

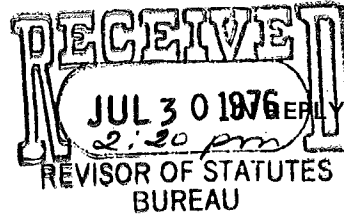


NR104

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl  
Secretary

BOX 450  
MADISON, WISCONSIN 53701



REFER TO: \_\_\_\_\_

STATE OF WISCONSIN )  
DEPARTMENT OF NATURAL RESOURCES ) SS

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Anthony S. Earl, Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. WQ-48-76 was duly approved and adopted by this Department on April 15, 1976. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at Pyare Square Building in the Village of Shorewood Hills, this 22<sup>ND</sup> day of July, 1976.

Anthony S. Earl, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

.....  
IN THE MATTER of repealing and recreating  
Chapter NR 104, Wisconsin Administrative  
Code, Pertaining to Intrastate Waters Uses  
and Designated Standards  
.....

WQ-48-76

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD

REPEALING AND RECREATING RULES

Pursuant to authority vested in the State of Wisconsin Natural Resources Board by section 144.025 and chapter 227, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby repeals and recreates rules as follows:

Chapter NR 104

INTRASTATE WATERS - USES AND  
DESIGNATED STANDARDS

NR 104.01 General. (1) "It is ... the goal of the state of Wisconsin that, wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by 1983..." section 147.01(1)(b), Wis. Stats. The long-range goal of Wisconsin water quality standards is, therefore, to permit the use of water resources for all lawful purposes. Surface waters which because of natural conditions are not conducive to the establishment and support of the complete heirarchy of aquatic organisms shall not be degraded below present levels, but shall be upgraded as necessary to support assigned uses.

Most surface waters within the state of Wisconsin already meet or exceed the goals specified above. However, certain waters of the state may not meet these goals for the following reasons:

- (a) The presence of inplac pollutants,
- (b) Low natural streamflow,
- (c) Natural background conditions, and
- (d) Irretrievable cultural alterations.



(c) Wetlands. This classification includes areas where water is at or near the surface of the land much of the year, where soils are poorly drained, and where a significant portion of the plant cover is deemed aquatic in nature.

(d) Wastewater effluent channels. This classification includes discharge conveyances constructed primarily for the purpose of transporting wastes from a facility to a point of discharge. Drainage ditches (including those established under chapter 88, Wis. Stats.) constructed primarily for the purposes of relieving excess waters on agricultural lands shall not be construed as effluent channels. Modifications made to natural watercourses receiving wastewater effluents for the purpose of increasing or enhancing the natural flow characteristics of the stream shall not be classified as effluent channels.

(e) Noncontinuous streams. This classification includes watercourses which have a defined stream channel, but have a natural 7-day  $Q_{10}$  flow of less than 0.1 cfs and do not exhibit characteristics of being perpetually wet without wastewater discharges.

(f) Continuous streams. This classification includes watercourses which have a natural 7-day  $Q_{10}$  flow of greater than 0.1 cfs or which exhibit characteristics of a perpetually wet environment, are generally capable of supporting a diverse aquatic biota and flow in a defined stream channel. Note: The application of this classification system is not dependent on the navigability properties of the watercourse, but is dependent upon the quantity-quality relationships of the surface water.

(2) Water quality classification. Whenever the goals as specified in section 147.01(1)(b), Wis. Stats., cannot be attained because of conditions enumerated in NR 104.01(1), a variance may be provided. Variances from a specific water quality criteria may be given in NR 104.04 et. seq. or a variance under one of the categories provided in NR 104.01(4) may be specified.

Table 1

Parameter	Monthly Average (mg/l)	Daily Maximum (mg/l)	Weekly Average (mg/l)	Other (mg/l)
BOD <sub>5</sub>	15	30	-	-
Total Suspended Solids	20	30	-	-
NH <sub>3</sub> -N (May-October)	-	-	3	-
NH <sub>3</sub> -N (November-April)	-	-	6	-
Dissolved Oxygen	-	-	-	4 (minimum)
Total Residual Chlorine	-	-	-	0.75 (maximum)

b. Unless otherwise specified in table 1 above, effluent limitations for sewage treatment works shall be as adopted in Wis. Adm. Code chapter NR 210.

c. In addition to the effluent limitations enumerated in table 1 above, effluent limitations for these and any other substance necessary to protect assigned uses shall be met.

(b) Marginal surface waters: 1. Applicability. This variance category may be applied to the continuous or noncontinuous stream hydrologic classification, except that it shall be applied to all surface waters classified as effluent channel, wetland or diffuse surface water.

2. Surface water criteria. The following surface water quality criteria shall be met in all surface waters included in this variance category:

- a. Minimum daily average dissolved oxygen shall not be less than 2 mg/l.
- b. To protect the public health, bacteriological qualities specified in Wis. Adm. Code section NR 102.02(4) shall be maintained.
- c. Disinfectant sufficient to protect the public health is permitted. Chlorine, when used as an effluent disinfectant, shall not be greater than 0.75 mg/l at any point in the receiving water.
- d. The pH shall be within the range of 6.0 to 9.0.
- e. Other substances shall be controlled in accordance with Wis. Adm. Code section NR 102.02(1).

2. Lakes and flowages. Effluent characteristics for discharges to lakes or flowages shall be based upon an evaluation of water quality necessary to protect fish and aquatic life taking into account mixing zone and nutrient removal criteria.

3. Minimum effluent criteria. If it can be reasonably demonstrated that the quality of the surface water is independent of a wastewater discharge, effluent limitations established under sections 147.04 and 147.06, Wis. Stats., shall apply.

(c) Wastewater treatment lagoons. Effluents from fill-and-draw wastewater treatment lagoons or domestic waste stabilization ponds may be permitted to vary from the limitations specified in table 1 or 2 provided the following conditions are met:

1. The discharge occurs only during the spring and fall of the year when the flow in the receiving water is high, the temperature is low and the dissolved oxygen in the effluent can be maintained at a level greater than or equal to 4 mg/l.

2. The effluent is discharged at a rate specified in a permit issued under section 147.02, Wis. Stats. The permitted rate of discharge shall be such that the dissolved oxygen and ammonia nitrogen criteria necessary to sustain fish and aquatic life are maintained in the stream during the period of discharge.

3. The effluent limitations do not exceed those established under sections 147.04 and 147.06, Wis. Stats.

(5) Changes in Classification. Surface waters which exhibit changing hydrologic and quality characteristics shall be classified accordingly. Effluent criteria for upstream discharges shall be based upon the most critical downstream classification and shall be specified by the department either on the basis of justified inference or by the application of a wasteload allocation analysis. Any subsequent changes in a stream's morphology or potential may necessitate the reevaluation of the classification.

mean based on not less than 5 samples per month nor exceed 2,000 per 100 ml in more than 10% of all samples during any month.

(a) Badfish creek from the east limits of the village of Oregon to the Dane-Rock county line.

TABLE 3  
SOUTHERN DISTRICT

<u>Surface Water (Facility Affected)</u>	<u>Reach Description</u>	<u>Hydrologic Classification</u>	<u>Applicable Criteria (1)</u>	<u>Effluent Limitations (2)</u>
Allen Creek (Brooklyn)	Upstream from Butts Corner Road.	Continuous	I	A
Coon Branch (Cuba City)	Upstream from right tributary approximately 1 mile above STH "11".	Non-Continuous	II	B
	Downstream from above tributary to confluence with Galena River.	Non-Continuous	I	NA
Mud Creek and Tributary (Deerfield)	Tributary from Deerfield STP to confluence with Mud Creek.	Effluent Ditch	II	B
	Mud Creek from above tributary downstream to confluence with Koshkonong Creek.	Continuous	I	
Indian Creek and Tributary (Dickeyville)	Tributary from Dickeyville STP to confluence with Indian Creek.	Non-Continuous	II	NA
	Indian Creek from above tributary downstream to confluence with Platte River.		I	A
Dodge Branch (Dodgeville)	Upstream from a point approximately 3,500 feet downstream from STH "191".	Non-Continuous	I	A
Gregory Branch (Fennimore)	Upstream from STH "61".	Continuous	I	A
Dead Creek (Juneau)	Upstream from CTH "M". From CTH "M" to St. Helena Rd.	Effluent Ditch	II	B
		Continuous	I	NA
Tributary-Pigeon Creek (Lancaster)	Tributary from Lancaster STP downstream to south line of Section 10.	Non-Continuous	II	Effluent limitations to be determined.
	Tributary from above point downstream to confluence with Pigeon Creek.	Continuous	I	
Tributary-East Branch Rock River (Lomira)	Tributary upstream from confluence with East Branch Rock River.	Non-Continuous	I	A
Brewery (Furnace) Creek (Mineral Point)	Brewery Creek upstream from confluence with Mineral Point Branch.	Continuous	II	B (Note: the above limitation shall remain in effect until significant non-point source problems can be corrected)

2. Barnes creek in Kenosha county.
3. Pike creek, a tributary of Pike river, in Kenosha county.
4. Pike river in Racine county.
5. Indian creek in Milwaukee county.
6. Honey creek in Milwaukee county.
7. Menomonee river in Milwaukee county below the confluence with Honey creek.
8. Kinnickinnic river in Milwaukee county.
9. Lincoln creek in Milwaukee county.

(b) The following surface waters in the southeast district shall meet the standards for fish and aquatic life except that the dissolved oxygen shall not be lowered to less than 2 mg/l at any time, nor shall the membrane filter fecal coliform count exceed 1,000 per 100 ml as a monthly geometric mean based on not less than 5 samples per month nor exceed 89°F at any time at the edge of the mixing zones established by the department under Wis. Adm. Code section NR 102.03(4):

1. Milwaukee river in Milwaukee county downstream from the North Avenue dam.
2. South Menomonee canal and Burnham canal in Milwaukee county.

TABLE 4  
SOUTHEAST DISTRICT

<u>Surface Water (Facility Affected)</u>	<u>Reach Description</u>	<u>Hydrologic Classification</u>	<u>Applicable Criteria (1)</u>	<u>Effluent Limitations (2)</u>
Tributary-Muskego Lake (Muskego)	Tributary from Muskego STP downstream to Muskego Lake.	Effluent Ditch	II	Effluent limitations to be determined.
Salem Branch (Salem Utility District 1)	Salem Branch from Salem Utility District 1 STP downstream to 216th Avenue.	Non-Continuous	I	A
Little Turtle River (Sharon)	Little Turtle River from Sharon STP downstream to Rock- Walworth County line.	Non-Continuous	II	B
Tributary-Rubicon River (Slinger)	Tributary of the Rubicon River from the Slinger STP downstream to the wetland adjacent to Slinger Road.	Effluent Ditch	II	B
	Tributary from above location downstream to Rubicon River.	Non-Continuous	II	NA
	Rubicon River from Slinger Ditch downstream to Pike Lake.	Non-Continuous	I	NA

TABLE 5  
LAKE MICHIGAN DISTRICT

<u>Surface Water (Facility Affected)</u>	<u>Reach Description</u>	<u>Hydrologic Classification</u>	<u>Applicable Criteria (1)</u>	<u>Effluent Limitations (2)</u>
Black Creek (Black Creek)	Black Creek from Black Creek STP to confluence with Shioc River (see Black Creek at Seymour).	Non-Continuous	I	A
Drainage to Gallagher Marsh (Brandon)	Upstream from STH "49" to Brandon. Drainage from STH "49" to Gallagher Marsh.	Effluent Ditch Diffuse Surface Water	II II	B NA
Tributary-Spring Creek (Brillion)	Channel from Brillion STP to Spring Creek.	Effluent Ditch	II	Effluent limits to be determined.
Barr Creek-Tributary (Cedar Grove)	Barr Creek and tributary to Cedar Grove STP upstream from Lake Michigan.	Non-Continuous	II	B
Tributary-Neshota River (Denmark)	Tributary from Denmark downstream to Neshota River	Non-Continuous	I	A
Tributary-DeNeveu Creek (Eden)	DeNeveu Creek tributary from Eden STP downstream to confluence with DeNeveu Creek.	Continuous	I	A
Seven Mile Creek (Haven Sanitary District)	Seven Mile Creek upstream from confluence with Meeme River.	Non-Continuous	II	B
Tributary-North Branch Manitowoc River (Hilbert)	Tributary to Hilbert upstream from confluence with North Branch Manitowoc River.	Non-Continuous	I	A
Tributaries-Plum Creek (Holland Sanitary District)	Tributary from CTH "D" downstream to Plum Creek.	Non-Continuous	II	B
	Tributary from Holland Sanitary District STP downstream to above named tributary.	Non-Continuous	II	B
Tributary-Kriwaniks Creek (Kellnersville)	Tributary from Kellnersville downstream to Kriwaniks Creek.	Non-Continuous	I	A
Jones Creek (Lena)	Jones Creek upstream from CTH "J".	Non-Continuous	II	B
	Jones Creek from CTH "J" downstream to confluence with Little River.	Continuous	I	NA
School Creek (Luxemburg)	School Creek upstream from confluence with Kewaunee R.	Non-Continuous	I	A
Tributary-Grand River (Markesan)	Ditch tributary from Markesan STP outfall to Grand River.	Effluent Ditch	II	Effluent limitations to be determined.
Tributary-Beaver Creek (Pound)	Tributary of Beaver Creek from Pound STP downstream to confluence with Beaver Creek.	Non-Continuous	I	A
Silver Creek (Random Lake)	Silver Creek from Random Lake STP downstream to first crossing of Creek Road.	Continuous	I	A
Tributary-West Branch Fond du Lac River (Rosendale)	Tributary from Rosendale STP downstream to confluence with West Branch Fond du Lac River.	Non-Continuous	I	A
Tributary-Manitowoc River (St. Nazianz)	Tributary from St. Nazianz STP to STH "151".	Non-Continuous	I	A



NR 104.08 Variances and Additions Applicable in the North Central District. Subject to the provisions of NR 104.04, intrastate waters in the north central district counties of Adams, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas and Wood shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

(1) Addition. The public water supply standards shall be met in Lake Nepco in Wood county.

(2) Variance. Surface waters in the north central district subject to a variance under NR 104.02(3) are listed in table 6.

TABLE 6  
NORTH CENTRAL DISTRICT

<u>Surface Water (Facility Affected)</u>	<u>Reach Description</u>	<u>Hydrologic Classification</u>	<u>Applicable Criteria (1)</u>	<u>Effluent Limitations (2)</u>
Mill Creek (Marshfield)	Mill Creek upstream from first road above CTH "E".	Effluent Ditch	II	Effluent limits to be determined.
	Mill Creek from above road to CTH "K".	Continuous	I	
Tributary-Big Eau Pleine River (Stratford)	Tributary from Stratford downstream to Big Eau Pleine R.	Non-Continuous	II	B
Drainage to Town Line Lake (Three Lakes Sanitary District)	Drainage area between Three Lakes Sanitary District STP and Town Line Lake.	Wetland	II	B

(1) Criteria I requires the maintenance of surface water criteria specified in NR 104.02(3)(a)2.

Criteria II requires the maintenance of surface water criteria specified in NR 104.02(3)(b)2.

(2) Effluent limitation A requires those limits specified in NR 104.02(3)(a)3.

Effluent limitation B requires those limits specified in NR 104.02(3)(b)3.

Table 7  
WEST CENTRAL DISTRICT

<u>Surface Water (Facility Affected)</u>	<u>Reach Description</u>	<u>Hydrologic Classification</u>	<u>Applicable Criteria (1)</u>	<u>Effluent Limitations (2)</u>
Baldwin Creek-Rush River (Baldwin)	Baldwin Creek-upstream from con- fluence with Rush River.	Non-Continuous	I	A
	Rush River-upstream from St. Croix-Pierce County line.	Non-Continuous	I	A
Little La Crosse River (Cashton)	Little La Crosse River upstream from 0.2 miles north of line between Sections 24 and 25, T15N, R4W.	Non-Continuous	I	A
Hay River (Cumberland)	Hay River from dam at Beaver Dam Lake downstream to Town Road at northwest corner of Section 29.	Non-Continuous	I	A
Drainage Area Tributary to Fish Hatchery Creek (Dresser)	Drainage area upstream from constructed drainage ditch to the tributary of Fish Hatchery Creek.	Wetland	II	B
	Drainage ditch and tributary to Fish Hatchery Creek.	Non-Continuous	I	A
Isabella Creek (Ellsworth)	Isabella Creek upstream from Town Road between Sections 28 and 33.	Non-Continuous	II	B
	Isabella Creek in Section 33.	Non-Continuous	I	NA
	Isabella Creek from above location downstream to CTH "V".	Continuous	I	NA
Brown Brook Tributary of Trade River (Frederic)	Brown Brook upstream from Town Rd. between Section 33 and Section 4.	Non-Continuous	II	B
	Brown Brook from above location downstream 0.5 mile.	Continuous	I	NA
Bear Creek (Loyal)	Bear Creek from Loyal STP down- stream to Town Road on north line of Section 8.	Non-Continuous	I	A
Tributary-Trade River (Luck)	Tributary from Luck STP down- stream to center of Section 21.	Effluent Ditch	II	B
Drainage Area Tributary Rice Lake (Milltown)	Drainage area north of Rice Lake in Section 17.	Wetland	II	B
Drainage from Village of Turtle Lake to Moon Creek (Turtle Lake)	Drainage area between Turtle Lake STP downstream to dike near south line of Section 32.	Wetland	II	B
	Channel from above dike downstream to south line of Section 32.	Non-Continuous	I	NA
Tributary to Springville Branch Bad Axe River (Viroqua)	Tributary from Viroqua STP downstream to large spring above Springville.	Non-Continuous	II	Effluent Limitations to be determined.
Tributary to North Fork Bad Axe River (Westby)	Tributary from Westby STP down- stream to line between Sections 35 and 36, T14N, R5W.	Non-Continuous	II	B

(3) Other variances. (a) The Flambeau river from the upper dam at Park Falls downstream to the Crowley dam shall meet the standards for fish and aquatic life and recreational use except that the dissolved oxygen shall not be lowered to less than 3.0 mg/l at any time.

(b) Newton creek from Stinson avenue to the mouth at Superior Bay in the city of Superior, Douglas county is classified as a noncontinuous stream. The water quality of Newton creek shall meet those criteria specified in Wis. Adm. Code section NR 102.02(1) and shall be maintained at a dissolved oxygen concentration of at least 5.0 mg/l at all times. Superior Bay shall meet the standards for fish and aquatic life and recreational uses except that the average total ammonia nitrogen concentration in the bay shoreward from Hog Island shall not exceed 2.83 mg/l. Determinations of average total ammonia nitrogen concentration shall be based on samples taken at 4 representative locations.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on April 15, 1976.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin

22 July 1976

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By

Anthony S. Earl  
Anthony S. Earl, Secretary

(SEAL)