Chapter NR 255

BATTERY MANUFACTURING

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Subchapter I — General Provisions

NR 255.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the battery manufacturing category of point sources and its subcategories.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.015 Applicability. This chapter applies to any battery manufacturing plant that discharges or may discharge a pollutant to waters of the state or that introduces pollutants into a publicly owned treatment works. Battery manufacturing operations subject to regulation under this chapter are not subject to regulation under chs. NR 260 and 261.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.02 General definitions. In addition to the definitions set forth in ch. NR 205 and s. NR 211.03, the following definitions apply to this chapter:

- (1) "Ancillary operations" means all of the operations specific to battery manufacturing and not included specifically within anode or cathode manufacture. Ancillary operations are primarily associated with battery assembly and chemical production of anode or cathode active materials.
- (2) "Battery" means a modular electric power source where part or all of the fuel is contained within the unit and electric power is generated directly from a chemical reaction rather than indirectly through a heat cycle engine. In this chapter, there is no differentiation between a single cell and a battery.
- (3) "Battery manufacturing operations" means all of the spethe chapter was last published.

cific processes used to produce a battery including the manufacture of anodes and cathodes and associated ancillary operations. These manufacturing operations are excluded from regulation under any other point source category.

- (4) "Discharge allowance" means the amount of pollutant that a plant will be permitted to discharge measured by mg. per kg. of production unit. For purposes of this chapter, the allowances are specific to battery manufacturing operations.
- (5) "Existing source" means any point source, except a new source as defined in sub. (9), from which pollutants may be discharged either into the waters of the state or into a POTW.
- (6) "Leclanche type batteries" means zinc anode batteries with acid electrolyte.
- (7) "Miscellaneous wastewater streams" means the combined wastewater streams from the process operations within each of 4 subcategories: cadmium, lead, lithium, and zinc. If a plant has one of these wastewater streams, then the plant receives the entire miscellaneous wastewater stream allowance. The process operations for the cadmium subcategory are cell wash, electrolyte preparation, floor and equipment wash, and employe wash. The process operations for the lead subcategory are floor wash, wet air pollution control, battery repair, laboratory, hand wash, and respirator wash. The process operations for the lithium subcategory are floor and equipment wash, cell testing, and lithium scrap disposal. The process operations for the zinc subcategory are cell wash, electrolyte preparation, employe wash, reject cell handling, and floor and equipment wash.
 - (8) "NSPS" means new source performance standards.
- (9) "New source," as defined for NSPS and PSNS, means any point source from which pollutants may be discharged directly Published under s. 35.93, Stats. Updated on the first day of each month. Entire code is always current. The Register date on each page is the date

into the waters of the state or into a POTW, the construction of which commenced after November 10, 1982.

- (10) "PSES" means pretreatment standards for existing sources.
 - (11) "PSNS" means pretreatment standards for new sources.
- (12) "Plate soak" means the process operation of soaking or reacting lead subcategory battery plates, that are more than 2.5 mm. or 0.100 in. thick, in sulfuric acid.
- (13) "Trucked batteries" means batteries moved into or out of the plant by truck when the truck is actually washed in the plant to remove residues left in the truck from the batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.03 Monitoring and reporting requirements.

Compliance with the maximum monthly average effluent limitations and pretreatment standards listed in the tables for each regulated process is required regardless of the number of samples analyzed and averaged. The maximum monthly average effluent limitations and pretreatment standards listed in the tables for each regulated process shall be the basis for monthly average discharge limits in direct discharge permits and for pretreatment standards. **History:** Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.04 Compliance date for PSES. The compliance date for pretreatment standards for existing sources is March 9, 1987.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter II — Cadmium Subcategory

NR 255.10 Applicability; description of the cadmium subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing cadmium anode batteries. History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.11 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 1 Pasted and Pressed Powder Anodes BPT

	BPI				
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR			
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE			
	Metric units — m	g/kg of cadmium			
	English units — I	b/million lbs of			
	cadmium				
Cadmium	0.92	0.41			
Nickel	5.18	3.43			
Zinc	3.94	1.65			
Cobalt	0.57	0.24			
Oil and grease	54.00	32.40			
TSS	111.00	52.65			
pН	(1)	(1)			

Within the range of 7.5 to 10.0 at all times.

Table 2 Electrodeposited Anodes BPT

POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	English units —	lb/million lbs of
	cadmium	
Cadmium	237.0	104.6
Nickel	1,338.2	885.2
Zinc	1,017.6	425.2
Cobalt	146.4	62.7
Oil and grease	13,940.0	8,364.0
TSS	28,577.0	13,592.0
pН	(1)	(1)

Within the range of 7.5 to 10.0 at all times.

Table 3
Impregnated Anodes

	Dri	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	English units -	 lb/million lbs of
	cadmium	
Cadmium	339.3	149.7
Nickel	1,916.2	1,267.5
Zinc	1,457.1	608.8
Cobalt	209.6	89.8
Oil and grease	19,960.0	11,976.0
TSS	40,918.0	19,461.0
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Nickel Electrodeposited Cathodes
BPT

	BPI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of nickel
	applied	
	English units -	- lb/million lbs of
	nickel applied	
Cadmium	193.5	85.4
Nickel	1,092.5	722.6
Zinc	830.7	347.1
Cobalt	119.5	51.2
Oil and grease	11,380.0	6,828.0
TSS	23,329.0	11,095.5
pН	(¹)	(¹)

Table 5 Nickel Impregnated Cathodes BPT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Cadmium	557.6	246.0
Nickel	3,148.8	2,082.8
Zinc	2,394.4	1,000.4
Cobalt	344.4	147.6
Oil and grease	32,800.0	19,680.0
TSS	67,240.0	31,980.0
pН	(1)	(1)

 $^{^{1}\,}$ Within the range of 7.5 to 10.0 at all times.

Table 6 Miscellaneous Wastewater Streams

	BPI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Cadmium	6.29	2.77
Nickel	35.54	23.50
Zinc	27.02	11.29
Cobalt	3.89	1.66
Oil and grease	370.20	222.12
TSS	758.91	360.94
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 7
Cadmium Powder Production
RPT

	DI I			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR		
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE		
	Metric units —	mg/kg of cadmium		
	powder produced	1		
	English units —	lb/million lbs of		
	cadmium powde	cadmium powder produced		
Cadmium	22.34	9.86		
Nickel	126.14	83.44		
Zinc	95.92	40.08		
Cobalt	13.80	5.91		
Oil and grease	1,314.00	788.40		
TSS	2,693.00	1,281.20		
pН	(¹)	(¹)		

¹ Within the range of 7.5 to 10.0 at all times.

Table 8 Silver Powder Production BPT

	DII	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	powder produce	d
	English units —	lb/million lbs of
	silver powder pr	oduced
Cadmium	7.21	3.18
Nickel	40.70	26.92
Silver	8.69	3.61
Zinc	30.95	12.93
Cobalt	4.45	1.91
Oil and grease	424.00	254.40
TSS	869.20	413.40
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 9 Cadmium Hydroxide Production

	BPI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	used	
	English units —	lb/million lbs of
	cadmium used	
Cadmium	0.31	0.14
Nickel	1.73	1.14
Zinc	1.31	0.55
Cobalt	0.19	0.08
Oil and grease	18.00	10.80
TSS	86.90	17.60
pH	(¹)	(¹)
	•	

Within the range of 7.5 to 10.0 at all times.

Table 10 Nickel Hydroxide Production

BPT				
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR		
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE		
	Metric units —	mg/kg of nickel used		
	English units -	 lb/million lbs of 		
	nickel used			
Cadmium	37.4	16.5		
Nickel	211.2	139.7		
Zinc	160.6	67.1		
Cobalt	23.1	9.9		
Oil and grease	2,200.0	1,320.0		
TSS	4,510.0	2,145.0		
pН	(1)	(1)		
I	0 : 11 ::			

Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 1 to 10.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.12 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 11 Electrodeposited Anodes

BAT				
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR		
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE		
Metric units — mg/kg of cadmium				
	English units —	lb/million lbs of		
	cadmium			
Cadmium	11.95	5.27		
Nickel	67.49	44.64		
Zinc	51.32	21.44		
Cobalt	7.38	3.16		

Table 12 Impregnated Anodes or Nickel Impregnated Cathodes

	BAT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of cadmium or
	nickel applied	
	English units —	lb/million lbs of
	cadmium or nick	kel applied
Cadmium	68.0	30.0
Nickel	384.0	254.0
Zinc	292.0	122.0
Cobalt	42.0	18.0

Table 13 Nickel Electrodeposited Cathodes

	BAT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Cadmium	11.22	4.95
Nickel	63.36	41.91
Zinc	48.18	20.13
Cobalt	6.93	2.97

Table 14 Miscellaneous Wastewater Streams

	BAT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Cadmium	0.79	0.35
Nickel	4.47	2.96
Zinc	3.40	1.42
Cobalt	0.49	0.21

Table 15 Cadmium Powder Production BAT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	powder produce	d
	English units — lb/million lbs of	
	cadmium powder produced	
Cadmium	2.23	0.99
Nickel	12.61	8.34
Zinc	9.59	4.01
Cobalt	1.38	0.59

Table 16 Silver Powder Production

	BAT		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — 1	mg/kg of silver	
powder produced			
	English units — lb/million lbs of		
	silver powder produced		
Cadmium	1.09	0.48	
Nickel	6.16	4.08	
Silver	1.32	0.55	
Zinc	4.69	1.96	
Cobalt	0.67	0.29	

Table 17 Cadmium Hydroxide Production

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	used	
	English units —	lb/million lbs of
	cadmium used	
Cadmium	0.05	0.02
Nickel	0.27	0.18
Zinc	0.20	0.09
Cobalt	0.03	0.01

Table 18 Nickel Hydroxide Production

	BAT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units — 1	mg/kg of nickel used
	English units -	 lb/million lbs of
	nickel used	
Cadmium	5.61	2.48
Nickel	31.68	20.96
Zinc	24.09	10.07
Cobalt	3.47	1.49

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 11 to 18

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.13 New source performance standards. (1)

The discharge of wastewater pollutants from any new source subject to this subchapter may not exceed the following standards:

Table 19
Electrodeposited Anodes

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	English units —	lb/million lbs of
	cadmium	
Cadmium	7.03	2.81
Nickel	19.33	13.01
Zinc	35.85	14.76
Cobalt	4.92	2.46
Oil and grease	351.5	351.5
TSS	527.3	421.8
н	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 20 Impregnated Anodes or Nickel Impregnated Cathodes NSPS

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cadmium or
	nickel applied	
	English units —	lb/million lbs of
	cadmium or nicl	kel applied
Cadmium	40.0	16.0
Nickel	110.0	74.0
Zinc	204.0	84.0
Cobalt	28.0	14.0
Oil and grease	2,000.0	2,000.0
TSS	3,000.0	2,400.0
Ha	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 21
Nickel Electrodeposited Cathodes

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Cadmium	6.60	2.64
Nickel	18.15	12.21
Zinc	33.66	13.86
Cobalt	4.62	2.31
Oil and grease	330.0	330.0
TSS	495.0	396.0
pH	(1)	(1)

¹ Within the range of 7.5 to 10.0 at all times.

Table 22 Miscellaneous Wastewater Streams NSPS

	- 10- 0	
POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
POLLUTANT PROPERTY		
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Cadmium	0.47	0.19
Nickel	1.28	0.86
Zinc	2.38	0.98
Cobalt	0.33	0.16
Oil and grease	23.3	23.3
TSS	35.0	28.0
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 23 Cadmium Powder Production

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	powder produced	d
English units — lb/million lbs of		
	cadmium powde	r produced
Cadmium	1.31	0.53
Nickel	3.61	2.43
Zinc	6.70	2.76
Cobalt	0.92	0.46
Oil and grease	65.70	65.70
TSS	98.55	78.84
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 24 Silver Powder Production NSPS

	Noro	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	powder produce	d
	English units —	lb/million lbs of
	silver powder pr	oduced
Cadmium	0.64	0.26
Nickel	1.77	1.19
Silver	0.93	0.39
Zinc	3.27	1.35
Cobalt	0.45	0.22
Oil and grease	32.10	32.10
TSS	48.15	38.52
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 25 Cadmium Hydroxide Production NSPS

	11010	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	used	
	English units —	lb/million lbs of
	cadmium used	
Cadmium	0.028	0.011
Nickel	0.077	0.051
Zinc	0.142	0.058
Cobalt	0.019	0.009
Oil and grease	1.40	1.40
TSS	2.10	1.68
nН	(¹)	$\binom{1}{1}$

Within the range of 7.5 to 10.0 at all times.

Table 26 Nickel Hydroxide Production NSPS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of nickel used
	English units -	 lb/million lbs of
	nickel used	
Cadmium	3.30	1.32
Nickel	9.08	6.11
Zinc	16.83	6.93
Cobalt	2.31	1.16
Oil and grease	165.0	165.0
TSS	247.5	198.0
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 19 to 26.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.14 Pretreatment standards for existing sources. (1) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources:

Table 27
Electrodeposited Anodes
PSES

	IDED	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	English units —	lb/million lbs of
	cadmium	
Cadmium	11.95	5.27
Nickel	67.49	44.64
Zinc	51.32	21.44
Cobalt	7.38	3.16

Table 28 Impregnated Anodes or Nickel Impregnated Cathodes PSES

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	
	Metric units — r	ng/kg of cadmium or
nickel applied		
English units — lb/million lbs of		
	cadmium or nickel applied	
Cadmium	68.0	30.0
Nickel	384.0	254.0
Zinc	292.0	122.0
Cobalt	42.0	18.0

Table 29 Nickel Electrodeposited Cathodes PSES

	1 0120	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Cadmium	11.22	4.95
Nickel	63.36	41.91
Zinc	48.18	20.13
Cobalt	6.93	2.97

Table 30 Miscellaneous Wastewater Streams

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Cadmium	0.79	0.35
Nickel	4.47	2.96
Zinc	3.40	1.42
Cobalt	0.49	0.21

Table 31 Cadmium Powder Production

	LOES		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units —	mg/kg of cadmium	
	powder produce	d	
	English units — lb/million lbs of		
	cadmium powder produced		
Cadmium	2.23	0.99	
Nickel	12.61	8.34	
Zinc	9.59	4.01	
Cobalt	1.38	0.59	

Table 32 Silver Powder Production PSES

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver pow-
	der produced	
	English units —	lb/million lbs of
	silver powder produced	
Cadmium	1.09	0.48
Nickel	6.16	4.08
Silver	1.32	0.55
Zinc	4.69	1.96
Cobalt	0.67	0.29

Table 33
Cadmium Hydroxide Production

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	used	
	English units —	lb/million lbs of
	cadmium used	
Cadmium	0.05	0.02
Nickel	0.27	0.18
Zinc	0.20	0.09
Cobalt	0.03	0.012

Table 34
Nickel Hydroxide Production
PSES

	1 0120	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of nickel used
	English units -	 lb/million lbs of
	nickel used	
Cadmium	5.61	2.48
Nickel	31.68	20.96
Zinc	24.09	10.07
Cobalt	3.47	1.49

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 27 to 34.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.15 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 35
Electrodeposited Anodes

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	English units —	lb/million lbs of
	cadmium	
Cadmium	7.03	2.81
Nickel	19.33	13.01
Zinc	35.85	14.76
Cobalt	4.92	2.46

Table 36
Impregnated Anodes or Nickel Impregnated Cathodes
PSNS

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of cadmium or
	nickel applied	
English units — lb/million lbs of		
	cadmium or nick	tel applied
Cadmium	40.0	16.0
Nickel	110.0	74.0
Zinc	204.0	84.0
Cobalt	28.0	14.0

Table 37 Nickel Electrodeposited Cathodes

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Cadmium	6.60	2.64
Nickel	18.15	12.21
Zinc	33.66	13.86
Cobalt	4.62	2.31

Table 38 Miscellaneous Wastewater Streams PSNS

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of cells
	produced	
	English units -	- lb/million lbs of
	cells produced	
Cadmium	0.47	0.19
Nickel	1.28	0.86
Zinc	2.38	0.96
Cobalt	0.33	0.16

Table 39 Cadmium Powder Production

1 51 15			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units —	mg/kg of cadmium	
	powder produced	l	
	English units —	lb/million lbs of	
	cadmium powder	r produced	
Cadmium	1.31	0.53	
Nickel	3.61	2.43	
Zinc	6.70	2.76	
Cobalt	0.92	0.46	

Table 40
Silver Powder Production

	PSNS		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — 1	mg/kg of silver	
	powder produced	d	
	English units — lb/million lbs of		
	silver powder pro	oduced	
Cadmium	0.64	0.26	
Nickel	1.77	1.19	
Silver	0.93	0.39	
Zinc	3.27	1.35	
Cobalt	0.45	0.22	

Table 41
Cadmium Hydroxide Production

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of cadmium
	used	
	English units —	lb/million lbs of
	cadmium used	
Cadmium	0.028	0.011
Nickel	0.077	0.051
Zinc	0.142	0.058
Cobalt	0.019	0.009

Table 42 Nickel Hydroxide Production PSNS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of nickel used
	English units -	 lb/million lbs of
	nickel used	
Cadmium	3.30	1.32
Nickel	9.08	6.11
Zinc	16.83	6.93
Cobalt	2.31	1.16

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 35 to

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter III — Calcium Subcategory

NR 255.20 Applicability; description of the calcium subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing calcium anode batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.23 New source performance standards.

There may be no discharge allowance for process wastewater pollutants from any battery manufacturing new source subject to this subchapter.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.25 Pretreatment standards for new sources. There may be no discharge allowance for process wastewater pollutants into a POTW from any battery manufacturing new source subject to this subchapter.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter IV — Lead Subcategory

NR 255.30 Applicability; description of the lead subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing lead anode batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.31 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 43
Closed Formation — Double Fill, or Fill and Dump

	DF I	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
•	Metric units — 1	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.86	0.45
Lead	0.19	0.090
Iron	0.54	0.27
Oil and grease	9.00	5.40
TSS	18.45	8.78
pН	(¹)	(¹)

Table 44
Open Formation — Dehydrated
RPT

	Dri	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	20.99	11.06
Lead	4.64	2.21
Iron	16.13	6.74
Oil and grease	221.00	132.60
TSS	453.05	215.47
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 45
Open Formation — Wet

	DII	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.10	0.05
Lead	0.02	0.01
Iron	0.06	0.03
Oil and grease	1.06	0.64
TSS	2.17	1.03
pН	(¹)	(1)

¹ Within the range of 7.5 to 10.0 at all times.

DEPARTMENT OF NATURAL RESOURCES

Table 46 Plate Soak RPT

DI I			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — 1	mg/kg of lead used	
	English units —	lb/million lbs of lead	
	used		
Copper	0.040	0.020	
Lead	0.009	0.004	
Iron	0.030	0.010	
Oil and grease	0.420	0.250	
TSS	0.860	0.410	
pН	(¹)	(1)	

¹ Within the range of 7.5 to 10.0 at all times.

Table 47 Battery Wash with Detergent

	BPI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	1.71	0.90
Lead	0.38	0.18
Iron	1.08	0.55
Oil and grease	18.00	10.80
TSS	36.90	17.55
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 48
Battery Wash — Water Only

	BPT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	1.12	0.59
Lead	0.25	0.12
Iron	0.71	0.36
Oil and grease	11.80	7.08
TSS	24.19	11.51
pH	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 49
Direct Chill Lead Casting

	BPI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.00040	0.00020
Lead	0.00008	0.00004
Iron	0.00020	0.00010
Oil and grease	0.00400	0.00200
TSS	0.00800	0.00300
pН	(¹)	(1)

Within the range of 7.5 to 10.0 at all times.

Table 50 Mold Release Formulation BPT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.011	0.006
Lead	0.002	0.001
Iron	0.007	0.004
Oil and grease	0.120	0.072
TSS	0.246	0.117
pН	(¹)	(1)

Within the range of 7.5 to 10.0 at all times.

Table 51 Truck Wash BPT

	D1 1	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead in
	trucked batteries	~ ~
	English units —	lb/million lbs of lead
	in trucked batter	ies
Copper	0.026	0.014
Lead	0.005	0.002
Iron	0.016	0.006
Oil and grease	0.280	0.168
TSS	0.574	0.273
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 52 Laundry

BPT		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	· · · · · · · · · · · · · · · · · · ·	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.21	0.11
Lead	0.05	0.02
Iron	0.13	0.07
Oil and grease	2.18	1.31
TSS	4.47	2.13
Hq	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 53 Miscellaneous Wastewater Streams

	BPT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.81	0.43
Lead	0.18	0.09
Iron	0.51	0.26
Oil and grease	8.54	5.12
TSS	17.51	8.33
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 43 to 53.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.32 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 54
Open Formation — Dehydrated

	BAT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	3.19	1.68
Lead	0.71	0.34
Iron	2.02	1.02

Table 55 Open Formation — Wet

AI
IMUM FOR MAXIMUM FOR
ANY 1 DAY MONTHLY AVERAGE
ic units — mg/kg of lead used
ish units — lb/million lbs of lead
0.100 0.053
0.022 0.010
0.06 0.03

Table 56 Plate Soak

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.039	0.021
Lead	0.008	0.004
Iron	0.030	0.010

Table 57 Battery Wash with Detergent

	BAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
Metric units — mg/kg of lead used		
English units — lb/million lbs of lead		
	used	
Copper	1.71	0.90
Lead	0.38	0.18
Iron	1.08	0.55

Table 58 Direct Chill Lead Casting BAT

	27.22	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.0004	0.0002
Lead	0.00008	0.00004
Iron	0.0002	0.0001

Table 59 Mold Release Formulation

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	- lb/million lbs of lead
	used	
Copper	0.011	0.006
Lead	0.002	0.001
Iron	0.007	0.003

Table 60 Truck Wash BAT

POLLUTANT OR POLLUTANT PROPERTY	ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
		- mg/kg of lead in
	trucked batterie	es
	English units —	- lb/million lbs of lead
	in trucked batte	eries
Copper	0.026	0.014
Lead	0.005	0.002
Iron	0.016	0.008
<u> </u>		·

Table 61 Laundry BAT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.21	0.11
Lead	0.05	0.02
Iron	0.13	0.07

Table 62 Miscellaneous Wastewater Streams

BAT		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	- lb/million lbs of lead
	used	
Copper	0.58	0.31
Lead	0.13	0.06
Iron	0.37	0.19

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 54 to 62.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.33 New source performance standards. (1)

The discharge of wastewater pollutants from any new source subject to this subchapter may not exceed the following standards:

Table 63 Open Formation — Dehydrated NSPS

1131 3		
	Metric units — mg	/kg of lead used
English units — lb/million lbs of lead		million lbs of lead
	used	
Copper	2.15	1.02
Lead	0.47	0.21
Iron	2.01	1.02
Oil and grease	16.80	16.80
TSS	25.20	20.16
pH	(1)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 64 Open Formation — Wet

113F3		
	Metric units — mg	/kg of lead used
English units — lb/million lbs of lead		
	used	
Copper	0.067	0.032
Lead	0.014	0.006
Iron	0.063	0.032
Oil and grease	0.53	0.53
TSS	0.80	0.64
pН	(¹)	(¹)

¹Within the range of 7.5 to 10.0 at all times.

Table 65 Plate Soak

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of lead used
	English units —	lb/million lbs of lead
		used
Copper	0.026	0.012
Lead	0.005	0.002
Iron	0.025	0.012
Oil and grease	0.21	0.21
TSS	0.32	0.25
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 66 Battery Wash with Detergent

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	1.152	0.549
Lead	0.252	0.117
Iron	1.08	0.55
Oil and grease	9.0	9.0
TSS	13.5	10.8
Нα	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 67 Direct Chill Lead Casting NSPS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.000256	0.000122
Lead	0.000056	0.000026
Iron	0.000240	0.000122
Oil and grease	0.0020	0.0020
TSS	0.0030	0.0024
pН	(¹)	(1)
Within the same of 7.5 to 10.4	at all times	

Within the range of 7.5 to 10.0 at all times.

Table 68 Mold Release Formulation NSPS

MAXIMUM FOR	MAXIMUM FOR	
ANY 1 DAY	MONTHLY AVERAGE	
Metric units — mg/kg of lead used		
English units —	lb/million lbs of lead	
used		
0.0077	0.0037	
0.0017	0.0008	
0.0072	0.0037	
0.060	0.060	
0.090	0.072	
(1)	(1)	
	ANY 1 DAY Metric units — 1 English units — 1 used 0.0077 0.0017 0.0072 0.060 0.090	

Within the range of 7.5 to 10.0 at all times.

Table 69 Truck Wash

NSPS		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead in
	trucked batteries	
	English units —	b/million lbs of lead
	in trucked batteri	es
Copper	0.006	0.003
Lead	0.001	0.0007
Iron	0.006	0.003
Oil and grease	0.050	0.050
TSS	0.075	0.060
рH	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 70 Laundry NSPS

	11010	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.14	0.07
Lead	0.03	0.01
Iron	0.13	0.07
Oil and grease	1.09	1.09
TSS	1.64	1.31
pН	(¹)	(¹)

Table 71 Miscellaneous Wastewater Streams NSPS

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.39	0.19
Lead	0.085	0.039
Iron	0.37	0.19
Oil and grease	3.07	3.07
TSS	4.61	3.69
pH	(1)	(1)

¹ Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 63 to 71.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.34 Pretreatment standards for existing sources. (1) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources:

Table 72
Open Formation — Dehydrated

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units — lb/million lbs of lead	
	used	
Copper	3.19	1.68
Lead	0.71	0.34

Table 73
Open Formation — Wet

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.100	0.053
Lead	0.022	0.010

Table 74
Plate Soak

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.039	0.021
Lead	0.008	0.004

Table 75
Battery Wash with Detergent
PSES

	1020	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	1.71	0.90
Lead	0.38	0.18

Table 76 Direct Chill Lead Casting

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.0004	0.0002
Lead	0.00008	0.00004

Table 77 Mold Release Formulation

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.011	0.006
Lead	0.002	0.001

Table 78 Truck Wash

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead in
	trucked batteries	
	English units —	b/million lbs of lead
	in trucked batteri	es
Copper	0.026	0.014
Lead	0.005	0.002

Table 79 Laundry

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
		mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.21	0.11
Lead	0.05	0.02

Table 80 Miscellaneous Wastewater Streams PSES

	LOES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	- lb/million lbs of lead
	used	
Copper	0.58	0.31
Lead	0.13	0.06

- **(2)** There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 72 to 80.
- (3) In cases where battery employe shower wastewater containing concentrations of lead exceeding 0.20 mg/l is combined with process wastewaters prior to treatment, the control authority may, under and notwithstanding the provisions of s. NR 211.12, exercise its discretion and classify battery employe shower wastewater as an unregulated rather than a dilute (F_D) wastestream, for the purpose of applying the combined wastestream formula. Before the control authority may exercise its discretion to classify such a stream as an unregulated stream, the battery manufacturer must provide engineering, production, and sampling and analysis information sufficient to allow a determination by the control authority on how the stream should be classified.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.35 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 81
Open Formation — Dehydrated

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	2.15	1.02
Lead	0.47	0.21

Table 82 Open Formation — Wet PSNS

MAXIMUM FOR

ANY 1 DAY

MAXIMUM FOR

0.012

0.002

MONTHLY AVERAGE

POLLUTANT OR

Copper

Lead

POLLUTANT PROPERTY

	Metric units — mg/kg of lead used	
	English units — lb/million lbs of lead	
	used	
Copper	0.067	0.032
Lead	0.014	0.006
	Table 83 Plate Soak PSNS	
POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
TODDE THE TROPERTY	Metric units —	mg/kg of lead used - lb/million lbs of lead

Table 84 Battery Wash with Detergent

0.026

0.005

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	1.152	0.549
Lead	0.252	0.117

Table 85 Direct Chill Lead Casting PSNS

POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
	Metric units —	mg/kg of lead used
	English units —	- lb/million lbs of lead
	used	
Copper	0.000256	0.000122
Lead	0.000056	0.000026

Table 86 Mold Release Formulation

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.007	0.0037
Lead	0.0017	0.0008

Table 87 Truck Wash

	1 0110	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead in
trucked batteries		
	English units — lb/million lbs of lead	
	in trucked batter	ies
Copper	0.006	0.003
Lead	0.001	0.0007

Table 88 Laundry PSNS

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of lead used
	English units —	lb/million lbs of lead
	used	
Copper	0.14	0.07
Lead	0.03	0.01

Table 89 Miscellaneous Wastewater Streams PSNS

MAXIMUM FOR	MAXIMUM FOR
ANY 1 DAY	MONTHLY AVERAGE
Metric units — r	ng/kg of lead used
English units —	lb/million lbs of lead
used	
0.39	0.19
0.085	0.039
	ANY 1 DAY Metric units — 1 English units — used 0.39

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 81 to 89.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter V — Leclanche Subcategory

NR 255.40 Applicability; description of the Leclanche subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of

Published under s. 35.93, Stats. Updated on the first day of each month. Entire code is always current. The Register date on each page is the date the chapter was last published.

pollutants into POTWs from manufacturing Leclanche type batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.43 New source performance standards. (1) The discharge of wastewater pollutants from any new source sub-

The discharge of wastewater pollutants from any new source sub ject to this subchapter may not exceed the following standards:

Table 90 Foliar Battery Miscellaneous Wash NSPS

	11020	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	 mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Mercury	0.010	0.004
Zinc	0.067	0.030
Manganese	0.019	0.015
Oil and grease	0.66	0.66
TSS	0.99	0.79
pН	(¹)	(¹)

¹Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than the battery manufacturing operation listed in table 90.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.44 Pretreatment standards for existing sources. (1) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources:

Table 91 Foliar Battery Miscellaneous Wash PSES

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Mercury	0.010	0.004
Zinc	0.067	0.030
Manganese	0.019	0.015

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than the battery manufacturing operation listed in table 91

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.45 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 92 Foliar Battery Miscellaneous Wash PSNS

	1 51 15	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
English units — lb/million lbs of		
	cells produced	
Mercury	0.010	0.004
Zinc	0.067	0.030
Manganese	0.019	0.015

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than the battery manufacturing operation listed in table 92.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter VI — Lithium Subcategory

NR 255.50 Applicability; description of the lithium subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing lithium anode batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.53 New source performance standards. (1)

The discharge of wastewater pollutants from any new source subject to this subchapter may not exceed the following standards:

Table 93 Lead Iodide Cathodes NSPS

	11010	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of lead
	English units —	lb/million lbs of lead
Chromium	23.34	9.46
Lead	17.66	8.20
Iron	75.70	38.48
TSS	946.2	756.96
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 94 Iron Disulfide Cathodes

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of iron
	disulfide	
	English units — Il	o/million lbs of iron
	disulfide	
Chromium	2.79	1.13
Lead	2.11	0.96
Iron	9.05	4.60
TSS	113.1	90.5
pH	(¹)	(¹)

Table 95
Miscellaneous Wastewater Streams
NSPS

	Nors	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	0.039	0.016
Lead	0.030	0.014
Iron	0.129	0.066
TSS	1.62	1.30
рH	(1)	(1)

Within the range of 7.5 to 10.0 at all times.

Table 96 Air Scrubbers NSPS

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of cells
	produced	
	English units —	- lb/million lbs of
	cells produced	
TSS	434.0	207.0
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 93 to 96.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.55 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 97
Lead Iodide Cathodes

	1 5145	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of lead
	English units —	lb/million lbs of lead
Chromium	23.34	9.46
Lead	17.66	8.20

Table 98
Iron Disulfide Cathodes

	LONO	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of iron
	disulfide	
	English units —	lb/million lbs of iron
	disulfide	
Chromium	2.79	1.13
Lead	2.11	0.96

Table 99 Miscellaneous Wastewater Streams PSNS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	0.039	0.016
Lead	0.030	0.014

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 97 to 99.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter VII — Magnesium Subcategory

NR 255.60 Applicability; description of the magnesium subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing magnesium anode batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.63 New source performance standards. (1) The discharge of wastewater pollutants from any new source sub-

The discharge of wastewater pollutants from any new source subject to this subchapter may not exceed the following standards:

Table 100
Silver Chloride Cathodes — Chemically Reduced
NSPS

	11020	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Lead	22.93	10.65
Silver	23.75	9.83
Iron	98.28	49.96
TSS	1,228.5	982.8
COD	4,095.0	1,999.0
pН	(¹)	(¹)
XXX: 1 . 1 . C 10 . C	11	

Within the range of 7.5 to 10.0 at all times.

Table 101 Silver Chloride Cathodes — Electrolytic

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Lead	40.6	18.9
Silver	42.1	17.4
Iron	174.0	86.5
TSS	2,175.0	1,740.0
COD	7,250.0	3,540.0
pН	(¹)	(¹)
W	11	

Table 102 Cell Testing NSPS

	1101 0	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Lead	19.5	7.89
Silver	15.3	6.31
Iron	63.1	32.1
TSS	789.0	631.2
COD	2,630.0	1,290.0
Нα	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 103 Floor and Equipment Wash

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	- mg/kg of cells
	produced	0 0
	English units -	- lb/million lbs of
	cells produced	
Lead	0.026	0.012
Silver	0.027	0.011
Iron	0.112	0.057
COD	1.41	1.13
TSS	4.70	2.30
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 104 Air Scrubber

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	 mg/kg of cells
	produced	
	English units -	- lb/million lbs of
	cells produced	
TSS	8,467.0	4,030.0
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 100 to 104.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.64 Pretreatment standards for existing sources. (1) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources:

Table 105
Silver Chloride Cathodes — Chemically Reduced
PSES

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY
		AVERAGE
	Metric units — r	ng/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Lead	1.032.36	491.60
	1,002.00	1,71,00

Table 106 Silver Chloride Cathodes — Electrolytic PSES

	- ~~	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Lead	60.9	29.0
Silver	59.5	24.7
	processed English units — silver processed 60.9	lb/million lbs of 29.0

Table 107 Cell Testing

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Lead	22.1	10.5
Silver	21.6	8.9

Table 108 Floor and Equipment Wash

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Lead	0.039	0.018
Silver	0.038	0.105

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 105 to 108

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.65 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 109
Silver Chloride Cathodes — Chemically Reduced
PSNS

	1 51 15	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units -	 mg/kg of silver
	processed	
	English units —	lb/million lbs of sil-
	ver processed	
Lead	22.93	10.65
Silver	23.75	9.83

Table 110 Silver Chloride Cathodes — Electrolytic

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Lead	40.6	18.9
Silver	42.1	17.4

Table 111 Cell Testing PSNS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Lead	19.5	7.89
Silver	15.3	6.31
Silver	15.5	0.31

Table 112 Floor and Equipment Wash

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Lead	0.026	0.012
Silver	0.027	0.001

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 109 to 112.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

Subchapter VIII — Zinc Subcategory

NR 255.70 Applicability; description of the zinc subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from manufacturing zinc anode batteries.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.71 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 113 Wet Amalgamated Powder Anodes BPT

	27. 1	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — mg/kg zinc	
	English units —	lb/million lbs 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
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 114
Gelled Amalgam Anodes
RPT

	DF I	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of zinc
	English units —	lb/million lbs 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
pН	(¹)	(¹)
Within the range of 7.5 to 10.0	at all times	

Within the range of 7.5 to 10.0 at all times.

Table 115 Zinc Oxide, Formed Anodes BPT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	English units —	lb/million lbs 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	(1)	(1)

Table 116 Electrodeposited Anodes BPT

D1 1		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	deposited	
	English units —	lb/million lbs of zinc
	deposited	
Chromium	1,404.0	574.0
Mercury	798.0	319.0
Silver	1,308.0	543.0
Zinc	4,657.0	1,948.0
Manganese	2,169.0	925.0
Oil and grease	63,800.0	38,280.0
TSS	130,700.0	62,210.0
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 117
Silver Powder, Formed Cathodes

BPI			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
Metric units — mg/kg of silver			
	applied		
	English units —	lb/million lbs 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	
pН	(¹)	(¹)	

¹ Within the range of 7.5 to 10.0 at all times.

Table 118
Silver Oxide Powder, Formed Cathodes

BPI			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units —	mg/kg of silver	
	applied		
	English units —	lb/million lbs 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	
pН	(1)	(1)	

¹ Within the range of 7.5 to 10.0 at all times.

Table 119 Silver Peroxide Cathodes BPT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs 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
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 120 Nickel Impregnated Cathodes

BPI			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units —	mg/kg of nickel	
	applied		
	English units -	 lb/million lbs 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	(¹)	(¹)	

Within the range of 7.5 to 10.0 at all times.

Table 121 Miscellaneous Wastewater Streams

	RLL	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	3.85	1.58
Cyanide	2.54	1.05
Mercury	2.19	0.68
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
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 122 Silver Etch

Shver Etch			
BPT			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — 1	ng/kg of silver	
	processed		
	English units —	lb/million lbs 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	
pН	(¹)	(¹)	

Table 123

Silver Peroxide Production BPT

	DII	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver in
	silver peroxide p	roduced
	English units —	lb/million lbs of
	silver in silver p	eroxide produced
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
рH	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Within the range of 7.5 to 10.0 at all times.

Table 124
Silver Powder Production

	BPT	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	powder produce	d
	English units —	lb/million lbs of
	silver powder pr	oduced
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
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 113 to 124.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.72 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 125 Wet Amalgamated Powder Anodes BAT

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	English units —	lb/million lbs of zinc
Chromium	0.24	0.099
Mercury	0.14	0.056
Silver	0.23	0.093
Zinc	0.80	0.34
Manganese	0.37	0.16

Table 126
Gelled Amalgam Anodes

	Dill	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	English units —	lb/million lbs 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

Table 127 Zinc Oxide Formed Anodes BAT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of zinc
	English units —	lb/million lbs 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

Table 128 Electrodeposited Anodes

	BAI		
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — mg/kg of zinc		
	deposited		
	English units —	lb/million lbs 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	

Table 129 Silver Powder Formed Cathodes BAT

	BAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of silver
	applied	
	English units —	lb/million lbs 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

Table 130 Silver Oxide Powder Formed Cathodes BAT

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	8.73	3.57
Mercury	4.96	1.99
Silver	8.14	3.37
Zinc	28.96	12.11
Manganese	13.50	5.76

Table 131 Silver Peroxide Cathodes BAT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — mg/kg of silver		
	applied		
	English units —	lb/million lbs of	
	silver applied		
Chromium	2.09	0.87	
Mercury	1.19	9.48	
Silver	1.95	0.81	
Zinc	6.95	2.90	
Manganese	3.24	1.38	

Table 132 Nickel Impregnated Cathodes BAT

DAI	
MAXIMUM FOR	MAXIMUM FOR
ANY 1 DAY	MONTHLY AVERAGE
Metric units —	mg/kg of nickel
applied	
English units -	 lb/million lbs of
nickel applied	
88.0	36.0
50.0	20.0
384.0	254.0
82.0	34.0
292.0	122.0
136.0	58.0
	MAXIMUM FOR ANY 1 DAY Metric units — napplied English units — nickel applied 88.0 50.0 384.0 82.0 292.0

Table 133 Miscellaneous Wastewater Streams BAT

	BAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	0.57	0.23
Cyanide	0.38	0.16
Mercury	0.32	0.13
Nickel	2.48	1.64
Silver	0.53	0.22
Zinc	1.88	0.79
Manganese	0.88	0.37

Table 134 Silver Etch BAT

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	
	Metric units —	mg/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Chromium	3.27	1.34
Mercury	1.86	0.74
Silver	3.05	1.26
Zinc	10.86	4.54
Manganese	5.06	2.16

Table 135 Silver Peroxide Production BAT

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of silver in
	silver peroxide produced	
	English units — lb/million lbs of	
	silver in silver peroxide produced	
Chromium	3.48	1.42
Mercury	1.96	0.79
Silver	3.24	1.34
Zinc	11.56	4.83
Manganese	5.36	2.29

Table 136 Silver Powder Production BAT

	DAI	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver pow-
	der produced	
	English units — lb/million lbs of	
	silver powder produced	
Chromium	1.41	0.58
Mercury	0.80	0.32
Silver	1.32	0.55
Zinc	4.69	1.96
Manganese	2.18	0.93

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 125 to 136.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.73 New source performance standards. (1)

The discharge of wastewater pollutants from any new source subject to this subchapter may not exceed the following standards:

Table 137
Zinc Oxide Formed Anodes

	Noro	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of zinc
	English units —	lb/million lbs of zinc
Chromium	4.55	1.97
Mercury	2.82	1.19
Silver	4.55	1.97
Zinc	0.87	0.39
Manganese	6.50	4.98
Oil and grease	216.7	216.7
TSS	325.0	260.0
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 138 Electrodeposited Anodes NSPS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	deposited	
	English units —	lb/million lbs of zinc
	deposited	
Chromium	45.09	19.54
Mercury	27.91	11.81
Silver	45.09	19.54
Zinc	8.59	3.86
Manganese	64.41	49.38
Oil and grease	2,147.00	2,147.00
TSS	3,220.50	2,576.40
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 139 Silver Powder Formed Cathodes

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	6.24	2.70
Mercury	3.86	1.63
Silver	6.24	2.70
Zinc	1.19	0.53
Manganese	8.91	6.83
Oil and grease	297.00	297.00
TSS	445.5	356.40
pН	(¹)	(¹)

Within the range of 7.5 to 10.0 at all times.

Table 140 Silver Oxide Powder Formed Cathodes NSPS

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	4.17	1.81
Mercury	2.58	1.09
Silver	4.17	1.81
Zinc	0.79	0.36
Manganese	5.96	4.57
Oil and grease	198.5	198.5
TSS	297.8	238.2
pН	(¹)	(¹)

¹Within the range of 7.5 to 10.0 at all times.

Table 141 Silver Peroxide Cathodes NSPS

	11010	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	1.00	0.43
Mercury	0.62	0.26
Silver	1.00	0.43
Zinc	0.19	0.09
Manganese	1.43	1.09
Oil and grease	47.6	47.6
TSS	71.4	57.1
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 142 Nickel Impregnated Cathodes

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Chromium	42.0	18.2
Mercury	26.0	11.0
Nickel	42.0	18.2
Silver	42.0	18.2
Zinc	8.0	3.6
Manganese	60.0	46.0
Oil and grease	2,000.0	2,000.0
TSS	3,000.0	2,400.0
pН	(¹)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 143 Miscellaneous Wastewater Streams NSPS

	NSPS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	0.27	0.12
Cyanide	0.039	0.016
Mercury	0.17	0.07
Nickel	0.27	0.12
Silver	0.27	0.12
Zinc	0.05	0.02
Manganese	0.39	0.30
Oil and grease	12.90	12.90
TSS	19.35	15.48
pH	(1)	(¹)

¹ Within the range of 7.5 to 10.0 at all times.

Table 144 Silver Etch **NSPS**

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Chromium	1.56	0.68
Mercury	0.97	0.41
Silver	1.56	0.68
Zinc	0.30	0.13
Manganese	2.23	1.71
Oil and grease	74.40	74.40
TSS	111.60	89.28
pН	(¹)	(1)

Within the range of 7.5 to 10.0 at all times.

Within the range of 7.5 to 10.0 at all times.

Table 145 Silver Peroxide Production

	Noro	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of silver in
	silver peroxide p	
	English units —	lb/million lbs of
	silver in silver pe	eroxide produced
Chromium	1.66	0.72
Mercury	1.03	0.44
Silver	1.66	0.72
Zinc	0.32	0.14
Manganese	2.37	1.82
Oil and grease	79.10	79.10
TSS	118.65	94.92
pН	(¹)	(¹)

Table 146

Silver Powder Production NSPS POLLUTANT OR MAXIMUM FOR MAXIMUM FOR MONTHLY AVERAGE POLLUTANT PROPERTY ANY 1 DAY Metric units — mg/kg of silver

powder produced English units - lb/million lbs of silver powder produced Chromium 0.29 0.67 Mercury 0.42 0.18 Silver 0.67 0.29 Zinc 0.13 0.06 Manganese 0.96 0.74 32.10 32.10 Oil and grease TSS 48.15 38.52 рΗ (1)

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 137 to 146.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.74 Pretreatment standards for existing **sources.** (1) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources:

Published under s. 35.93, Stats. Updated on the first day of each month. Entire code is always current. The Register date on each page is the date the chapter was last published.

Within the range of 7.5 to 10.0 at all times.

Table 147 Wet Amalgamated Powder Anode PSES

	IDED	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of zinc
	English units —	lb/million lbs 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

Table 148 Gelled Amalgam Anodes PSES

	- ~	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of zinc
	English units —	lb/million lbs of zinc
Chromium	0.030	0.12
Mercury	0.017	0.006
Silver	0.028	0.012
Zinc	0.099	0.042
Manganese	0.046	0.020

Table 149 Zinc Oxide Formed Anodes PSES

POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
	Metric units — 1	mg/kg of zinc
	English units —	lb/million lbs 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

Table 150 Electrodeposited Anodes PSFS

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	deposited	
	English units —	lb/million lbs 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

Table 151 Silver Powder Formed Cathodes

	PSES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	mg/kg of silver
	applied	
	English units —	lb/million lbs 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

Table 152 Silver Oxide Powder Formed Cathodes PSES

POLLUTANT OR		MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	- lb/million lbs of
	silver applied	
Chromium	8.73	3.57
Mercury	4.96	1.99
Silver	8.14	3.37
Zinc	28.98	12.11
Manganese	13.50	5.76

Table 153 Silver Peroxide Cathodes PSES

	1010	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	2.09	0.87
Mercury	1.19	0.48
Silver	1.95	0.81
Zinc	6.95	2.90
Manganese	3.24	1.38

Table 154 Nickel Impregnated Cathodes PSES

	ISES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — r	ng/kg of nickel
	applied	
	English units -	 lb/million lbs of
	nickel applied	
Chromium	88.0	36.0
Mercury	50.0	20.0
Nickel	384.0	254.0
Silver	82.0	34.0
Zinc	292.0	122.0
Manganese	136.0	58.0

Table 155 Miscellaneous Wastewater Streams

PSES			
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR	
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE	
	Metric units — 1	ng/kg of cells	
	produced		
	English units -	 lb/million lbs of 	
	cells produced		
Chromium	0.57	0.23	
Cyanide	0.38	0.16	
Mercury	0.32	0.13	
Nickel	2.48	1.64	
Silver	0.53	0.22	
Zinc	1.88	0.79	
Manganese	0.88	0.37	

Published under s. 35.93, Stats. Updated on the first day of each month. Entire code is always current. The Register date on each page is the date the chapter was last published.

Table 156 Silver Etch PSES

	IDED	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Chromium	3.27	1.34
Mercury	1.86	0.74
Silver	3.05	1.26
Zinc	10.86	4.54
Manganese	5.06	2.16

Table 157 Silver Peroxide Production PSES

	IBEB	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of silver in
	silver peroxide produced	
	English units — lb/million lbs of	
	silver in silver peroxide produced	
Chromium	3.48	1.42
Mercury	1.98	0.79
Silver	3.24	1.34
Zinc	11.55	4.83
Manganese	5.38	2.29

Table 158 Silver Powder Production PSES

	ISES	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	powder produce	d
	English units —	lb/million lbs of
	silver powder pr	oduced
Chromium	1.41	0.58
Mercury	0.80	0.32
Silver	1.32	0.55
Zinc	4.69	1.96
Manganese	2.18	0.93

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 147 to 158

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register April 2013 No. 688.

NR 255.75 Pretreatment standards for new sources. (1) Except as provided in 40 CFR 403.7, any new source subject to this subchapter that introduces pollutants into a POTW shall comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources:

Table 159 Zinc Oxide Formed Anodes PSNS

POLLUTANT OR POLLUTANT PROPERTY	MAXIMUM FOR ANY 1 DAY	MAXIMUM FOR MONTHLY AVERAGE
	Metric units —	mg/kg of zinc
	English units —	lb/million lbs of zinc
Chromium	4.55	1.97
Mercury	2.82	1.19
Silver	4.55	1.97
Zinc	0.87	0.39
Manganese	6.50	4.98

Table 160 Electrodeposited Anodes

	Pono	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of zinc
	deposited	
	English units —	lb/million lbs of zinc
	deposited	
Chromium	45.09	19.54
Mercury	27.91	11.81
Silver	45.09	19.54
Zinc	8.59	3.86
Manganese	64.41	49.38

Table 161 Silver Powder Formed Cathodes PSNS

	I DIAD	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — applied	ng/kg of silver
	English units —	lb/million lbs of
	silver applied	
Chromium	6.24	2.70
Mercury	3.86	1.63
Silver	6.24	2.70
Zinc	1.19	0.53
Manganese	8.91	6.83
		-

Table 162 Silver Oxide Powder Formed Cathodes

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — applied	ng/kg of silver
	English units —	lb/million lbs of
	silver applied	
Chromium	4.17	1.81
Mercury	2.58	1.09
Silver	4.17	1.81
Zinc	0.79	0.36
Manganese	5.96	4.57

Table 163 Silver Peroxide Cathodes PSNS

	1 9149	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
Metric units — mg/kg of silver		
	applied	
	English units —	lb/million lbs of
	silver applied	
Chromium	1.00	0.43
Mercury	0.62	0.26
Silver	1.00	0.43
Zinc	0.19	0.09
Manganese	1.43	1.09

Table 164 Nickel Impregnated Cathodes PSNS

POLLUTANT OR MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY ANY 1 DAY	MONTHLY AVERAGE
Metric units —	 mg/kg of nickel
applied	6 6
English units -	 lb/million lbs of
nickel applied	
Chromium 42.0	18.2
Mercury 26.0	11.0
Nickel 42.0	18.2
Silver 42.0	18.2
Zinc 8.0	3.6
Manganese 60.0	46.0

Table 165 Miscellaneous Wastewater Streams PSNS

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of cells
	produced	
	English units -	 lb/million lbs of
	cells produced	
Chromium	0.27	0.12
Cyanide	0.039	0.016
Mercury	0.17	0.07
Nickel	0.27	0.12
Silver	0.27	0.12
Zinc	0.05	0.02
Manganese	0.39	0.30

Table 166 Silver Etch

	PSNS	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units — 1	ng/kg of silver
	processed	
	English units —	lb/million lbs of
	silver processed	
Chromium	1.56	0.68
Mercury	0.97	0.41
Silver	1.56	0.68
Zinc	0.30	0.13
Manganese	2.23	1.71

Table 167 Silver Peroxide Production PSNS

POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY		MONTHLY AVERAGE
	Metric units —	mg/kg of silver in
	silver peroxide p	roduced
	English units —	lb/million lbs of
	silver in silver pe	eroxide produced
Chromium	1.66	0.72
Mercury	1.03	0.44
Silver	1.66	0.72
Zinc	0.32	0.14
Manganese	2.37	1.82

Table 168 Silver Powder Production PSNS

	1 5115	
POLLUTANT OR	MAXIMUM FOR	MAXIMUM FOR
POLLUTANT PROPERTY	ANY 1 DAY	MONTHLY AVERAGE
	Metric units —	mg/kg of silver
	powder produce	d
	English units —	lb/million lbs of
	silver powder pr	oduced
Chromium	0.67	0.29
Mercury	0.42	0.18
Silver	0.67	0.29
Zinc	0.13	0.06
Manganese	0.96	0.74

(2) There may be no discharge allowance for process wastewater pollutants from any battery manufacturing operation other than those battery manufacturing operations listed in tables 159 to 168.

History: Cr. Register, November, 1987, No. 383, eff. 12-1-87.

NR 255.80 Cross-references. The federal citations in this chapter correspond to provisions of the Wisconsin administrative code and Wisconsin statutes. The federal citations may be cross-referenced in the following table:

Code of Federal	Corresponding State
Regulations	References
40 CFR Part 401	ch. NR 205
40 CFR 403.6 (e)	s. NR 211.12
40 CFR 125.30 to 125.32	s. 283.13 (3), Stats.
History: Cr. Register, November, 1987, No	. 383, eff. 12-1-87.