

Chapter NR 257

ALUMINUM FORMING

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NR 257.01 Purpose. The purpose of this chapter is to establish effluent limitations, performance standards, and pretreatment standards for the discharge of process wastes from the aluminum forming point source category and its subcategories.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.02 Applicability. (1) This chapter applies to any aluminum forming facility which discharges or may discharge pollutants to waters of the state or which introduces or may introduce pollutants into a publicly owned treatment works.

(2) This chapter applies to chemical or electrochemical treatments applied to the surface of the aluminum when these surface treatments are performed at [the] aluminum forming site. When these surface treatments are not performed at the aluminum forming site, regulations for electroplating, ch. NR 260, or metal finishing, ch. NR 261, apply.

(3) This chapter applies to aluminum casting when the casting is performed as an integral part of aluminum forming and is located at the aluminum forming site. When aluminum forming is performed on the same site as primary aluminum reduction, this chapter applies if the aluminum cools prior to casting. If the aluminum does not cool prior to casting, the regulations for nonferrous metals manufacturing, ch. NR 274, apply.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.03 General definitions. In addition to the definitions set forth in ss. NR 205.03, 205.04, and 211.03, the following definitions apply to the terms used in this chapter:

(1) "Aluminum forming" means a set of manufacturing operations in which aluminum and aluminum alloys are made into

semifinished products by hot or cold working, such as rolling, drawing, extruding, and forging, and related operations such as heat treatment and casting.

(2) "Ancillary operation" means a manufacturing operation that has a large flow, discharges significant amounts of pollutants, and may not be present at every plant in a subcategory but when present is an integral part of the aluminum forming process.

(3) "Cleaning or etching operation" means a chemical solution bath and rinse or series of rinses designed to produce a desired surface finish on the workpiece, including conversion coating and anodizing when performed as an integral part of the aluminum forming operations, and the air pollution scrubbers used to control fumes from the chemical solution baths.

(4) "Contact cooling water" means any wastewater which contacts the aluminum workpiece or the raw materials used in aluminum forming.

(5) "Continuous casting" means the production of sheet, rod, or other long shapes by solidifying the metal while it is being poured through an open ended mold using little or no contact cooling water.

(6) "Degassing" means the removal of dissolved hydrogen from the molten aluminum prior to casting by adding chemicals and bubbling gases through the molten aluminum.

(7) "Direct chill casting" means an operation in which molten aluminum is poured into a water cooled mold, contact cooling water is sprayed onto the aluminum as the aluminum is dropped into the mold, and the aluminum ingot falls into a water bath at the end of the process.

(8) "Drawing" means the process of pulling metal through a die or succession of dies to reduce the metal's diameter or alter its shape, using either neat oils, emulsions, or soap solutions as a lubricant.

(9) "Emulsion" means a stable dispersion of 2 immiscible liquids, usually oil and water.

(10) "Existing source" means any point source from which pollutants may be discharged either directly into the waters of the state or into a POTW, except a new source as defined in sub. (18).

(11) "Extrusion" means the application of pressure to a billet of aluminum to force the aluminum to flow through a die orifice.

(12) "Forging" means the exertion of pressure on dies or rolls surrounding heated aluminum stock to force the stock to change shape and, when dies are used, to take the shape of the die.

(13) "Heat treatment" means the application of heat of specified temperature and duration to change the physical properties of the metal.

(14) "Hot water seal" means a water bath heated to approximately 180° F used to seal the surface coating on formed aluminum which has been anodized and coated.

(15) "lb/million off-lbs" means pounds of pollutant introduced into the wastestream per million pounds of aluminum or aluminum alloy removed from a forming or ancillary operation at the end of a process cycle for transfer to a different machine or process.

(16) "mg/off-kg" means milligrams of pollutant introduced into the wastestream per kilogram of aluminum or aluminum alloy removed from a forming or ancillary operation at the end of a process cycle for transfer to a different machine or process.

(17) "Neat oil" means an oil used as a lubricant with few or no added impurities.

(18) "New source" means any point source for which construction commenced after November 22, 1982 and from which pollutants may be discharged either directly into waters of the state or into a publicly owned treatment works.

(19) "Rolling" means the reduction in thickness or diameter of a workpiece by passing it between rollers lubricated with either neat oils or emulsions.

(20) "Stationary casting" means the pouring of molten aluminum into molds and allowing the metal to air cool.

(21) "TTO" means the sum of the masses or concentrations of each of the following toxic organic compounds which is found in the discharge at a concentration greater than 0.010 mg/l:

p-chloro-m-cresol	tetrachloroethylene	
2-chlorophenol	toluene	
2,4-dinitrotoluene	trichloroethylene	
1,2-diphenylhydrazine		endosulfan sulfate
ethylbenzene	bis(2-ethylhexyl)phthalate	
fluoranthene	diethylphthalate	
isophorone	3,4-benzofluoranthene	
naphthalene	benzo(k)fluoranthene	
N-nitrosodiphenylamine		chrysene
phenol		acenaphthylene

benzo(a)pyrene	anthracene	
benzo(ghi)perylene	di-n-butyl phthalate	
fluorene	endrin	
phenanthrene	endrin aldehyde	
dibenzo(a,h)anthracene		PCB-1242, 1254, 1221, 1232, 1248, 1260, 1016
indeno(1,2,3-c,d)pyrene		acenaphthene
pyrene		

(22) "Wet scrubber" means an air pollution control device used to remove particulates and fumes from air by entraining the pollutants in a water spray.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.04 Monitoring and reporting requirements.

The following special monitoring and reporting requirements apply to all facilities subject to this chapter:

(1) Analyses for cyanide are not required when both of the following conditions are met:

(a) The first wastewater sample of the calendar year has been analyzed and found to contain less than 0.07 mg/l.

(b) The owner or operator of the aluminum forming facility certifies in writing to the department or control authority that cyanide is not and will not be used in the aluminum forming process.

(2) As an alternative pretreatment monitoring procedure, the POTW user may measure and limit oil and grease to the levels shown in the pretreatment standards in lieu of measuring and regulating TTO.

(3) Compliance with the maximum monthly average effluent limitations and pretreatment standards is required regardless of the number of samples analyzed and averaged. The maximum monthly average effluent limitations and pretreatment standards shall be the basis for monthly average discharge limits in direct discharge permits and for pretreatment standards.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.05 Compliance dates. (1) Any existing source subject to this chapter which discharges to waters of the state shall achieve;

(a) The effluent limitations representing BPT by July 1, 1977; and

(b) The effluent limitations representing BAT by July 1, 1984.

(2) Any new source subject to this chapter which discharges to waters of the state shall achieve NSPS at the commencement of discharge.

(3) Any existing source subject to this chapter which discharges process wastewater pollutants to a POTW shall achieve PSES by October 24, 1986.

(4) Any new source subject to this chapter which discharges process wastewater pollutants to a POTW shall achieve PSNS at the commencement of discharge.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.06 Removal allowances for pretreatment standards. Removal allowances for pretreatment standards pursuant to s. NR 211.13 may be granted for the toxic metals limited by this chapter when the toxic metals are used as indicator pollutants.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter I — Rolling With Neat Oils Subcategory

NR 257.10 Applicability; description of the rolling with neat oils subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary rolling with neat oils operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.11 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the rolling operation, such as continuous rod casting, continuous sheet casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means rolling using neat oils, roll grinding, sawing, annealing, stationary casting, homogenizing, artificial aging, degreasing, and stamping.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.12 Effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point 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
Core with an annealing furnace scrubber BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.0360	0.0147
Cyanide	0.0237	0.0098
Zinc	0.119	0.0498
Aluminum	0.525	0.257
Oil and grease	1.634	0.980
Suspended solids	3.348	1.593
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 2
Core without an annealing furnace scrubber BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.0244	0.010
Cyanide	0.0161	0.0067
Zinc	0.0808	0.0338
Aluminum	0.356	0.174
Oil and grease	1.11	0.664
Suspended solids	2.27	1.079
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 3
Continuous sheet casting spent lubricant BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum sheet cast by continuous methods	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.0029	0.0012
Aluminum	0.0127	0.0063
Oil and grease	0.0393	0.0236

Suspended solids	0.805	0.0383
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 4
Solution heat treatment contact cooling water BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 5
Cleaning or etching bath BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.110
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 6
Cleaning or etching rinse and hot water seal BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

**Table 7
Cleaning or etching scrubber liquor BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

¹Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.13 Effluent limitations 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 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 8
Core with an annealing furnace scrubber BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.036	0.015
Cyanide	0.024	0.0098
Zinc	0.119	0.050
Aluminum	0.525	0.257

Table 9
Core without an annealing furnace scrubber BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.025	0.010
Cyanide	0.016	0.0067
Zinc	0.081	0.034
Aluminum	0.356	0.174

Table 10
Continuous sheet casting spent lubricant BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum sheet cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.00287	0.0012
Aluminum	0.0127	0.0062

Table 11
Solution heat treatment contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.367
Cyanide	0.591	0.245
Zinc	2.974	1.243
Aluminum	13.10	6.518

Table 12
Cleaning or etching bath BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.151	0.573

Table 13
Cleaning or etching rinse and hot water seal BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.031	0.849
Aluminum	8.944	4.450

Table 14
Cleaning or etching scrubber liquor BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.822	1.179
Aluminum	12.43	6.186

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.14 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

Table 15
Core with an annealing furnace scrubber NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.030	0.0123
Cyanide	0.016	0.0065
Zinc	0.084	0.0343
Aluminum	0.499	0.221
Oil and grease	0.817	0.817
Suspended solids	1.225	0.980
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 16
Core without an annealing furnace scrubber NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.021	0.0083
Cyanide	0.011	0.0044
Zinc	0.057	0.023
Aluminum	0.338	0.150
Oil and grease	0.553	0.553
Suspended solids	0.830	0.664
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 17
Continuous sheet casting spent lubricant NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00073	0.00029
Cyanide	0.00039	0.00016
Zinc	0.0020	0.00082
Aluminum	0.012	0.0053
Oil and grease	0.0197	0.019
Suspended solids	0.0295	0.022
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 18
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 19
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 20
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.70
Oil and grease	13.91	13.91
Suspended solids	20.87	16.69
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 21
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.29
Cyanide	0.387	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.15 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

Table 22
Core with an annealing furnace scrubber PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.036	0.015
Cyanide	0.024	0.010
Zinc	0.119	0.050
TTO	0.057	
Oil and grease (alternate monitoring parameter)	4.30	2.10

Table 23
Core without an annealing furnace scrubber PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.025	0.010
Cyanide	0.016	0.007
Zinc	0.081	0.034
TTO	0.038	
Oil and grease (alternate monitoring parameter)	2.90	1.50

Table 24
Continuous sheet casting lubricant PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.100	0.052

Table 25
Solution heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 26
Cleaning or etching bath PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.0032
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

Table 27
Cleaning or etching rinse and hot water seal PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

Table 28
Cleaning or etching scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.16 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

Table 29
Core with an annealing furnace scrubber PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.030	0.013
Cyanide	0.017	0.007
Zinc	0.084	0.035
TTO	0.057	
Oil and grease (alternate monitoring parameter)	0.817	0.817

Table 30
Core without an annealing furnace scrubber PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum with neat oils	
Chromium	0.021	0.009
Cyanide	0.011	0.005
Zinc	0.057	0.024
TTO	0.038	
Oil and grease (alternate monitoring parameter)	0.54	0.54

Table 31
Continuous sheet casting lubricant PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00073	0.00029
Cyanide	0.00039	0.00016
Zinc	0.0020	0.00082
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

Table 32
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 33
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 34
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 35
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter II — The Rolling With Emulsions Subcategory

NR 257.20 Applicability; description of the rolling with emulsions subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary rolling with emulsions operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.21 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the rolling operation, such as direct chill casting, solution heat treatment, cleaning or etching, and degassing.

(2) "Core operation" means rolling using emulsions, roll grinding, stationary casting, homogenizing, artificial aging, annealing, and sawing.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.22 Effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

**Table 36
Core operation
BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.19	0.079
Aluminum	0.84	0.416
Oil and grease	2.60	1.56
Suspended solids	5.33	2.53
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

**Table 37
Direct chill casting contact cooling water BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26
Oil and grease	26.58	15.95
Suspended solids	54.49	25.92
pH	(1)	(1)

¹ The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

**Table 38
Solution heat treatment contact cooling water BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	0.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

**Table 39
Cleaning or etching bath BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

**Table 40
Cleaning or etching rinse and hot water seal BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

**Table 41
Cleaning or etching scrubber liquor BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.23 Effluent limitations 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 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 42
Core operation BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.19	0.079
Aluminum	0.84	0.42

Table 43
Direct chill casting contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26

Table 44
Solution heat treatment contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

Table 45
Cleaning or etching bath BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
Aluminum	1.15	0.573

Table 46
Cleaning or etching rinse and hot water seal BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
Aluminum	8.95	4.45

Table 47
Cleaning or etching scrubber liquor BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.24 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

Table 48
Core operation NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.048	0.020
Cyanide	0.026	0.011
Zinc	0.133	0.055
Aluminum	0.80	0.35
Oil and grease	1.30	1.30
Suspended solids	1.95	1.56
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 49
Direct chill casting contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by continuous methods	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
Aluminum	8.12	3.60
Oil and grease	13.29	13.29
Suspended solids	19.94	15.95
pH	(1)	(1)

¹ The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

Table 50
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 51
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 52
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 53
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.25 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources

Table 54
Core operation PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.190	0.079
TTO	0.090	
Oil and grease (alternate monitoring parameter)	6.80	3.40

Table 55
Direct chill casting contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
TTO	0.92	
Oil and grease (alternate monitoring parameter)	69.0	35.0

Table 56
Solution heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 57
Cleaning or etching bath PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

Table 58
Cleaning or etching rinse and hot water seal PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

Table 59
Cleaning or etching scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.83	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.26 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

Table 60
Core operation PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.048	0.020
Cyanide	0.026	0.011
Zinc	0.133	0.055
TTO	0.090	
Oil and grease (alternate monitoring parameter)	1.30	1.30

Table 61
Direct chill casting contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
TTO	0.92	
Oil and grease (alternate monitoring parameter)	13.29	13.29

Table 62
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 63
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 64
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 65
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter III — The Extrusion Subcategory

NR 257.30 Applicability; description of the extrusion subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary extrusion operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.31 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the extrusion operation, such as direct chill casting, press or solution heat treatment, cleaning or etching, degassing, and extrusion press hydraulic fluid leakage.

(2) "Core operation" means extrusion die cleaning, any wet scrubber associated with the die cleaning, dummy block cooling, stationary casting, artificial aging, annealing, degreasing, and sawing.

(3) "Extrusion die cleaning" means an operation in which the steel dies used for aluminum extrusion are cleaned by dipping the dies into a concentrated caustic bath to dissolve the aluminum and then rinsing the dies with water.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.32 Effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 66
Core operation BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.16	0.066
Cyanide	0.11	0.044
Zinc	0.53	0.22
Aluminum	2.34	1.16
Oil and grease	7.32	4.39
Suspended solids	15.00	7.13
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 67
Extrusion press leakage BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
Aluminum	9.51	4.73
Oil and grease	29.56	17.74
Suspended solids	60.60	28.82
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 68
Direct chill casting contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26
Oil and grease	26.58	15.95
Suspended solids	54.49	25.92
pH	(1)	(1)

¹ The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

Table 69
Press heat treatment contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 70
Solution heat treatment contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 71
Cleaning or etching bath BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 72
Cleaning or etching rinse and hot water seal BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 73
Cleaning or etching scrubber liquor BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 74
Degassing scrubber liquor BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum degassed	
Chromium	1.15	0.47
Cyanide	0.76	0.32
Zinc	3.81	1.59
Aluminum	16.78	8.35
Oil and grease	52.18	31.31
Suspended solids	106.97	50.88
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.33 Effluent limitations 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 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT. Degassing operations may not discharge wastewater pollutants.

**Table 75
Core operation BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
Aluminum	25.0	13.0

**Table 76
Extrusion press leakage BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
Aluminum	9.51	4.73

**Table 77
Direct chill casting contact cooling water BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26

**Table 78
Press heat treatment contact cooling water BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

**Table 79
Solution heat treatment contact cooling water BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

**Table 80
Cleaning or etching bath BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.58

**Table 81
Cleaning or etching rinse and hot water seal BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
Aluminum	25.0	13.0

**Table 82
Cleaning or etching scrubber liquor BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.34 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards. Degassing operations may not discharge wastewater pollutants.

**Table 83
Core operation NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.13	0.051
Cyanide	0.068	0.027
Zinc	0.35	0.14
Aluminum	2.07	0.92
Oil and grease	3.39	3.39
Suspended solids	5.10	4.07
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 84
Extrusion press leakage NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.11	0.045
Cyanide	0.060	0.024
Zinc	0.31	0.126
Aluminum	1.82	0.81
Oil and grease	2.98	2.98
Suspended solids	4.47	3.58
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 85
Direct chill casting contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.4	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
Aluminum	8.12	3.60
Oil and grease	13.29	13.29
Suspended solids	19.94	15.95
pH	(1)	(1)

¹ The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

Table 86
Press heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 87
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 88
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 89
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 90
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.35 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources. Degassing operations may not discharge wastewater pollutants.

Table 91
Core operation PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.15	0.061
Cyanide	0.098	0.041
Zinc	0.49	0.21
TTO	0.23	
Oil and grease (alternate monitoring parameter)	18.0	8.8

Table 92
Extrusion press leakage PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
TTO	1.02	
Oil and grease (alternate monitoring parameter)	77.0	39.0

Table 93
Direct chill casting contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
TTO	0.92	
Oil and grease (alternate monitoring parameter)	69.0	35.0

Table 94
Press heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 95
Solution heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 96
Cleaning or etching bath PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

Table 97
Cleaning or etching rinse and hot water seal PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
TTO	2.7	
Oil and grease (alternate monitoring parameter)	200.0	100.0

Table 98
Cleaning or etching scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.36 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources. Degassing operations may not discharge wastewater pollutants.

Table 99
Core operation PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.13	0.05
Cyanide	0.07	0.03
Zinc	0.35	0.15
TTO	0.24	
Oil and grease (alternate monitoring parameter)	3.40	3.40

Table 100
Extrusion press leakage PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.11	0.05
Cyanide	0.06	0.03
Zinc	0.31	0.13
TTO	0.21	
Oil and grease (alternate monitoring parameter)	2.98	2.98

Table 101
Direct chill casting contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
TTO	0.92	
Oil and grease (alternate monitoring parameter)	13.29	13.29

Table 102
Press heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 103
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 104
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 105
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 106
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter IV — The Forging Subcategory

NR 257.40 Applicability; description of the forging subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary forging operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.41 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the forging operation, such as forging air pollution scrubbers, solution heat treatment, cleaning or etching.

(2) "Core operation" means forging, artificial aging, annealing, degreasing, and sawing.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.44 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

Table 107
Core operation NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
Aluminum	0.305	0.135
Oil and grease	0.50	0.50
Suspended solids	0.75	0.60
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 108
Forging scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.035	0.014
Cyanide	0.019	0.008
Zinc	0.096	0.04
Aluminum	0.576	0.256
Oil and grease	0.943	0.95
Suspended solids	1.42	1.13
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 109
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.163
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 110
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 111
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.69
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 112
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.155
Zinc	1.97	0.812
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.45 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

Table 113
Core operation PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
TTO	0.035	
Oil and grease (alternate monitoring parameter)	2.6	1.3

Table 114
Forging scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.042	0.017
Cyanide	0.028	0.011
Zinc	0.140	0.058
TTO	0.065	
Oil and grease (alternate monitoring parameter)	4.9	2.5

Table 115
Solution heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.37
Cyanide	0.591	0.25
Zinc	2.98	1.24
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 116
Cleaning or etching bath PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.11
TTO	0.123	
Oil and grease (alternate monitoring parameter)	9.30	4.70

Table 117
Cleaning or etching rinse and hot water seal PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
TTO	2.7	
Oil and grease (alternate monitoring parameter)	200.0	100.0

Table 118
Cleaning or etching scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.35
Cyanide	0.561	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.46 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

Table 119
Core operation PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
TTO	0.035	
Oil and grease (alternate monitoring parameter)	0.50	0.50

Table 120
Forging scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.035	0.014
Cyanide	0.019	0.008
Zinc	0.096	0.040
TTO	0.065	
Oil and grease (alternate monitoring parameter)	0.95	0.95

Table 121
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.16
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 122
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 123
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 124
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter V — The Drawing With Neat Oils Subcategory

NR 257.50 Applicability; description of the drawing with neat oils subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary drawing with neat oils operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.51 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the drawing operation, such as continuous rod casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means drawing with neat oils, stationary casting, artificial aging, annealing, degreasing, sawing, and swaging.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.52 Effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 125
Core operation BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.0090
Cyanide	0.015	0.0050
Zinc	0.073	0.031
Aluminum		
Oil and grease	0.97	0.598
Suspended solids	2.04	0.972
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 126
Continuous rod casting spent lubricant BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.00287	0.0012
Aluminum	0.0127	0.0063
Oil and grease	0.0393	0.0236
Suspended solids	0.0805	0.0383
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 127
Continuous rod casting contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.684	0.28
Cyanide	0.451	0.187
Zinc	2.271	0.949
Aluminum	10.00	4.976
Oil and grease	31.10	18.66
Suspended solids	63.76	30.322
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 128
Solution heat treatment contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 129
Cleaning or etching bath BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.11
Aluminum	1.150	0.57
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 130
Cleaning or etching rinse and hot water seal BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.40	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 131
Cleaning or etching scrubber liquor BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.53 Effluent limitations 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 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 132
Core operation BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
Aluminum	0.321	0.16

Table 133
Continuous rod casting spent lubricant BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.00086	0.0004

Cyanide	0.0006	0.0002
Zinc	0.0029	0.0012
Aluminum	0.0127	0.0063

Table 134
Continuous rod casting contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.056	0.024
Zinc	0.283	0.118
Aluminum	1.247	0.621

Table 135
Solution heat treatment contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.896	0.367
Cyanide	0.591	0.245
Zinc	2.974	1.243
Aluminum	13.10	6.519

Table 136
Cleaning or etching bath BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.151	0.563

Table 137
Cleaning or etching rinse and hot water seal BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.512	0.251
Cyanide	0.404	0.167
Zinc	2.031	0.849
Aluminum	8.944	4.451

Table 138
Cleaning or etching scrubber liquor BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.179
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.54 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

Table 139
Core operation NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
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mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils

Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
Aluminum	0.304	0.135
Oil and grease	0.498	0.498
Suspended solids	0.747	0.598
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 140
Continuous rod casting spent lubricant NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.002	0.0008
Aluminum	0.012	0.006
Oil and grease	0.02	0.02
Suspended solids	0.03	0.024
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 141
Continuous rod casting contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082
Aluminum	1.185	0.526
Oil and grease	1.939	1.939
Suspended solids	2.909	2.327
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 142
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.754	0.306
Cyanide	0.408	0.163
Zinc	2.08	0.856
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 143
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 144
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.515	0.209
Cyanide	0.278	0.111
Zinc	1.42	0.584
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 145
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.290
Cyanide	0.387	0.155
Zinc	1.97	0.812
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.55 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

Table 146
Core operation PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
TTO	0.035	
Oil and grease (alternate monitoring parameter)	2.6	1.3

Table 147
Continuous rod casting lubricant PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.10	0.052

Table 148
Continuous rod casting contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.057	0.023

Zinc	0.283	0.118
TTO	0.133	
Oil and grease (alternate monitoring parameter)	10.00	5.10

Table 149
Solution heat treatment contact cooling water PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.896	0.367
Cyanide	0.591	0.245
Zinc	2.98	1.24
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

Table 150
Cleaning or etching bath PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.033
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

Table 151
Cleaning or etching rinse and hot water seal PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

Table 152
Cleaning or etching scrubber liquor PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.56 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

Table 153
Core operation PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.019	0.008
Cyanide	0.010	0.004

Zinc	0.051	0.021
TTO	0.035	
Oil and grease (alternate monitoring parameter)	0.50	0.50

Table 154
Continuous rod casting lubricant PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0007	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

Table 155
Continuous rod casting contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082
TTO	0.134	
Oil and grease (alternate monitoring parameter)	1.94	1.94

Table 156
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.306
Cyanide	0.41	0.163
Zinc	2.08	0.856
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 157
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 158
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 159
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Subchapter VI — The Drawing With Emulsions or Soaps Subcategory

NR 257.60 Applicability; description of the drawing with emulsions or soaps subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary drawing with emulsions or soaps operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.61 Specialized definitions. In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the drawing operation, such as continuous rod casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means drawing with emulsions or soaps, stationary casting, artificial aging, annealing, degreasing, sawing, and swaging.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.62 Effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 160
Core operation BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.680	0.285
Aluminum	3.00	1.50
Oil and grease	9.33	5.60
Suspended solids	19.12	9.10
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 161
Continuous rod casting spent lubricant BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.001
Aluminum	0.013	0.007

Oil and grease	0.040	0.024
Suspended solids	0.081	0.039
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 162
Continuous rod casting contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.684	0.28
Cyanide	0.450	0.187
Zinc	2.27	0.949
Aluminum	10.00	4.976
Oil and grease	31.10	18.66
Suspended solids	63.76	30.323
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 163
Solution heat treatment contact cooling water BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 164
Cleaning or etching bath BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 165
Cleaning or etching rinse and hot water seal BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.519
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 166
Cleaning or etching scrubber liquor BPT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.63 Effluent limitations representing the degree of effluent reduction attainable by the application of best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 167
Core operation BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.681	0.285
Aluminum	3.00	1.49

Table 168
Continuous rod casting spent lubricant BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
Aluminum	0.013	0.0063

Table 169
Continuous rod casting contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.056	0.024
Zinc	0.283	0.118
Aluminum	1.25	0.62

Table 170
Solution heat treatment contact cooling water BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.37
Cyanide	0.591	0.25

Zinc	2.98	1.24
Aluminum	13.10	6.52

Table 171
Cleaning or etching bath BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.11
Aluminum	1.15	0.57

Table 172
Cleaning or etching rinse and hot water seal BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.03	0.849
Aluminum	8.95	4.45

Table 173
Cleaning or etching scrubber liquor BAT

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.64 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

Table 174
Core operation NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.173	0.070
Cyanide	0.094	0.038
Zinc	0.476	0.196
Aluminum	2.85	1.27
Oil and grease	4.67	4.67
Suspended solids	7.00	5.60
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 175
Continuous rod casting spent lubricant NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
Aluminum	0.012	0.0053
Oil and grease	0.020	0.020
Suspended solids	0.030	0.024
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 176
Continuous rod casting contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.081
Aluminum	1.184	0.526
Oil and grease	1.940	1.940
Suspended solids	2.91	2.33
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 177
Solution heat treatment contact cooling water NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.754	0.31
Cyanide	0.408	0.16
Zinc	2.08	0.86
Aluminum	12.450	5.52
Oil and grease	20.00	20.37
Suspended solids	20.56	24.45
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 178
Cleaning or etching bath NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.49
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 179
Cleaning or etching rinse and hot water seal NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.515	0.21
Cyanide	0.278	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.911	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

Table 180
Cleaning or etching scrubber liquor NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.290
Cyanide	0.387	0.155
Zinc	1.97	0.812
Aluminum	1.18	5.24

Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

¹ Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.65 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

**Table 181
Core operation PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.681	0.285
TTO	0.32	
Oil and grease (alternate monitoring parameter)	25.0	12.0

**Table 182
Continuous rod casting lubricant PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.10	0.052

**Table 183
Continuous rod casting contact cooling water PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.056	0.024
Zinc	0.283	0.119
TTO	0.134	
Oil and grease (alternate monitoring parameter)	10.0	5.1

**Table 184
Solution heat treatment contact cooling water PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.896	0.367
Cyanide	0.591	0.245
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 185
Cleaning or etching bath PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.11

TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 186
Cleaning or etching rinse and hot water seal PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.03	0.849
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

**Table 187
Cleaning or etching scrubber liquor PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.66 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 188
Core operation PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.173	0.070
Cyanide	0.094	0.038
Zinc	0.48	0.196
TTO	0.32	
Oil and grease (alternate monitoring parameter)	4.67	4.67

**Table 189
Continuous rod casting lubricant PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

**Table 190
Continuous rod casting contact cooling water PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082

TTO	0.134	
Oil and grease (alternate monitoring parameter)	1.94	1.94

Table 191
Solution heat treatment contact cooling water PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.306
Cyanide	0.41	0.163
Zinc	2.08	0.856
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

Table 192
Cleaning or etching bath PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

Table 193
Cleaning or etching rinse and hot water seal PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

Table 194
Cleaning or etching scrubber liquor PSNS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.290
Cyanide	0.387	0.155
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.
Note: The Wisconsin administrative code corresponds to the code of federal regulations according to the following table:

	State Code	Corresponding Federal Regulation	
s.	NR 205.03	40 CFR	401.11
s.	NR 205.04	40 CFR	401.11
ch.	NR 211	40 CFR Part	403
s.	NR 211.03	40 CFR	403.3
s.	NR 211.13	40 CFR	403.7
s.	NR 211.14	40 CFR	403.13
ch.	NR 257	40 CFR Part	467