NR 160

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## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Secretary

BOX 450 MADISON, WISCONSIN 53701

IN REPLY REFER TO: \_\_\_

STATE OF WISCONSIN	)	
	)	S
DEPARTMENT OF NATURAL RESOURCES	)	

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, L. P. Voigt, 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. FA-20-75 was duly approved and adopted by this Department on April 25, 1975. 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 <sup>19th</sup> day of August, 1975.

(SEAL)

## STATE OF WISCONSIN NATURAL RESOURCES BOARD

IN THE MATTER of repealing and recreating Chapter NR 160 of the Wisconsin Administrative Code pertaining to priority ranking for pollution abatement projects

FA-20-75

## ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD REPEALING AND RECREATING RULES

Pursuant to the authority vested in the State of Wisconsin Natural Resources
Board by sections 147.25(8) and 227.14(2), Wisconsin Statutes, the State of
Wisconsin Natural Resources Board hereby repeals and recreates rules as follows:

Chapter NR 160
Federal Construction Grant
Priority Ranking System for Water
Pollution Abatement Projects

NR 160.01 Purpose

NR 160.02 Definitions

NR 160.03 Priority rating system

NR 160.04 Project priority value

NR 160.08 Severability

NR 160.05 Procedure for determination of project priority value

NR 160.06 Project ranking system

NR 160.07 Cluster projects

NR 160.08 Severability

NR 160.01 Purpose. The purpose of this chapter is to establish a priority system for distributing federal grant funds for the construction of municipal wastewater treatment systems as provided in the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) (33 U.S.C. 1251 et. seq.).

NR 160.02 Definitions. (1) "Department" means the department of natural resources.

- (2) "Intercepting sewer" means a sewer constructed:
- (a) To receive and convey the dry weather flow from one or more sanitary sewer system terminals in a previously developed area, other than from a dwelling or building, and to convey the flow to an existing sanitary sewer or to a treatment works, whichever is nearer; or

- (b) To serve in lieu of an existing or proposed treatment works.
- (3) "Municipality" means a city, township, village, county, sanitary district, county utility district, metropolitan sewerage district or any other public entity created pursuant to law and having the authority to own, operate, maintain, finance and construct a publicly-owned sewer system or sewage treatment plant.
- (4) "Dry weather conditions" means the usual conditions that occur in the absence of snowmelt, rainfall and high groundwater.
- (5) "Sanitary sewer" means a sewer designed and constructed to convey only sanitary sewage or industrial wastewater or both, but not runoff from streets or land, due to rain, flooding or melting snow. The term "sanitary sewer" does not include combined sewers.
- (6) "Combined sewer" means a sewer designed and constructed to convey sanitary sewage, industrial wastewater or both during dry weather and storm water from rain or snow during wet weather.
- (7) "Federal grant" means a grant made pursuant to the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 et. seg.).
- (8) "Lateral" means a service sewer from a building to a publicly owned sanitary or combined sewer.

NR 160.03 Priority rating system. The following factors, when applied to particular projects in accordance with NR 160.04, will determine the priority ranking of municipal wastewater treatment projects for funding for a federal grant pursuant to the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 et. seq.).

- (1) River basin score. (a) Each project shall be assigned a river basin score.
- (b) In assigning a river basin score to a project, the department shall assign the score corresponding to the river basin within which the problem to be remedied by the project is located.

(c) The river basin score and the priority ranking of the following river basins is given below.

Rank	Basin Code	Basin Name	River Basin Score
1	052	Milwaukee County	7.40
2	113	Lower Fox (Wisconsin)	6.95
3	171	Upper Wisconsin	5.89
4	030	Des Plaines	5.61
5	040	Root	5.53
6	130	Pensaukee	5.53
7	090	Kewaunee	5.33
8	012	Lower Rock	5.33
9	011	Upper Rock	4.87
10	020	Fox (Illinois)	4.81
11	080	Twin	4.55
12	060	Sheboygan	4.52
13	100	Door	4.38
14	051	Milwaukee River	4.33
15	120	Duck	4.30
16	220	La Crosse	3.64
17	070	Manitowoc	3.62
18	160	Menominee	3.46
19	140	Oconto	3.38
20	180	Sugar	3.25
21	172	Baraboo-Lemonweir	3.22
22	111	Upper Fox (Wisconsin)	3.18
23	150	Peshtigo	3.13
24	262	Lower Chippewa	3.08
25	173	Lower Wisconsin	3.00
26	190	Pecatonica	2.98
27	270	St. Croix	2.80
28	. 250	Buffalo	2.76
29	210	Bad Axe	2.74
30	200	Grant-Pla <b>tte</b>	2.71
31	240	Trempealeau	2.57
32	112	Wolf	2.30
33	280	Lake Superior	2.26
34	261	Upper Chippewa	2.21
35	230	Black	2.15

Note: The river basin score is determined by the department from several different factors which generally characterize the water quality and population of the basin. A report which discusses the calculation of the various river basin scores is available upon request from the Department of Natural Resources, Grant-in-Aid Section, Box 450, Madison, Wisconsin 53701.

- (2) Health hazard score. (a) The health hazard score assignable to a project falling into the following categories shall be determined as follows:
- 1. Projects necessary to alleviate groundwater pollution which occurs in
  10 or more of the public or private potable water supply systems in the project
  area and results from the discharge of wastewaters shall be assigned 4.0 points;
- 2. Projects necessary to prevent the discharge of raw sewage from sewers or treatment facilities during periods of dry weather shall be assigned 3.5 points;
- 3. Projects necessary to eliminate ponding or runoff of effluent from 10 or more of the septic tank systems in the project area shall be assigned 3.0 points;
- 4. Projects necessary to eliminate the discharge or bypass of wastewater effluent from a sewage treatment plant after primary treatment shall be assigned 2.5 points; or
- 5. Sewer projects necessary to eliminate basement backups which occur annually in buildings and result from sewer surcharging during wet or dry weather conditions, provided that such basement backups occur in 10 or more of such buildings, shall be assigned 2.0 points. This does not include backups due to plugged sewers or laterals which result from the lack of proper maintenance.
- (b) The health hazard score assigned to a project shall not be cumulative. It shall be the single highest value which can properly be assigned to the project. If a health hazard category enumerated in paragraph (a) above is not properly assignable to a project, it shall be assigned a health hazard score of zero.
- (c) A health hazard score shall be assigned only to a project required to alleviate the health hazard. If a project contains elements not required to alleviate a health hazard, a health hazard score shall not be assigned to the entire project.

- (3) Assimilative capacity factor score. (a) Only projects designed to enhance the quality of treatment provided by existing municipal sewage treatment plants discharging to surface waters are eligible for the assignment of assimilative capacity factor (ACF) points.
- (b) The maximum number of ACF points assignable to any eligible project is 5.0. The number of points assigned to any eligible project may be determined from the following mathematical expression:

$$ACF = 5 \times \frac{BOD_D}{BOD_D + BOD_A}$$

Where  $\mathrm{BOD}_{\mathrm{D}}$  is the average number of pounds of 5-day biochemical oxygen demand (BOD) discharged per day and  $\mathrm{BOD}_{\mathrm{A}}$  is the maximum number of pounds per day of 5-day biochemical oxygen demand which can be assimilated by the receiving body of water under a low flow condition which occurs as the 7-day average once in 10 years. In computing the number of ACF points asignable to an eligible project, the department will use the best information available to it at the time the determination is made.

- (c) If the ACF score for an eligible project is less than 2.22, it is assumed that the receiving water can assimilate the waste load discharged to it. In such event, no ACF points shall be assigned to the project. If the ACF score for an eligible project is equal to or greater than 2.22, it is assumed that the potential for water quality degradation exists and ACF points shall be assigned to the project.
- (4) Nutrient control score. If phosphorous control is required by the department for an existing municipal sewage treatment plant discharge, a project designed to enhance the quality of treatment provided by such a plant shall be assigned a nutrient control score of 2.0 points.

(5) Population score. (a) The department shall assign to each project a population score which shall be computed as the logarithm to the base 10 (log 10) of the population equivalents served by the project. The population equivalents served is the sum of the population which would be served by the project if it were built at the time the determination of the population score is made plus 6 times the total pounds of 5-day biochemical oxygen demand presently being discharged per day by industries into an existing municipal sewerage system to be served by the project. NOTE: The following table demonstrates the relationship between the population score and the population equivalents served:

Equivalent Population Served	Population Score
100	2.00
1,000	3.00
5,000	3.69
10,000	4.00
20,000	4.30
50,000	4.69
100,000	5.00
1,000,000	6.00

- (b) In cases where treatment is proposed between municipalities and nonconnected industries, the industrial population equivalents will not be assigned
  to the population score of a project intended to implement such a proposed
  treatment plant until a cost effectiveness study, environmental assessment
  and sewerage user charge ordinance meeting federal grant requirements have
  been submitted by the municipality and have been approved by the department.
- (6) Project category score. Projects which are properly assignable to any of the project categories enumerated in this subsection shall be assigned a project category score as follows:
- (a) Projects intended to enhance the level of treatment provided by existing primary-designed treatment plants requiring a higher degree of treatment or to eliminate existing primary-designed treatment plants by construction

of intercepting sewers where the initial dry weather flow is at least 25% of the design capacity of the sewer, shall be assigned 18 points;

- (b) Projects intended to replace, improve or expand existing secondary-designed treatment facilities, to provide advanced waste treatment for existing secondary-designed facilities, to eliminate existing municipal sewage treatment plants by construction of intercepting sewers where the initial dry-weather flow is at least 25% of the design capacity of the sewer or to construct new sewage treatment plants or interceptor sewers primarily designed to serve developed areas which were in existence on October 18, 1972 shall be assigned 16 points;
- (c) Relief interceptor sewers shall be assigned 14 points if they are intended:
  - 1. To eliminate dry weather overflows from sewers;
- 2. To alleviate documented basement backups occurring annually and resulting from surcharged sanitary sewers or to eliminate bypasses, crossovers or documented portable pumping implemented to prevent such backups; or
- 3. To eliminate an existing sewage treatment plant serving at least 5,000 persons and resulting in an initial flow of at least 10% of the design capacity of the sewer.
- (d) Projects to eliminate malfunctioning private sanitary waste disposal systems by the construction of new sanitary sewers, shall be assigned 10 points.
- (e) Projects for the rehabilitation of existing sanitary sewer systems to eliminate infiltration or inflow problems shall be assigned 10 points.
- (f) Projects for the separation of combined sewers or for the elimination of combined sewer overflows shall be assigned 10 points.
- (g) Projects for reducing, storing, treating, separating or disposing of storm water runoff shall be assigned 2 points.

NR 160.04 Project priority value. (1) A project priority value (PV) shall be assigned by the department to each project for which a completed priority evaluation review form has been received from the project sponsor. The project priority value shall be determined using the following formula:

$$PV = A + B + C + D + E + F$$

where A = River basin score

B = Health hazard score

C = Assimilative capacity factor score

D = Nutrient control score

E = Population score

F = Project category score

(2) In computing the project priority value, the department shall consider only those scores properly assignable to a particular project. If a project does not satisfy the necessary criteria associated with the assignment of a particular score, a score of zero will be recorded for that particular score.

NR 160.05 Procedure for determination of project priority value. (1) Project sponsors shall submit to the department a written request for priority determination on a priority evaluation review form, available from the Grant-in-Aid Section of the department.

- (2) No project will be assigned a priority value, nor will it be placed on the project priority list until a priority evaluation review form for the project has been submitted by the project sponsor and evaluated by the department.
- (3) Upon completion of the review and determination of priority value, the department will notify the project sponsor of the determination.
- (4) If the project sponsor objects to the department's determination of the priority value, he shall notify the department in writing within 30 days. This notice shall state specifically the objection, and the notice shall present information supporting the objection and the priority value which the sponsor feels should be assigned to the project based on this information.

- (5) Upon receipt of such notice the department shall reevaluate its determination of the project priority value and shall notify the sponsor. If the department denies the requested priority value, it shall state the reasons in writing.
- (6) If information relevant to the assigned priority value of a project is obtained by the department, the department may reevaluate the assigned priority value of such a project based on the application of the information in accordance with this chapter. If the department changes the priority value of a project, it shall so notify the project sponsor in accordance with subsection (3). For purposes of subsections (4) and (5) of this section, notification of a change in priority value made pursuant to this subsection shall be deemed to be an initial determination of priority value.

NR 160.06 Project ranking system. (1) The department shall maintain a project priority list which shall rank the projects for which priority values have been determined. The projects will be ranked in the order of descending priority value with the project with the highest priority value to be ranked first.

- (2) In case 2 or more projects have the same priority value, the project having the higher population to be served immediately will be considered to have the higher priority.
- (3) The project priority list shall be revised annually by the department and shall be used by the department as a basis for processing applications for federal grants and allocating federal funds provided that the project sponsors have satisfied all federal requirements for grant application.
- (4) Regardless of their priority value determined under this chapter, projects which are ranked 1 through 86 inclusive on the project priority list of December 18, 1973 shall be given the same priority ranking under this

chapter provided that project sponsors have proceeded expeditiously to meet federal requirements for a construction grant. If the department determines as of the effective date of these rules, that a sponsor has not proceeded expeditiously to meet federal requirements for a construction grant, it shall so notify the sponsor. If he so desires, the sponsor may within 30 days inform the department in writing of the reasons why he has not so acted and may submit an anticipated schedule of progress. If such a schedule cannot be mutually agreed to by the sponsor and the department, or the agreed upon schedule has not been adhered to, the project shall then be ranked based on its priority value determined under this chapter.

NR 160.07 Cluster projects. (1) Where several projects are proposed to be associated with a common project and are not separable in their analysis, design, construction and management, the department may consider them as a cluster project. In making its determination, the department will consider technological and economic feasibility, as well as environmental and institutional considerations. Sanitary sewer collection systems will not be considered as part of a cluster project.

- (2) Cluster projects will be assigned the priority value of the highest individual project, adjusted to include the sum of population equivalents which contribute to the common project.
- (3) For determination of (step 1) facilities planning priorities, a formal resolution of intent to discharge to a single regional waste treatment plant by the governing bodies of the participating municipalities will be required prior to construction of such a project. For consideration of (step 2) plans and specifications grants and (step 3) construction grants, a contract committing the participating municipalities to cooperative wastewater treatment will be

required. When a statement of intent or a contract to effect regional treatment is submitted for each municipality together with a single priority evaluation review form, a cluster priority will be considered.

NR 160.08 Severability. Should any section, paragraph, phrase, sentence, clause or word of this chapter be declared invalid or unconstitutional for any reason, the remainder of this chapter shall not be affected thereby.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on April 25, 1975.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin August 20, 1975

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

L. P. Voigt, Secretary

(SEAL)