

§ 464.13

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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) .....	0.297	0.162
Lead (T) .....	0.305	0.151
Zinc (T) .....	0.44	0.166
Oil and grease .....	11.6	3.86
TSS .....	14.7	5.79
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>1</sup>	(mg/l) <sup>1</sup>	
Copper (T) .....	0.77	0.42	0.0656
Lead (T) .....	0.79	0.39	0.0849
Zinc (T) .....	1.14	0.43	0.104
Oil and grease .....	30	10	1.93
TSS .....	38	15	3.86
pH .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>3</sup> )

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal  
<sup>2</sup> These concentrations must be multiplied by the ratio of (46.3/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.  
<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

[50 FR 45247, Oct. 30, 1985; 51 FR 21760, June 16, 1986]

**§ 464.13 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/62.3 million Sm<sup>3</sup> 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.*

BAT 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) .....	0.0771	0.0421
Lead (T) .....	0.0791	0.039
Zinc (T) .....	0.114	0.0431

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.017
Lead (T) .....	0.79	0.39	0.022
Zinc (T) .....	1.14	0.43	0.027

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (12/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

(b) *Casting Quench Operations.*

BAT 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) .....	0.0093	0.0051
Lead (T) .....	0.0096	0.0047
Zinc (T) .....	0.0138	0.0052

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.0021
Lead (T) .....	0.79	0.39	0.0027
Zinc (T) .....	1.14	0.43	0.0033

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (1.45/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

(c) *Die Casting Operations.*

BAT 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) .....	0.0066	0.0036
Lead (T) .....	0.0068	0.0034
Zinc (T) .....	0.0098	0.0037
Total Phenols .....	0.0074	0.0026

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	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.0015
Lead (T) .....	0.79	0.39	0.0019
Zinc (T) .....	1.14	0.43	0.0023
Total Phenols .....	0.86	0.3	0.0017

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (1.04/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

**(d) Dust Collection Scrubber Operations.**

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 million Sm <sup>3</sup> (pounds per billion SCF) of air scrubbed	
Copper (T) .....	0.231	0.126
Lead (T) .....	0.237	0.117
Zinc (T) .....	0.343	0.129
Total Phenols .....	0.258	0.09

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.0511
Lead (T) .....	0.79	0.39	0.0661
Zinc (T) .....	1.14	0.43	0.0811
Total Phenols .....	0.86	0.3	0.0601

<sup>1</sup> kg/62.3 million Sm<sup>3</sup> (lb per billion SCF) of air scrubbed.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (0.036/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.

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

**(f) Investment Casting.**

**BAT 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) .....	8.48	4.63
Lead (T) .....	8.7	4.3
Zinc (T) .....	12.6	4.74

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	1.87
Lead (T) .....	0.79	0.39	2.42
Zinc (T) .....	1.14	0.43	2.97

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> 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.

**(g) Melting Furnace Scrubber Operations.**

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	kg/62.3 million Sm <sup>3</sup> (pounds per billion SCF) of air scrubbed	
Copper (T) .....	3.01	1.64
Lead (T) .....	3.09	1.52
Zinc (T) .....	4.45	1.68
Total phenols .....	3.36	1.17

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.664
Lead (T) .....	0.79	0.39	0.859
Zinc (T) .....	1.14	0.43	1.05
Total phenols .....	0.86	0.3	0.781

<sup>1</sup> kg/62.3 million Sm<sup>3</sup> (pounds per billion SCF) of air scrubbed.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (0.468/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.

**(h) Mold Cooling Operations.**

**BAT 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) .....	0.297	0.162
Lead (T) .....	0.305	0.151
Zinc (T) .....	0.44	0.166

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>	(mg/l) <sup>2</sup>	
Copper (T) .....	0.77	0.42	0.0656
Lead (T) .....	0.79	0.39	0.0849
Zinc (T) .....	1.14	0.43	0.104

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.

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<sup>2</sup>These concentrations must be multiplied by the ratio of (46.3/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

[50 FR 45247, Oct. 30, 1985; 51 FR 21760, June 16, 1986]

**§ 464.14 New source performance standards.**

Any new source subject to this subpart must achieve the following new source performance standards (NSPS), 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 Sm<sup>3</sup> or lb/billion SCF of air scrubbed) effluent standards for copper, lead, zinc, total phenols, oil and grease, and TSS. For non-continuous dischargers, annual average mass standards and maximum day and maximum for monthly average concentration (mg/l) standards shall apply. Concentration standards and annual average mass standards shall only apply to non-continuous dischargers.

*(a) Casting Cleaning Operations.*

**NSPS**

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) .....	0.0771	0.0421
Lead (T) .....	0.0791	0.039
Zinc (T) .....	0.114	0.0431
Oil and grease .....	3.0	1.0
TSS .....	3.8	1.5
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>		
Copper (T) .....	0.77	0.42	0.017
Lead (T) .....	0.79	0.39	0.022
Zinc (T) .....	1.14	0.43	0.027
Oil and grease .....	30	10	0.501
TSS .....	38	15	1.0
pH .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (12/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.  
<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

*(b) Casting Quench Operations.*

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**NSPS**

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) .....	0.0093	0.0051
Lead (T) .....	0.0096	0.0047
Zinc (T) .....	0.0138	0.0052
Oil and grease .....	0.363	0.121
TSS .....	0.46	0.182
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>		
Copper (T) .....	0.77	0.42	0.0021
Lead (T) .....	0.79	0.39	0.0027
Zinc (T) .....	1.14	0.43	0.0033
Oil and grease .....	30	10	0.0605
TSS .....	38	15	0.121
pH .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (1.45/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.  
<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

*(c) Die Casting Operations.*

**NSPS**

Pollutant or pollutant property	Maximum for one 1 day	Maximum for monthly average
	kg/1,000 kkg (pounds per million pounds) of metal poured	
Copper (T) .....	0.0066	0.0036
Lead (T) .....	0.0068	0.0034
Zinc (T) .....	0.0098	0.0037
Total Phenols .....	0.0074	0.0026
Oil and grease .....	0.259	0.0864
TSS and .....	0.33	0.13
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.0 to 10.0 at all times.

	Maximum for any 1 day	Maximum for monthly average	Annual average <sup>1</sup>
	(mg/l) <sup>2</sup>		
Copper (T) .....	0.77	0.42	0.0015
Lead (T) .....	0.79	0.39	0.0019
Zinc (T) .....	1.14	0.43	0.0023
Total phenols .....	0.86	0.3	0.0017
Oil and grease .....	30	10	0.0432
TSS and .....	38	15	0.0864
pH .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> kg/1,000 kkg (pounds per million pounds) of metal poured.  
<sup>2</sup> These concentrations must be multiplied by the ratio of (1.04/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured)  
<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

*(d) Dust Collection Scrubber Operations.*