

CHAPTER 7050
MINNESOTA POLLUTION CONTROL AGENCY
WATERS OF THE STATE

7050 0150	DETERMINATION OF COMPLIANCE WITH WATER QUALITY STANDARDS AND WATER QUALITY CONDITION	7050 0222	SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 2 WATERS OF THE STATE, AQUATIC LIFE AND RECREATION
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7050.0150 DETERMINATION OF COMPLIANCE WITH WATER QUALITY STANDARDS AND WATER QUALITY CONDITION.

Subpart 1 **Policy and scope.** The intent of the state is to protect and maintain surface waters in a condition which allows for the maintenance of all existing beneficial uses. The condition of a surface water body is determined by its physical, chemical, and biological qualities. The narrative water quality standards in subpart 3 prescribe the qualities or properties of surface waters that are necessary for the protection of designated public uses and benefits. If the narrative standards in this part are exceeded, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses of the waters of the state.

Subparts 5 to 7 list factors the commissioner will use to determine if surface waters are in compliance with applicable narrative standards in subpart 3. Determination of compliance with the narrative standards will be made for individual water bodies on a case by case basis.

Subp 2. **Other standards preserved.** The requirements of this part are in addition to the application of other narrative or numerical water quality standards in this chapter. If the requirements of this part conflict with any other narrative or numerical standard in this chapter, the more stringent standard applies.

Subp 3 **Narrative standards.** For all Class 2 waters, the aquatic habitat, which includes the waters of the state and stream bed, shall not be degraded in any material manner, there shall be no material increase in undesirable slime growths or aquatic plants, including algae, nor shall there be any significant increase in harmful pesticide or other residues in the waters, sediments, and aquatic flora and fauna, the normal fishery and lower aquatic biota upon which it is dependent and the use thereof shall not be seriously impaired or endangered, the species composition shall not be altered materially, and the propagation or migration of the fish and other biota normally present shall not be prevented or hindered by the discharge of any sewage, industrial waste, or other wastes to the waters.

Subp 4 **Definitions.** For the purposes of this part, the following terms have the meanings given them:

A "Chlorophyll-a" means a pigment in green plants including algae. The concentration of chlorophyll-a, expressed in weight per unit volume of water, is a measurement of the abundance of algae.

B "Ecoregion" means an area of relative homogeneity in ecological systems based on similar soils, land use, land surface form, and potential natural vegetation.

C "Hydraulic residence time" means the time water resides in a basin or, alternately, the time it would take to fill the basin if it were empty.

D "Impaired water" or "impaired condition" means a water body that does not meet applicable water quality standards or fully support applicable beneficial uses, due in whole or in part to water pollution from point or nonpoint sources, or any combination thereof.

E "Index of biological integrity" or "IBI" means an index developed by measuring attributes of an aquatic community that change in quantifiable and predictable ways in response to human disturbance, representing the health of that community.

F "Lake morphometry" means the physical characteristics of the lake basin that are reasonably necessary to determine the shape of a lake, such as maximum length and width, maximum and mean depth, area, volume, and shoreline configuration.

G "Mixing status" means the frequency of complete mixing of the lake water from surface to bottom, which is determined by whether temperature gradients are established and maintained in the water column during the summer season.

H "Nuisance algae bloom" means an excessive population of algae that is characterized by obvious green or blue-green pigmentation in the water, floating mats of algae, reduced light transparency, aesthetic degradation, loss of recreational use, possible harm to the aquatic community, or possible toxicity to animals and humans. Algae blooms are measured through tests for chlorophyll-a, observations using a Secchi disk, and observations of impaired recreational and aesthetic conditions by the users of the water body, or any other reliable data that identifies the population of algae in an aquatic community.

I "Readily available and reliable data and information" means chemical, biological, and physical data and information determined by the commissioner to meet the quality assurance and quality control requirements in subpart 8, that are not more than ten years old from the time they are used for the assessment. A subset of data in the ten-year period, or data more than ten years old can be used if credible scientific evidence shows that these data are representative of current conditions.

J "Reference water body" means a water body least impacted by point or nonpoint sources of pollution that is representative of water bodies in the same ecoregion or watershed. Reference water bodies are used as a base for comparing the quality of similar water bodies in the same ecoregion or watershed.

K. "Secchi disk transparency" means the average water depth of the point where a weighted white or black and white disk disappears when viewed from the shaded side of a boat, and the point where it reappears upon raising it after it has been lowered beyond visibility. The Secchi disk measures water clarity and is usually used in lakes.

L. "Summer-average" means a representative average of concentrations or measurements of nutrient enrichment factors, taken over one summer growing season from June 1 through September 30.

M "Transparency tube" means a graduated clear plastic tube, 24 inches or more in length by 1-1/2 inches in diameter, with a stopper at the bottom end, the inside surface of which is painted black and white. The tube is filled with water from a surface water; the water is released through a valve at the bottom end until the painted surface of the stopper is just visible through the water column when viewed from the top of the tube. The depth of water at the point of initial visibility is the transparency. The transparency tube measures water clarity and is usually used in rivers and streams.

N "Trophic status or condition" means the productivity of a lake as measured by the phosphorus content, algae abundance, and depth of light penetration.

O "Water body" means a lake, reservoir, wetland, or a geographically defined portion of a river or stream.

Subp 5 Impairment of waters due to excess algae or plant growth. In evaluating whether the narrative standards in subpart 3, which prohibit any material increase in undesirable slime growths or aquatic plants including algae, are being met, the commissioner will use all readily available and reliable data and information for the following factors of use impairment.

A. representative summer-average concentrations of total phosphorus and total nitrogen measured in the water body throughout the summer growing season;

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B representative summer-average concentrations of chlorophyll-a measured in the water body throughout the summer growing season,

C representative measurements of light transparency in the water body, as measured with a Secchi disk in lakes or a transparency tube in rivers and streams, throughout the growing season, and

D. any other scientifically objective, credible, and supportable factor

A finding of an impaired condition must be supported by data showing elevated levels of nutrients in item A, and at least one factor showing impaired conditions resulting from nutrient over-enrichment in items B and C. The trophic status data described in items A to D must be assessed in light of the magnitude, duration, and frequency of nuisance algae blooms in the water body, and documented impaired recreational and aesthetic conditions observed by the users of the water body due to excess algae or plant growth, reduced transparency, or other deleterious conditions caused by nutrient over-enrichment.

Assessment of trophic status and the response of a given water body to nutrient enrichment will take into account the trophic status of reference water bodies, and all relevant factors that affect the trophic status of the given water body appropriate for its geographic region, such as the morphometry, hydraulic residence time, mixing status, watershed size, and location. The factors in this subpart apply to lakes and, where scientifically justified, to rivers, streams, and wetlands.

Subp. 6 **Impairment of biological community and aquatic habitat.** In evaluating whether the narrative standards in subpart 3, which prohibit serious impairment of the normal fisheries and lower aquatic biota upon which they are dependent and the use thereof, material alteration of the species composition, material degradation of stream beds, and the prevention or hindrance of the propagation and migration of fish and other biota normally present, are being met, the commissioner will consider all readily available and reliable data and information for the following factors of use impairment:

A an index of biological integrity calculated from measurements of attributes of the resident fish community, including measurements of:

- (1) species diversity and composition,
- (2) feeding and reproduction characteristics, and
- (3) fish abundance and condition,

B an index of biological integrity calculated from measurements of attributes of the resident aquatic invertebrate community, including measurements of

- (1) species diversity and composition,
- (2) feeding characteristics, and
- (3) species abundance and condition,

C. an index of biological integrity calculated from measurements of attributes of the resident aquatic plant community, including measurements of

- (1) species diversity and composition, including algae, and
- (2) species abundance and condition,

D a quantitative or qualitative assessment of habitat quality, determined by an assessment of

- (1) stream morphological features that provide spawning, nursery, and refuge areas for fish and invertebrates,
- (2) bottom substrate size and variety,
- (3) variations in water depth,
- (4) sinuosity of the stream course,
- (5) physical or hydrological alterations of the stream bed including excessive sedimentation,
- (6) types of land use in the watershed, and
- (7) other scientifically accepted and valid factors of habitat quality; and

E any other scientifically objective, credible, and supportable factors

A finding of an impaired condition must be supported by data for the factors listed in at least one of items A to C. The biological quality of any given surface water body will be assessed by comparison to the biological conditions determined for a set of reference water bodies which best represents the most natural condition for that surface water body type within a geographic region.

Subp 7 Impairment of waters relating to fish for human consumption. In evaluating whether the narrative standards in subpart 3, which prevent harmful pesticide or other residues in aquatic flora or fauna, are being met, the commissioner will use the residue levels in fish muscle tissue established by the Minnesota Department of Health to identify surface waters supporting fish for which the Minnesota Department of Health recommends a reduced frequency of fish consumption for the protection of public health. A water body will be considered impaired when the recommended consumption frequency is less than one meal per week, such as one meal per month, for any member of the population. That is, a water body will not be considered impaired if the recommended consumption frequency is one meal per week, or any less restrictive recommendation such as two meals per week, for all members of the population. The impaired condition must be supported with measured data on the contaminant levels in the indigenous fish.

Subp 8 Determination of compliance. In making tests or analyses of the waters of the state, sewage, industrial wastes, or other wastes to determine compliance with the standards and water quality condition, samples shall be collected in a manner and place, and of such type, number, and frequency as may be considered necessary by the agency from the viewpoint of adequately reflecting the condition of the waters, the composition of the effluents, and the effects of the pollutants upon the specified uses. The samples shall be collected, preserved, and analyzed following accepted quality control and quality assurance methods, and according to the procedures in Code of Federal Regulations, title 40, part 136. The agency may accept or may develop other methods, procedures, guidelines, or criteria for collecting and analyzing samples and measuring water quality characteristics. The commissioner will retain a record of all impairment decisions using the factors in this part, including all supporting data, for a minimum of eight years.

Statutory Authority: *MS s 115 03; 115 44*

History: *27 SR 1217*

7050.0210 GENERAL STANDARDS FOR DISCHARGERS TO WATERS OF THE STATE.

[For text of subps 1 to 4, see M.R.]

Subp 5 Mixing zones. Reasonable allowance will be made for dilution of the effluents, which are in compliance with part 7050.0211 or 7050.0212, as applicable, following discharge into waters of the state. The agency, by allowing dilution, may consider the effect on all uses of the waters of the state into which the effluents are discharged. The extent of dilution allowed regarding any specific discharge as specified in subpart 7 shall not violate the applicable water quality standards. Means for expediting mixing and dispersion of sewage, industrial waste, or other waste effluents in the receiving waters are to be provided so far as practicable when deemed necessary by the agency to maintain the quality of the receiving waters in accordance with applicable standards. Mixing zones must be established by the agency on an individual basis, with primary consideration being given to the following guidelines:

A. mixing zones in rivers shall permit an acceptable passageway for the movement of fish,

B. the total mixing zone or zones at any transect of the stream should contain no more than 25 percent of the cross sectional area and/or volume of flow of the stream, and should not extend over more than 50 percent of the width,

C. mixing zone characteristics shall not be lethal to aquatic organisms,

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D for contaminants other than heat, the FAV, as defined in part 7050 0218, subpart 3, item O, for toxic pollutants should not be exceeded as a one-day mean concentration at any point in the mixing zone,

E. mixing zones should be as small as possible, and not intersect spawning or nursery areas, migratory routes, water intakes, nor mouths of rivers, and

F overlapping of mixing zones should be minimized and measures taken to prevent adverse synergistic effects.

This subpart applies in cases where a Class 7 water is tributary to a Class 2 water

[For text of subps 6c to 18, see MR]

Statutory Authority: *MS s 115 03, 115.44*

History: *27 SR 1217*

7050.0222 SPECIFIC STANDARDS OF QUALITY AND PURITY FOR CLASS 2 WATERS OF THE STATE; AQUATIC LIFE AND RECREATION.

[For text of subps 1 to 3, see MR]

Subp. 4 **Class 2B waters.** The quality of Class 2B surface waters shall be such as to permit the propagation and maintenance of a healthy community of cool or warm water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. This class of surface water is not protected as a source of drinking water. The applicable standards are given below, with substances considered carcinogenic followed by a (c). The basis columns to the right of the chronic standards and to the right of the acute standards indicate whether the chronic and acute standards, respectively, are based on the protection of the aquatic community from adverse toxic effects (Tox.), or the protection of human consumers of sport-caught fish (HH). "NA" means not applicable. Subpart 7, item E, should be referenced for FAV and MS values and "none" noted with an asterisk (*).

Substance or Characteristic (c) = carcinogen	Units	Class 2B Chronic Standard		Class 2B Acute Standards		
		CS	Basis	MS	FAV	Basis
Acenaphthene	µg/l	20	HH	56	112	Tox
Acrylonitrile (c)	µg/l	0.89	HH	1140*	2281*	Tox.
Alachlor	µg/l	59	Tox	800	1600	Tox.
Aluminum, total	µg/l	125	Tox	1072	2145	Tox
Ammonia un-ionized as N	µg/l	40	Tox	None	None	NA

The percent un-ionized ammonia can be calculated for any temperature and pH as described in subpart 2.

Anthracene	µg/l	0.035	Tox.	0.32	0.63	Tox.
Antimony	µg/l	31	Tox	90	180	Tox.
Arsenic, total	µg/l	53	HH	360	720	Tox.
Atrazine	µg/l	10	Tox	323	645	Tox.
Benzene	µg/l	114	Tox.	4487	8974	Tox
Bromoform	µg/l	466	HH	2900	5800	Tox
Cadmium, total	µg/l	Formula	Tox.	Formula	Formula	Tox

Cadmium, total

The CS shall not exceed $\exp.(0.7852[\ln(\text{total hardness mg/l})]-3.490)$

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The MS shall not exceed: $\exp(1.128[\ln(\text{total hardness mg/l})]-1.685)$

The FAV shall not exceed $\exp(1.128[\ln(\text{total hardness mg/l})]-0.9919)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Cadmium standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	0.66	1.1	2.0		
	MS	15	33	73		
	FAV	31	67	146		
Carbon tetra-chloride (c)	$\mu\text{g/l}$	5.9	HH	1750*	3500*	Tox
Chlordane (c)	ng/l	0.29	HH	1200*	2400*	Tox.
Chloride	mg/l	230	Tox.	860	1720	Tox
Chlorine, total residual	$\mu\text{g/l}$	11	Tox	19	38	Tox.

Chlorine standard applies to conditions of continuous exposure, where continuous exposure refers to chlorinated effluents that are discharged for more than a total of two hours in any 24-hour period.

Chlorobenzene (Monochlorobenzene)	$\mu\text{g/l}$	20	HH	423	846	Tox.
Chloroform	$\mu\text{g/l}$	155	Tox.	1392	2784	Tox.
Chlorpyrifos	$\mu\text{g/l}$	0.041	Tox.	0.083	0.17	Tox
Chromium +3, total	$\mu\text{g/l}$	Formula	Tox	Formula	Formula	Tox.

Chromium +3, total

The CS shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})]+1.561)$

The MS shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})]+3.688)$

The FAV shall not exceed $\exp(0.819[\ln(\text{total hardness mg/l})]+4.380)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Chromium +3 standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard.	CS	117	207	365		
	MS	984	1737	3064		
	FAV	1966	3469	6120		
Chromium +6, total	$\mu\text{g/l}$	11	Tox.	16	32	Tox
Cobalt	$\mu\text{g/l}$	5.0	Tox	436	872	Tox
Copper, total	$\mu\text{g/l}$	Formula	Tox	Formula	Formula	Tox.

Copper, total

The CS shall not exceed: $\exp(0.6200[\ln(\text{total hardness mg/l})]-0.570)$

The MS shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})]-1.464)$

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The FAV shall not exceed $\exp(0.9422[\ln(\text{total hardness mg/l})] - 0.7703)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Copper standards in $\mu\text{g/l}$ for three hardness values

Hardness (mg/l)		50	100	200		
Standard	CS	6.4	9.8	15		
	MS	9.2	18	34		
	FAV	18	35	68		
Cyanide, free	$\mu\text{g/l}$	5.2	Tox	22	45	Tox
DDT (c)	ng/l	1.7	HH	550*	1100*	Tox.
1,2-Dichloroethane (c)	$\mu\text{g/l}$	190	HH	45,050*	90,100*	Tox
Dieldrin (c)	ng/l	0.026	HH	1300*	2500*	Tox
D1-2-ethylhexyl phthalate (c)	$\mu\text{g/l}$	2.1	HH	None*	None*	NA
D1-n-octyl phthalate	$\mu\text{g/l}$	30	Tox.	825	1650	Tox
Dissolved oxygen	mg/l	5.0 as a daily minimum				

This dissolved oxygen standard may be modified on a site-specific basis according to subpart 8, except that no site-specific standard shall be less than 5 mg/l as a daily average and 4 mg/l as a daily minimum. Compliance with this standard is required 50 percent of the days at which the flow of the receiving water is equal to the lowest weekly flow with a once in ten-year recurrence interval (7Q10). This standard applies to all Class 2B waters except for those portions of the Mississippi River from the outlet of the metro wastewater treatment works in Saint Paul (River Mile 835) to Lock and Dam No. 2 at Hastings (River Mile 815). For this reach of the Mississippi River the standard is not less than 5 mg/l as a daily average from April 1 through November 30, and not less than 4 mg/l at other times.

Endosulfan	$\mu\text{g/l}$	0.031	HH	0.28	0.56	Tox.
Endrin	$\mu\text{g/l}$	0.016	HH	0.090	0.18	Tox
Ethylbenzene	$\mu\text{g/l}$	68	Tox	1859	3717	Tox

Fecal coliform organisms: Not to exceed 200 organisms per 100 milliliters as a geometric mean of not less than five samples in any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 2,000 organisms per 100 milliliters. The standard applies only between April 1 and October 31.

Fluoranthene	$\mu\text{g/l}$	1.9	Tox.	3.5	6.9	Tox
Heptachlor (c)	ng/l	0.39	HH	260 [†]	520 [†]	Tox.
Heptachlor epoxide (c)	ng/l	0.48	HH	270*	530*	Tox.
Hexachlorobenzene (c)	ng/l	0.24	HH	None*	None*	Tox

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Lead, total	µg/l	Formula	Tox	Formula	Formula	Tox
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Lead, total

The CS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-4.705)$

The MS shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-1.460)$

The FAV shall not exceed $\exp.(1.273[\ln(\text{total hardness mg/l})]-0.7643)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Lead standards in µg/l for three hardness values:

Hardness (mg/l)	50	100	200
Standard			
CS	1.3	3.2	7.7
MS	34	82	197
FAV	68	164	396

Lindane (c) (Hexachlorocyclohexane, gamma-)	µg/l	0.036	HH	4.4*	8.8*	Tox.
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Mercury, total	µg/l	0.0069	HH	2.4*	4.9*	Tox
Methylene chloride (c) (Dichloromethane)	µg/l	1940	HH	13,875	27,749	Tox

Naphthalene	µg/l	81	Tox.	409	818	Tox
Nickel, total	µg/l	Formula	Tox.	Formula	Formula	Tox.

Nickel, total

The CS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})] + 1.1645)$

The MS shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})] + 3.3612)$

The FAV shall not exceed $\exp.(0.846[\ln(\text{total hardness mg/l})] + 4.0543)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Nickel standards in µg/l for three hardness values:

Hardness (mg/l)	50	100	200
Standard			
CS	88	158	283
MS	789	1418	2549
FAV	1578	2836	5098

Oil	µg/l	500	NA	5000	10,000	NA
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Parathion	µg/l	0.013	Tox	0.07	0.13	Tox.
Pentachloro-phenol	µg/l	Formula	Tox. /HH	Formula	Formula	Tox

For waters with pH values greater than 6.95, the CS shall not exceed the human health-based standard of 5.5 µg/l. For waters with pH values less than 6.96, the CS shall not exceed $\exp.(1.005[\text{pH}]-5.290)$

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The MS shall not exceed $\exp.(1.005[\text{pH}]-4.830)$
 The FAV shall not exceed. $\exp (1.005[\text{pH}]-4.1373)$
 Pentachlorophenol standards in $\mu\text{g/l}$ for three pH values

pH (su)	7 0	7 5	8 0	
Standard:	CS	5 5	5.5	5 5
	MS	9.1	15	25
	FAV	18	30	50

pH (su)	Not less than 6 5 nor greater than 9 0					
Phenanthrene	$\mu\text{g/l}$	3.6	Tox	32	64	Tox
Phenol	$\mu\text{g/l}$	123	Tox	2214	4428	Tox
Polychlorinated biphenyls, total (c)	ng/l	0 029	HH	1000*	2000*	Tox

Radioactive materials Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as permitted by the appropriate authority having control over their use

Selenium	$\mu\text{g/l}$	5 0	Tox	20	40	Tox
Silver, total	$\mu\text{g/l}$	1 0	Tox	Formula	Formula	Tox

Silver, total

The CS shall not exceed. 1.0

The MS shall not exceed $\exp (1.720[\ln(\text{total hardness mg/l})]-7.2156)$

The FAV shall not exceed: $\exp.(1.720[\ln(\text{total hardness mg/l})]-6.520)$

Provided that the MS and FAV shall be no less than 1 0 $\mu\text{g/l}$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard.

Silver standards in $\mu\text{g/l}$ for three hardness values:

Hardness (mg/l)	50	100	200	
Standard	CS	1.0	1.0	1 0
	MS	1 0	2 0	6.7
	FAV	1 2	4 1	13

Temperature 5°F above natural in streams and 3°F above natural in lakes, based on monthly average of the maximum daily temperature, except in no case shall it exceed the daily average temperature of 86°F

1,1,2,2-Tetrachloroethane (c)	$\mu\text{g/l}$	13	HH	1127	2253	Tox.
Tetrachloroethylene (c)	$\mu\text{g/l}$	8 9	HH	428	857	Tox
Thallium	$\mu\text{g/l}$	0 56	HH	64	128	Tox
Toluene	$\mu\text{g/l}$	253	Tox	1352	2703	Tox.

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Toxaphene (c)	ng/l	1.3	HH	730*	1500*	Tox.
1,1,1	μg/l	329	Tox	2957	5913	Tox
-Trichloroethane						
1,1,2	μg/l	120	HH	6988	13,976	Tox.
-Trichloroethylene						
(c)						
2,4,6	μg/l	2.0	HH	102	203	Tox
-Trichlorophenol						
Turbidity value	NTU	25	NA	None	None	NA
Vmyl chloride (c)	μg/l	9.2	HH	None*	None*	NA
Xylene, total m,p,o	μg/l	166	Tox.	1407	2814	Tox.
Zinc, total	μg/l	Formula	Tox.	Formula	Formula	Tox.

Zinc, total

The CS shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 0.7615)$

The MS shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 0.8604)$

The FAV shall not exceed $\exp(0.8473[\ln(\text{total hardness mg/l})] + 1.5536)$

For hardness values greater than 400 mg/l, 400 mg/l shall be used to calculate the standard

Zinc standards in μg/l for three hardness values

Hardness (mg/l)		50	100	200
Standard	CS	59	106	191
	MS	65	117	211
	FAV	130	234	421

[For text of subps 5 and 6, see M.R.]

Subp 7. Additional standards. The following additional standards and requirements apply to all Class 2 waters

A No sewage, industrial waste, or other wastes from point or nonpoint sources shall be discharged into any of the waters of this category so as to cause any material change in any other substances or characteristics which may impair the quality of the waters of the state or the aquatic biota of any of the classes in subparts 2 to 6 or in any manner render them unsuitable or objectionable for fishing, fish culture, or recreational uses. Additional selective limits or changes in the discharge bases may be imposed on the basis of local needs

[For text of items B to E, see M.R.]

[For text of subps 8 and 9, see M.R.]

Statutory Authority: *MS s 115 03, 115 44*

History: *27 SR 1217*

7050.0470 CLASSIFICATIONS FOR WATERS IN MAJOR SURFACE WATER DRAINAGE BASINS.

Subpart 1 Lake Superior Basin. The water use classifications for the listed waters in the Lake Superior Basin are as identified in items A, B, and D

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[For text of item A, see MR]

B Lakes:

[For text of subitems (1) to (127), see MR]

(128) *Superior, Lake, excluding the portions identified in subitem (129)
[11/5/84R] (T 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, R.14W-7E): 1B,
2A, 3A,

[For text of subitems (129) to (153), see MR.]

[For text of items C and D, see MR]

[For text of subps 2 to 9, see MR]

Statutory Authority: *MS s 115 03, 115 44*

History: *27 SR 1217*