

## Environmental Protection Agency

§ 461.71

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver processed English units—pounds per 1,000,000 pounds of silver processed	
Lead .....	22.93	10.65
Silver .....	23.75	9.83

(2) Subpart F—Silver Chloride Cathodes—Electrolytic PSNS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver processed English units—pounds per 1,000,000 pounds of silver processed	
Lead .....	40.6	18.9
Silver .....	42.1	17.4

(3) Subpart F—Cell Testing—PSNS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of cells produced English units—pounds per 1,000,000 pounds of cells produced	
Lead .....	19.5	7.89
Silver .....	15.3	6.31

(4) Subpart F—Floor and Equipment Wash—PSNS.

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of cells produced English units—pounds per 1,000,000 pounds of cells produced	
Lead .....	0.026	0.012
Silver .....	0.027	0.011

(b) There shall be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed above.

## Subpart G—Zinc Subcategory

### § 461.70 Applicability; description of the zinc subcategory.

This subpart applies to discharges to waters of the United States, and introductions of pollutants into publicly owned treatment works from the manufacturing of zinc anode batteries.

### § 461.71 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

(a) 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:

(1) Subpart G—Wet Amalgamated Powder Anodes.

#### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	1.67	0.68
Mercury .....	0.95	0.38
Silver .....	1.56	0.65
Zinc .....	5.55	2.32
Manganese .....	2.58	1.10
Oil and grease .....	76.0	45.6
TSS .....	155.8	74.1
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(2) Subpart G—Gelled Amalgam Anodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	0.30	0.12
Mercury .....	0.17	0.07
Silver .....	0.28	0.12
Zinc .....	0.99	0.42
Manganese .....	0.46	0.20
Oil and grease .....	13.6	8.16
TSS .....	27.9	13.26
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(3) Subpart G—Zinc Oxide, Formed Anodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	62.9	25.7
Mercury .....	35.8	14.3
Silver .....	58.7	24.3
Zinc .....	208.8	87.2
Manganese .....	97.2	41.5
Oil and grease .....	2,860.0	1,716.0
TSS .....	5,863.0	2,789.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(4) Subpart G—Electrodeposited Anodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of zinc deposited English units—pounds per 1,000,000 pounds of zinc deposited	
Chromium .....	1,404.0	574.0
Mercury .....	798.0	319.0
Silver .....	1,308.0	543.0
Zinc .....	4,657.0	1,946.0
Manganese .....	2,169.0	925.0
Oil and grease .....	63,800.0	38,280.0
TSS .....	130,700.0	62,210.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(5) Subpart G—Silver Powder, Formed Cathodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver applied English units—pounds per 1,000,000 pounds of silver applied	
Chromium .....	86.2	35.3
Mercury .....	49.0	19.6
Silver .....	80.4	33.3
Zinc .....	286.2	119.6
Manganese .....	133.3	56.8
Oil and grease .....	3,920.0	2,350.0
TSS .....	8,036.0	3,822.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(6) Subpart G—Silver Oxide Powder, Formed Cathodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver applied English units—pounds per 1,000,000 pounds of silver applied	
Chromium .....	57.7	23.6
Mercury .....	32.8	13.1
Silver .....	53.7	22.3
Zinc .....	191.3	79.9
Manganese .....	89.1	38.0
Oil and grease .....	2,620.0	1,570.0
TSS .....	5,370.0	2,554.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(7) Subpart G—Silver Peroxide Cathodes.

## BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver applied English units—pounds per 1,000,000 pounds of silver applied	
Chromium .....	13.8	5.65
Mercury .....	7.85	3.14
Silver .....	12.9	5.34
Zinc .....	45.8	19.2
Manganese .....	21.4	9.11
Oil and grease .....	628.0	377.0
TSS .....	1,287.0	612.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

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(8) Subpart G—Nickel Impregnated Cathodes.

### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of nickel applied	
	English units—pounds per 1,000,000 pounds of nickel applied	
Chromium .....	721.6	295.2
Mercury .....	410.0	164.0
Nickel .....	3,149.0	2,083.0
Silver .....	672.4	279.0
Zinc .....	2,394.4	1,000.4
Manganese .....	1,115.2	475.6
Oil and grease .....	32,800.0	19,680.0
TSS .....	67,240.0	31,980.0
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(9) Subpart G—Miscellaneous Waste-water Streams.

### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of cells produced	
	English units—pounds per 1,000,000 pounds of cells produced	
Chromium .....	3.85	1.58
Cyanide .....	2.54	1.05
Mercury .....	2.19	0.88
Nickel .....	16.82	11.12
Silver .....	3.59	1.49
Zinc .....	12.79	5.34
Manganese .....	5.96	2.54
Oil and grease .....	175.20	105.12
TSS .....	359.16	170.82
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(10) Subpart G—Silver Etch.

### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver processed	
	English units—pounds per 1,000,000 pounds of silver processed	
Chromium .....	21.6	8.84
Mercury .....	12.3	4.91
Silver .....	20.2	8.35
Zinc .....	71.7	30.0
Manganese .....	33.4	14.3
Oil and grease .....	982.0	589.2
TSS .....	2,013.1	957.5
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(11) Subpart G—Silver Peroxide Production.

### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver peroxide processed	
	English units—pounds per 1,000,000 pounds of silver peroxide processed	
Chromium .....	23.0	9.40
Mercury .....	13.1	5.22
Silver .....	21.4	8.88
Zinc .....	76.2	31.80
Manganese .....	35.5	15.10
Oil and grease .....	1,044.0	627.00
TSS .....	2,140.0	1,018.00
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

(12) Subpart G—Silver Powder Production.

### BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver powder processed	
	English units—pounds per 1,000,000 pounds of silver powder processed	
Chromium .....	9.33	3.82
Mercury .....	5.30	2.12
Silver .....	8.69	3.61
Zinc .....	30.95	12.93
Manganese .....	14.42	6.15
Oil and grease .....	424.0	254.40
TSS .....	869.0	413.40
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 7.5–10.0 at all times.

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(b) There shall be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed above.

[49 FR 9134, Mar. 9, 1984; 49 FR 13879, Apr. 9, 1984]

**§ 461.72 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

(a) 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:

(1) Subpart G—Wet Amalgamated Powder Anodes.

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	0.24	0.099
Mercury .....	0.14	0.055
Silver .....	0.23	0.093
Zinc .....	0.80	0.34
Manganese .....	0.37	0.16

(2) Subpart G—Gelled Amalgam Anodes.

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	0.030	0.012
Mercury .....	0.017	0.007
Silver .....	0.028	0.012
Zinc .....	0.099	0.042
Manganese .....	0.046	0.020

(3) Subpart G—Zinc Oxide Formed Anodes.

**40 CFR Ch. I (7–1–10 Edition)**

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of Zinc English units—pounds per 1,000,000 pounds of Zinc	
Chromium .....	9.53	3.90
Mercury .....	5.42	2.17
Silver .....	8.89	3.68
Zinc .....	31.64	13.22
Manganese .....	14.74	6.28

(4) Subpart G—Electrodeposited Anodes.

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of zinc deposited English units—pounds per 1,000,000 pounds of zinc deposited	
Chromium .....	94.47	38.65
Mercury .....	53.68	21.47
Silver .....	88.03	36.50
Zinc .....	313.46	130.97
Manganese .....	146.00	62.26

(5) Subpart G—Silver Powder Formed Cathodes.

**BAT EFFLUENT LIMITATIONS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Metric units—mg/kg of silver applied English units—pounds per 1,000,000 pounds of silver applied	
Chromium .....	13.07	5.35
Mercury .....	7.43	2.97
Silver .....	12.18	5.05
Zinc .....	43.36	18.12
Manganese .....	20.20	8.61

(6) Subpart G—Silver Oxide Powder Formed Cathodes.