



CR 85-204

State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

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Secretary

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STATE OF WISCONSIN)
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-6-86 was duly approved and adopted by this Department on May 29, 1986. 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 hereunto set my hand and affixed the official seal of the Department at General Executive Facility #2 in the City of Madison, this 11th day of July, 1986.

Bruce B. Braun
Bruce B. Braun, Deputy Secretary

(SEAL)

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ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
CREATING RULES

IN THE MATTER of creating ch. NR 262
of the Wisconsin Administrative Code
pertaining to the effluent limitations
and pretreatment standards for the
porcelain enameling industry.

WW-6-86

Analysis Prepared by Department of Natural Resources

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 guidelines, pretreatment standards, and new source performance standards for industrial dischargers. 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 state of 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 state of Wisconsin Department of Natural Resources is promulgating ch. NR 262, Wis. Adm. Code, to regulate the porcelain enameling industry. The provisions of this chapter are based on the regulations of the Environmental Protection Agency in 40 C.F.R. Part 466.

The purpose of this rule is to specify effluent limitations for BPT, BAT, BCT, NSPS for direct dischargers and to establish pretreatment standards for indirect dischargers. The effect of the creation of ch. NR 262, Wis. Adm. Code will be to adopt standards and provisions of effluent limitations in the porcelain enameling industry. This will reflect changes made by the Environmental Protection Agency under the authority of Sections 301, 304, 306, 307, 308 and 501 of the Clean Water Act.

"Porcelain enameling" is a term used to describe the combination of processing steps involved in applying a thermally fused glass-like coating to a metal basis material. The major manufacturing processes in porcelain enameling are (1) surface preparation which includes cleaning, etching, and application of a bonding material and (2) coating operations which include manufacturing and applying the wet coating material and firing or fusing the coating.

Subcategorization in the porcelain enameling point source category is based upon the basis materials used and the processes performed. This is because the basis metal used in the enameling is the principal factor affecting wastewater characteristics. Both the metal basis material constituents and the process chemicals, which are selected based upon the type of basis materials enameled, affect and can appear in the wastewater. The 4 subcategories are porcelain enameling on steel (sometimes called enameling iron), porcelain enameling on cast iron, porcelain enameling on aluminum and porcelain enameling on copper.

Precious metals are frequently enameled, but they are not included in the basis materials subcategories of porcelain enameling, and therefore precious metals are not controlled by this rule. Because of the apparent nature of this aspect of porcelain enameling, porcelain enameling on precious metals is not regulated nationally. The pieces of precious metal enameled are quite small and most of these enameling operations are believed to be minimal indirect dischargers which would not be covered by the categorical standards of this rule.

The pollutants regulated by this rule are six metals, chromium, lead, nickel, zinc, aluminum and iron, and 3 conventional pollutants, oil and grease, TSS and pH. This level of control and regulation will effectively ensure that the treatment technology is installed and properly operated. The pollutants not being regulated are metals which are effectively removed by properly operated technology and will be removed coincidentally with removal of the regulated pollutants.

Small porcelain enameling facilities have been excluded from regulation because of a disproportionate economic impact on this segment of the category which would result in 8 plant closures. Therefore, plants which produce less than 1600 m²/day product and discharge less than 60,000 l/day are not controlled by the categorical standards established by this rule. These facilities shall still conform to the provisions of 40 C.F.R. Part 403. BPT and BAT limitations are not being promulgated for the copper subcategory because there are no direct dischargers in this subcategory. PSES is not being promulgated because the only copper basis material manufacturing plants that discharge to publicly owned treatment works are excluded from the categorical standards by the small plant exclusion.

Technical information and more detailed analysis may be located in 4 federal publications. Costs and economic impacts of the technology options considered are discussed in detail in Economic Impact Analysis of Effluent Limitations and Standards for the Porcelain Enameling Industry (EPA 440/2-82-005, November 1982). A description of the Environmental Protection Agency's study methodology, data gathering efforts and analytical procedures supporting the rule may be found in the Development Document for Effluent Limitations Guidelines and Standards for the Porcelain Enameling Point Source Category (EPA 440/1-82/072, November 1982). Copies of the Economic Impact Analysis and the Development Document are available for inspection at the central office of the Department of Natural Resources, the Secretary of State's office, and the office of the Revisor of Statutes. Analytical methods are discussed in Sampling and Analysis Procedures for Screening of Industrial Effluent for

Priority Pollutants. A summary of the public comments received by the Environmental Protection Agency on the proposed rule is presented in a report: Responses to Public Comments, Proposed Porcelain Enameling Industry Effluent Guidelines and Standards. Copies of all 4 federal technical publications may be obtained for personal use from the National Technical Information Service, Springfield, Virginia 22161, (703) 487-4600.

The proposed rule is identical to 40 C.F.R. Part 466 under s. 227.024(1m), Stats. This rule uses the format and language of the federal regulations. The new format coincides with the Environmental Protection Agency regulations and makes the rule more readily usable and understood by regulating authorities, the industry, and the public. References to sections of the Code of Federal Regulations may be cross-referenced to the proper state code in the table at the end of the rule. Through this method, both the federal and state references are readily available, and the fewest changes possible are made to the federal code. Several changes have been made to this code as required by the Administrative Rules Procedures Manual: notes of approval by the Office of Management and Budget, the authority section, reserved sections and subpart divisions were deleted; a cross reference section, definitions for new source and existing source, and a purpose section were added; citation and definition formats were revised; and s. NR 262.02(5) was reworded to make the definition more readable.

Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by ss. 147.01, 147.035, 147.04, 147.06, 147.07, 227.11 and 227.14, Stats., the State of Wisconsin Natural Resources Board hereby creates rules interpreting ss. 147.035, 147.04, 147.06 and 147.07, Stats., as follows:

SECTION 1. Chapter NR 262 is created to read:

Chapter NR 262

PORCELAIN ENAMELING

- NR 262.01 Purpose
- NR 262.015 Applicability
- NR 262.02 General definitions
- NR 262.03 Monitoring and reporting requirements
- NR 262.04 Compliance date for PSES
- NR 262.10 Steel basis material subcategory
- NR 262.20 Cast iron basis material subcategory
- NR 262.30 Aluminum basis material subcategory
- NR 262.40 Copper basis material subcategory
- NR 262.50 Cross-references

NR 262.01 PURPOSE. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the porcelain enameling category of point sources and its subcategories.

NR 262.015 APPLICABILITY. (1) Except as provided in subs. (2) and (3), the provisions of this chapter apply to any porcelain enameling facility which discharges pollutants to waters of the state or introduces pollutants into a publicly owned treatment works.

(2) Any existing porcelain enameling facility which prepares or coats less than 1600m²/day and which introduces less than 60,000 l/day of wastewater into a publicly owned treatment works is not controlled by the pretreatment standards for existing sources established by this rule. Such facilities shall comply with the provisions of 40 C.F.R. Part 403.

(3) This chapter does not apply to the porcelain enameling on precious metal basis material.

(4) When wastewaters from coating cast iron are co-treated with wastewaters from coating steel, the limitations for coating steel contained in s. NR 262.11 may be applied to the entire wastestream.

NR 262.02 GENERAL DEFINITIONS. In addition to the definitions set forth in 40 C.F.R. Part 401, the following definitions apply to this chapter:

(1) "Area coated" means the area of basis material covered by each coating of enamel.

(2) "Area processed" means the total basis material area exposed to processing solutions.

(3) "Basis material" means the metal part or base onto which porcelain enamel is applied.

(4) "Coating operations" means all of the operations associated with preparation and application of the vitreous coating. Usually this includes ballmilling, slip transport, application of slip to the work pieces, cleaning and recovery of faulty parts, and firing (fusing) of the enamel coat.

(5) "Control authority" means the publicly owned treatment works if it has an approved pretreatment program; in the absence of such a program, the state.

(6) "Existing Source" means any source that is not a new source.

(7) "Metal preparation" means any and all of the metal processing steps preparatory to applying the enamel slip. Usually this includes cleaning, pickling and applying a nickel flash or chemical coating.

(8) "New Source," as defined for PSES and PSNS, means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after April 27, 1984.

(9) "New Source," as defined for BPT, BAT, BCT, and NSPS, means any point source the construction of which commenced after October 21, 1985.

(10) "Porcelain enameling" means the entire process of applying a fused vitreous enamel coating to a metal basis material. Usually this includes metal preparation and coating operations.

(11) "Precious metal" means gold, silver, or platinum group metals and the principal alloys of those metals.

NR 262.03 MONITORING AND REPORTING REQUIREMENTS. (1) Periodic analyses for chromium as may be required under 40 C.F.R. Part 122 or 403 is not required when both of the following conditions are met:

(a) The first wastewater sample of each calendar year has been analyzed and found to contain less than 0.08 mg/l chromium.

(b) The owner or operator of the porcelain enameling facility certifies in writing to the control authority that chromium is not contained in the raw materials or process chemicals of that facility and will not be used in the facility.

(2) The "monthly average" regulatory values shall be the basis for the monthly average discharge in direct discharge permits and for pretreatment standards. Compliance with the monthly discharge limit is required regardless of the number of samples analyzed and averaged.

NR 262.04 COMPLIANCE DATE FOR PRETREATMENT STANDARDS FOR EXISTING SOURCES (PSES). The compliance date for pretreatment standards for existing sources is November 25, 1985.

NR 262.10 APPLICABILITY; DESCRIPTION OF THE STEEL BASIS MATERIAL SUBCATEGORY. This subcategory applies to discharges to waters of the state and introduction of pollutants into publicly owned treatment works from porcelain enameling on steel basis materials.

NR 262.11 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT REDUCTION ATTAINABLE BY THE APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations for metal preparation operations

and for coating operations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

BPT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units—mg/m ² of area processed or coated				
Chromium	16.82	3.41	6.81	1.38
Lead	6.01	1.21	5.21	1.06
Nickel	56.46	11.43	40.05	8.11
Zinc	53.26	10.78	22.43	4.54
Aluminum	182.2	36.87	74.47	15.07
Iron	112.12	22.69	56.06	11.34
Oil and grease	800.84	162.1	480.51	97.23
TSS	1642.0	332.2	800.9	162.0
pH	(1)	(1)	(1)	(1)
English units—pounds per 1 million ft ² of area processed or coated				
Chromium	3.45	0.07	1.4	0.29
Lead	1.23	0.25	1.07	0.22
Nickel	11.57	2.34	8.2	1.66
Zinc	10.91	2.21	4.6	0.93
Aluminum	37.32	7.85	15.26	3.09
Iron	22.96	4.65	11.48	2.32
Oil and grease	164.03	33.19	98.42	19.92
TSS	337.0	68.1	164.0	33.2
pH	(1)	(1)	(1)	(1)

¹ Within the range 7.5 to 10.0.

NR 262.12 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. 125.30-125.32 any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

BAT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
	Metric units-mg/m ² of area processed or coated			
Chromium	16.82	0.53	6.81	0.22
Lead	6.01	0.19	5.21	0.16
Nickel	56.5	1.78	40.05	1.26
Zinc	53.3	1.68	22.43	0.71
Aluminum	182.0	5.74	74.48	2.35
Iron	112.12	3.53	56.06	1.77
	English units-pounds per 1 million ft ² of area processed or coated			
Chromium	3.45	0.11	1.4	0.05
Lead	1.23	0.04	1.07	0.03
Nickel	11.57	0.37	8.2	0.26
Zinc	10.91	0.35	4.6	0.15
Aluminum	37.32	1.18	15.26	0.48
Iron	22.96	0.72	11.48	0.36

NR 262.13 NEW SOURCE PERFORMANCE STANDARDS. Any new source subject to this subcategory shall achieve the following new source performance standards:

NSPS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units-mg/m ² of area processed or coated				
Chromium	3.7	0.47	1.5	0.19
Lead	1.0	0.13	0.9	0.11
Nickel	12.0	1.51	6.3	0.79
Zinc	10.2	1.29	4.2	0.53
Aluminum	30.3	3.82	12.4	1.56
Iron	28.0	3.53	14.0	1.77
Oil and grease	100.0	12.6	100.0	12.6
TSS	150.0	18.91	120.0	15.12
pH	(1)	(1)	(1)	(1)
English units-pounds per 1 million ft ² of area processed or coated				
Chromium	0.76	0.1	0.31	0.04
Lead	0.21	0.03	0.19	0.03
Nickel	2.46	0.31	1.29	0.16
Zinc	2.09	0.27	0.86	0.11
Aluminum	6.21	0.78	2.54	0.32
Iron	5.74	0.72	2.87	0.36
Oil and grease	20.48	2.58	20.48	2.58
TSS	30.72	3.87	24.58	3.1
ph	(1)	(1)	(1)	(1)

¹ Within the range 7.5 to 10.0.

NR 262.14 PRETREATMENT STANDARDS FOR EXISTING SOURCES. (1) Except as provided in 40 C.F.R. ss. 403.7 and 403.13, any existing source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for existing sources.

PSES				
Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Milligrams per liter (mg/l)				
Chromium	0.42		0.17	
Lead	0.15		0.13	
Nickel	1.41		1.0	
Zinc	1.33		0.56	

(2) In cases where POTWs find it necessary to impose mass effluent pretreatment standards the following equivalent mass standards are provided:

PSES				
Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation

Metric units-mg/m² of area
processed or coated

Chromium	16.82	0.53	6.81	0.22
Lead	6.01	0.19	5.21	0.16
Nickel	56.5	1.78	40.1	1.26
Zinc	53.3	1.68	22.5	0.71

English units-pounds per 1 million
ft² of area processed or coated

Chromium	3.45	0.11	1.4	0.05
Lead	1.23	0.04	1.07	0.03
Nickel	11.6	0.37	8.2	0.26
Zinc	10.9	0.35	4.6	0.15

NR 262.15 PRETREATMENT STANDARDS FOR NEW SOURCES. Except as provided in 40 C.F.R. ss. 403.7 and 403.13, any new source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for new sources:

Pollutant or pollutant property	PSNS			
	Maximum for any 1 day		Maximum for monthly average	
	Metal prepa- ration	Coat- ing opera- tion	Metal prepa- ration	Coat- ing opera- tion
	Metric units-mg/m ² of area processed or coated			
Chromium	3.7	0.47	1.5	0.19
Lead	1.0	0.13	0.9	0.11
Nickel	12.0	1.51	6.3	0.79
Zinc	10.2	1.29	4.2	0.53

English units—pounds per 1 million
ft² of area processed or coated

Chromium	0.76	0.1	0.31	0.04
Lead	0.2	0.03	0.19	0.02
Nickel	2.46	0.31	1.29	0.16
Zinc	2.09	0.27	0.86	0.11

NR 262.20 APPLICABILITY; DESCRIPTION OF THE CAST IRON BASIS MATERIAL SUBCATEGORY. This subcategory applies to discharges to waters of the state and introductions of pollutants into publicly owned treatment works from porcelain enameling of cast iron basis materials.

NR 262. 21 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT REDUCTION ATTAINABLE BY THE APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 125.30–125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

(1) There may not be discharge of process wastewater pollutants from metal preparation operations.

(2) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

BPT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average

Mg/m² (pounds per/1 million ft²) of
area coated

Chromium	0.29	(0.06)	0.12	(0.024)
Lead	0.11	(0.02)	0.09	(0.02)
Nickel	0.98	(0.02)	0.7	(0.15)
Zinc	0.93	(0.19)	0.39	(0.08)
Aluminum	3.16	(0.65)	1.29	(0.27)
Iron	0.86	(0.18)	0.44	(0.09)
Oil and grease	13.86	(2.84)	8.32	(1.71)
TSS	28.42	(5.82)	13.86	(2.84)
pH	(1)	(1)	(1)	(1)

¹ Within the range 7.5 to 10.0.

NR 262.22 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. 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

(1) There may not be discharge of process wastewater pollutants from metal preparation operations.

(2) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

BAT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Mg/m ² (pounds per/million ft ²) of area coated			
Chromium	0.53	(0.11)	0.22	(0.05)
Lead	0.19	(0.04)	0.16	(0.03)
Nickel	1.78	(0.37)	1.26	(0.26)
Zinc	1.68	(0.35)	0.71	(0.15)
Aluminum	5.74	(1.18)	2.35	(0.48)
Iron	1.55	(0.32)	0.79	(0.16)

NR 262.23 NEW SOURCE PERFORMANCE STANDARDS. Any new source subject to this subcategory shall achieve the following new source performance standards:

(1) There may not be discharge of process wastewater pollutants from metal preparation operations.

(2) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

NSPS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
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Mg/m² (pounds per million ft²) of
area coated

Chromium	0.47	(0.1)	0.19	(0.04)
Lead	0.13	(0.03)	0.11	(0.02)
Nickel	0.69	(0.14)	0.47	(0.1)
Zinc	1.29	(0.27)	0.53	(0.11)
Aluminum	3.82	(0.78)	1.56	(0.32)
Iron	1.55	(0.32)	0.79	(0.16)
Oil and grease	12.6	(2.58)	12.6	(2.58)
TSS	18.91	(3.87)	15.12	(3.1)
pH	(1)	(1)	(1)	(1)

¹ Within the range 7.5 to 10.0.

NR 262.24 PRETREATMENT STANDARDS FOR EXISTING SOURCES. (1) Except as provided in 40 C.F.R. ss. 403.7 and 403.13, any existing source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for existing sources:

(a) There may not be discharge of process wastewater pollutants from metal preparation operations.

(b) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
Milligrams per liter (mg/l)		
Chromium	0.42	0.17
Lead	0.15	0.13
Nickel	1.41	1.0
Zinc	1.33	0.56

(2) In cases where POTWs find it necessary to impose mass pretreatment standards the following equivalent mass standards are provided:

(a) There may not be discharge of process wastewater pollutants from metal preparation operations.

(b) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

PSES

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Mg/m ² (Pounds per/million ft ²) of area coated			
Chromium	0.53	(0.11)	0.22	(0.05)
Lead	0.19	(0.04)	0.16	(0.03)
Nickel	1.78	(0.37)	1.26	(0.26)
Zinc	1.68	(0.35)	0.71	(0.15)

NR 262.25 PRETREATMENT STANDARDS FOR NEW SOURCES. Except as provided in 40 C.F.R. s. 403.7, any new source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for new sources.

(1) There may not be discharge of process wastewater pollutants from metal preparation operations.

(2) The discharge of process wastewater pollutants from all porcelain enameling coating operations may not exceed the values set forth below:

PSNS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Mg/m ² (Pounds per/million ft ²) of area coated			
Chromium	0.47	(0.1)	0.19	(0.04)
Lead	0.13	(0.03)	0.11	(0.02)
Nickel	0.69	(0.14)	0.47	(0.1)
Zinc	1.29	(0.27)	0.53	(0.11)

NR 262.30 APPLICABILITY; DESCRIPTION OF THE ALUMINUM BASIS MATERIAL SUBCATEGORY. This subcategory applies to discharges to waters of the state and introductions of pollutants into publicly owned treatment works from porcelain enameling of aluminum basis materials.

NR 262.31 EFFLUENT LIMITATIONS REPRESENTING THE DEGREE OF EFFLUENT REDUCTION ATTAINABLE BY THE APPLICATION OF THE BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE. Except as provided in 40 C.F.R. ss. 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable:

BPT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units—mg/m ² of area processed or coated				
Chromium	16.34	6.32	6.63	2.56
Lead	5.84	2.26	5.06	1.96
Nickel	54.85	21.21	38.9	15.04
Zinc	51.73	20.01	21.79	8.43
Aluminum	176.98	68.44	72.35	27.98
Iron	47.85	18.5	24.51	9.48
Oil and grease	777.92	300.84	466.76	108.5
TSS	1594.74	616.68	777.92	300.82
pH	(¹)	(¹)	(¹)	(¹)
English units—pounds per 1 million ft ² of area processed or coated				
Chromium	3.35	1.3	1.37	0.53
Lead	1.2	0.47	1.04	0.4
Nickel	11.24	4.35	7.97	3.08
Zinc	10.6	4.1	4.46	1.73
Aluminum	36.25	14.02	14.82	5.73
Iron	9.8	3.79	5.02	1.94
Oil and grease	159.33	61.61	95.6	36.97
TSS	326.62	126.33	159.33	61.61
pH	(¹)	(¹)	(¹)	(¹)

¹ Within the range 7.5 to 10.0.

NR 262.32 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. 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

BAT effluent limitations

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units-mg/m ² of area processed or coated				
Chromium	16.34	0.53	6.62	0.22
Lead	5.84	0.19	5.06	0.16
Nickel	54.85	1.78	38.9	1.26
Zinc	51.74	1.68	21.79	1.71
Aluminum	176.98	5.74	72.35	2.35
Iron	47.85	1.55	24.51	0.8
English units-pounds per 1 million ft ² of area processed or coated				
Chromium	3.35	0.11	1.36	0.05
Lead	1.2	0.04	1.04	0.03
Nickel	11.24	0.37	7.97	0.26
Zinc	10.6	0.35	4.46	0.35
Aluminum	36.25	1.18	14.82	0.48
Iron	9.8	0.32	5.02	0.16

NR 262.33 NEW SOURCE PERFORMANCE STANDARDS. Any new source subject to this subcategory shall achieve the following new source performance standards:

NSPS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units—mg/m ² of area processed or coated				
Chromium	3.6	0.47	1.46	0.19
Lead	0.97	0.13	0.88	0.11
Nickel	5.35	0.69	3.6	0.47
Zinc	9.92	1.29	4.09	0.53
Aluminum	29.46	3.82	12.06	1.56
Iron	11.96	1.55	6.13	0.79
Oil and grease	97.24	12.6	97.24	12.6
TSS	145.86	18.91	116.69	15.12
pH	(¹)	(¹)	(¹)	(¹)
English units—pounds per 1 million ft ² of area processed or coated				
Chromium	0.74	0.1	0.3	0.04
Lead	0.2	0.03	0.18	0.2
Nickel	1.1	0.14	0.74	0.1
Zinc	2.03	0.27	0.84	0.11
Aluminum	6.03	0.78	2.47	0.32
Iron	2.45	0.32	1.26	0.16
Oil and grease	19.92	2.58	19.92	2.58
TSS	29.88	3.87	23.9	3.1
pH	(¹)	(¹)	(¹)	(¹)

¹ Within the range 7.5 to 10.0.

NR 262.34 PRETREATMENT STANDARDS FOR EXISTING SOURCES. (1) Except as provided in 40 C.F.R. ss. 403.7 and 403.13, any existing source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for existing sources:

PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	Milligrams per liter (mg/l)	
Chromium	0.42	0.17
Lead	0.15	0.13
Nickel	1.41	1.0
Zinc	1.33	0.56

(2) In cases where POTWs find it necessary to impose mass pretreatment standards the following equivalent mass standards are provided:

PSES

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal prepa- ration	Coating opera- tion	Metal prepa- ration	Coating opera- tion
Metric units-mg/m ² of area processed or coated				
Chromium	16.34	0.53	6.62	0.22
Lead	5.84	0.19	5.06	0.16
Nickel	54.85	1.78	38.9	1.26
Zinc	51.74	1.68	21.79	1.71

English units-pounds per 1 million ft²
of area processed or coated

Chromium	3.35	0.11	1.36	0.05
Lead	1.2	0.04	1.04	0.03
Nickel	11.24	0.37	7.97	0.25
Zinc	10.6	0.35	4.46	0.35

NR 262.35 PRETREATMENT STANDARDS FOR NEW SOURCES. Except as provided in 40 C.F.R. s. 403.7, any new source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for new sources:

PSNS				
Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units-mg/m ² of area processed or coated				
Chromium	3.6	0.47	1.46	0.19
Lead	0.97	0.13	0.88	0.11
Nickel	5.35	0.69	3.6	0.47
Zinc	9.92	1.29	4.09	0.53

English units-pounds per 1 million ft² of area processed or coated

Chromium	0.74	0.1	0.3	0.04
Lead	0.2	0.03	0.18	0.02
Nickel	1.1	0.14	0.74	0.1
Zinc	2.03	0.27	0.84	0.11

NR 262.40 APPLICABILITY; DESCRIPTION OF THE COPPER BASIS MATERIAL SUBCATEGORY. This subcategory applies to discharges to waters of the state and introductions of pollutants into publicly owned treatment works from porcelain enameling of copper basis materials.

NR 262.43 NEW SOURCE PERFORMANCE STANDARDS. Any new source subject to this subcategory shall achieve the following new source performance standards:

NSPS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units-mg/m ² of area processed or coated				
Chromium	6.23	0.46	2.52	0.19
Lead	1.69	0.13	1.52	0.11
Nickel	9.25	0.69	6.23	0.47
Zinc	17.16	1.29	7.07	0.53
Aluminum	50.97	3.82	20.86	1.56
Iron	20.69	1.55	10.6	0.79
Oil and grease	168.23	12.6	168.23	12.6
TSS	252.35	18.91	201.88	15.12
pH	(¹)	(¹)	(¹)	(¹)
English units-pounds per 1 million ft ² of area processed or coated				
Chromium	1.28	0.1	0.52	0.04
Lead	0.35	0.03	0.31	0.03
Nickel	1.9	0.14	1.28	0.1
Zinc	3.52	0.27	1.45	0.11
Aluminum	10.44	0.78	4.27	0.32
Iron	4.24	0.32	2.17	0.16
Oil and grease	34.46	2.58	34.46	2.58
TSS	51.69	3.87	41.35	3.1
pH	(¹)	(¹)	(¹)	(¹)

¹ Within the range 7.5 to 10.0.

NR 262.45 PRETREATMENT STANDARDS FOR NEW SOURCES. Any new source subject to this subcategory which introduces pollutants into a publicly owned treatment works shall comply with 40 C.F.R. Part 403 and achieve the following pretreatment standards for new sources:

PSNS

Pollutant or pollutant property	Maximum for any 1 day		Maximum for monthly average	
	Metal preparation	Coating operation	Metal preparation	Coating operation
Metric units-mg/m ² of area processed or coated				
Chromium	6.23	0.46	2.52	0.19
Lead	1.69	0.13	1.52	0.11
Nickel	9.25	0.69	6.23	0.47
Zinc	17.16	1.29	7.07	0.53

English Units-pounds per 1 million ft ² of area processed or coated				
Chromium	1.28	0.1	0.52	0.04
Lead	0.35	0.03	0.31	0.02
Nickel	1.9	0.14	1.28	0.1
Zinc	3.52	0.27	1.45	0.11

NR 262.50 CROSS-REFERENCES. The federal citations in this chapter correspond to provisions of the Wisconsin Administrative Code and Wisconsin Statutes. The federal citations may be cross-referenced in the following table:

<u>Code of Federal Regulations</u>	<u>Corresponding state code section</u>
40 C.F.R. Part 466	ch. NR 262
40 C.F.R. ss. 125.30-125.32	s. NR 211.14, s. 147.04(3), Stats.
40 C.F.R. Part 401	chs. NR 205, 215, 219
40 C.F.R. Part 403	chs. NR 211, 217
40 C.F.R. s. 403.7	s. NR 211.13
40 C.F.R. s. 403.13	s. NR 211.14

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on May 29, 1986.

The rules contained herein shall take effect as provided in s. 227.22 (1)(intro.), Stats.

Dated at Madison, Wisconsin July 11, 1986

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By Carroll D. Besadny
Carroll D. Besadny Secretary

(SEAL)