



CR 86-76

State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

BOX 7921
MADISON, WISCONSIN 53707

STATE OF WISCONSIN)
) ss
DEPARTMENT OF NATURAL RESOURCES)

✓ RECEIVED
DEC 9 1986
8:35 am
Revisor of Statutes
Bureau

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Bruce B. Braun, Deputy 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. WW-24-86 was duly approved and adopted by this Department on October 23, 1986. 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 General Executive Facility #2 in the City of Madison, this 9th day of December, 1986.

Bruce B. Braun
Bruce B. Braun, Deputy Secretary

(SEAL)

3-1-87

Handwritten text at the top of the page, possibly a header or title, which is mostly illegible due to fading and bleed-through.

Handwritten text block, possibly a date or a short note.

Handwritten text block, possibly a name or a short note.

Handwritten text block, possibly a name or a short note.

Vertical handwritten text along the right edge of the page, possibly a margin note or a list of items.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
CREATING RULES

.....
IN THE MATTER of creating ch. NR 208 and
s. NR 210.11, Wisconsin Administrative Code,
pertaining to compliance maintenance
annual reports (CMARs)
.....

WW-24-86

Analysis Prepared by Department of Natural Resources

The proposed rules contain the Department's compliance maintenance policy for all municipal dischargers. The rules will prevent violations of effluent limits, maximize design lives of sewerage systems, and where necessary require municipalities to initiate planning prior to effluent limits violations. This program will be carried out through the existing Wisconsin Pollutant Discharge Elimination System (WPDES) permit process. The major provisions of the code are:

1. All municipal permittees shall submit a compliance maintenance annual report.
2. Municipal government responsibility is increased.
3. A point system, based on the indicators described in the annual report is developed. Points will be generated for the following treatment characteristics: system performance, relationship to design, plant age, bypassing, sludge management, new development and operator.
4. Three levels of municipal and Department activity are created based on increasing point values: voluntary, Department recommendation, Department action levels. Point totals associated with each level are set in the code.
5. An annual refinement procedure is established allowing changes in the point totals associated with each level.
6. The operation and needs review is created.
7. The code will encourage facility plans to solve specific problems.
8. The creation of a work plan, a component of the facility plan or operations and needs review is created.
9. "Self-evaluation," subjective questions, that do not generate points appear at the end of the annual report.
10. Questions covering the financing of wastewater facilities are included in the annual report.

The statutes interpreted are ss. 147.01 and 147.02, Stats.

Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by s. 227.11(2)(a), Stats., the State of Wisconsin Natural Resources Board hereby creates rules interpreting ss. 147.01 and 147.02, Stats., as follows:

SECTION 1. Chapter NR 208 is created to read:

CHAPTER NR 208
COMPLIANCE MAINTENANCE

NR 208.01 PURPOSE. This chapter implements Ch. 147, Stats., and encourages and, where necessary, requires owners of publicly owned treatment works and privately owned domestic sewage treatment works to take necessary actions to avoid water quality degradation and prevent violations of WPDES permit effluent limits. This chapter encourages actions which promote the owner's awareness and responsibility for wastewater treatment needs, maximize the useful life of sewerage systems through improved operation and maintenance and initiate formal planning, design and construction to prevent effluent violations.

NR 208.02 APPLICABILITY. This chapter applies to owners of publicly owned treatment works and privately owned domestic sewage treatment works.

NR 208.03 DEFINITIONS. In addition to the definitions and abbreviations in chs. NR 110, 114, 205, 206 and 210, and ch. 147, Stats., the following definitions apply to terms in this chapter.

(1) "Compliance maintenance annual report" or "CMAR" means a report which the owner of a treatment works submits to the department to describe the physical conditions and the performance of the owner's sewerage system during the previous calendar year.

(2) "Facility plan" means a report which the owner of a treatment works submits to the department that consists of those necessary plans and studies directly relating to the construction of proposed sewage treatment facilities or additions to existing sewage treatment facilities where additional treatment capacity is proposed.

(3) "Operation and needs review" or "ONR" means a report which the owner of a treatment works submits to the department evaluating the ability of the sewerage system to maintain effluent limits over the next 5 years.

(4) "Work plan" means a list of all necessary actions and a corresponding time schedule which is included in the facility plan or operation and needs review to ensure that an owner's sewerage system maintains effluent limits.

NR 208.04 COMPLIANCE MAINTENANCE ANNUAL REPORT. (1) PURPOSE. The compliance maintenance annual report describes the physical conditions and the performance of the sewerage system during the previous calendar year, and provides a treatment works owner with an objective analysis to determine whether a more detailed evaluation of the sewerage system shall be conducted. The owner and the department shall use the CMAR to identify needs for future planning actions. In conjunction with a point rating system, the CMAR shall determine whether sewerage system owners shall initiate actions to prevent effluent limit violations.

(2) SUBMITTAL TIMING AND OTHER REQUIREMENTS. The CMAR shall be submitted to the department on or before June 30, 1987. Thereafter, the CMAR shall be submitted to the department on or before March 31 of each subsequent year. The CMAR shall be based on information and monitoring data collected in the previous calendar year. A duly authorized representative of the owner shall complete and sign the CMAR. (3) RESOLUTION. In the case of a publicly owned treatment works, a resolution from the municipality's governing body shall accompany the CMAR. The resolution shall include the following:

- (a) An acknowledgment that the governing body has reviewed the CMAR;
- (b) A description of actions which the owner will take to maintain compliance with effluent limitations; and
- (c) Any other information the governing body deems appropriate.
- (4) CONTENT. The CMAR shall be submitted on forms provided by the department. The owner shall supply and analyze the following information:
 - (a) Effluent quality and wastewater treatment facility performance;
 - (b) Actual influent flow and BOD₅ loading to the wastewater treatment facility in relation to the design flows and design BOD₅ loadings for the facility;
 - (c) Age of the wastewater treatment facilities;
 - (d) The occurrence of bypasses and overflows in the sewerage system;
 - (e) Anticipated new development;
 - (f) Sludge storage and disposal capacity;
 - (g) Financial status of the wastewater utility;
 - (h) General physical condition of the facility;
 - (i) Expected useful life of the facility;
 - (j) Operator training and certification; and
 - (k) Other information required by the department.

NR 208.05 COMPLIANCE MAINTENANCE POINT SYSTEM. (1) PURPOSE. The CMAR shall contain a point system component which is applied to all owners, to establish actions which promote effluent limit compliance, identify whether an owner shall take additional steps to maintain or improve existing sewerage system operations, and evaluate the condition of the sewerage system.

(2) RATINGS ITEMS. On an annual basis, the owner shall calculate a point total T which is based on information provided by the owner in the CMAR. The point total T shall be determined with the following equation:

$T = (TBL + TQ + TBOD + TTSS + TAGE + TBYP + TBEF + TSTG + TSD + TND + TFD + TOC +TOT) \times EQ$ which is defined as follows:

(a) TBL, the point sum for monthly average BOD₅ mass loading in relation to the design BOD₅ loading, shall equal the sum of numbers appearing in Table 1 for monthly exceedances of 90% and 100% of design average BOD₅ loading in the previous calendar year.

Table 1
Point Assignments Related to Exceedances of a Percentage of Design BOD₅ Loadings in the Previous Calendar Year

Number of Months that a Percentage of Design BOD ₅ Loadings is Exceeded	Percent of Design BOD ₅ Loadings	
	90%	100%
0	0	0
1	0	10
2	5	20
3	5	30
4	5	40
5 or greater	10	50

(b) TQ, the point sum for monthly average volumetric flow in relation to design average volumetric flow, shall equal the sum of numbers appearing in Table 2 for monthly exceedances of 90% and 100% of design average volumetric flow in the previous calendar year.

Table 2
Point Assignments Related to the Exceedance of Percentages of Design Volumetric Flows in the Previous Calendar Year

Number of Months that a Percentage of Design Volumetric Flow is Exceeded	Percent of Design Flows	
	90%	100%
0	0	0
1	0	5
2	0	5
3	0	10
4	0	10
5 or greater	5	15

(c) TBOD, the point sum relating to the effluent limit for 5-day biochemical oxygen demand (BOD₅), shall equal the sum of numbers appearing in Table 3 for exceedances of 90% and 100% of the monthly average effluent limits contained in the WPDES permit. In the absence of monthly average effluent limits for BOD₅, weekly effluent limits shall be used in the calculation.

Table 3
Point Assignments Related to the
Exceedance of Percentages of the BOD₅ Effluent Limit(s)
in the Previous Calendar Year

Number of Months that a Percentage of the BOD ₅ Effluent Limit is Exceeded	Percent of BOD ₅ Effluent Limit	
	90%	100%
0	0	0
1	0	5
2	10	5
3	20	10
4	30	10
5 or greater	40	10

(d) TTSS, the point sum relating to the effluent limit for total suspended solids, shall equal the sum of numbers appearing in Table 4 for exceedances of 90% and 100% of the monthly average effluent limits contained in the WPDES permit. In the absence of monthly average effluent limits for total suspended solids, weekly effluent limits shall be used in the calculation. If no total suspended solids limit is included in the WPDES permit, TTSS shall equal 0.

Table 4
 Point Assignments Related to the Exceedance
 of Percentages of the Total Suspended Solids Effluent
 Limit(s) in the Previous Calendar Year

Number of Months that a Percentage of the TSS Effluent Limit(s) is Exceeded	Percent of TSS Effluent Limit	
	90%	100%
0	0	0
1	0	5
2	10	5
3	20	10
4	30	10
5 or greater	40	10

(e) TAGE, the point sum relating to facility age, shall be the time period in years since the wastewater treatment facility was constructed or underwent major structural modification or major additions were placed in operation multiplied by the age factors contained in table 5 associated with the type of sewage treatment plant indicated. Under this subsection TAGE may not be greater than 40.

Table 5

<u>Plant Type</u>	<u>Age Factor</u>
Stabilization Ponds	1.0
Aerated Lagoons	1.5
All other plants	2.0

(f) TBYP, the point sum relating to bypassing due to precipitation, shall be the number of calendar days that bypasses or overflows due to precipitation events occurred during the previous calendar year multiplied by 5. Under this subsection TBYP may not be greater than 25.

(g) TBEF, the point sum relating to bypassing due to equipment failure, shall be the number of calendar days that bypasses or overflows due to equipment failure occurred during the previous calendar year multiplied by 5. Under this subsection TBEF may not be greater than 25.

(h) TSTG, the point total associated with sludge storage capacity, shall be the number of points appearing on Table 6 relating to the sludge storage capacity at the owner's wastewater treatment facility and off site. For aerated lagoons and stabilization ponds, TSTG shall equal 0.

Table 6
Point Assignments Associated with Sludge Storage

<u>Sludge Storage Capacity</u>	<u>Point Total</u>
Less than one month	50
Less than 2 months and greater than or equal to one month	30
Less than 3 months and greater or equal to 2 months	20
Less than 4 months but greater than or equal to 3 months	10
Greater than or equal to 4 months	0

(i) TSD, the point total associated with sludge disposal sites, shall be the number of points appearing on Table 7 relating to the adequacy of sludge disposal sites approved for use by the permittee. For aerated lagoons and stabilization ponds, TSD shall equal 0. For other facilities that do not discharge sludge on land, TSD shall equal 0.

Table 7

Point Assignments Associated with Sludge Disposal Practices

<u>Number of Months The Permittee Has Access to and Approval for Sufficient Land Disposal of Sludge</u>	<u>Point Total</u>
36 or more	0
Less than 36 and greater than or equal to 24	10
Less than 24 and greater than or equal to 12	20
Less than 12 and greater than or equal to 6	30
Less than 6	50

(j) TND, the point total associated with new development within the sewer service area of permittee, shall equal 10 points if new development has occurred over the last 12 months that will have a significant impact on discharges to the permittee's sewerage system. Otherwise TND shall equal 0.

(k) TFD, the point total associated with future development within the sewer service area, shall equal 10 points if new development is likely to occur in the next 3 years that will result in a significant new discharge to the permittee's sewerage system. Otherwise TFD shall equal 0.

(l) TOC, the point total associated with operator certification, shall equal 0 points if the individual in direct responsible charge of the operation of the treatment plant is certified at the grade level required by s. NR 114.14, and 5 points if the chief operator is not certified at the grade level required by s. NR 114.14.

(m) TOT, the point total associated with operator training, shall equal 0 points if the individual in direct responsible charge of the operation of the treatment plant has completed greater than or equal to 12 hours of continuing education in the previous 2 calendar years. TOT shall equal 5 points if the chief operator has completed less than 12 hours of continuing education in the previous 2 calendar years.

(n) EQ, the factor that equalizes the point sum for different types of sewage treatment plants, shall be equal to 1.33 for aerated lagoons and stabilization ponds that discharge to surface waters, 1.60 for aerated lagoons and stabilization ponds that discharge to groundwater, 1.14 for all other sewage treatment plants that discharge to groundwater, and 1.00 for all other sewage treatment plants.

(3) CALCULATION OF CMAR POINT TOTAL. The CMAR shall include the procedure for calculating the point total of the items in sub. (2). The owner shall calculate T with the CMAR submittal. The owner may submit an explanation of the assumptions that were used in rating the items and determining point values contained in the completed CMAR.

NR 208.06 REVIEW OF CMAR. (1) DEPARTMENT REVIEW AND ACCEPTANCE. The department shall review the CMAR and the point total contained in the CMAR for accuracy and completeness. The department shall notify the owner within 60 days of submittal whether the CMAR and the point total calculations are acceptable. In case of error, the department shall recalculate the point total and notify the owner of the corrected totals. The notification shall explain the corrections.

(2) LEVELS OF OWNER AND DEPARTMENT RESPONSES. When accepted point totals are within the following ranges, the department shall notify each owner of the range:

(a) Voluntary range. For point totals equal to or less than 70, the owner may evaluate and implement steps to address problems identified in the CMAR. The owner may initiate longer range planning for new, upgraded or additional treatment facilities. (b) Department recommendation range. For point totals greater than 70 but less than or equal to 200 for all CMAR's submitted pursuant to the June 30, 1987 deadline, the department shall notify the owner that an operation and needs review is recommended. Thereafter, the department recommendation range shall be greater than 70 points and less than or equal to 120 points. A facility plan shall be recommended if the CMAR indicates the existing system is not capable of providing adequate wastewater treatment in the next 5 years.

(c) Department action range. For point totals greater than 200 for all CMAR's submitted pursuant to the June 30, 1987 deadline, the department shall require the owner to complete an operation and needs review within a time period which the department prescribes. Thereafter, the department action range shall be greater than 120 points. A facility plan shall be required if the department determines that consistent future compliance with effluent limitations will not result from improved system operation maintenance and efficiency or that growth within areas served by the owner's sewerage system jeopardizes future compliance. A work plan shall be submitted as a part of the facility plan or operations and needs review. If necessary, the department shall modify the owner's WPDES permit to require one or more of the referenced reports. All procedures used in the modification of a WPDES permit shall conform with requirements in ch. NR 203.

(3) OWNER RESPONSE REQUIREMENTS. The following are general requirements of the reports described below.

(a) Operations and needs review. The content and scope of the ONR shall be based on individual point totals for each information item identified in s. NR 208.05(2). The ONR shall include an investigation of the sewerage system to determine whether improved operation, maintenance and efficiency of the existing facility will result in continued effluent limit compliance over the next 5 years. The ONR shall evaluate anticipated increases in discharges due to residential, commercial and industrial growth within the owner's sewer service area. The ONR may replace a facility plan for minor upgrading of sewerage systems.

(b) Facility plan. The scope of the facility plan shall be based on individual point totals for each information item identified in s. NR 208.05(2) and upon the requirements of s. NR 110.09.

(c) Work plan. The owner shall submit a work plan as a part of the facility plan or the ONR. For a major upgrading program, the work plan shall be a schedule of all necessary planning, design and construction tasks for the new system. Work plans may also specify operational or pretreatment improvements for the sewerage system.

(4) OTHER ACTIONS. A permittee's CMAR does not preclude the department from taking actions necessary to ensure the permittee's compliance with chs. 29, 30, 31, 144 and 147, Stats.

(5) REVISION OF POINT VALUES. On or before November 1 of each year the department may revise the point ranges associated with each level of owner and department response in sub. (2). All owners shall be notified of the point total revisions on or before December 1. All CMARs submitted the following

year shall be evaluated for response based on the revised point ranges. To revise the point ranges the department shall consider the previous year's point totals for all sewage treatment plants, statewide compliance with effluent limits, fiscal considerations, environmental impacts and other factors. The point ranges may be revised only after consultation with the following persons or organizations:

- (a) Municipal officials;
- (b) Owners of private domestic sewage treatment plants;
- (c) Sewage treatment plant operators;
- (d) The attorney general; and
- (e) Environmental organizations.

NR 208.07 ACTIONS REQUIRED TO MAINTAIN COMPLIANCE. (1) REPORT SUBMITTAL REQUIREMENTS. All facility plans or operation and needs reviews shall be submitted to the department on a timely basis. For publicly owned treatment works, a resolution passed by the municipality's governing body shall accompany the facility plan or the operation and needs review. The resolution shall include:

- (a) An acknowledgment that the governing body has reviewed the report to be submitted;
- (b) An acknowledgment of the work plan which is contained in either the facility plan or operation and needs review, and description of actions the municipality may take to maintain compliance with effluent limits;
- (c) If necessary, a discussion of financial programs to be used to implement the work plan and;
- (d) Any other information the governing body deems appropriate.

(2) WORK PLAN REVIEW. Upon receipt of the facility plan or operation and needs review, the department shall review the report for assurance that effluent limits will not be violated during the term of the work plan. The department may require the owner to revise the reports or the work plan to prevent effluent limit violations.

(3) IMPLEMENTATION. It is the owner's responsibility to complete all tasks identified in the work plan to prevent effluent limit violations. The owner shall maintain the time schedule identified in the work plan.

(4) MODIFICATIONS TO THE WORK PLANS. (a) Work plan modifications shall be submitted to the department. The department may allow additional time to implement the work plan. Factors that the department shall consider in allowing additional time include the financial status of the community, the anticipated performance of the existing sewerage system, environmental consequences of the proposed time schedule change, and events over which the owner has little or no control.

(b) The department may not allow a work plan modification if it determines that the modification will result in significant effluent limit violations prior to the completion of the schedule. Under this section, owners may provide assurances to install temporary treatment facilities, improve operation, maintenance and efficiency to avoid effluent limit violations or to decrease commercial, industrial or residential loadings to the sewerage systems. Owners may also agree to restrict sewer extension installation prior to the completion of work included in the work plan.

(5) WPDES PERMIT. The department may take action to modify the owner's WPDES permit to include the work plan or subsequent or necessary revisions to maintain compliance with effluent limitations.

Note: In general, WPDES permits may not be modified to include work plans for operational changes or for planning, design and construction programs that can be completed within one year.

SECTION 2. NR 210.11 is created to read:

NR 210.11 COMPLIANCE MAINTENANCE ANNUAL REPORT (CMAR). The CMAR shall be submitted on or before June 30, 1987. Thereafter, the CMAR shall be submitted to the department on March 31 of each subsequent year. The content of the CMAR is described in ch. NR 208. The CMAR shall be completed and signed by a duly authorized representative of the owner. In the case of a publicly owned treatment works, a resolution from the municipality's governing body shall accompany the CMAR and shall include the information specified in s. NR 208.04(3).

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on October 23, 1986.

The rules shall take effect as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin December 3, 1986.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By Carroll D. Besadny
Carroll D. Besadny, Secretary

(SEAL)

8335Y