

**Environmental Protection Agency**

**§ 464.44**

|                  | 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                        | 0.0076                      |
| Lead (T) .....   | 0.53                  | 0.26                        | 0.0067                      |
| Zinc (T) .....   | 0.76                  | 0.29                        | 0.008                       |

<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 (5.34/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

**(b) 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) .....                  | 0.0046                                                   | 0.0022                      |
| Zinc (T) .....                  | 0.0066                                                   | 0.0025                      |
| Total phenols .....             | 0.0074                                                   | 0.0026                      |

|                     | 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) .....      | 0.53                  | 0.26                        | 0.0013                      |
| Zinc (T) .....      | 0.76                  | 0.29                        | 0.0016                      |
| 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.

**(c) 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) .....                | 1.56                                                                     | 0.852                       |
| Lead (T) .....                  | 1.07                                                                     | 0.527                       |
| Zinc (T) .....                  | 1.54                                                                     | 0.588                       |
| Total phenolse .....            | 1.74                                                                     | 0.608                       |

|  | Maximum for any 1 day | Maximum for monthly average | Annual average <sup>1</sup> |
|--|-----------------------|-----------------------------|-----------------------------|
|  | (mg/l) <sup>2</sup>   | (mg/l) <sup>2</sup>         |                             |

|                     | Maximum for any 1 day | Maximum for monthly average | Annual average <sup>1</sup> |
|---------------------|-----------------------|-----------------------------|-----------------------------|
| Copper (T) .....    | 0.77                  | 0.42                        | 0.345                       |
| Lead (T) .....      | 0.53                  | 0.26                        | 0.304                       |
| Zinc (T) .....      | 0.76                  | 0.29                        | 0.365                       |
| Total phenols ..... | 0.86                  | 0.3                         | 0.406                       |

<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 (0.243/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 pounds of metal poured) for a specific plant.

**(d) 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) .....                | 0.304                                                    | 0.166                       |
| Lead (T) .....                  | 0.209                                                    | 0.103                       |
| Zinc (T) .....                  | 0.3                                                      | 0.114                       |

|                  | 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                        | 0.067                       |
| Lead (T) .....   | 0.53                  | 0.26                        | 0.0591                      |
| Zinc (T) .....   | 0.76                  | 0.29                        | 0.071                       |

<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 (47.3/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 21762, June 16, 1986]

**§ 464.44 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 Quench 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) .....                | 0.0344                                                   | 0.0187                      |
| Lead (T) .....                  | 0.0237                                                   | 0.0116                      |
| Zinc (T) .....                  | 0.0339                                                   | 0.0129                      |
| Oil and grease .....            | 1.34                                                     | 0.446                       |
| TSS .....                       | 0.67                                                     | 0.536                       |
| 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>   | (mg/l) <sup>2</sup>         |                             |
| Copper (T) .....     | 0.77                  | 0.42                        | 0.0076                      |
| Lead (T) .....       | 0.53                  | 0.26                        | 0.0067                      |
| Zinc (T) ..          | 0.76                  | 0.29                        | 0.008                       |
| Oil and grease ..... | 30                    | 10                          | 0.223                       |
| TSS .....            | 15                    | 12                          | 0.116                       |
| 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 (5.34/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) Die Casting 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) .....                | 0.0066                                                   | 0.0036                      |
| Lead (T) .....                  | 0.0046                                                   | 0.0022                      |
| Zinc (T) .....                  | 0.0066                                                   | 0.0025                      |
| Total phenols .....             | 0.0074                                                   | 0.0026                      |
| Oil and grease .....            | 0.259                                                    | 0.0864                      |
| TSS .....                       | 0.13                                                     | 0.104                       |
| 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>   | (mg/l) <sup>2</sup>         |                             |
| Copper (T) .....     | 0.77                  | 0.42                        | 0.0015                      |
| Lead (T) .....       | 0.53                  | 0.26                        | 0.0013                      |
| Zinc (T) ..          | 0.76                  | 0.29                        | 0.0016                      |
| Total phenols .....  | 0.86                  | 0.3                         | 0.0017                      |
| Oil and grease ..... | 30                    | 10                          | 0.0432                      |
| TSS .....            | 15                    | 12                          | 0.0225                      |
| 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) for a specific plant.

<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

(c) Melting Furnace Scrubber Operations.

NSPS

| 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) .....                | 1.56                                                                     | 0.852                       |
| Lead (T) .....                  | 1.07                                                                     | 0.527                       |
| Zinc (T) ..                     | 1.54                                                                     | 0.588                       |
| Total phenols .....             | 1.74                                                                     | 0.608                       |
| Oil and grease .....            | 60.8                                                                     | 20.3                        |
| TSS .....                       | 30.4                                                                     | 24.3                        |
| 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>   | (mg/l) <sup>2</sup>         |                             |
| Copper (T) .....     | 0.77                  | 0.42                        | 0.345                       |
| Lead (T) .....       | 0.53                  | 0.26                        | 0.304                       |
| Zinc (T) ..          | 0.76                  | 0.29                        | 0.365                       |
| Total phenols .....  | 0.86                  | 0.3                         | 0.406                       |
| Oil and grease ..... | 30                    | 10                          | 10.1                        |
| TSS .....            | 15                    | 12                          | 5.27                        |
| pH .....             | ( <sup>3</sup> )      | ( <sup>3</sup> )            | ( <sup>3</sup> )            |

<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 (0.243/x) where x is the actual normalized process wastewater flow (in gallons per 1,000 SCF of air scrubbed) for a specific plant.

<sup>3</sup> Within the range of 7.0 to 10.0 at all times.

(d) Mold Cooling 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) .....                | 0.304                                                    | 0.166                       |
| Lead (T) .....                  | 0.209                                                    | 0.103                       |
| Zinc (T) .....                  | 0.3                                                      | 0.114                       |
| Oil and grease .....            | 11.8                                                     | 3.94                        |
| TSS .....                       | 5.91                                                     | 4.73                        |
| pH .....                        | ( <sup>1</sup> )                                         | ( <sup>1</sup> )            |

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

**Environmental Protection Agency**

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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                        | 0.067                       |
| Lead (T) .....       | 0.53                  | 0.26                        | 0.0591                      |
| Zinc (T) .....       | 0.76                  | 0.29                        | 0.071                       |
| Oil and grease ..... | 30                    | 10                          | 1.97                        |
| TSS .....            | 15                    | 12                          | 1.03                        |
| 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 (47.3/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 21762, June 16, 1986]

**§ 464.45 Pretreatment standards for existing sources.**

Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources.

*(a) Casting Quench Operations.*

**PSSES**

| 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) .....                                | 0.0344                                                   | 0.0187                      |
| Lead (T) .....                                  | 0.0237                                                   | 0.0116                      |
| Zinc (T) .....                                  | 0.0339                                                   | 0.0129                      |
| TTO .....                                       | 0.093                                                    | 0.0304                      |
| Oil and grease (for alternate monitoring) ..... | 1.34                                                     | 0.446                       |

*(b) Die Casting Operations.*

**PSSES**

| 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) .....                                 | 0.0046                                                   | 0.0022                      |
| Zinc (T) .....                                 | 0.0066                                                   | 0.0025                      |
| Total phenols .....                            | 0.0074                                                   | 0.0026                      |
| TTO .....                                      | 0.0196                                                   | 0.0064                      |
| Oil and grease for alternate monitoring) ..... | 0.259                                                    | 0.0864                      |

*(c) Melting Furnace Scrubber Operations.*

**PSSES**

| Pollutant or pollutant property                | Maximum for any 1 day                           | Maximum for monthly average |
|------------------------------------------------|-------------------------------------------------|-----------------------------|
|                                                | kg/62.3 million per billion SCF of air scrubbed |                             |
| Copper (T) .....                               | 1.56                                            | 0.852                       |
| Lead (T) .....                                 | 1.07                                            | 0.527                       |
| Zinc (T) .....                                 | 1.54                                            | 0.588                       |
| Total phenols .....                            | 1.74                                            | 0.608                       |
| TTO .....                                      | 3.95                                            | 1.29                        |
| Oil and grease for alternate monitoring) ..... | 60.8                                            | 20.3                        |

*(d) Mold Cooling Operations.*

**PSSES**

| 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) .....                               | 0.304                                                    | 0.166                       |
| Lead (T) .....                                 | 0.209                                                    | 0.103                       |
| Zinc (T) .....                                 | 0.3                                                      | 0.114                       |
| TTO .....                                      | 0.821                                                    | 0.268                       |
| Oil and grease for alternate monitoring) ..... | 11.8                                                     | 3.94                        |

**§ 464.46 Pretreatment standards for new sources.**

Except as provided in 40 CFR 403.7, any new source subject to this subpart which introduces pollutants into publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for new sources.

*(a) Casting Quench 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) .....                                | 0.0344                                                   | 0.0187                      |
| Lead (T) .....                                  | 0.0237                                                   | 0.0116                      |
| Zinc (T) .....                                  | 0.0339                                                   | 0.0129                      |
| TTO .....                                       | 0.093                                                    | 0.0304                      |
| Oil and grease (for alternate monitoring) ..... | 1.34                                                     | 0.446                       |

*(b) Die Casting Operations.*