil and Grease (for alternate monitoring	70.6	23.5

(g) *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)	0.392	0.214
Lead (T)	0.27	0.132
Zinc (T)	0.387	0.148
TTO	0.428	0.14
Oil and Grease (for alternate monitoring	15.3	5.09

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

Subpart C—Ferrous Casting Subcategory

§ 464.30 Applicability; description of the ferrous 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 ferrous casting operations as defined in § 464.02(c).

§ 464.31 Specialized definitions.

For the purpose of this subpart:

(a) *Total Toxic Organics (TTO).* TTO is a regulated parameter under PSES (§ 464.35) and PSNS (§ 464.36) for the ferrous 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 (§ 464.35(b) and § 464.36(b)):

23. chloroform (trichloromethane)
34. 2,4-dimethylphenol

(2) Dust Collection Scrubber (§ 464.35(c) and § 464.36(b)):

1. acenaphthene
23. chloroform (trichloromethane)
31. 2,4-dichlorophenol
34. 2,4-dimethylphenol
39. fluoranthene
44. methylene chloride (dichloromethane)
55. naphthalene
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)
76. chrysene
77. acenaphthylene
78. anthracene
80. fluorene
81. phenanthrene
84. pyrene

(3) Investment Casting (§ 464.35(e) and § 464.36(e)):

23. chloroform (trichloromethane)
44. methylene chloride (dichloromethane)
66. bis (2-ethylhexyl) phthalate
77. acenaphthylene
84. pyrene

(4) Melting Furnace Scrubber (§ 464.35(f) and § 464.36(f)):

23. chloroform (trichloromethane)
31. 2,4-dichlorophenol
34. 2,4-dimethylphenol
39. fluoranthene
44. methylene chloride (dichloromethane)
55. naphthalene
65. phenol
66. bis (2-ethylhexyl) phthalate
67. butyl benzyl phthalate
68. di-n-butyl phthalate
72. benzo (a)anthracene (1,2-benzanthracene)
76. chrysene
77. acenaphthylene
78. anthracene
80. fluorene
81. phenanthrene
84. pyrene

(5) Mold Cooling (§ 464.35(g) and § 464.36(g)):

23. chloroform (trichloromethane)
34. 2,4-dimethylphenol

(6) Slag Quench (§ 464.35(h) and § 464.36(h)):

34. 2,4-dimethylphenol
71. dimethyl phthalate

(7) Wet Sand Reclamation (§ 464.35(i) and § 464.36(i)):

1. acenaphthene
34. 2,4-dimethylphenol
39. fluoranthene
44. methylene chloride (dichloromethane)
55. naphthalene
65. phenol
66. bis (2-ethylhexyl) phthalate
68. di-n-butyl phthalate
70. diethyl phthalate
71. dimethyl phthalate
72. benzo(a)anthracene (1,2-benzanthracene)
77. acenaphthylene
84. pyrene

(b) *Cast Iron.* An iron containing carbon in excess of the solubility in the austentite that exists in the alloy at the eutectic temperature. Cast iron also is defined here to include any iron-carbon alloys containing 1.2 percent or more carbon by weight.

(c) *Ductile Iron.* A cast iron that has been treated while molten with a master alloy containing an element such as magnesium or cerium to induce the formation of free graphite as nodules or spherules, which imparts a measurable degree of ductility to the cast metal.

(d) *Gray Iron.* A cast iron that gives a gray fracture due to the presence of flake graphite.

(e) *Malleable Iron.* A cast iron made by a prolonged anneal of white cast iron in which decarburization or graphitization, or both, take place to eliminate some or all of the cementite. Graphite is present in the form of temper carbon.

(f) *Steel.* An iron-base alloy containing carbon, manganese, and often other alloying elements. Steel is defined here to include only those iron-carbon alloys containing less than 1.2 percent carbon by weight.

(g) The ''primary metal cast'' shall mean the metal that is poured in the greatest quantity at an individual plant.

(h) *Multiple Ferrous Melting Furnace Scrubber Configuration.* A multiple ferrous melting furnace scrubber configuration is a configuration where two or more discrete wet scrubbing devices are employed in series in a single melting furnace exhaust gas stream. The ferrous melting furnace scrubber mass allowance shall be given to each discrete wet scrubbing device that has an associated wastewater discharge in a multiple ferrous melting furnace scrubber configuration. The mass allowance for each discrete wet scrubber shall be identical and based on the air flow of the exhaust gas stream that passes through the multiple scrubber configuration.

(i) *Discrete Wet Scrubbing Device.* A discrete wet scrubbing device is a distinct, stand-alone device that removes particulates and fumes from a contaminated gas stream by bringing the gas stream into contact with a scrubber liquor, usually water, and from which there is a wastewater discharge. Examples of discrete wet scrubbing devices are: Spray towers and chambers, venturi scrubbers (fixed and variable),

wet caps, packed bed scrubbers, quenchers, and orifice scrubbers. Semi-wet scrubbing devices where water is added and totally evaporates prior to dry air pollution control are not considered to be discrete wet scrubbing devices. Ancillary scrubber operations such as fan washes and backwashes are not considered to be discrete wet scrubber devices. These ancillary operations are covered by the mass limitations of the associated scrubber. Aftercoolers are not considered to be discrete wet scrubbing devices, and water discharges from aftercooling are not regulated as a process wastewater in this category.

§ 464.32 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/1,000 kkg or lb/million lb of sand reclaimed; kg/62.3 million Sm^3 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 Cleaning Operations.*

BPT EFFLUENT LIMITATIONS

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)	0.0129	0.0071
Lead (T)	0.0353	0.0174
Zinc (T)	0.0656	0.025
Oil and grease	1.34	0.446
TSS	1.7	0.67
pH	(1)	(1)

[1] 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)	0.29	0.16	0.0029
Lead (T)	0.79	0.39	0.0098
Zinc (T)	1.47	0.56	0.0179
Oil and grease	30	10	0.223
TSS	38	15	0.446
pH	(3)	(3)	(3)

[1] kg/1,000 kkg (pounds per million pounds) of metal poured.
[2] These concentrations must be multiplied by the ratio (5.33/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.
[3] Within the range of 7.0 to 10.0 at all times.

(b) *Casting Quench Operations*

BPT EFFLUENT LIMITATIONS

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)	0.0138	0.0076
Lead (T)	0.0376	0.0185
Zinc (T)	0.0699	0.0266
Oil and grease	1.43	0.476
TSS	1.81	0.713
pH	(1)	(1)

[1] 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)	0.29	0.16	0.0031
Lead (T)	0.79	0.39	0.0105
Zinc (T)	1.47	0.56	0.019
Oil and grease	30	10	0.238
TSS	38	15	0.476
pH	(3)	(3)	(3)

[1] kg/1,000 kkg (pounds per million pounds) of metal poured.
[2] These concentrations must be multiplied by the ratio of (5.7/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.
[3] Within the range of 7.0 to 10.0 at all times.

(c) *Dust Collection Scrubber Operations.*