Chapter NR 270

ORE MINING AND DRESSING

NR 270.001 Purpose. The purpose of this chapter is to establish effluent limitations and standards of performance for discharges of process wastes from the ore mining and dressing category of point sources and its subcategories.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.0015 Applicability. Abbreviations and methods of analysis set forth in 40 CFR Part 401 shall apply to this chapter except as provided in ss. NR 270.002 and 270.003. The general provisions and definitions apply to all subcategories of this chapter unless otherwise noted.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.002 General definitions. In addition to the definitions set forth in 40 CFR Part 401, the following definitions apply to this chapter:

c1d XActive mining areaY is a place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

c2d XAnnual precipitationY and Xannual evaporationY are the mean annual precipitation and mean annual lake evaporation, respectively, as established by the U.S. department of commerce, environmental science services administration, environmental data services, or equivalent regional rainfall and evaporation data.

c3d XAppropriate treatment of the recycle waterY includes, but is not limited to pH adjustment, settling and pH adjustment, settling, and mixed media filtration.

c4d XExisting sourceY means any source that is not a new source.

c5d XGroundwater infiltrationY means that water which enters the treatment facility as a result of the interception of natural springs, aquifers, or run-off which percolates into the ground and seeps into the treatment facility[s tailings pond or wastewater holding facility and that cannot be diverted by ditching or grouting the tailings pond or wastewater holding facility.

c6d XIn-situ leach methodsY means the processes involving the purposeful introduction of suitable leaching solutions into a uranium ore body to dissolve the valuable minerals in place and the purposeful leaching of uranium ore in a static or semistatic condition either by gravity through an open pile, or by flooding a confined ore pile. It does not include the natural dissolution of uranium by groundwaters, the incidental leaching of uranium by mine drainage, nor the rehabilitation of aquifers and the monitoring of these aquifers.

c7d XMillY means a preparation facility within which the metal ore is cleaned, concentrated, or otherwise processed before

it is shipped to the customer, refiner, smelter, or manufacturer. A mill includes all ancillary operations and structures necessary to clean, concentrate, or otherwise process metal ore, such as ore and gangue storage areas and loading facilities.

c8d XMineY is an active mining area, including all land and property placed under, or above the surface of such land, used in or resulting from the work of extracting metal ore or minerals from their natural deposits by any means or method, including secondary recovery of metal ore from refuse or other storage piles, wastes, or rock dumps and mill tailings derived from the mining, cleaning or concentration of metal ores.

c9d XMine drainageY means any water drained, pumped, or siphoned from a mine.

c10d XNavigable waterY has the meaning designated in s. 281.31 c2d cdd, Stats.

c11d XNew source,Y as defined for BPT, BAT, BCT, and NSPS, means any point source the construction of which commenced after January 17, 1983.

c12d XTen year, 24-hour precipitation eventY is the maximum 24-hour precipitation event with a probable recurrence interval of once in 10 years as established by the U.S. department of commerce, national oceanic and atmospheric administration, national weather service, or equivalent regional or rainfall probability information.

c13d XUY means uranium as measured by the procedure discussed in 40 CFR 141.25 cbd c2d, or an equivalent method.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86; correction in c10d made under s. 13.93 c2md cbd 7., Stats., Register, November, 1997, No. 503.

NR 270.003 General provisions. c1d COMBINED WASTE STREAMS. In the event that waste streams from various subcategories or segments of subcategories in this chapter are combined for treatment and discharge, the quantity and concentration of each pollutant or pollutant property in the combined discharge that is subject to effluent limitations may not exceed the quantity and concentration of each pollutant or pollutant property that could have been discharged had each waste stream been treated separately. In addition, the discharge flow from the combined discharge may not exceed the volume that could have been discharged had each waste stream been treated separately.

c2d STORM EXEMPTION FOR FACILITIES PERMITTED TO DISCHARGE. If, as a result of precipitation or snowmelt, a source with an allowable discharge under this chapter has an overflow or excess discharge of effluent which does not meet the limitations of this chapter, the source may qualify for an exemption from such limitations with respect to such discharge if the following conditions are met:

cad The facility is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or treat the maximum flow associated with these volumes. In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the facility shall include the volume which would result from all areas contributing runoff to the individual treatment facility, i.e., all runoff that is not diverted from the active mining area and runoff which is not diverted from the mill area.

cbd The facility takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow.

ccd The facility complies with the notification requirements of 40 CFR 122.41 cmd and cnd. The storm exemption is designed to provide an affirmative defense to an enforcement action. Therefore, the operator has the burden of demonstrating to the appropriate authority that the conditions have been met.

c3d STORM EXEMPTION FOR FACILITIES NOT PERMITTED TO DISCHARGE. If, as a result of precipitation crainfall or snowmeltd, a source which is not permitted to discharge under this chapter, has an overflow or discharge which violates the limitations of this chapter, the source may qualify for an exemption from such limitations with respect to such discharge if the following conditions are met:

cad The facility is designed, constructed, and maintained to contain the maximum volume of wastewater stored and contained by the facility during normal operating conditions without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event. In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the facility shall include the volume which would result from all areas contributing runoff to the individual treatment facility, i.e., all runoff that is not diverted from the area or process subject to zero discharge, and other runoff that is allowed to commingle with the influent to the treatment system.

cbd The facility takes all reasonable steps to minimize the overflow or excess discharge.

ccd The facility complies with the notification requirements of 40 CFR 122.41 cmd and cnd. The storm exemption is designed to provide an affirmative defense to an enforcement action. Therefore, the operator has the burden of demonstrating to the appropriate authority that the conditions have been met.

c4d PH ADJUSTMENT. cad Where the application of neutralization and sedimentation technology to comply with relevant metal limitations results in an inability to comply with the pH range of 6.0 to 9.0, the permit issuer may allow the pH level in the final effluent to slightly exceed 9.0 so that the copper, lead, zinc, mercury and cadmium limitations will be achieved.

cbd In the case of a discharge into natural receiving waters for which the pH, if unaltered by human activities, is or would be less than 6.0 and approved water quality standards authorize such lower pH, the pH limitations for the discharge may be adjusted downward to the pH water quality criterion for the receiving waters provided the other effluent limitations for the discharge are met. In no case may a pH limitation below 5.0 be permitted.

c5d GROUNDWATER INFILTRATION PROVISION. In the event a new source subject to a no discharge requirement can demonstrate that groundwater infiltration contributes a substantial amount of water to the tailing impoundment or wastewater holding facility, the department may allow the discharge of a volume of water equivalent to the amount of groundwater infiltration. This discharge shall be subject to the limitations for mine drainage applicable to the new source subcategory.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.01 Applicability: description of the iron ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines operated to obtain iron ore, regardless of the type of ore or its mode of occurrence; and

c2d Mills beneficiating iron ores by physical cmagnetic and nonmagneticd or chemical separation, or both.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.012 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30 - 125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable after application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines operated to obtain iron ore may not exceed:

	Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe cdissolvedd	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills that employ physical cmagnetic and nonmagneticd or chemical methods, or both, to beneficiate iron ore may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe cdissolvedd	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.013 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines operated to obtain iron ore may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Fe cdissolvedd	2.0	1.0

c2d The concentration of pollutants discharged from mills that employ physical cmagnetic and nonmagneticd or chemical methods, or both, to beneficiate iron ore may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Fe cdissolvedd	2.0	1.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.014 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from mines operated to obtain iron ore may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe cdissolvedd	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills that employ physical cmagnetic and nonmagneticd or chemical methods, or both, to beneficiate iron ore may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe cdissolvedd	2.0	1.0
pH	c1d	c1d

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86

NR 270.02 Applicability: description of the aluminum ore subcategory. The provisions of this subcategory are applicable to discharges from facilities engaged in the mining of bauxite as an aluminum ore.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.022 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30 - 125.32, any existing source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd, The concentration of pollutants discharged in mine drainage from mines producing bauxite ores may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe ctotald	1.0	0.5
Al	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86

NR 270.023 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30 - 125.32, any existing point source subject to this subcategory shall achieve the following limitations representing the degree of effluent reduction at-

tainable by the application of the best available technology economically achievable cBATd. The concentration of pollutants discharged in mine drainage from mines producing bauxite ores may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Fe ctotald	1.0	0.5
Al	2.0	1.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.024 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd. The concentration of pollutants discharged in mine drainage from mines producing bauxite ores may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe ctotald	1.0	0.5
Al	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.03 Applicability; description of the uranium, radium and vanadium ores subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines either open-pit or underground, from which uranium, radium and vanadium ores are produced; and

c2d Mills using the acid leach, alkaline leach, or combined acid and alkaline leach process for extraction of uranium, radium and vanadium. Only vanadium byproduct production from uranium ores is covered under this subcategory.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.032 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30 - 125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable after application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines either open-pit or underground, from which uranium, radium and vanadium ores are produced excluding mines using in-situ leach methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
COD	200.0	100.0
Zn	1.0	0.5
Ra226[1] cdissolvedd	10.0	3.0
Ra226[1] ctotald	30.0	10.0
U	4.0	2.0
pH	c2d	c2d

[1] Values in picocuries per liter cpCi{1d.
[2] Within the range 6.0 to 9.0.

c2d The concentrations of pollutants discharged from mills using the acid leach, alkaline leach or combined acid and alkaline leach process for the extraction of uranium, radium and vanadium including mill-mine facilities and mines using in-situ leach methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
COD	-	500.0
As	1.0	0.5
Zn	1.0	0.5
Ra226[1] cdissolvedd	10.0	3.0
Ra226[1] ctotald	30.0	10.0
NH_3	-	100.0
pH	c2d	c2d

[1] Values in picocuries per liter cpCi{1d.
[2] Within the range 6.0 to 9.0.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.033 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30 - 125.32, any existing point source subject to this subcategory shall achieve the following limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines either open-pit or underground, that produce uranium ore, including mines using in-situ leach methods, may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
COD	200.0	100.0
Zn	1.0	0.5
Ra226[1] cdissolvedd	10.0	3.0
Ra226[1] ctotald	30.0	10.0
U	4.0	2.0

[1] Values in picocuries per liter cpCi{1d.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.034 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from mines, either open-pit or underground, that pro-

duce uranium ore, excluding mines using in-situ leach methods, may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
COD	200.0	100.0
Zn	1.0	0.5
Ra226[1] cdissolvedd	10.0	3.0
Ra226[1] ctotald	30.0	10.0
U	4.0	2.0
pH	c2d	c2d

[1] Values in picocuries per liter cpCi{1d.
[2] Within the range 6.0 to 9.0.

c2d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills using the acid leach, alkaline leach or combined acid and alkaline leach process for the extraction of uranium or from mines and mills using in-situ leach methods.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equivalent to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

History: Cr. Register, October, 1986, No. 3y0, eff. 11-1-86.

NR 270.04 Applicability; description of the mercury ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines, either open-pit or underground, that produce mercury ores; and

c2d Mills beneficiating mercury ores by gravity separation methods or by froth-flotation methods.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.042 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable after application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines, either open-pit or underground, operated for the production of mercury ores may not exceed the following limitations:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Hg	0.002	0.001
Ni	0.2	0.1
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills beneficiating mercury ores by gravity separation methods or by froth flotation methods.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equivalent to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in par. cad.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.043 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines, either open pit or underground, that produce mercury ores may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Hg	0.002	0.001

c2d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills beneficiating mercury ores by gravity separation methods or by froth-flotation methods.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.044 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002, and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from mines either open pit or underground, that produce mercury ores may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Hg	0.002	0.001
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills beneficiating mercury ores by gravity separation methods or by froth-flotation methods.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evap-

oration may be discharged subject to the limitations set forth in sub. c1d.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.05 Applicability; description of the titanium ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines obtaining titanium ores from lode deposits,

c2d Mills beneficiating titanium ores by electrostatic methods, magnetic and physical methods, or flotation methods; and

c3d Mines engaged in the dredge mining of placer deposits of sands containing rutile, ilmenite, leucoxene, monazite, zircon, and other heavy metals, and the milling techniques employed in conjunction with the dredge mining activity cmilling techniques employed include the use of wet gravity methods in conjunction with electrostatic or magnetic methodsd.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.052 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable after application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines obtaining titanium ores from lode deposits may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe	2.0	0.001
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills beneficiating titanium ores by electrostatic methods, magnetic and physical methods, or flotation methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Zn	1.0	0.5
Ni	0.2	0.1
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d The concentration of pollutants discharged in mine drainage from mines engaged in the dredge mining of placer deposits of sands containing rutile, ilmenite, leucoxene, monazite, zircon, or other heavy metals, and the milling techniques employed in conjunction with the dredge mining activity cmilling techniques employed include the use of wet gravity metals in conjunction with electrostatic or magnetic methodsd may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe	2.0	1.0
pH	c1d	c1d

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86; Chapter NR 270 was republished to correct an error in transcription in c2d cintro.d Register October 2024 No. 826.

NR 270.053 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines obtaining titanium ores from lode deposits may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Fe	2.0	1.0

c2d The concentration of pollutants discharged from mills beneficiating titanium ores by electrostatic methods, magnetic and physical methods, or flotation methods may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Zn	1.0	0.5

c3d The concentration of pollutants discharged in mine drainage from mines engaged in the dredge mining of placer deposits of sands containing rutile, ilmenite, leucoxene, monazite, or zircon and the milling techniques employed in conjunction with the dredge mining activity cmilling techniques employed include the use of wet gravity methods in conjunction with electrostatic or magnetic methodsd may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Fe	2.0	1.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.054 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from mines obtaining titanium ores from lode deposits may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills beneficiating titanium ores by electrostatic methods, magnetic and physical methods, or flotation methods may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Zn	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d The concentration of pollutants discharged in mine drainage from mines engaged in the dredge mining of placer deposits of sands containing rutile, ilmenite, leucoxene, monazite, or zircon and the milling techniques employed in conjunction with the dredge mining activity cmilling techniques employed include the use of wet gravity methods in conjunction with electrostatic or magnetic methodsd may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Fe	2.0	1.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.06 Applicability; description of the tungsten ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines that produce tungsten ore; and

c2d Mills that process tungsten ore by either the gravity separation or froth-flotation methods.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.062 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants in mine drainage from mines producing 5000 metric tons c5512 short tonsd or more of tungsten bearing ores per year may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged in mine drainage from mines producing less than 5000 metric tons c5512 short tonsd or discharged from mills processing less than 5000 metric tons c5512 short tonsd of tungsten ores per year by methods other than ore leaching may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	50.0	30.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of tungsten ores per year by purely physical methods including ore crushing, washing, jigging, heavy media separation, and magnetic and electrostatic separation may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c4d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of tungsten ores per year by froth flotation methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.063 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from tungsten mines may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5

c2d The concentration of pollutants discharged from mills may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.064 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from tungsten mines may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.07 Applicability; description of the nickel ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines that produce nickel ore; and

c2d Mills that process nickel ore.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-96.

NR 270.072 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines producing 5000 metric tons c5512 short tonsd or more of nickel bearing ores per year may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged in mine drainage from mines producing less than 5000 metric tons c5512 short tonsd or discharged from mills processing less than 5000 metric tons c5512 short tonsd of nickel ores per year by methods other than ore leaching may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	50.0	30.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of nickel ores per year by purely physical methods including ore crushing, washing, jigging, heavy media separation, and magnetic and electrostatic separation may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c4d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of nickel ore per year by froth flotation methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.08 Applicability; description of the vanadium ore subcategory. The provisions of this subcategory are applicable to discharge from:

c1d Mines that produce vanadium ore crecovered alone and not as a by-product of uranium mining and millsd; and

c2d Mills that process vanadium ore crecovered alone, not as a by-product of uranium mining and millsd.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.082 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reductio attainable by the application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines producing 5000 metric tons c5512 short tonsd or more of vanadium bearing ores per year may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged in mine drainage from mines producing less than 5000 metric tons c5512 short tonsd or discharged from mills processing less than 5000 metric tons c5512 short tonsd of vanadium ore per year by methods other than ore leaching may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	50.0	30.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of vanadium ores per year by purely physical methods including ore crushing, washing, jigging, heavy media separation, and magnetic and electrostatic separation may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c4d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of vanadium ores per year by froth flotation methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.09 Applicability; description of the antimony ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines that produce antimony ore; and

c2d Mills that process antimony ore.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.10 Applicability; description of the copper, lead, zinc, gold, silver, and molybdenum ores subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines that produce copper, lead, zinc, gold, silver, or molybdenum bearing ores, or any combination of these ores from open-pit or underground operations other than placer deposits;

c2d Mills that use the froth-flotation process alone or in conjunction with other processes, for the beneficiation of copper, lead, zinc, gold, silver, or molybdenum ores, or any combination of these ores;

c3d Mines and mills that use dump, heap, in-situ leach or vat-leach processes to extract copper from ores or ore waste materials;

c4d Mills that use the cyanidation process to extract gold or silver; and

c5d Mines or mines and mills that use gravity separation methods cincluding placer or dredge mining or concentrating operations, and hydraulic mining operationsd to extract gold ores or silver ores.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.102 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology cBPTd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available cBPTd:

c1d The concentration of pollutants discharged in mine drainage from mines operated to obtain copper bearing ores, lead bearing ores, zinc bearing ores, gold bearing ores, or silver bearing ores, or any combination of these ores open-pit or underground operations other than placer deposits may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cu	0.3	0.15
Zn	1.0	0.75
Pb	0.6	0.3
Hg	0.002	0.001
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d The concentration of pollutants discharged from mills which employ the froth flotation process alone or in conjunction with other processes, for the beneficiation of copper ores, lead ores, zinc ores, gold ores, or silver ores, or any combination of these ores may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
Hg	0.002	0.001
Cd	0.1	0.05
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c3d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable water from mines and mills which employ dump, heap, in-situ leach or vat leach processes for the extraction of copper from ores or ore waste materials.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equivalent to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

c4d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills which extract gold or silver by use of the cyanidation process.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equivalent to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

Note: The concentration of pollutants discharged in mine drainage from mines of discharged from mine and mill complexes beneficiating gold ores or silver ores by gravity separation methods including mining of placer deposits, dredge mining and hydraulic mining operations will be proposed and promulgated at a late date.

c6d The concentration of pollutants discharged in mine drainage from mines producing 5000 metric tons c5512 short tonsd or more of molybdenum bearing ores per year may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.10	0.05
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c7d The concentration of pollutants discharged in mine drainage from mines producing less than 5000 metric tons c5512 short tonsd or discharged from mills processing less than 5000 metric tons c5512 short tonsd of molybdenum ores per year by methods other than ore leaching may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	50.0	30.0
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c8d The concentration of pollutants discharged from mills processing 5,000 metric tons c5,512 short tonsd or more of molybdenum ores per year by purely physical methods including ore crushing, washing, jigging, and heavy media separation may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c9d The concentration of pollutants discharged from mills processing 5000 metric tons c5512 short tonsd or more of molybdenum ores per year by froth flotation methods may not exceed:

	[BPT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cd	0.1	0.05
Cu	0.3	0.15
Zn	1.0	0.5
As	1.0	0.5
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.103 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines that produce copper, lead, zinc, gold, silver, or molybdenum bearing ores or any combination of these ores from open-pit or underground operations other than placer deposits may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cu	0.3	0.15
Zn	1.5	0.75
Pb	0.6	0.3
Hg	0.002	0.001
Cd	0.1	0.05

c2d The concentration of pollutants discharged from mills that use the froth flotation process alone, or in conjunction with other processes, for the beneficiation of copper, lead, zinc, gold, silver, or molybdenum ores or any combination of these ores may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
Hg	0.002	0.001
Cd	0.1	0.05

c3d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mine areas and mill processes and areas that use dump, heap, in-situ leach or vat-leach processes to extract copper from ores or ore waste materials.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

c4d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills that use the cyanidation process to extract gold or silver.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

Note: The concentration of pollutants discharged in mine drainage or discharged from mines and mills beneficiating gold or silver ores by gravity separation methods including mining of placer deposits, dredge mining and hydraulic mining operations will be proposed and promulgated at a later date.

History: Cr. Register, October, 1986, No. 30, eff. 11-1-86.

NR 270.104 New source performance standards cNSPSd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any new source subject to this subcategory shall achieve the following NSPS representing the degree of effluent reduction attainable by the application of the best available demonstrated technology cBADTd:

c1d The concentration of pollutants discharged in mine drainage from mines that produce copper, lead, zinc, gold, silver, or molybdenum bearing ores or any combination of these ores from open-pit or underground operations other than placer deposits may not exceed:

	[NSPS] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
TSS	30.0	20.0
Cu	0.3	0.15
Zn	1.5	0.75
Pb	0.6	0.3
Hg	0.002	0.001
Cd	0.1	0.05
pH	c1d	c1d

[1] Within the range 6.0 to 9.0

c2d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills that use the froth-flotation process alone, or in conjunction with other processes, for the beneficiation of copper, lead, zinc, gold, silver, or molybdenum ores or any combination of these ores.

cbd 1. In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

2. In the event there is a build up of contaminants in the recycle water which significantly interferes with the ore recovery process and this interference cannot be eliminated through appropriate treatment of the recycle water, the permitting authority may allow a discharge of process wastewater in an amount necessary to correct the interference problem after installation of appropriate treatment. This discharge shall be subject to the limitations of sub. c1d. The facility shall have the burden of demonstrating to the department that that discharge is necessary to eliminate interference in the ore recovery process and that the interference could not be eliminated through appropriate treatment of the recycle water.

c3d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mine areas and mill processes and areas that use dump, heap, in-situ leach or vat-leach processes to extract copper from ores or ore waste materials.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

c4d cad Except as provided in this subsection, there may not be discharge of process wastewater to navigable waters from mills that use the cyanidation process to extract gold or silver.

cbd In the event that the annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility exceeds the annual evaporation, a volume of water equal to the difference between annual precipitation falling on the treatment facility and the drainage area contributing surface runoff to the treatment facility and annual evaporation may be discharged subject to the limitations set forth in sub. c1d.

Note: The concentration of pollutants discharged in mine drainage or discharged from mines and mills beneficiating gold or silver ores by gravity separation methods including mining of placer deposits, dredge mining and hydraulic mining operations will be proposed and promulgated at a later date.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.11 Applicability; description of the platinum ore subcategory. The provisions of this subcategory are applicable to discharges from:

c1d Mines that produce platinum ore; and

c2d Mills that process platinum ore.

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.113 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd. Except as provided in ss. NR 270.0015, 270.002 and 270.003 and 40 CFR 125.30-125.32, any existing point source subject to this subcategory shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable cBATd:

c1d The concentration of pollutants discharged in mine drainage from mines that produce platinum bearing ores from open-pit or underground operations other than placer deposits may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cu	0.3	0.15
Zn	1.5	0.75
Pb	0.8	0.3
Hg	0.002	0.06
Cd	0.1	0.06

c2d The concentration of pollutants discharged from mills that use the froth-flotation process alone, or in conjunction with other processes, for the beneficiation of platinum ores may not exceed:

	[BAT] Effluent limitations	
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Milligrams per liter	
Cu	0.3	0.15
Zn	1.0	0.5
Pb	0.6	0.3
Hg	0.002	0.001
Cd	0.1	0.05

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86.

NR 270.12 Cross-references. The federal citations in this chapter correspond to provisions of the Wisconsin Administrative Code and Wisconsin Statutes. The federal citations may be cross-referenced in the following table:

Code of Federal Regulations	Corresponding State Code Section
40 CFR Part 40	ch. NR 270
40 CFR 122.41 cmd	NR 205.07 c3d
40 CFR 122.41 cnd	NR 205.03 c41d
40 CFR 125.30-125.32	NR 211.14, s. 283.13 c3d, Stats.
40 CFR Part 401	chs. NR 205, 215, 219

History: Cr. Register, October, 1986, No. 370, eff. 11-1-86; correction made under s. 13.93 c2md cbd 7., Stats., Register, November, 1997.