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.*

BPT EFFLUENT LIMITATIONS

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)	0.218	0.12
Lead (T)	0.593	0.293
Zinc (T)	1.1	0.421
Total phenols	0.656	0.225
Oil and grease	22.5	7.51
TSS	28.5	11.3
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]	(mg/l) [2]
Copper (T)	0.29	0.16	0.0488
Lead (T)	0.79	0.39	0.165
Zinc (T)	1.47	0.56	0.3
Total phenols	0.86	0.3	0.15
Oil and grease	30	10	3.76
TSS	38	15	7.51
pH	(3)	(3)	(3)

[1] kg/62.3 million Sm^3 (pounds per billion SCF) of air scrubbed.
[2] These concentrations must be multiplied by the ratio (0.090/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.
[3] Within the range of 7.0 to 10.0 at all times.

(d) *Grinding Scrubber Operations.* No discharge of process wastewater pollutants to navigable waters.

(e) *Investment Casting.*

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)	3.19	1.76
Lead (T)	8.7	4.3
Zinc (T)	16.2	6.17
Oil and grease	330	110
TSS	419	165
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	0.716
Lead (T)	0.79	0.39	2.42
Zinc (T)	1.47	0.56	4.41
Oil and grease	30	10	55.1
TSS	38	15	110
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 (1,320/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.

(f) *Melting Furnace Scrubber Operations.*

BPT EFFLUENT LIMITATIONS

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)	1.02	0.561
Lead (T)	2.77	1.37
Zinc (T)	5.15	1.96
Total phenols	3.01	1.05
Oil and grease	105	35
TSS	133	52.6
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	0.228
Lead (T)	0.79	0.39	0.771
Zinc (T)	1.47	0.56	1.4
Total phenols	0.86	0.3	0.701
Oil and grease	30	10	17.5
TSS	38	15	35
pH	(3)	(3)	(3)

[1] kg/62.3 million Sm^3 (pounds per billion SCF) or air scrubbed.
[2] These concentrations must be multiplied by the ratio of (0.42/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.
[3] Within the range of 7.0 to 10.0 at all times.

(g) *Mold Cooling 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)	0.0428	0.0236
Lead (T)	0.117	0.0576
Zinc (T)	0.217	0.0827
Oil and grease	4.43	1.48
TSS	5.61	2.22
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	0.0096
Lead (T)	0.79	0.39	0.0325
Zinc (T)	1.47	0.56	0.0591
Oil and grease	30	10	0.738
TSS	38	15	1.48
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 (17.7/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.

(h) *Slag 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	
Cooper (T)	0.0527	0.0291
Lead (T)	0.144	0.0709
Zinc (T)	0.267	0.102
Oil and grease	5.46	1.82
TSS	6.91	2.73
pH	(1)	(1)

[1] Within the range 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	0.0118
Lead (T)	0.79	0.39	0.04
Zinc (T)	1.47	0.56	0.0728
Oil and grease	30	10	0.909
TSS	38	15	1.82
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 (21.8/x) where x is the actual normalized process wasterwater 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.

(i) *Wet Sand Reclamation 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 sand reclaimed	
Cooper (T)	0.217	0.12
Lead (T)	0.59	0.291
Zinc (T)	1.1	0.418
Total phenols	0.642	0.224
Oil and grease	22.4	7.47
TSS	28.4	11.2
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]	
Cooper (T)	0.29	0.16	0.0485
Lead (T)	0.79	0.39	0.164
Zinc (T)	1.47	0.56	0.299
Total phenols	0.86	0.3	0.149
Oil and grease	30	10	3.73
TSS	38	15	7.47
pH	(3)	(3)	(3)

[1] kg/1,000 kkg (pounds per million pounds) of sand reclaimed.

[2] These concentrations must be multiplied by the ratio of (89.5/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of sand reclaimed) for a specific plant.

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

[50 FR 45247, Oct. 30, 1985; 51 FR 21761, June 16, 1986]

§ 464.33 Effluent limitations guidelines 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 limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable, 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, and total phenols. 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.* (1) Applicable to plants that are casting primarily ductile or gray iron and to plants that are casting primarily malleable iron where greater than 3,557 tons of metal are poured per year.