Chapter NR 230

INORGANIC CHEMICALS MANUFACTURING

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NR 230.001 Purpose. The purpose of this chapter is to establish effluent limitations, performance standards, and pretreatment standards for discharges of process wastes from the inorganic chemicals manufacturing point source category and its subcategories.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.002 Applicability. This chapter applies to any manufacturing operation which discharges or may discharge process wastewater pollutants to waters of the state or into a publicly owned treatment works and which produces any of the inorganic chemicals listed in table A:

Table A

aluminum fluoride	lithium
aluminum sulfate	nickel salts
ammonium chloride	nitrogen
borax	oxygen
boric acid	potassium metal
bromine	potassium chloride
cadmium pigments and salts	potassium dichromate
calcium carbide	potassium hydroxide
calcium carbonate	potassium iodide
calcium chloride	potassium sulfate
calcium hydroxide	silver nitrate
calcium oxide	sodium bicarbonate
carbon monoxide	sodium bisulfite
chlorine	sodium chlorate
chrome pigments	sodium chloride
chromic acid	sodium dichromate
cobalt salts	sodium fluoride
copper salts	sodium hydroxide
ferric chloride	sodium sulfate
fluorine	sodium sulfite
hydrofluoric acid	stannic oxide
hydrogen	titanium dioxide
hydrogen cyanide	zinc chloride
hydrogen peroxide	zinc sulfate
iodine	

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.003 General definitions. The following definitions are applicable to the terms used in this chapter. Definitions of other terms and abbreviations are set forth in ss. NR 205.03, 205.04, and 211.03.

(1) "Antimony" means the total antimony present in the process wastewater stream exiting the wastewater treatment system.

(2) "Arsenic" means the total arsenic present in the process wastewater stream exiting the wastewater treatment system.

(3) "Bitterns" means the saturated brine solution remaining after precipitation of sodium chloride in the solar evaporation process.

(4) "Cadmium" means the total cadmium present in the process wastewater stream exiting the wastewater treatment system.

(5) "Chlorine" means the total residual chlorine present in the process wastewater stream exiting the wastewater treatment system.

(6) "Chromium" means the total chromium present in the process wastewater stream exiting the wastewater treatment system.

(7) "Cobalt" means the total cobalt present in the process wastewater stream exiting the wastewater treatment system.

(8) "Copper" means the total copper present in the process wastewater stream exiting the treatment system.

(9) "Cyanide A" means cyanides amenable to chlorination as determined by the methods set forth in ch. NR 219, Table B, for parameter 24.

(10) "Existing source" means any point source, except a new source as defined in sub. (13), from which pollutants may be discharged either into waters of the state or into a publicly owned treatment works.

(11) "Lead" means the total lead present in the process wastewater stream exiting the wastewater treatment system.

(12) "Mercury" means the total mercury present in the process wastewater stream exiting the mercury treatment system.

(13) "New source" means any point source from which pollutants are or may be discharged directly to waters of the state or into a publicly owned treatment works and for which construction commenced after the date given in table B:

Table B

July 24, 1980	October 25, 1983
Aluminum fluoride	Borax
Aluminum sulfate	Bromine
Calcium carbide	Cadmium pigments and salts
Calcium chloride	Calcium hydroxide
Calcium oxide	Chromic acid
Chlor–alkali	Cobalt salts
Chrome pigments	Copper salts (other than
Copper salts (copper sulfate)	copper sulfate)
Hydrofluoric acid	Ferric chloride
Hydrogen cyanide	Fluorine
Nickel salts (nickel sulfate)	Iodine
Potassium dichromate	Lead monoxide
Potassium metal	Nickel salts (other than
Potassium sulfate	nickel sulfate)
Sodium bicarbonate	Potassium chloride
Sodium bisulfate	Sodium chlorate
Sodium chloride	Sodium fluoride
Sodium dichromate	Sodium sulfite
Sodium sulfate	Stannic oxide
Titanium dioxide	Zinc chloride
	Zinc sulfate

(14) "Nickel" means the total nickel present in the process wastewater stream exiting the wastewater treatment system.

(15) "Selenium" means the total selenium present in the process wastewater stream exiting the wastewater treatment system.

(16) "Zinc" means the total zinc present in the process wastewater stream exiting the wastewater treatment system.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.004 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 the aluminum chloride, aluminum sulfate, potassium dichromate, ferric chloride, lead monoxide, silver nitrate, or sodium fluoride subcategory which discharges process wastewater pollutants to a POTW shall achieve PSES by July 20, 1980.

(4) Any existing source subject to the copper salts, nickel salts, cadmium pigments and salts, cobalt salts, or zinc chloride subcategory which discharges process wastewater pollutants to a POTW shall achieve PSES by August 22, 1987, except for discharges from copper sulfate and nickel sulfate manufacturing operations.

(5) Any existing source not subject to sub. (3) or (4) which discharges process wastewater pollutants to a POTW shall achieve PSES by June 29, 1985.

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

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter I — Aluminum chloride

NR 230.01 Applicability; description of the aluminum chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of aluminum chloride.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.015 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 the pH of the discharge shall be within the range of 5.0 to 10.0.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter II — Aluminum sulfate

NR 230.02 Applicability; description of the aluminum sulfate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of aluminum sulfate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.022 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR125.30 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 application of BPT.

(2) Except as provided in subs. (3), (4), and (5), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 10–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of the precipitation attributable to the 10–year, 24–hour rainfall event, when such an event occurs.

(4) During any calendar month, a process wastewater impoundment may discharge a volume equivalent to whatever is the greater of the following:

(a) The difference between the precipitation for that month which falls within the impoundment and the evaporation for that month; or

(b) The difference between the mean precipitation for that month which falls within the impoundment and the mean evaporation for that month as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration or as otherwise established if no monthly evaporation has been determined by the national climatic center.

(5) Any process wastewater discharged according to sub. (3) shall comply with the following effluent limitations representing BPT:

Table 1
Aluminum Sulfate

BPT Effluent Limitations		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	50	25
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.023 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT.

(2) Except as provided in sub. (3), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.024 New source performance standards. (1) Except as provided in sub. (2), any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

(2) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.025 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 PSES:

Table 2
Aluminum Sulfate

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Zinc	5.0	2.5

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.026 Pretreatment standards for new sources. Except as provided in s. NR 211.13 and sub. (2), any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the standards set forth in s. NR 230.024.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter III — Calcium carbide

NR 230.03 Applicability; description of the calcium carbide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of calcium carbide in uncovered furnaces.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.032 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 CFR 125.30 to 125.32, any

existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.033 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.034 New source performance standards. Any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.036 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter IV — Calcium chloride

NR 230.04 Applicability; description of the calcium chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of calcium chloride by the brine extraction process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.042 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 3
Calcium Chloride

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of calcium chloride	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.016	0.0082
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.043 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.044 New source performance standards. Any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.046 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter V — Calcium oxide

NR 230.05 Applicability; description of the calcium oxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of calcium oxide.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.052 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT.

(2) Except as provided in subs. (3), (4), and (5), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 10–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of the precipitation attributable to the 10–year, 24–hour rainfall event, when such an event occurs.

(4) During any calender month, a process wastewater impoundment may discharge a volume equivalent to whatever is the greater of the following:

(a) The difference between the precipitation for that month which falls within the impoundment and the evaporation for that month; or

(b) The difference between the mean precipitation for that month which falls within the impoundment and the mean evaporation for that month as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration or as otherwise established if no monthly evaporation has been determined by the national climatic center.

(5) Any process wastewater discharged according to sub. (4) shall comply with the following effluent limitations:

Table 4
Calcium Oxide

BAT Effluent Limitations		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	50	25
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.053 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT.

(2) Except as provided in sub. (3), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that

attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.054 New source performance standards. **(1)** Except as provided in sub. (2), any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

(2) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.056 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 standards set forth in s. NR 230.054.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter VI — Chlor–alkali

NR 230.06 Applicability; description of the chlor–alkali subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of chlorine and either sodium hydroxide or potassium hydroxide by the diaphragm cell process and by the mercury cell process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.062 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 5
Chlor–Alkali Mercury Cells

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.64	0.32
Mercury	0.00028	0.00014
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 6
Chlor–Alkali Diaphragm Cells

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	1.1	0.51
Copper	0.018	0.0070
Lead	0.026	0.010
Nickel	0.014	0.0056
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.063 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT:

Table 7
Chlor–Alkali Mercury Cells

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Mercury	0.00023	0.00010
Total residual chlorine	0.0032	0.0019

Table 8
Chlor–Alkali Diaphragm Cells

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	0.012	0.0049
Lead	0.0059	0.0024
Nickel	0.0097	0.0037
Total residual chlorine	0.013	0.0079

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.064 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 9
Chlor–Alkali Mercury Cells

NSPS		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.64	0.32
Mercury	0.00023	0.00010
Total residual chlorine	0.0032	0.0019
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 10
Chlor–Alkali Diaphragm Cells

NSPS		
	kg/kkg (pounds per 1,000 pounds) of chlorine	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	1.1	0.51
Lead	0.0047	0.0019
Total residual chlorine	0.013	0.0079
pH	(1)	(1)

(1)Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.065 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any new [existing] source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 11
Chlor–Alkali Diaphragm Cells(1)

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	2.1	0.80
Lead	2.9	1.1
Nickel	1.6	0.64

(1)When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.062 for copper, lead, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.066 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 PSNS:

Table 12
Chlor–Alkali Mercury Cells(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Mercury	0.11	0.048

(1)When a POTW finds that mass limitations are necessary, the PSNS shall be the limitations set forth in s. NR 230.064 for mercury.

Table 13
Chlor–Alkali Diaphragm Cells(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Lead	0.53	0.21

(1)When a POTW finds that mass limitations are necessary, the PSNS shall be the limitations set forth in s. NR 230.064 for lead.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.067 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter using the mercury cell process shall achieve the effluent limitations set forth in s. NR 230.062 for TSS and pH for chlor–alkali mercury cells.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter VIII — Hydrofluoric acid

NR 230.08 Applicability; description of the hydrofluoric acid subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of hydrofluoric acid.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.082 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 14
Hydrofluoric Acid

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of hydrofluoric acid	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	11.0	5.3
Fluoride	6.1	2.9
Nickel	0.036	0.011
Zinc	0.12	0.036
pH	(1)	(1)

(1)Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.083 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT:

Table 15
Hydrofluoric Acid

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of hydrofluoric acid	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Fluoride	3.4	1.6
Nickel	0.020	0.0060
Zinc	0.072	0.022

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.084 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 16
Hydrofluoric Acid

NSPS		
	kg/kkg (pounds per 1,000 pounds) of hydrofluoric acid	
Pollutant orpollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	6.0	3.0
Fluoride	3.4	1.6
Nickel	0.020	0.0060
Zinc	0.072	0.022
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.086 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 PSNS:

Table 17
Hydrofluoric Acid(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Fluoride	100	50
Nickel	0.66	0.20
Zinc	2.2	0.66

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.084 for fluoride, nickel, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter IX — Hydrogen peroxide

NR 230.09 Applicability; description of the hydrogen peroxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of hydrogen peroxide by the electrolytic process and by the oxidation of alkyl hydroanthraquinones.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.092 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 18
Hydrogen Peroxide Organic Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of 100% hydrogen peroxide solution	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.80	0.40
TOC	0.44	0.22
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 19
Hydrogen Peroxide Electrolyte Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of 100% hydrogen peroxide solution	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.0050	0.0025
Cyanide A	0.00040	0.00020
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XI — Potassium metal

NR 230.11 Applicability; description of the potassium metal subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of potassium metal.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.112 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.113 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.114 New source performance standards. Any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.116 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XII — Potassium dichromate

NR 230.12 Applicability; description of the potassium dichromate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of potassium dichromate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.122 Effluent limitations representing the degree of effluent reduction attainable by the applica-

tion of the best practicable control technology currently available. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.123 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.124 New source performance standards. Any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.125 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any new [existing] source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 20
Potassium Dichromate

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Hexavalent chromium	0.25	0.090
Total Chromium	3.0	1.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.126 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XIII — Potassium sulfate

NR 230.13 Applicability; description of the potassium sulfate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of potassium sulfate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.132 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT.

(2) Except as provided in subs. (3), (4), and (5), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 10–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 10–year, 24–hour rainfall event, when such an event occurs.

(4) During any calendar month, a process wastewater impoundment may discharge a volume equivalent to the greater of the following:

(a) The difference between the precipitation for that month which falls within the impoundment and the evaporation for that month;

(b) The difference between the mean precipitation for that month which falls within the impoundment and the mean evaporation for that month as established by the national climatic center, national oceanic and atmospheric administration for the impoundment's location or as otherwise established if no monthly evaporation has been determined by the national climatic center.

(5) Any process wastewater discharged pursuant to sub. (4) shall comply with the following limitations:

Table 21
Potassium Sulfate

BPT Effluent Limitations		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	50	25
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.133 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT.

(2) Except as provided in sub. (3), process wastewater pollutants may not be discharged to waters of the state.

(3) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.134 New source performance standards. (1) Except as provided in sub. (2), any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

(2) If a process wastewater impoundment is designed, constructed, and operated to contain the precipitation from the 25–year, 24–hour rainfall event as established for the impoundment's location by the national climatic center, national oceanic and atmospheric administration, the impoundment may discharge a volume of process wastewater equivalent to the volume of precipitation which falls within the impoundment in excess of that attributable to the 25–year, 24–hour rainfall event, when such an event occurs.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.136 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 standards set forth in s. NR 230.134.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XIV — Sodium bicarbonate

NR 230.14 Applicability; description of the sodium bicarbonate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium bicarbonate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.142 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.143 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.144 New source performance standards. Any new source subject to this subchapter may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.146 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XVI — Sodium chloride

NR 230.16 Applicability; description of the sodium chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium chloride by the solution brine mining process and by the solar evaporation process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.162 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) SOLAR EVAPORATION. (a) Except as provided in 40 CFR 125.30 to 125.32 and par. (b), any existing point source subject to this subchapter which uses the solar evaporation procedure may not discharge process wastewater pollutants to waters of the state.

(b) If no additional pollutants are added to the bitterns during production of sodium chloride, unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn.

(2) SOLUTION BRINE MINING. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses the solution brine mining process shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 22
Sodium Chloride Brine Mining Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium chloride	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.34	0.17
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.163 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. (1) SOLAR EVAPORATION. (a) Except as provided in 40 CFR 125.30 to 125.32 and par. (b), any existing point source subject to this subchapter which uses the solar evaporation procedure may not discharge process wastewater pollutants to waters of the state.

(b) If no additional pollutants are added to the bitterns during production of sodium chloride, unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.164 New source performance standards. (1) SOLAR EVAPORATION. (a) Except as provided in par. (b), any new source subject to this subchapter which uses the solar evaporation process may not discharge process wastewater pollutants to waters of the state.

(b) If no additional pollutants are added to the bitterns during production of sodium chloride, unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn.

(2) SOLUTION BRINE MINING. Any new source subject to this subchapter which uses the solution brine mining process may not discharge process wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.166 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 shall achieve the standards set forth in s. NR 230.164.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XVII — Sodium dichromate and sodium sulfate

NR 230.17 Applicability; description of the sodium dichromate and sodium sulfate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium dichromate and byproduct sodium sulfate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.172 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the

following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 23
Sodium Dichromate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium dichromate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.44	0.22
Hexavalent Chromium	0.00090	0.00050
Total Chromium	0.0088	0.0044
Nickel	0.0068	0.0034
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.173 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.172 for total chromium, hexavalent chromium, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.174 New source performance standards. Any new source subject to this subchapter shall achieve the standards set forth in s. NR 230.172.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.176 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 shall achieve the following PSNS:

Table 24
Sodium Dichromate(1)

PSNS		
	kg/kkg (pounds per 1,000 pounds) of sodium dichromate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Total Chromium	1.0	0.50
Hexavalent Chromium	0.11	0.060
Nickel	0.80	0.40

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.172 for total chromium, hexavalent chromium, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.177 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.172 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XX — Sodium sulfite

NR 230.20 Applicability; description of the sodium sulfite subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium sulfite by reacting sulfur dioxide with sodium carbonate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.202 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 25
Sodium Sulfite

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium sulfite	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.032	0.016
COD	3.4	1.7
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.203 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32 any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 26
Sodium Sulfite

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium sulfite	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Chromium	0.0020	0.00063
Zinc	0.0051	0.0015
COD	3.4	1.7

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.204 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 27
Sodium Sulfite

NSPS		
	kg/kkg (pounds per 1,000 pounds) of sodium sulfite	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.032	0.016
Chromium	0.0020	0.00063
Zinc	0.0051	0.0015
COD	3.4	1.7
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.206 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 shall achieve the following PSNS:

Table 28
Sodium Sulfite

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Chromium	1.3	0.42
Zinc	3.4	1.2
COD	1260	630

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.204 for total chromium, total zinc, and COD.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXII — Titanium dioxide

NR 230.22 Applicability; description of the titanium dioxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of titanium dioxide by the sulfate process, the chloride process, and the chloride–ilmenite process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.222 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 29
Titanium Dioxide Sulfate Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	140	38
Chromium	0.48	0.21
Nickel	0.29	0.14
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 30
Titanium Dioxide Chloride Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	23	6.4
Chromium	0.057	0.030
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 31
Titanium Dioxide Chloride–Ilmenite Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	35	9.6
Chromium	0.12	0.053
Nickel	0.072	0.035
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.223 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32 any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.222 for chromium and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.224 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 32
Titanium Dioxide Sulfate Process

NSPS		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	110	30
Iron	4.1	1.2
Chromium	0.27	0.14
Nickel	0.18	0.095
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 33
Titanium Dioxide Chloride Process

NSPS		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	14	4.0
Iron	0.52	0.16
Chromium	0.023	0.012
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 34
Titanium Dioxide Chloride–Ilmenite Process

NSPS		
	kg/kkg (pounds per 1,000 pounds) of titanium dioxide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	8.4	2.4
Iron	0.32	0.096
Chromium	0.014	0.0072
Nickel	0.020	0.010
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.226 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 shall achieve the following PSNS:

Table 34–A
Titanium Dioxide Sulfate Process(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Iron	8.5	2.5
Chromium	0.57	0.30
Nickel	0.38	0.20

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.224 for chromium, iron, and nickel.

Table 35
Titanium Dioxide Chloride Process(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Iron	5.3	1.6
Chromium	0.23	0.12

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.224 for chromium, iron, and nickel.

Table 36
Titanium Dioxide Chloride–Ilmenite Process(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Iron	5.3	1.6
Chromium	0.23	0.12
Nickel	0.33	0.17

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the standards set forth in s. NR 230.224 for chromium, iron, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.227 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.222 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXIII — Aluminum fluoride

NR 230.23 Applicability; description of the aluminum fluoride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of aluminum fluoride by the dry process in which partially dehydrated alumina hydrate is reacted with hydrofluoric acid gas.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.232 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 37
Aluminum Fluoride

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of aluminum fluoride	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	2.4	1.2
Fluoride	1.3	0.63
Chromium	0.015	0.0045
Nickel	0.0079	0.0024
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.233 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32 any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.232 for fluoride, chromium, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.234 New source performance standards. Any new source subject to this subchapter shall achieve the standards set forth in s. NR 230.232.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.237 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32 any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.232 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXIV — Ammonium chloride

NR 230.24 Applicability; description of the ammonium chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of ammonium chloride by the reaction of anhydrous ammonia with hydrogen chloride gas and by the recovery process from Solvay process wastes.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.241 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.2415 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.242 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which reacts anhydrous ammonia with hydrogen gas may not discharge process wastewater pollutants to waters of the state.

(2) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses the recovery process from Solvay process wastes shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 38
Ammonium Chloride

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of ammonium chloride	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Ammonia (as N)	8.8	4.4
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXVII — Borax

NR 230.27 Applicability; description of the borax subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of borax by the ore mining process and by the Trona process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.272 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state, but residual brine and depleted liquor may be returned to the body of water from which the process brine solution was originally drawn.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.276 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 limitations set forth in s. NR 230.272.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXVIII — Boric acid

NR 230.28 Applicability; description of the boric acid subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of boric acid from either ore mined borax or borax produced by the Trona process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.282 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses borax made by the Trona process may not discharge process wastewater pollutants into waters of the state, but residual brine and depleted liquor may be returned to the body of water from which the process brine solution was originally withdrawn.

(2) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses ore mined borax shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 39
Boric Acid Ore Mined Borax Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of boric acid	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Arsenic	0.0028	0.0014
TSS	0.14	0.07
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXIX — Bromine

NR 230.29 Applicability; description of the bromine subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of bromine by the brine mining process and by the Trona process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.292 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants to waters of the state, but residual brine and depleted liquor may be returned to the body of water from which the process brine solution was originally withdrawn.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.296 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 limitations set forth in s. NR 230.292.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXX — Calcium carbonate

NR 230.30 Applicability; description of the calcium carbonate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of calcium carbonate by the milk of lime process and by the recovery process from Solvay process wastes.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.302 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 40
Calcium Carbonate Milk Of Lime Process

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of calcium carbonate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.56	0.28
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 41
Calcium Carbonate Solvay Recovery Process

BPT Effluent Limitations		
	Maximum for any 1 day	Average of daily values for 30 consecutive days
Pollutant or pollutant property	kg/kkg (pounds per 1,000 pounds) of calcium carbonate	
TSS	1.16	0.58
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXI — Calcium hydroxide

NR 230.31 Applicability; description of the calcium hydroxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of calcium hydroxide by the lime slaking process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.311 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product, if all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.312 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.316 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXIII — Carbon monoxide and byproduct hydrogen

NR 230.33 Applicability; description of the carbon monoxide and byproduct hydrogen subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of carbon monoxide and byproduct hydrogen by the reforming process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.332 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 42
Carbon Monoxide and Byproduct Hydrogen

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of carbon monoxide and hydrogen	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
COD	0.50	0.25
TSS	0.12	0.060
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXIV – Chrome pigments

NR 230.34 Applicability; description of the chrome pigments subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of chrome yellow, chrome orange, molybdate chrome orange, anhydrous and hydrous chromium oxide, chrome green, and zinc yellow.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.342 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 CFR 125.30 to 125.32, any

existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 43
Chrome Pigments

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of chrome pigments	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	9.1	3.8
Chromium	0.31	0.13
Lead	0.36	0.15
Zinc	0.31	0.13
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.343 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve limitations set forth in s. NR 230.342 for chromium, lead, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.344 New source performance standards. Any new source subject to this subchapter shall achieve the limitations set forth in s. NR 230.342.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.345 Pretreatment standards for existing sources. (1) Except as provided in ss. NR 211.13 and 211.14 and sub. (2), any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 44
Chrome Pigments(1)

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Chromium	2.9	1.2
Lead	3.4	1.4
Zinc	2.9	1.2

(1) When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.342 for chromium, lead, and zinc.

(2) Existing sources which annually introduce less than 210,000 cubic meters (55 million gallons) of chrome pigments process wastewater into a POTW shall comply with ch. NR 211.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.346 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 standards set forth in s. NR 230.345.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.347 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.342 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXV — Chromic acid

NR 230.35 Applicability; description of the chromic acid subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of chromic acid by facilities which also manufacture sodium dichromate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.352 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.172.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.356 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 standards set forth in s. NR 230.172.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXVI — Copper salts

NR 230.36 Applicability; description of the copper salts subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of copper salts, such as copper sulfate, copper chloride, copper iodide, copper nitrate, and copper carbonate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.362 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 45
Copper Sulfate, Copper Chloride, Copper Iodide, and Copper Nitrate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of copper salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.069	0.023
Copper	0.0030	0.0010
Nickel	0.0060	0.0020
Selenium	0.0015	0.00050
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 46
Copper Carbonate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of copper salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	4.2	1.4
Copper	0.19	0.064
Nickel	0.37	0.12
Selenium	0.093	0.031
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.363 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve limitations set forth in s. NR 230.362 for copper, nickel, and selenium.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.364 New source performance standards. Any new [existing] source subject to this subchapter shall achieve the limitations set forth in s. NR 230.362.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.365 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any new [existing] source subject to the copper salts subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 47
Copper Sulfate, Copper Chloride, Copper Iodide, Copper Nitrate, and Copper Carbonate(1)

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	3.2	1.1
Nickel	6.4	2.1
Selenium	1.6	0.53

(1) When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.362 for copper, nickel, and selenium.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.366 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 standards set forth in s. NR 230.365.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.367 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.362 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XXXVIII — Ferric chloride

NR 230.38 Applicability; description of the ferric chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of ferric chloride from pickle liquor.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.381 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.3815 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.382 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.385 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 pollut-

ants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 48
Ferric Chloride

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Total Chromium	3.0	1.0
Hexavalent Chromium	0.25	0.09
Copper	1.0	0.50
Nickel	2.0	1.0
Zinc	5.0	2.5

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.386 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

Subchapter XL — Fluorine

NR 230.40 Applicability; description of the fluorine subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of fluorine by the liquid hydrofluoric acid electrolysis process.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.401 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.4015 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.402 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.406 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

Subchapter XLI — Hydrogen

NR 230.41 Applicability; description of the hydrogen subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of hydrogen as a refinery byproduct.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.411 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product, if all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.412 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state, except as provided in ch. NR 279.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

Subchapter XLII — Hydrogen cyanide

NR 230.42 Applicability; description of the hydrogen cyanide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of hydrogen cyanide by the Andrussow process.

History: Cr. Register, September, 1990, No. 417, eff. 10-1-90.

NR 230.422 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 49
Hydrogen Cyanide

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of hydrogen cyanide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	8.6	3.2
Cyanide A	0.10	0.021
Total cyanide	0.65	0.23
pH	(1)	(1)

(1) Within the range of 6.0 to 10.5

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.423 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BAT:

Table 50
Hydrogen Cyanide

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of hydrogen cyanide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Cyanide A	0.10	0.021
Total cyanide	0.65	0.23
Total residual chlorine	0.086	0.051

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.424 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 51
Hydrogen Cyanide

NSPS		
	kg/kkg (pounds per 1,000 pounds) of hydrogen cyanide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	8.6	3.2
Cyanide A	0.10	0.021
Total cyanide	0.65	0.23
Total residual chlorine	0.086	0.051
pH	(1)	(1)

(1) Within the range of 6.0 to 10.5

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.426 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 PSNS:

Table 52
Hydrogen Cyanide(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Cyanide A	1.7	0.36
Total cyanide	11	4.0

(1) When a POTW finds that mass limitations are necessary, the PSNS shall be the limitations set forth in s. NR 230.424 for cyanide A and total cyanide.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.427 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.422 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XLIII — Iodine

NR 230.43 Applicability; description of the iodine subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of iodine.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.431 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product, if all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.432 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.436 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XLIV — Lead monoxide

NR 230.44 Applicability; description of the lead monoxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of lead monoxide.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.441 Specialized definitions. The following definitions apply to the terms used in this subcategory:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.4415 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.442 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge process wastewater pollutants into waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.445 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and NR 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 PSES:

Table 53
Lead Monoxide

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Lead	2.0	1.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.446 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XLV — Lithium carbonate

NR 230.45 Applicability; description of the lithium carbonate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of lithium carbonate by the Trona process and from spodumene ore.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.452 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available. (1) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses the Trona process may not discharge process wastewater pollutants to waters of the state, but residual brine and depleted liquor may be returned to the water body from which the process brine solution was originally withdrawn.

(2) Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter which uses spodumene ore shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 54
Lithium Carbonate From Spodumene Ore

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of lithium carbonate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	2.7	0.90
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter XLVII — Nickel salts

NR 230.47 Applicability; description of the nickel salts subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of nickel salts, such as nickel sulfate, nickel chloride, nickel nitrate, nickel fluoborate, and nickel carbonate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.472 Effluent limitations representing the degree of effluent reduction attainable by the applica-

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

Table 55
Nickel Sulfate, Nickel Chloride, Nickel Nitrate, and Nickel Fluoborate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of nickel salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.096	0.032
Nickel	0.0060	0.0020
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0.

Table 56
Nickel Carbonate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of nickel carbonate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	17	5.6
Nickel	1.1	0.35
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.473 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction obtainable by the application of BAT:

Table 57
Nickel Sulfate, Nickel Chloride, Nickel Nitrate, and Nickel Fluoborate

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of nickel salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	0.00074	0.00024
Nickel	0.00074	0.00024

Table 58
Nickel Carbonate

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of nickel carbonate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	0.13	0.042
Nickel	0.13	0.042

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.474 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 59
Nickel Sulfate, Nickel Chloride, Nickel Nitrate, and Nickel Fluoborate

NSPS		
	kg/kkg (pounds per 1,000 pounds) of nickel salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.096	0.032
Copper	0.00074	0.00024
Nickel	0.00074	0.00024
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 60
Nickel Carbonate

NSPS		
	kg/kkg (pounds per 1,000 pounds) of nickel carbonate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	17	5.6
Copper	0.13	0.042
Nickel	0.13	0.042
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.475 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any new [existing] source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following PSES:

Table 61
Nickel Sulfate, Nickel Chloride, Nickel Nitrate, Nickel Fluoborate and Nickel Carbonate(1)

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Copper	1.1	0.36
Nickel	1.1	0.36

(1) When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.473 for copper and nickel.

NR 230.476 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 standards set forth in s. NR 230.475.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.477 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.472 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter IL — Oxygen and nitrogen

NR 230.49 Applicability; description of the oxygen and nitrogen subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of

pollutants into POTWs from the production of oxygen and nitrogen by air liquefaction.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.492 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 62
Oxygen and Nitrogen

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of oxygen and nitrogen	
Pollutant orn pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Oil and grease	0.0020	0.0010
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter L — Potassium chloride

NR 230.50 Applicability; description of the potassium chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of potassium chloride by the Trona process and by the mining process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.502 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge wastewater pollutants to waters of the state, but residual brine and depleted liquor may be returned to the water body from which the process brine solution was originally withdrawn.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.506 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 limitations set forth in s. NR 230.502.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LI — Potassium iodide

NR 230.51 Applicability; description of the potassium iodide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of potassium iodide.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.512 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 63
Potassium Iodide

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of potassium iodide	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.090	0.030
Sulfide	0.015	0.0050
Iron	0.015	0.0050
Barium	0.0090	0.0030
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LIII — Silver nitrate

NR 230.53 Applicability; description of the silver nitrate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of silver nitrate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.532 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 64
Silver Nitrate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of silver nitrate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Silver	0.0090	0.0030
TSS	0.069	0.023
pH	(1)	(1)

(1) Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.535 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 PSES:

Table 65
Silver Nitrate

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Silver	1.0	0.5

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LIV — Sodium bisulfite

NR 230.54 Applicability; description of the sodium bisulfite subcategory. This subchapter applies to the dis-

charge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium bisulfite.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.542 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 66
Sodium Bisulfite

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium bisulfite	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.32	0.080
COD	3.8	0.95
Chromium	0.0020	0.00063
Zinc	0.0051	0.0015
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.543 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.542 for COD, chromium, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.544 New source performance standards. Any new source subject to this subchapter shall achieve the limitations set forth in s. NR 230.542.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.546 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 PSNS:

Table 67
Sodium Bisulfite(1)

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Chromium	1.3	0.42

(1) When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.542 for chromium.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.547 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.542 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LV — Sodium fluoride

NR 230.55 Applicability; description of the sodium fluoride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium fluoride by the anhydrous neutralization process and by the silico fluoride process.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.551 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.5515 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.552 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.555 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 PSES:

Table 68
Sodium Fluoride

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Fluoride	50	25

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.556 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LX — Stannic oxide

NR 230.60 Applicability; description of the stannic oxide subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollut-

ants into POTWs from the production of stannic oxide by the reaction of tin metal with air or oxygen.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.601 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.6015 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.602 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.606 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LXIII — Zinc sulfate

NR 230.63 Applicability; description of the zinc sulfate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of zinc sulfate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.631 Specialized definitions. The following definitions apply to the terms used in this subchapter:

(1) "Contaminated nonprocess wastewater" means any water which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, byproduct, or waste product.

(2) "Incidental contact" means contact resulting from:

(a) Rainfall runoff;

(b) Accidental spills;

(c) Accidental leaks which are caused by failure of process equipment and which are repaired within the shortest reasonable time not to exceed 24 hours after discovery; and

(d) Discharges from safety showers and related personal safety equipment.

(3) "Process wastewater" means any water which, during manufacturing or processing, comes into contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product, except for contaminated nonprocess wastewater.

(4) "Process wastewater pollutants" means pollutants present in the process wastewater.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.6315 Regulation of contaminated nonprocess wastewater. Contaminated nonprocess wastewater shall be regulated as process wastewater unless all reasonable measures have been taken to prevent, reduce, and control incidental contact and to mitigate the effects of incidental contact after it has occurred.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.632 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter may not discharge wastewater pollutants to waters of the state.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.636 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 may not discharge process wastewater pollutants into a POTW.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LXIV — Cadmium pigments and salts

NR 230.64 Applicability; description of the cadmium pigments and salts subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of cadmium pigments and salts, such as cadmium chloride, cadmium nitrate, and cadmium sulfate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.642 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by application of BPT:

Table 69
Cadmium Pigments

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of cadmium pigments	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	2.59	1.57
Cadmium	0.078	0.026
Selenium	0.11	0.037
Zinc	0.017	0.0092
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

Table 70
Cadmium Salts

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of cadmium salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.0016	0.001
Cadmium	0.0000487	0.0000162
Selenium	0.000070	0.000023
Zinc	0.0000104	0.0000058
pH	(1)	(1)

(1) Within the range of 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.643 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.642 for cadmium, selenium, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.644 New source performance standards. Any new source subject to this subchapter shall achieve the limitations set forth in s. NR 230.642.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.645 Pretreatment standards for existing sources. (1) 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 PSES:

Table 71
Cadmium Pigments and Salts(1)

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Cadmium	0.84	0.28
Selenium	1.1	0.40
Zinc	0.18	0.10

(1) When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.642 for cadmium, selenium, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.646 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 standards set forth in s. NR 230.645 for cadmium, selenium, and zinc.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.647 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.642 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LXV — Cobalt salts

NR 230.65 Applicability; description of the cobalt salts subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of cobalt salts.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.652 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 72
Cobalt Salts

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of cobalt salts	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.0023	0.0014
Cobalt	0.0003	0.00012
Copper	0.00027	0.000083
Nickel	0.00027	0.000083
pH	(1)	(1)

(1) Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.653 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the limitations set forth in s. NR 230.652 for cobalt, copper, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.654 New source performance standards. Any new source subject to this subchapter shall achieve the limitations set forth in s. NR 230.652.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.655 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 PSES:

Table 73
Cobalt Salts[1]

PSES		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Cobalt	3.6	1.4
Copper	3.3	1.0
Nickel	3.3	1.0

[1] When a POTW finds that mass limitations are necessary, the PSES shall be the limitations set forth in s. NR 230.652 for cobalt, copper, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.656 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 standards set forth in s. NR 230.655 for cobalt, copper, and nickel.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.657 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.652 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LXVI — Sodium chlorate

NR 230.66 Applicability; description of the sodium chlorate subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of sodium chlorate.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.662 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 74
Sodium Chlorate

BPT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium chlorate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.12	0.068
Antimony	0.0086	0.0043
Chromium	0.0027	0.0014
Chlorine	0.0041	0.0024
pH	(1)	(1)

(1) Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.663 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 75
Sodium Chlorate

BAT Effluent Limitations		
	kg/kkg (pounds per 1,000 pounds) of sodium chlorate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Antimony	0.0043	0.0022
Chromium	0.0017	0.00086
Chlorine	0.0041	0.0024

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.664 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 76
Sodium Chlorate

NSPS		
	kg/kkg (pounds per 1,000 pounds) of sodium chlorate	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	0.076	0.046
Antimony	0.0043	0.0022
Chromium	0.0017	0.00086
Chlorine	0.0041	0.0024
pH	(1)	(1)

[1] Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.666 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 PSNS:

Table 77
Sodium Chlorate[1]

PSNS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Antimony	1.6	0.8
Chromium	0.64	0.32

[1] When a POTW finds that mass limitations are necessary, the PSNS shall be the limitations set forth in s. NR 230.663 for antimony and chromium.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.667 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.662 for TSS and pH.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

Subchapter LXVII — Zinc chloride

NR 230.67 Applicability; description of the zinc chloride subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from the production of zinc chloride.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.672 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 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

Table 78
Zinc Chloride

BPT Effluent Limitations		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	43	25
Arsenic	3.0	1.0
Zinc	11.4	3.8
Lead	1.8	0.6
pH	(1)	(1)

[1] Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.673 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

Table 79
Zinc Chloride

BAT Effluent Limitations		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
Arsenic	3.0	1.0
Zinc	2.3	0.76
Lead	0.18	0.048

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.674 New source performance standards. Any new source subject to this subchapter shall achieve the following NSPS:

Table 80
Zinc Chloride

NSPS		
	milligrams per liter	
Pollutant or pollutant property	Maximum for any 1 day	Average of daily values for 30 consecutive days
TSS	28	17
Arsenic	3.0	1.0
Zinc	2.3	0.76
Lead	0.18	0.048
pH	(1)	(1)

[1] Within the range 6.0 to 9.0

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.675 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 limitations set forth in s. NR 230.673.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.676 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 limitations set forth in s. NR 230.673.

History: Cr. Register, September, 1990, No. 417, eff. 10–1–90.

NR 230.677 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology. Except as provided in 40 CFR 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the effluent limitations set forth in s. NR 230.672 for TSS and pH.

Note: The Wisconsin administrative code corresponds to the code of federal regulations as cross referenced in the following table:

State Code	Corresponding Federal Regulation
s. NR 205.03	40 CFR s. 401.11
s. NR 205.04	40 CFR s. 401.11
ch. NR 211	40 CFR Part 403
s. NR 211.03	40 CFR s. 403.3
s. NR 211.13	40 CFR s. 403.7
s. NR 211.14	40 CFR s. 403.13
ch. NR 219	40 CFR Part 136
ch. NR 230	40 CFR Part 415
ch. NR 279	40 CFR Part 419