seq. or a variance under one of the categories provided in this chapter may be specified.

(b) Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development, or other activities shall be controlled so that waters regardless of their hydrologic and water quality classifications meet the general aesthetic and acute toxicity conditions in Wis. Adm. Code section NR 102.02 (1).

(3) VARIANCE CATEGORIES. (a) Surface waters not supporting a balanced aquatic community (intermediate aquatic life):

1. Applicability. This category of variance may be applied to either the continuous or noncontinuous stream hydrologic classification.

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

a. Dissolved oxygen shall not be less than 3 mg/1.

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.

d. Chlorine, when used as an effluent disinfectant, shall not be greater than 0.50 mg/1 at any point in the receiving water.

e. Ammonia nitrogen (as N) at all points in the receiving water shall not be greater than 3 mg/1 during warm temperature conditions nor greater than 6 mg/1 during cold temperatures to minimize the zone of toxicity and to reduce dissolved oxygen depletion caused by oxidation of the ammonia.

f. The pH shall be within the range of 6.0 to 9.0.

g. Other substances shall be controlled in accordance with Wis. Adm. Code section NR 102.02 (1).

3. Effluent criteria. a. The effluent limitations determined necessary to meet the surface water criteria listed above are enumerated in table 1.

Table 1

Parameter	Monthly Average (mg/1)	Daily Maximum (mg/1)	Weekly Average (mg/1)	Other (mg/1)
BOD_5	15	30	-	-
Total Suspended Solids	20	30	-	-
NH_3-N (May-October)	-	-	3	-
NH_3-N (November-April)	-	-	6	-
Dissolved Oxygen	-	-	-	4 (minimum)
Total Residual Chlorine	-	-	-	0.50 (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 is 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. Dissolved oxygen shall not be less than 2 mg/1.

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 0.50 mg/1 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).

3. Effluent criteria. a. The effluent limitations determined necessary to meet the surface water criteria listed above are enumerated in table 2.

Table 2

Parameter	Monthly Average (mg/1)	Weekly Average (mg/1)	Other (mg/1)
BOD_5	20	30	-
Total Suspended Solids	20	30	-
Dissolved Oxygen	-	-	4 (minimum)
Total Residual Chlorine	-	-	0.50 (maximum)

b. Unless otherwise specified in table 2 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 2 above, effluent limitations for these and any other substance necessary to protect assigned uses shall be met.

(4) OTHER CLASSIFICATIONS AND EFFLUENT CRITERIA. (a) *Surface waters significant to the environmental integrity of the state or region.* Under all hydrologic categories, the department reserves the right to require other effluent limitations, including allocation of wasteloads for organic material, toxicants and chlorine residuals if it is determined that the specified surface water is important to the overall environmental integrity of the area. In waters identified as trout streams, located in scientific areas or wild and scenic areas, providing endangered species habitat or of high recreational potential, effluent criteria will be evaluated on a case-by-case basis.

(b) *Surface waters classified for fish and aquatic life.* 1. Streams. Where flowing streams or rivers are specified to achieve fish and aquatic life criteria, wasteload allocation for organic material, toxicants and

chlorine residuals shall determine effluent criteria necessary to achieve that standard.

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 discharging to waters receiving a variance in this chapter 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 normally high, and the temperature is low. The rate of discharge shall not exceed that specified in a permit under section 147.02, Wis. Stats., or where no rate is indicated, the allowable discharge quantities shall be determined by the department based upon current evaluation of the receiving water.

2. In lieu of the previous conditions, the discharge from a fill-and-draw lagoon may occur at any time provided the rate does not exceed the assimilative capacity of the receiving water as specified in a permit under section 147.02, Wis. Stats.

3. The dissolved oxygen in the effluent is maintained at a level greater than or equal to 4 mg/1, and 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.

4. 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.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. Tables 1 and 2, (2), (3) (a) 2a and d, (3) (b) 2a and c, (4) (c), Register, December, 1977, No. 264, eff. 1-1-78.

NR 104.03 Classification of surface waters and antidegradation. In no case shall the effluent criteria specified herein cause degradation of surface water quality below present levels. Surface waters which, be reason of their hydrologic classification, are permitted to receive a new effluent of a quality specified in NR 104.02 shall not receive such effluent unless it has been affirmatively demonstrated to the department that such degradation is necessary to protect the public health or to maintain

or restore the environmental integrity of a higher value resource. In no case shall a new effluent interfere with or become injurious to any assigned uses made of or presently possible in any surface water.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. Register, December, 1977, No. 264, eff. 1-1-78.

NR 104.04 Provision for changes. The surface waters specified in this chapter are not intended to be an exclusive listing nor do the specified effluent criteria purport to meet the 1983 water quality goals set forth in chapter 147, Wis. Stats. Additions to or deletions from these listings may be made based upon the accumulation of information necessary to make such determination and in accordance with the requirements of chapter 227, Wis. Stats.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76.

NR 104.05 Variances and additions applicable in the southern district. Subject to the provision of NR 104.04, intrastate surface waters in the southern district counties of Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock and Sauk shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

(1) ADDITION. The public water supply standard shall be met on the Wisconsin river in section 8, township 10 north, range 7 east.

(2) VARIANCE. Surface waters in the southern district subject to a variance under NR 104.02(3) are listed in table 3.

TABLE 3
SOUTHERN DISTRICT

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2)
1. Goose Lake Tributary (Arlington)	Tributary upstream from Goose Lake	Noncontinuous	II	Effluent limitations to be determined
2. Tributary - East Branch Pecatonica River (Barneveld)	From the Barneveld STP downstream to the East Branch Pecatonica River	Noncontinuous	II	B
3. Williams Creek (Blue Mounds)	From the Blue Mounds STP downstream to the east line of Sec. 14, T6N, R5E	Noncontinuous	I	A
4. Sanders Creek (Boscobel)	From the Boscobel STP downstream to the Wisconsin River	Continuous	I	A
5. Allen Creek (Brooklyn)	Upstream from Butts Corner Road	Continuous	I	A
6. Kummel Creek (Brownsville)	From Brownsville STP downstream to CTH "HH"	Noncontinuous	I	A
7. Spring Brook and Tributary (Clinton)	Tributary from the Clinton STP to Spring Brook	Effluent ditch	II	B
	Spring Brook in Clinton Township	Continuous	II	NA
8. Tributary - Dead Creek (Clyman)	Tributary from Clyman STP downstream to Dead Creek	Noncontinuous	II	B
9. West Branch Pecatonica River (Cobb)	From the Cobb STP downstream to confluence with an unnamed tributary NE¼, NW¼, Sec. 2, T5N, R1E.	Continuous	I	A
10. Door Creek (Cottage Grove)	Door Creek upstream from STH 12 & 18	Noncontinuous	I	A
	From STH 12 & 18 downstream to Lake Kegonsa	Continuous	I	NA

	Dill Creek from Elm Brook to the town road between sections 29 and 32, T28N, R2E	Continuous	I	NA
5. Tributary - Peshtigo Lake (Crandon)	From the Crandon STP to Peshtigo Lake	Noncontinuous	II	Effluent limits to be determined
6. Scotch Creek (Edgar)	From CTH "H" downstream to Soda Creek	Noncontinuous	I	A
7. Tributary - Mill Creek (Junction City)	From the Junction City STP downstream to Mill Creek	Noncontinuous	II	B
8. Tributary - Wisconsin River (Land O'Lakes)	From outfall to unnamed lake in the NW¼, SW¼, Sec. 2, R10E, T42N	Noncontinuous	II	B
	From the above location to Wisconsin River	Continuous	I	NA
9. Tributary - North Branch Prairie River (Lincoln Hills School)	From outfall to small pond in the NW¼, SW¼, of Sec. 15, T33N, R7E	Noncontinuous	II	B
10. 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	
11. Randall Creek (Milan) or the 2nd alternative Marsh Creek (Milan S.D.)	From the discharge location to the middle north half of Sec. 21, T29N, R3E	Wetland	II	B
	From proposed discharge site to the middle of Section 19, T29N, R3E	Diffused surface water	II	B
	From that point to the town road bridge between Sections 25 & 36	Noncontinuous	II	NA
	From above location to Randall Creek	Noncontinuous	I	NA
12. Spirit Lake Drainage (Northernaire Lake Terrace)	The area between the Northernaire Lake Terrace discharge and Spirit Lake	Wetland	II	B
13. Tributary - Deerskin River (Phelps)	From the Phelps STP discharge to STH "17"	Wetland	II	B
	From STH "17" to the town road between Secs. 12 & 13, T41N, R11E	Noncontinuous	II	NA
	From above location to Deerskin River	Noncontinuous	I	NA
14. Tributary - Wild Creek (Rozellville)	From STP to tributary of Wild Creek	Diffused surface waters	II	B
	Tributary upstream from Wild Creek	Noncontinuous	II	NA
	Wild Creek upstream from Eau Pleine River	Noncontinuous	I	NA
15. Tributary - Wisconsin River (Rudolph)	From the Rudolph STP downstream to the town road in Sec. 16, T23N, R6E	Effluent ditch	II	B
	From above road down to tributary in Sec. 26, T23N, R3E	Noncontinuous	II	NA
	From above tributary downstream to the Wisconsin River	Continuous	I	NA
16. Tributary - Little Eau Pleine River (Spencer)	From the Spencer STP to the tributary in the NE corner of Sec. 8, T26N, R2E	Effluent ditch	II	B
	From above location downstream to the Little Eau Pleine River	Noncontinuous	II	NA
17. Tributary-Big Eau Pleine River (Stratford)	Tributary from Stratford downstream to Big Eau Pleine R.	Noncontinuous	II	B
18. Drainage to Town Line Lake (Three Lakes Sanitary District)	Drainage area between Three Lakes Sanitary District STP and Town Line Lake	Wetland	II	B
19. Tributary - Hemlock Creek (Vesper)	From Vesper STP to the confluence with Hemlock Creek	Noncontinuous	II	NA
	Hemlock Creek from the Vesper Dam to Dawes Creek	Noncontinuous	I	A

(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.

NA — Not applicable

(3) OTHER VARIANCES. (a) The Wisconsin river from the Rhinelander dam downstream to Crescent creek 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/1 at any time.

(b) The Wisconsin river from the Rothschild dam downstream to state highway "34" 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 mg/1 at any time.

(c) The Wisconsin river from the state highway "73" bridge at Nekoosa downstream to state highway "82" bridge shall meet the standards for fish and aquatic life and recreational use except that the dissolved oxygen shall not be lowered to less than 2 mg/1 from January 1 to April 15 annually.

History: Cr. Register, September, 1976, No. 249, eff. 10-1-76; am. Table 6, Register, December, 1977, No. 264, eff. 1-1-78.

NR 104.09 Variances and additions applicable in the west central district. Subject to the provisions of NR 104.04, intrastate waters in the west central district counties of Barron, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, La Crosse, Monroe, Pepin, Pierce, Polk, St. Croix, Trempealeau and Vernon shall meet the criteria for fish and aquatic life and recreational use with exceptions and additions as follows:

(1) ADDITION. The public water supply standard shall be met in the following surface waters:

(a) Black river at Neillsville.

(b) Town creek at Black River Falls.

(2) VARIANCE. Surface waters in the west central district subject to a variance under NR 104.02(3) are listed in table 7.

TABLE 7
WEST CENTRAL DISTRICT

Surface Water (Facility Affected)	Reach Description	Hydrologic Classification	Applicable Criteria (1)	Effluent Limitations (2)
1. Drainage Area - CR. 31-16, "Meyer's Valley Creek" (Arcadia)	Drainage area south of railroad tracks and west of stabilization ponds in N½, NE¼, Sec. 1, T20N, R10W	Wetland	II	B
	Cr. 31-16 (Meyer's Valley Creek) North of railroad tracks to Trempealeau River	Continuous	I	NA
2. Baldwin Creek-Rush River (Baldwin)	Baldwin Creek-upstream from confluence with Rush River.	Noncontinuous	I	A
	Rush River-upstream from St. Croix-Pierce County line.	Noncontinuous	I	A
3. Tributary - Hay Creek (Boyd)	Tributary from Boyd STP downstream 1,300 feet	Noncontinuous	II	Effluent limitations to be determined
	Tributary from above location to Hay Creek	Continuous	I	
4. Little La Crosse River (Cashton)	Little La Crosse River upstream from 0.2 miles north of line between Sections 24 and 25, T15N, R4W.	Noncontinuous	I	A