CR 85-180

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

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STATE OF WISCONSIN)
) ss
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-46-85 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 18th 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
REPEALING AND RECREATING, AND CREATING RULES

IN THE MATTER of repealing and recreating ch. NR 260; and creating ch. NR 261 of the Wisconsin Administrative Code pertaining to pretreatment standards for discharges from the electroplating point source category; and standards of performance, effluent limitations and pretreatment standards for discharges from the metal finishing point source category	WW-46-85

Analysis Prepared by the Department of Natural Resources

The effect of the repeal and recreation of ch. NR 260, Wis. Adm. Code, will be to update the pretreatment standards for existing sources in the electroplating industry. These changes include deletion of the following sections which are either outdated or applicable to the metal finishing category which is being created as a separate chapter: modification of effluent limitations; record maintenance; effluent limitations, best practicable treatment; effluent limitations, best available treatment; standards of performance; and pretreatment standards. The changes also include expansion of the definitions section, and an update of the applicability pretreatment standards sections, and an addition of a section on monitoring requirements. In addition, the chapter is divided into 2 subchapters indicating the need to distinguish direct dischargers from indirect dischargers regarding their discharge standards and monitoring requirements.

The effect of the creation of ch. NR 261, Wis. Adm. Code, will be to keep the electroplating regulations separate from the metal finishing regulations. The separation parallels the new federal regulatory breakdown into electroplating and metal finishing industries found at 40 CFR 413 and 40 CFR 433.

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 and 227.11(2)(a), Stats., the State of Wisconsin Natural Resources Board hereby repeals and recreates, and creates rules interpreting ss. 147.01, 147.035, 147.04, 147.06 and 147.07, Stats., as follows:

SECTION 1. Chapter NR 260 is repealed and recreated to read:

Chapter NR 260

Electroplating

NR 260.01 PURPOSE. The purpose of this chapter is to establish pretreatment standards and effluent limitations for existing sources in the electroplating industry which introduce pollutants into publicly owned treatment works.

NR 260.02 APPLICABILITY. (1) The provisions of this chapter are applicable to existing sources which discharge pollutants into publicly owned treatment works resulting from operations in the following process subcategories as defined in s. NR 260.03(3):

(a) Electroplating of common metals.

(b) Electroplating of precious metals.

(c) Electroplating of specialty metals.

NOTE: This process subcategory is reserved.

(d) Anodizing.

(e) Coating (chromating, phosphating and coloring).

(f) Chemical etching and milling.

(g) Electroless plating.

(h) Printed circuit board manufacture.

(2) The provisions of this chapter are not applicable to the following:

(a) Operations similar to electroplating which are specifically regulated by other categorical standards.

NOTE: These other applicable categorical standards include: aluminum forming, battery manufacturing, coil coating, copper forming, electrical and

electronic components, iron and steel manufacturing, metal molding and casting (foundries), nonferrous metals forming, nonferrous metals manufacturing, plastic molding and forming, porcelain enameling.

(b) Metallic platemaking and gravure cylinder preparation conducted for use in the printing and publishing industry.

(c) Industrial users subject to pretreatment standards for new sources (PSNS), which are regulated under ch. NR 261.

(d) Industrial users subject to best practicable technology currently available (BPT), best available technology economically achievable (BAT), and new source performance standards (NSPS), which are regulated under ch. NR 261.

NR 260.03 DEFINITIONS. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in chs. NR 205 and 211, and the Development Document for Existing Source Pretreatment Standards for the Electroplating Point Source Category, EPA 440/1-79/003, August 1979.

NOTE: Copies of this document are available for inspection at the office of the department of natural resources, 101 S. Webster, Madison; the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20460.

(1) "Cyanide, A" means cyanide amenable to alkaline chlorination as determined by ch. NR 219.

(2) "Captive facility" means a facility which owns more than 50% (annual area basis) of the materials undergoing electroplating.

(3) "Electroplating process wastewater" means wastewater generated in the operations defined below and listed in s. NR 260.02(1).

(a) "Electroplating of common metals" means any step in a process in which a ferrous or nonferrous basis metal is electroplated with copper, nickel, chromium, zinc, tin, cadmium, iron, aluminum, or a combination thereof and which is followed by a rinse; this includes the related operations of alkaline cleaning, acid pickling, stripping, and coloring.

(b) "Electroplating of precious metals" means any step in a process in which a ferrous or nonferrous basis metal is electroplated with gold, silver, irridium, palladium, platinum, rhodium, ruthenium or a combination thereof and which is followed by a rinse; this includes the related operations of alkaline cleaning, acid pickling, stripping, and coloring.

(c) "Electroplating of specialty metals" means any step in which a ferrous or nonferrous basis metal is electroplated with a metal not used in par. (a) or (b) which is followed by a rinse.

(d) "Anodizing" means any step in the production of a protective oxide film on a ferrous or nonferrous metal which passes an electric current through a bath where the metal is suspended and is followed by a rinse; this includes the related operations of cleaning and coloring.

(e) "Coating" means the processes of chromating, phosphating, or immersion plating of ferrous or nonferrous materials in which a basis material surface is acted upon by a process solution which is followed by a rinse; this includes the related operations of alkaline cleaning, acid pickling and sealing.

(f) "Chemical etching and milling" means any step in the process of etching or milling of ferrous or nonferrous material in which metal is chemically or electrochemically removed from the work piece and is followed by a rinse; this includes the related metal cleaning operations which precede chemical etching or milling.

(g) "Electroless plating" means any step in a process in which a metallic layer is deposited on a metallic or nonmetallic basis material and which is followed by a rinse; this includes the related operations of alkaline cleaning, acid pickling and stripping.

(h) "Printed circuit manufacturing" means any step in the process of converting an insulating substrate to a finished printed circuit board in which the board is immersed in an aqueous process bath which is followed by a rinse.

(4) "Integrated facility" means a facility where manufacturing of a product at a single physical location includes electroplating as only one of several operations and produces significant quantities of process wastewater from nonelectroplating manufacturing operations and in which one or more plant electroplating process wastewater lines are combined prior to or at the point of treatment (or proposed treatment) with one or more plant sewers carrying nonelectroplating process wastewater.

(5) "New source" means any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after August 31, 1982.

(6) "Strong chelating agents" means compounds which form soluble metal complexes which are not removed by subsequent metals control techniques such as pH adjustment followed by clarification or filtration.

(7) "TTO" means total toxic organics, which is the sum of all quantifiable values greater than 0.01 milligrams per liter (10 micrograms per liter) of the toxic organics listed in s. NR 215.03 A through E.

Subchapter I - Direct Discharges

NR 260.10 APPLICABILITY. All facilities which generate wastewater from any of the processes listed in s. NR 260.02(1) discharging directly to waters of the state are subject to the provisions of ch. NR 261.

Subchapter II - Indirect Discharges

NR 260.20 APPLICABILITY. All indirect discharges of wastewater generated from any of the processes listed in s. NR 260.02(1) except those subject to pretreatment standards for new sources included under ch. NR 261, are subject to the provisions of this subchapter. All captive facilities are regulated under ch. NR 261, as of February 15, 1986, and the provisions of this chapter no longer apply.

NR 260.21 COMPLIANCE DATES. Industrial users subject to the provisions of this subchapter shall meet the following compliance dates:

(1) By April 27, 1984, for all facilities which are not integrated facilities and are subject to pretreatment standards for existing sources.

(2) By June 30, 1984, for all integrated facilities subject to pretreatment standards for existing sources.

(3) By July 15, 1986, for all industrial users subject to TTO limitations.

NR 260.22 DISCHARGE STANDARDS. (1) Any existing source which introduces pollutants into a publicly owned treatment works shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources (PSES);

The subcategories referred to in Tables 1 through 4 are those process subcategories listed in s. NR 260.02(1).

(a) No industrial user introducing wastewater pollutants into a publicly owned treatment works under the provisions of this chapter may augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(b) For facilities discharging less than 38,000 liters (10,000 gal.) per calendar day of electroplating process wastewater the following limitations shall apply:

Table 1

Facilities discharging less than 38,000 liters per day PSES limitations (mg/l)

All subcategories

Pollutant or pollutant property[1]	1 day max.	4 day avg.[2]	30 day avg.[3]
Cyanide, A (CN, A)	5.0	2.7	1.5
Lead (Pb)	0.6	0.4	0.3
Cadmium (Cd)	1.2	0.7	.5
Total Toxic Organics (TTO)	4.57		

[1]All metals shall be determined in "total" form.
[2]Average of daily values for 4 consecutive monitoring days.
[3]Limitations for integrated facilities using the combined wastestream formula as set forth in s. NR 211.12.

(c) Except as provided in pars. (d) and (e), for facilities discharging 38,000 liters (10,000 gal.) or more per calendar day of electroplating process wastewater the following limitations shall apply:

Table 2

Facilities discharging 38,000 liters or more per day PSES limitations (mg/l)

All subcategories

Pollutant or pollutant property[1]	1 day max.	4 day avg.[2]	30 day avg.[3]
Silver (Ag)[4]	1.2	0.7	.5
Cyanide (CN)	1.9	1.0	.55
Copper (Cu)	4.5	2.7	1.8
Nickel (Ni)	4.1	2.6	1.8
Chromium (Cr)	7.0	4.0	2.5
Zinc (Zn)	4.2	2.6	1.8
Lead (Pb)	0.6	0.4	0.3
Cadmium (Cd)	1.2	0.7	.5
Total Metals[5]	10.5	6.8	5.0
Total Toxic Organics(TTO)	2.13		

[1]All metals and cyanide shall be determined in "total" form.
[2]Average of daily values for 4 consecutive monitoring days.
[3]Limitations for integrated facilities using the combined wastestream formula as set forth in s. NR 211.12.
[4]Applicable to subcategory (b) only - Electroplating of precious metals.
[5]Total Metals equals the sum of the concentrations of copper, nickel, chromium and zinc.

(d) The following optional mass based limitations are equivalent to and may apply in place of those outlined in Table 2 if there has been a prior agreement between the facility and the publicly owned treatment works receiving such regulated wastes:

Table 3

Optional Mass Limits
Facilities discharging 38,000 liters or more per day PSES limitations (mg/sq m - operation[1])

Pollutant or pollutant property[2]	Subcategories (a) to (g) 1 day max.	4 day avg.[3]	30 day avg.[4]	Subcategory (h) 1 day max.	4 day avg.[3]	30 day avg.[4]
Silver (Ag)[5]	47	29	20			
Cyanide (CN)	74	39	21	169	89	49
Copper (Cu)	176	105	70	401	241	160
Nickel (Ni)	160	100	70	365	229	160
Chromium (Cr)	273	156	96	623	357	223
Zinc (Zn)	164	102	70	374	232	160
Lead (Pb)	23	16	13	53	36	27
Cadmium (Cd)	47	29	20	107	65	45
Total Metals[6]	410	267	195	935	609	445
Total Toxic Organics (TTO)[7]	2.13			2.13		

[1]The area plated or acted upon by the processes described in ss. NR 260.02(1) and 260.03(3) which are expressed in square meters.
[2]All metals and cyanide shall be determined in "total" form.
[3]Average of daily values for 4 consecutive monitoring days.
[4]Limitations for integrated facilities using the combined wastestream formula as set forth in s. NR 211.12.
[5]Applicable to subcategory (b) only - Electroplating of precious metals.
[6]Total Metals equals the sum of the masses of copper, nickel, chromium and zinc.
[7]TTO shall be measured in mg/l

(e) In the absence of strong chelating agents, after reduction of hexavalent chreomium wastes, and after neutralization using calcium oxide (or hydroxide), the following control program may be elected by the industrial user, with the approval of the control authority, in place of the limitations in Table 2. These optional pollutant limitations are not eligible for allowance for removal achieved by the publicly owned treatment works.

Table 4

Optional Control Program Limits[1]
Facilities discharging 38,000 liters or more per day PSES limitations (mg/l)

All subcategories

Pollutant or pollutant property[2]	1 day max.	4 day avg.[3]	30 day avg.[4]
Cyanide (CN)	1.9	1.0	.55
Lead (Pb)	0.6	0.4	0.3
Cadmium (Cd)	1.2	0.7	.5
Total Suspended Solids (TSS)	20.0	13.4	10.0
pH[5]	7.5 - 10.0	7.5 - 10.0	
Total Toxic Organics (TTO)	2.13		

[1]Optional pollutants agreed upon by facility and control authority.
[2]All metals and cyanide shall be determined in "total" form.
[3]Average of daily values for 4 consecutive monitoring days.
[4]Limitations for integrated facilities using the combined wastestream formula as set forth in s. NR 211.12.
[5]pH shall be measured in standard units.

(2) Where electroplating process wastewaters are combined with regulated wastewaters which have 30-day average standards, the corresponding 30-day average standard for the electroplating wastewaters shall be used. The 30-day average for pollutants may be found in Tables 1 through 4.

NR 260.23 TOTAL TOXIC ORGANICS MONITORING REQUIREMENTS. (1) In place of monitoring for TTO, the control authority may allow industrial users of publicly owned treatment works to make the following certification to replace the periodic reports required by s. NR 211.15:

> "Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic plan submitted to the control authority."

(2) Industrial users of publicly owned treatment works shall submit a toxic organic management plan when requesting that monitoring not be required. The plan shall specify the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for assuring that toxic organics do not routinely spill or leak into the wastewater.

(3) An existing source submitting a certification in lieu of monitoring pursuant to subs. (1) and (2) shall implement the toxic organic management plan approved by the control authority.

(4) If monitoring is necessary to measure compliance with the TTO standard, the industrial user need analyze only for those pollutants reasonably expected to be present.

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SECTION 2. Chapter NR 261 is created to read:

Chapter NR 261

Metal Finishing

NR 261.01 PURPOSE. The purpose of this chapter is to establish standards of performance and effluent limitations for discharges of wastewater from the metal finishing point source category into waters of the state. It is also the purpose of this chapter to establish pretreatment standards and effluent limitations for new and existing sources in the metal finishing point source category which discharge wastewater into publicly owned treatment works.

NR 261.02 APPLICABILITY. (1) The provisions of this chapter are applicable to dischargers performing any of the operations outlined in s. NR 260.02(1) which include: electroplating of common metals, electroplating of precious metals, anodizing, coatings (chromating, phosphating and coloring), chemical etching and milling, electroless plating and printed circuit board manufacturing. When any of the above operations are present the provisions also apply to discharges from the following process operations:

Abrasive jet machining
Assembly
Brazing
Burnishing
Calibration
Cleaning
Electric discharge machining
Electrochemical machining
Electron beam machining
Electropainting
Electrostatic painting
Flame spraying
Grinding
Heat treating
Hot dip coating
Impact deformation
Laminating
Laser beam machining
Machining
Mechanical plating
Paint stripping
Painting
Plasma arc machining
Polishing
Pressure deformation
Salt bath descaling
Sand blasting
Shearing
Sintering
Soldering
Solvent degreasing
Sputtering
Testing
Thermal cutting
Thermal infusion
Tumbling
Ultrasonic machining
Vacuum metalizing
Vapor plating
Welding

(2) The provisions of this chapter are not applicable to the following:

(a) Operations similar to metal finishing which are specifically regulated by other categorical standards.

NOTE: These other applicable standards include aluminum forming, battery manufacturing, coil coating, copper forming, electrical and electronic components, iron and steel manufacturing, metal molding and casting (foundries), nonferrous metals forming, nonferrous metals manufacturing, plastic molding and forming, and porcelain enameling.

(b) Existing indirect discharging electroplating job shops and independent printed circuit board manufacturers, which are regulated under ch. NR 260.

(c) Metallic platemaking and gravure cylinder preparation conducted for use in the printing and publishing facilities.

NR 261.03 DEFINITIONS. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in chs. NR 205, 211, and 260, and the EPA Development Document for Effluent Limitations Guidelines and Standards for the Metal Finishing Point Source Category (EPA 440/1-83/091, June 1983).

NOTE: Copies of this document are available for inspection at the office of the department of natural resources, 101 S. Webster, Madison; the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20460.

(1) "Cyanide, A" means cyanide amenable to alkaline chlorination as determined by ch. NR 219.

(2) "Independent printed circuit board manufacturer" means a facility which manufactures printed circuit boards principally for sale to other companies.

(3) "Job shop" means a facility which owns not more than 50% (annual area basis) of the materials undergoing metal finishing.

(4) "New source" for indirect dischargers means any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after August 31, 1982; and for direct dischargers means any point source, the construction of which commenced after August 29, 1983.

(5) "NSPS" means new source performance standards.

(6) "PSES" means pretreatment standards for existing sources.

(7) "PSNS" means pretreatment standards for new sources.

(8) "TTO" means total toxic organics, which is the sum of all quantifiable values greater than 0.01 milligrams per liter (10 micrograms per liter) of the toxic organics listed in s. NR 215.03 A through E.

Subchapter I - Direct Discharges

NR 261.10 APPLICABILITY. The provisions of this subchapter are applicable to discharges of wastewater from the metal finishing point source category directly into waters of the state.

NR 261.11 COMPLIANCE DATES. Discharge of pollutants from facilities subject to the provisions of this subchapter may not exceed, as appropriate:

(1) By July 1, 1977 effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT);

(2) By July 1, 1984 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT);

(3) At the commencement of discharge for new source performance standards (NSPS).

NR 261.12 DISCHARGE STANDARDS. (1) BEST PRACTICABLE TECHNOLOGY (BPT). (a) Except as provided in par. (b) and s. NR 261.14, any existing point source subject to this subchapter shall, no later than July 1, 1977, achieve the following effluent limitations attainable by applying the best practicable control technology currently available:

Table 1
BPT Effluent Limitations (mg/l)

Pollutant or pollutant property[1]	1 day max.	monthly avg.
Cadmium (Cd)	0.69	0.26
Chromium (Cr)	2.77	1.71
Copper (Cu)	3.38	2.07
Lead (Pb)	0.69	0.43
Nickel (Ni)	3.98	2.38
Silver (Ag)	0.43	0.24
Zinc (Zn)	2.61	1.48
Cyanide (CN)	1.20	0.65
Total Toxic Organics (TTO)	2.13	--
Oil & Grease	52	26
Total Suspended Solids (TSS)	60	31
pH	6.0 - 9.5	6.0 - 9.5

[1]All metals and cyanide shall be determined in "total" form.

(b) For facilities with cyanide treatment, and upon approval of the department, an amenable cyanide limit (Cyanide, A) of 0.86 milligrams per liter (1 day max.) and 0.32 milligrams per liter (monthly avg.) may apply in place of the total cyanide limit specified in Table 1.

(c) No discharger subject to the provisions of this subsection may augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(2) BEST AVAILABLE TECHNOLOGY (BAT). (a) Except as provided in par. (b) and s. NR 261.14, any existing point source subject to this subchapter shall, no later than July 1, 1984, achieve the following effluent limitations attainable by applying the best available technology economically achievable:

Table 2
BAT Effluent Limitations (mg/l)

Pollutant or pollutant property[1]	1 day max.	monthly avg.
Cadmium (Cd)	0.69	0.26
Chromium (Cr)	2.77	1.71
Copper (Cu)	3.38	2.07
Lead (Pb)	0.69	0.43
Nickel (Ni)	3.98	2.38
Silver (Ag)	0.43	0.24
Zinc (Zn)	2.61	1.48
Cyanide (CN)	1.20	0.65
Total Toxic Organics (TTO)	2.13	----

[1]All metals and cyanide shall be determined in "total" form.

(b) For facilities with cyanide treatment, and upon approval of the department, an amenable cyanide limit (Cyanide, A) of 0.86 milligrams per liter (1 day max.) and 0.32 milligrams per liter (monthly avg.) may apply in place of the total cyanide limit specified in Table 2.

(c) No discharger subject to the provisions of this subsection may augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(3) NEW SOURCE PERFORMANCE STANDARDS (NSPS). (a) Except as provided in par. (b) and s. NR 261.14, any new source subject to this subchapter shall, at the commencement of discharge, achieve the following performance standards:

Table 3
NSPS (mg/l)

Pollutant or pollutant property[1]	1 day max.	monthly avg.
Cadmium (Cd)	0.11	0.07
Chromium (Cr)	2.77	1.71
Copper (Cu)	3.38	2.07
Lead (Pb)	0.69	0.43
Nickel (Ni)	3.98	2.38
Silver (Ag)	0.43	0.24
Zinc (Zn)	2.61	1.48
Cyanide (CN)	1.20	0.65
Total Toxic Organics (TTO)	2.13	--
Oil & Grease	52	26
Total Suspended Solids (TSS)	60	31
pH	6.0 - 9.5	6.0 - 9.5

[1]All metals and cyanide shall be determined in "total" form.

(b) For facilities with cyanide treatment, and upon approval of the department, an amenable cyanide limit (Cyanide, A) of 0.86 milligrams per liter (1 day max.) and 0.32 milligrams per liter (monthly avg.) may apply in place of the total cyanide limit specified in Table 3.

(c) No discharger subject to the provisions of this subsection may augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

NR 261.13 MONITORING REQUIREMENTS. (1) TOTAL TOXIC ORGANICS. (a) In place of monitoring for TTO, the department may allow dischargers to make the following certification statement:

> "Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the Department of Natural Resources."

(b) In requesting the certification alternative, a discharger shall submit a toxic organic management plan. The plan shall specify to the satisfaction of the department, the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater. The department shall incorporate the plan as a provision of the permit.

(c) If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analyze only for those pollutants reasonably expected to be present or those pollutants specified in the discharge permit.

(2) CYANIDE. Self-monitoring for cyanide shall be conducted after cyanide treatment but before dilution with other wastestreams. Alternatively, samples may be taken of the final effluent if the facility limitations are adjusted based on the dilution ratio of the cyanide wastestream flow to the effluent flow.

NR 261.14 MODIFICATION OF EFFLUENT LIMITATIONS. (1) The effluent limitations and standards set forth in this subchapter shall be used in accordance with this section to establish the quantity or quality of pollutants or pollutant properties which may be discharged by point sources subject to the provisions of this subchapter, except as:

(a) For BAT and NSPS purposes: 1. They may be superseded by more stringent limitations and standards necessary to achieve water quality standards or meet other legal requirements; or

2. They may be supplemented or superseded by standards or prohibitions for toxic pollutants or by additional limitations for other pollutants required to achieve water quality standards.

(b) For BPT purposes: An individual discharger or other interested person may submit evidence to the department that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the effluent limitations. On the basis of such evidence or other available information, the department shall make a written determination that such factors are or are not fundamentally different for that facility compared to those specified in the applicable sections of the EPA Development Document for Effluent Limitations Guidelines and Standards for the Metal Finishing Point Source Category (EPA 440/1-83/091, June 1983). If such fundamentally different factors are found to exist, the department may establish effluent limitations in the WPDES permit either more or less stringent than the limitations in this chapter, to the extent dictated by such fundamentally different factors. Such limitations shall be reviewed by EPA which may approve, disapprove, or specify other limitations.

NOTE: Copies of the development document identified in subd. 1. are available for inspection at the office of the department of natural resources, 101 S. Webster, Madison; the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20460.

Subchapter II - Indirect Discharges

NR 261.20 APPLICABILITY. The provisions of this subchapter are applicable to discharges of wastewater from the metal finishing processes as listed in s. NR 261.02(1) into publicly owned treatment works.

NR 261.21 COMPLIANCE DATES. Discharge of pollutants from facilities subject to the provisions of this subchapter may not exceed, as appropriate:

(1) By February 15, 1986 for pretreatment standards for existing sources (PSES);

(2) At the commencement of discharge for pretreatment standards for new sources (PSNS).

NR 261.22 DISCHARGE STANDARDS. (1) PRETREATMENT STANDARDS FOR EXISTING SOURCES (PSES). (a) Except as provided in par. (b), any existing source subject to this subchapter shall comply with ch. NR 211 and achieve, by February 15, 1986, the following pretreatment standards for existing sources:

Table 4
PSES (mg/l)

Pollutant or pollutant property[1]	1 day max.	monthly avg.
Cadmium (Cd)	0.69	0.26
Chromium (Cr)	2.77	1.71
Copper (Cu)	3.38	2.07
Lead (Pb)	0.69	0.43
Nickel (Ni)	3.98	2.38
Silver (Ag)	0.43	0.24
Zinc (Zn)	2.61	1.48
Cyanide (CN)	1.20	0.65
Total Toxic Organics (TTO)	4.57(by June 30, 1984)[2]	----
	2.13(by Feb. 15, 1986)	----

[1]All metals and cyanide shall be determined in "total" form.

[2]Metal finishing facilities which are covered by ch. NR 254 shall comply with the 4.57 mg/l TTO limitation by July 10, 1985.

(b) For facilities with cyanide treatment, and upon approval of the control authority, an amenable cyanide limit (Cyanide, A) of 0.86 milligrams per liter (1 day max.) and 0.32 milligrams per liter (monthly avg.) may apply in place of the total cyanide limit specified in Table 4.

(c) No discharger subject to the provisions of this subchapter may augment the use of process wastewater, or otherwise dilute the wastewater, as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(2) PRETREATMENT STANDARDS FOR NEW SOURCES (PSNS). (a) Except as provided in par. (b), any new source subject to this subchapter shall comply with ch. NR 211 and achieve, at the commencement of discharge, the following pretreatment standards for new sources:

Table 5
PSNS (mg/l)

Pollutants or pollutant property[1]	1 day max.	monthly avg.
Cadmium (Cd)	0.11	0.07
Chromium (Cr)	2.77	1.71
Copper (Cu)	3.38	2.07
Lead (Pb)	0.69	0.43
Nickel (Ni)	3.98	2.38
Silver (Ag)	0.43	0.24
Zinc (Zn)	2.61	1.48
Cyanide (CN)	1.20	0.65
Total Toxic Organics (TTO)	2.13	----

[1]All metals and cyanide shall be determined in "total" form.

(b) For facilities with cyanide treatment, and upon approval of the control authority, an amenable cyanide limit (Cyanide, A) of 0.86 milligrams per liter (1 day max.) and 0.32 milligrams per liter (monthly avg.) may apply in place of the total cyanide limit specified in Table 5.

(c) No discharger subject to the provisions of this subchapter may augment the use of process wastewater, or otherwise dilute the wastewater, as a partial or total substitute for adequate treatment to achieve compliance with this standard.

NR 261.23 MONITORING REQUIREMENTS. (1) TOTAL TOXIC ORGANICS. (a) In place of monitoring for TTO, the control authority may allow dischargers to make the following certification statement:

> "Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify

that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority."

(b) In requesting the certification alternative, a discharger shall submit a toxic organic management plan. The plan shall specify to the satisfaction of the control authority, the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

(c) If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analyze only for those pollutants reasonably expected to be present.

(d) A new or existing source submitting a certification pursuant to pars. (a) to (c) shall implement the toxic organic management plan approved by the control authority.

(2) CYANIDE. Self-monitoring for cyanide shall be conducted after cyanide treatment but before dilution with other wastestreams. Alternatively, samples may be taken of the final effluent if the facility limitations are adjusted based on the dilution ratio of the cyanide wastestream flow to the effluent flow.

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 18, 1986.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By Carroll D. Besadny
Carroll D. Besadny, Secretary

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