

State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

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CR 87-18

STATE OF WISCONSIN )  
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DEPARTMENT OF NATURAL RESOURCES )

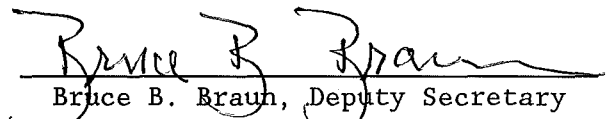
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TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Bruce B. Braun, Deputy Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. WW-7-87 was duly approved and adopted by this Department on May 28, 1987. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have here-  
unto set my hand and affixed the  
official seal of the Department at  
the Natural Resources Building in  
the City of Madison, this 18<sup>th</sup>  
day of September, 1989.

  
Bruce B. Braun, Deputy Secretary

(SEAL)

12-1-89



ORDER OF THE STATE OF WISCONSIN  
NATURAL RESOURCES BOARD  
CREATING RULES

.....  
IN THE MATTER of creating ch. NR 257 .....  
of the Wisconsin Administrative Code .....  
pertaining to the effluent limitations ..... WW-7-87  
and pretreatment standards for the .....  
aluminum forming industry. ....  
.....

Analysis Prepared by Department of Natural Resources

The rules are promulgated under the authority of ss. 147.035, 147.04, 147.06, 147.07(2) and 227.11(2)(a), Stats., and interpret ss. 147.01, 147.035, 147.04, 147.06 and 147.07(2), Stats.

The federal water pollution control act amendments of 1972 established a comprehensive program to "restore and maintain the chemical, physical and biological integrity of the Nation's waters" (section 101(a)). To implement the act, the U.S. environmental protection agency issued effluent limitations, pretreatment standards, and new source performance standards for industrial wastewater discharge. The clean water act of 1977 expanded on the federal program of pollution control by setting different types of effluent limitations, "best practicable technology" (BPT), "best available technology" (BAT), "best conventional technology" (BCT), "new source performance standards" (NSPS), "pretreatment standards for existing sources" (PSES), and "pretreatment standards for new sources" (PSNS). The clean water act stressed control of toxic pollutants, including 65 "priority" pollutants and classes of pollutants in 21 major industries.

The Wisconsin department of natural resources instituted the Wisconsin pollutant discharge elimination system in 1976. This system included regulation of effluent discharges in various industries. The Wisconsin department of natural resources is promulgating ch. NR 257, Wis. Adm. Code, to regulate the aluminum forming industry. The provisions of this chapter are based on the U.S. environmental protection agency regulations in 40 C.F.R. Part 467.

The purpose of this rule is to specify effluent limitations for BPT, BAT, BCT and NSPS for the direct discharge of waste to waters of the state and to establish pretreatment standards for the introduction of pollutants to publicly owned treatment works. The effect of the creation of ch. NR 257, Wis. Adm. Code, will be to adopt standards and limitations for industrial wastewater discharge in the aluminum forming industry. The code provisions will reflect changes made by the U.S. environmental protection agency under the authority of ss. 301, 304, 306, 307, 308 and 501 of the clean water act.

Aluminum forming is the deformation of aluminum into specific shapes by hot or cold working. The aluminum forming operations covered by this rule are rolling, extruding, forging, and drawing of aluminum. Associated operations, such as the casting of aluminum for subsequent forming, heat treatment, and all surface treatment operations performed as an integral part of aluminum

forming (called cleaning or etching for the purpose of this rule), are also included. The aluminum forming point source category is subcategorized according to 6 manufacturing processes: (1) rolling with neat oils, (2) rolling with emulsions, (3) extrusion, (4) forging, (5) drawing with neat oils, and (6) drawing with emulsions or soaps. The major factors considered in identifying subcategories included waste characteristics, raw materials, manufacturing processes, products manufactured, water use, water pollution control technology, treatment costs, solid waste generation, size and age of plant, number of employees, total energy requirements, nonwater quality characteristics, and unique plant characteristics.

Each subcategory consists of 2 segments. The first segment is the core operation and consists of the specific forming operation and related operations that occur in conjunction with the forming operation. The core operation also includes operations that are not always found in conjunction with the forming operation, but do not discharge wastewater. The second segment consists of ancillary operations that generate wastewater and are performed as part of the aluminum forming process. The ancillary operations, such as solution heat treatment, cleaning or etching, and casting, are performed to achieve desired characteristics or finishes on the aluminum products and are characterized by the generation of substantial volumes of wastewater. Because they are not found at every plant in a subcategory and are not always unique to a specific subcategory, they are not included in the core operation. Instead, a separate limitation is established for ancillary operations based on the wastestreams generated by these operations.

Aluminum forming operations generate a variety of wastestreams. Lubricants consisting of neat oils, oil-water emulsions, or soap solutions are used for lubrication and cooling in sawing, casting, and rolling and drawing operations. Contact cooling water is commonly used to quench aluminum products after casting, forming operations, or heat treatment. Wastewater is also generated by the discharge of the baths and rinses used for the cleaning and etching of aluminum products.

The most important pollutants or pollutant parameters generated in aluminum forming wastewater are: (1) toxic pollutants - cadmium, chromium, copper, cyanide, lead, nickel, selenium, and zinc; (2) conventional pollutants - oil and grease, suspended solids, and pH; and (3) nonconventional pollutant - aluminum.

Two federal documents form the basis for 40 C.F.R. Part 467 and this rule: (1) economic impact analysis of effluent limitations and standards for the aluminum forming industry (EPA 440/2-83-010, September 1983); and (2) development document for effluent limitations guidelines and standards for the aluminum forming point source category (EPA 440/1-84/073, June 1984). Copies of these two documents are available for inspection at the central office of the Wisconsin department of natural resources, 101 south Webster street, Madison, and may be obtained for personal use from the national technical information service (NTIS), Springfield, Virginia 22161, (703) 487-4600.

Two additional federal sources relevant to 40 C.F.R. Part 467 and this rule may be obtained from the U.S. environmental protection agency: (1) sampling and analysis procedures for screening of industrial effluents for priority

pollutants; and (2) the responses to public comments which are contained in the public record for 40 C.F.R. Part 467.

This rule uses the format and text of 40 C.F.R. Part 467 and is identical to the federal regulation for purposes of s. 227.14(1m)(a), Stats. However, several changes have been made to the text of the federal regulations to make the rule useful to Wisconsin citizens, industry, and regulating authorities. These changes have been made to reflect current state rule drafting conventions.

As required by the administrative rules procedures manual; a purpose section has been added. Revisions have been made to the numbering system, citation formats, and definition formats. Where possible, Wisconsin Administrative Code references have been substituted for references to the Code of Federal Regulations. The Wisconsin Administrative Code and the Code of Federal Regulations are cross referenced by the note at the end of the chapter. Subchapters in the state rule reflect the subpart divisions in the federal regulations. Finally, definitions for "existing source" and "new source" have been added, along with a compliance dates section.

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Section 1. Chapter NR 257 is created to read:

Chapter NR 257

ALUMINUM FORMING

NR 257.01	Purpose
NR 257.02	Applicability
NR 257.03	General definitions
NR 257.04	Monitoring and reporting requirements
NR 257.05	Compliance dates
NR 257.10	Applicability; description of the rolling with neat oils subcategory
NR 257.20	Applicability; description of the rolling with emulsions oils subcategory
NR 257.30	Applicability; description of the extrusion subcategory
NR 257.40	Applicability; description of the forging subcategory
NR 257.50	Applicability; description of the drawing with neat oils subcategory
NR 257.60	Applicability; description of the drawing with emulsions or soaps subcategory

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.

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 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.

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 degrees 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	trichloroethylene
2-chlorophenol	endosulfan sulfate
2,4-dinitrotoluene	bis(2-ethyl hexyl) phthalate
1,2-diphenylhydrazine	diethylphthalate
ethylbenzene	3,4-benzofluoranthene
fluoranthene	benzo(k)fluoranthene
isophorone	chrysene
naphthalene	acenaphthylene
N-nitrosodiphenylamine	anthracene
phenol	di-n-butyl phthalate
benzo(a)pyrene	endrin
benzo(ghi)perylene	endrin aldehyde
fluorene	PCB-1242, 1254, 1221,
phenanthrene	1232, 1248, 1260,
dibenzo(a,h)anthracene	1016
indeno(1,2,3-c,d)pyrene	acenaphthene
pyrene	
tetrachloroethylene	
toluene	

(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.

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 a 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.

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.

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.

#### 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.

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.

NR 257.12 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT LIMITATIONS ATTAINABLE BY APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 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)

(1) Within 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)

1 Within 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)

1 Within 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)

1 Within 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)

1 Within 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)

<sup>1</sup> Within 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)

<sup>1</sup> Within the range of 7.0 to 10 at all times.



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 C.F.R. ss. 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

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)

<sup>1</sup> 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)

<sup>1</sup> 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)

<sup>1</sup> 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)

<sup>1</sup> 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)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

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 (1b/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 (1b/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

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 rolled 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

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.

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.

NR 257.22 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT LIMITATIONS ATTAINABLE BY APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 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)

Within the range of 7.0 to 10.0 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)

<sup>1</sup> 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

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

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 C.F.R. ss. 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

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 (1b/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)

<sup>1</sup> Within the range of 7.0 to 10.0 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 (1b/million off-lbs) of aluminum cast by semicontinuous 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)

<sup>1</sup> 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 10.0 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 10.0 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

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

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

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

### 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.

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.

NR 257.32 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT LIMITATIONS ATTAINABLE BY APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 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)

Within the range of 7.0 to 10.0 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)

Within the range of 7.0 to 10.0 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)

<sup>1</sup> The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situation 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

<sup>1</sup> Within the range of 7.0 to 10.0 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)

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

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 C.F.R. ss. 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

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	0.82
Oil and grease	3.39	3.39
Suspended solids	5.10	4.07
pH	( )	( )

Within the range of 7.0 to 10.0 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)

<sup>1</sup>Within the range of 7.0 to 10.0 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	0.49	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)

<sup>1</sup>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)

1Within the range of 7.0 to 10.0 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)

1Within the range of 7.0 to 10.0 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 10.0 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 10.0 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 10.0 at all times.

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

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

#### 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.

##### 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, and cleaning or etching.

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

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)

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	0.55
Suspended solids	1.42	1.13
pH	(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)

1Within 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)

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

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)	4.0	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

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

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.

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.

NR 257.52 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT LIMITATIONS ATTAINABLE BY APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 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)

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)

1Within 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)

1Within 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)

<sup>1</sup>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)

<sup>1</sup>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)

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)

Within the range of 7.0 to 10 at all times.

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 C.F.R. ss. 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	0.116
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	0.612	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

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
	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	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>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)

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)

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 (1b/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)

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 (1b/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)

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)

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)

Within the range of 7.0 to 10 at all times.

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

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

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.

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.

NR 257.62 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT  
LIMITATIONS ATTAINABLE BY APPLICATION OF THE BEST PRACTICABLE CONTROL  
TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 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)

'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)

'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)

<sup>1</sup> 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)

<sup>1</sup> 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.

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 C.F.R. ss. 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

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 (1b/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)

<sup>1</sup>Within the range of 7.0 to 10.0 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 (1b/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)

<sup>1</sup>Within the range of 7.0 to 10.0 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)

'Within the range of 7.0 to 10.0 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)

'Within the range of 7.0 to 10.0 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)

<sup>1</sup>Within the range of 7.0 to 10.0 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)

<sup>1</sup>Within the range of 7.0 to 10.0 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)

Within the range of 7.0 to 10.0 at all times.

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

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  
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



NOTE: The Wisconsin administrative code corresponds to the code of federal regulations according to the following table:

<u>State Code</u>	<u>Corresponding Federal Regulation</u>
s. NR 205.03	40 C.F.R. s. 401.11
s. NR 205.04	40 C.F.R. s. 401.11
ch. NR 211	40 C.F.R. Part 403
s. NR 211.03	40 C.F.R. s. 403.3
s. NR 211.13	40 C.F.R. s. 403.7
s. NR 211.14	40 C.F.R. s. 403.13
ch. NR 257	40 C.F.R. Part 467

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on May 28, 1987.

The rules shall take effect the first day of the month following publication in the Wisconsin administrative register, as provided in s. 227.22(2) (intro.), Stats.

Dated at Madison, Wisconsin, September 1, 1989.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

SEAL

By Carroll D. Besadny  
Carroll D. Besadny, Secretary



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny  
Secretary

BOX 7921  
MADISON, WISCONSIN 53707

September 1, 1989

In reply refer to: 1020

Mr. Orlan L. Prestegard  
Revisor of Statutes  
Suite 702  
30 W. Mifflin Street

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SEP 8 1989

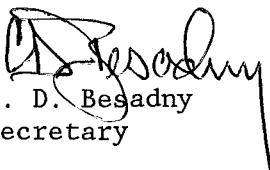
Revisor of Statutes  
Bureau

Dear Mr. Prestegard:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. WW-7-87. These rules were reviewed by the Assembly Committee on Environmental Resources and Utilities and the Senate Committee on Urban Affairs, Environmental Resources, Utilities and Elections pursuant to s. 227.19, Stats. A summary of the final regulatory flexibility analysis and comments of the legislative review committees is also enclosed.

You will note that this order takes effect following publication. Kindly publish it in the Administrative Code accordingly.

Sincerely,

  
C. D. Besadny  
Secretary

Enc.

