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§ 421.97 [Reserved]

**Subpart J—Primary Tungsten Subcategory**

**§ 421.100 Applicability: Description of the primary tungsten subcategory.**

The provisions of this subpart are applicable to discharges resulting from the production of tungsten at primary tungsten facilities.

[49 FR 8812, Mar. 8, 1984]

**§ 421.101 Specialized definitions.**

For the purpose of this subpart the general information, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

[49 FR 8812, Mar. 8, 1984]

**§ 421.102 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 shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable technology currently available:

(a) Subpart J—Tungstic Acid Rinse.

| BPT EFFLUENT LIMITATIONS        |  |                             |
|---------------------------------|--|-----------------------------|
| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|                                 | mg/kg (pounds per million pounds) of tungstic acid (as W) produced |                             |
| Lead .....                      | 17.230   | 8.205                       |
| Zinc .....                      | 59.900   | 25.030                      |
| Ammonia (as N) .....            | 5,469.000  | 2,404.00                    |
| Total suspended solids .....    | 1,682.000  | 800.000                     |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

(b) Subpart J—Acid Leach Wet Air Pollution Control.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungstic acid (as W) produced |                             |
| Lead .....                      | 15.040   | 7.162                       |
| Zinc .....                      | 52.280   | 21.840                      |
| Ammonia (as N) .....            | 4,773.000  | 2,098.000                   |
| Total suspended solids .....    | 1,468.000  | 698.300                     |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

(c) Subpart J—Alkali Leach Wash.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of sodium tungstate (as W) produced |                             |
| Lead .....                      | 0.000   | 0.000                       |
| Zinc .....                      | 0.000   | 0.000                       |
| Ammonia (as N) .....            | 0.000   | 0.000                       |
| Total suspended solids .....    | 0.000   | 0.000                       |
| pH .....                        | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

(d) Subpart J—Alkali Leach Wash Condensate.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of sodium tungstate (as W) produced |                             |
| Lead .....                      | 8.057   | 3.837                       |
| Zinc .....                      | 28.011  | 11.700                      |
| Ammonia (as N) .....            | 2,557.000   | 1,124.000                   |
| Total suspended solids .....    | 786.200   | 374.100                     |
| pH .....                        | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

(e) Subpart J—Ion Exchange Rafinate (Commingled With Other Process or Nonprocess Waters).

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced |                             |
| Lead .....                      | 37.160  | 17.700                      |
| Zinc .....                      | 129.200   | 53.970                      |

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**BPT EFFLUENT LIMITATIONS—Continued**

| Pollutant or pollutant property | Maximum for any 1 day | Maximum for monthly average |
|---------------------------------|-----------------------|-----------------------------|
| Ammonia (as N) .....            | 11,790.000            | 5,185.000                   |
| Total Suspended solids .....    | 3,627.000             | 1,726.000                   |
| pH .....                        | ( <sup>1</sup> )      | ( <sup>1</sup> )            |

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

(f) Subpart J—Ion Exchange Raffinate (Not Commingled With Other Process or Nonprocess Waters).

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property       | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------------|---|-----------------------------|
|                                       | mg/kg (pounds per million pounds) of ammonium tungstate (as W) produced |                             |
| Lead .....                            | 37.160  | 17.700                      |
| Zinc .....                            | 129.200   | 53.970                      |
| Ammonia (as N) ( <sup>2</sup> ) ..... | 11,790.000  | 5,185.000                   |
| Total suspended solids .....          | 3,627.000   | 1,726.000                   |
| pH .....                              | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

<sup>2</sup> The effluent limitation guideline for this pollutant does not apply if (a) the mother liquor feed to the ion exchange process or the raffinate from the ion exchange process contains sulfates at concentrations exceeding 1000 mg/l; (b) this mother liquor or raffinate is treated by ammonia steam stripping; and (c) such mother liquor or raffinate is not commingled with any other process or nonprocess waters prior to steam stripping for ammonia removal.

(g) Subpart J—Calcium Tungstate Precipitate Wash.

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of calcium tungstate (as W) produced |                             |
| Lead .....                      | 31.000   | 14.760                      |
| Zinc .....                      | 107.800  | 45.020                      |
| Ammonia (as N) .....            | 9,838.000  | 4,325.000                   |
| Total suspended solids .....    | 3,026.000  | 1,439.000                   |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

(h) Subpart J—Crystallization and Drying of Ammonium Paratungstate.

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of ammonium paratungstate (as W) produced |                             |
| Lead .....                      | 0.000   | 0.000                       |
| Zinc .....                      | 0.000   | 0.000                       |
| Ammonia (as N) .....            | 0.000   | 0.000                       |
| Total suspended solids .....    | 0.000   | 0.000                       |
| pH .....                        | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

(i) Subpart J—Ammonium Paratungstate Conversion to Oxides Wet Air Pollution Control.

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungstic oxide (as W) produced |                             |
| Lead .....                      | 11.600  | 5.523                       |
| Zinc .....                      | 40.320  | 16.850                      |
| Ammonia (as N) .....            | 3,681.000   | 1,618.000                   |
| Total suspended solids .....    | 1,132.000   | 538.500                     |
| pH .....                        | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

(j) Subpart J—Ammonium Paratungstate Conversion to Oxides Water of Formation.

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungstic oxide (as W) produced |                             |
| Lead .....                      | 0.026   | 0.013                       |
| Zinc .....                      | 0.092   | 0.038                       |
| Ammonia (as N) .....            | 8.398   | 3.692                       |
| Total suspended solids .....    | 2.583   | 1.229                       |
| pH .....                        | ( <sup>1</sup> )  | ( <sup>1</sup> )            |

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

(k) Subpart J—Reduction to Tungsten Wet Air Pollution Control.

**BPT EFFLUENT LIMITATIONS**

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungsten metal produced |                             |
| Lead .....                      | 12.940   | 6.161                       |

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BPT EFFLUENT LIMITATIONS—Continued

| Pollutant or pollutant property | Maximum for any 1 day | Maximum for monthly average |
|---------------------------------|-----------------------|-----------------------------|
| Zinc .....                      | 44.970                | 18.790                      |
| Ammonia (as N) .....            | 4,106.000             | 1,805.000                   |
| Total suspended solids .....    | 1,263.000             | 600.700                     |
| pH .....                        | ( <sup>1</sup> )      | ( <sup>1</sup> )            |

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

(l) Subpart J—Reduction to Tungsten Water of Formation.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungsten metal produced |                             |
| Lead .....                      | .205   | .098                        |
| Zinc .....                      | .714   | .298                        |
| Ammonia (as N) .....            | 65.190   | 28.660                      |
| Total suspended solids .....    | 20.050   | 9.536                       |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

(m) Subpart J—Tungsten Powder Acid Leach and Wash.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungsten metal produced |                             |
| Lead .....                      | 1.008  | 0.48                        |
| Zinc .....                      | 3.504  | 1.464                       |
| Ammonia (as N) .....            | 319.900  | 140.700                     |
| Total suspended solids .....    | 98.400   | 46.800                      |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

(n) Subpart J—Molybdenum Sulfide Precipitation Wet Air Pollution Control.

BPT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungsten metal produced |                             |
| Lead .....                      | .000   | .000                        |
| Zinc .....                      | .000   | .000                        |
| Ammonia (as N) .....            | .000   | .000                        |
| Total suspended solids .....    | .000   | .000                        |
| pH .....                        | ( <sup>1</sup> )   | ( <sup>1</sup> )            |

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

[49 FR 8812, Mar. 8, 1984, as amended at 53 FR 1706, Jan. 21, 1988]

§ 421.103 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 shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(a) Subpart J—Tungstic Acid Rinse.

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungstic acid (as W) produced |                             |
| Lead .....                      | 11.490   | 5.333                       |
| Zinc .....                      | 41.850   | 17.230                      |
| Ammonia (as N) .....            | 5,469.000  | 2,404.000                   |

(b) Subpart J—Acid Leach Wet Air Pollution Control.

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day  | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of tungstic acid (as W) produced |                             |
| Lead .....                      | 1.003  | 0.466                       |
| Zinc .....                      | 3.653  | 1.504                       |
| Ammonia (as N) .....            | 477.400  | 209.900                     |

(c) Subpart J—Alkali Leach Wash.

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any 1 day   | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
|                                 | mg/kg (pounds per million pounds) of sodium tungstate (as W) produced |                             |
| Lead .....                      | 0.000   | 0.000                       |
| Zinc .....                      | 0.000   | 0.000                       |
| Ammonia (as N) .....            | 0.000   | 0.000                       |

(d) Subpart J—Alkali Leach Wash Condensate.