ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board proposes an order to create NR 102.12(3), and amend NR 102.10(1)(d)8., and (f)2. and (lm)1. and 3 and 207.03(5) relating to the water quality classifications in the Lake Superior basin and the related anti-degradation procedures for WPDES permits.

WT-33-05

Analysis Prepared by the Department of Natural Resources

Statutory Authority and Explanation: The statute that authorizes the promulgation of this order is s. 281.15, Stats. This section grants rule-making authority to the department to set standards of water quality applicable to waters of the state.

Statutes Interpreted and Explanation: The statute directs the department to establish water quality standards for all waters of the state and that water quality standards for those rivers emptying into Lakes Superior and Michigan and Green Bay shall be as high as practicable.

Plain Language Rule Analysis: In 1991, the Governors of Minnesota, Michigan and Wisconsin, the Premier of Ontario, and representatives of the Canadian and the United States' federal governments signed an agreement to manage discharges of nine toxic pollutants in the Lake Superior basin as a zero discharge demonstration project. Within this agreement, the three states agreed to explore using water quality classifications and antidegradation procedures to promote the zero discharge goal. The nine pollutants targeted are toxic chemicals, which build up in the fish and accumulate to the extent that fish consumption advisories are required. They also pose direct health threats to fish and wildlife. The pollutants are PCB's, 2,3,7,8 TCDD (dioxins), hexachlorobenzene, toxaphene, mercury, DDT, dieldrin and metabolites, chlordane and octachlorostyrene. Under the binational agreement, the governments pledged to develop proposals to prohibit any new or increased discharges of these chemicals. In recognition that there are many uses of some of these pollutants, the proposal being advanced is to prohibit any new or increased discharge unless the applicant certifies that the increased discharge is necessary after utilization of best technology in process or control using treatment, pollution prevention techniques, waste minimization or municipal pretreatment programs.

Another portion of the binational program was the commitment to evaluate use of the Outstanding Resource Water (ORW) special designations to protect important areas in the Lake Superior basin. Examples of the areas to be considered included: national and state parks, national shorelines, refuges and recreational areas. The recommendation from the advisory committee was to establish ORW designations for the waters of Lake Superior within 1/4 mile of the shore for all the islands within the Apostle Islands National Lakeshore. They also recommended that for those tributaries currently designated ORW, the designation be extended into Lake Superior for a 1/4 mile arc at the mouth to protect the fish staging areas prior to the spawning runs into the streams. Under the ORW designation, wastewater would have to be highly treated so that the existing water quality would be protected.

Federal Regulatory Analysis: These proposals are water quality standards and implementing procedures. There is no federal statutory requirement to develop these proposals. Typically, the establishment of standards and implementing procedures are done at the state level based on federal guidance. While these proposals were included in the water quality guidance for the Great Lakes Water Quality Initiative, they were identified as options for Michigan, Minnesota and Wisconsin.

Analysis of Neighboring State Programs:

Both neighboring states on Lake Superior have completed administrative procedures to promulgate rules governing their state wastewater discharge permit programs. While the details are different between the two state programs, the concepts of the binational agreement have been established in rule.

Minnesota: Minnesota established the best technology requirement in their administrative procedures. Under their procedures, the applicant must submit technical reports for approval. Minnesota has also established an Outstanding Resource Value Designation for the waters of Lake Superior near Grand Portage and the outlet of the Pigeon River. This is comparable to Wisconsin's Outstanding Resource Water designation.

Michigan: Michigan also promulgated administrative rules requiring the application of best technology prior to any new or increased discharge approvals for the targeted toxic pollutants. They require a report from the permittee. They have also classified specific waters as Outstanding State Resource Waters: All waters within the Pictured Rocks National Lakeshore and Isle Royale National Park and the Ontonagon, Tahquamenon, Sturgeon, Yellow Dog, Two-Hearted Rivers and Dawson Creek. None of these waters may be lowered in quality. This is the same classification as Wisconsin's Outstanding Resource Water.

Summary of Factual Data and Analytical Methodologies: In 1989, the International Joint Commission, the binational organization charged to oversee the Boundary Water Treaty of 1909, called on the governments of the United States and Canada to protect Lake Superior from toxic pollutants by creating a zero discharge demonstration zone. Wisconsin, Minnesota, Michigan, Ontario and the two federal governments responded by developing a demonstration program, which was formalized in an agreement signed by the Governors, federal officials and the Province in 1991. A key component of this program was the commitment to evaluate the use of special water quality classifications as a means of both protecting Lake Superior and promoting new methods for reducing discharges of nine toxic pollutants. The targeted pollutants are mercury, PCB's, 2,3,7,8 TCDD (dioxins), hexachlorobenzene, chlordane, DDT, DDE and metabolites, toxaphene, and octachlorostyrene. These nine pollutants were identified by the states and province because they had been found in fish and wildlife in the Great Lakes system causing harm to different species and necessitating the issuance of fish consumption advisories.
As implementation of the program began, all three states formed advisory committees as part of the overall effort to develop consistent standards and implementation procedures for water discharges. This effort known as the Great Lakes Water Quality Initiative (GLI) resulted in federal guidance upon which each of the eight Great Lakes states was to base their standards and permitting approaches. Part of this guidance included two optional water classifications for the three Lake Superior states. The first was called Outstanding International Resource Waters. In the agreement, the Governors committed to use this designation for all waters of the basin as a means to prevent any new or increased discharges of the target pollutants unless the applicant demonstrated that the discharge was the necessary result of using "best technology in treatment and process". The second was the Outstanding National Resource Water designation to prohibit any new or increased discharges of toxic pollutants for special areas to be determined by the states: national parks, lakeshores and refuges, state parks, recreational areas or refuges.
In 1995, Wisconsin DNR formed an advisory committee to provide advice on these two proposals from the Governors' agreement as part of the GLI effort. In August 1996, the Board authorized public hearings on the proposals, which had been developed through the advisory committee process. Because there were unresolved concerns about the Lake Superior designations, these proposals were not included when the rest of the GLI rules were approved by the Board in February 1997. Instead, the question of the special designations was directed to a new Lake Superior basin interest advisory committee. This group was asked to try and resolve the concerns. This committee deliberated these issues until 2002 when they reported a consensus recommendation to the Secretary and the Board. Based on the Governors' agreement, the actions of Minnesota and Michigan, and the strong local desires to protect Lake Superior, they recommended:

1. Extending the ORW designation for several tributaries into Lake Superior for a 1/4 mile arc at the mouth to further protect spawning fish access to the rivers and adjacent beaches
2. Creating an 1/4 mile ORW designation around all the islands in the Apostle Islands National Lakeshore and
3. Establishing the same requirements which exist in Minnesota and Michigan prohibiting any new or increased discharges of the nine target toxic pollutants, unless the discharge was necessary after use of best technology in process or treatment, for all the waters within the Lake Superior drainage basin.

Following receipt of these recommendations, it was the Department's intent to bring these proposals back to the Board requesting a second hearing to ensure that this new proposal had a complete public review. However, in the interim, U.S. EPA proposed some new water regulations, which could have been a potential conflict with the advisory group's recommendations. Based on discussions with the group, they favored delaying any actions until the EPA regulations were finally resolved. Because the proposed regulations became extremely controversial, EPA

ultimately withdrew their proposal. At that point, we determined that the proposal could move forward without conflict with federal requirements.

We proposed small modifications to the recommendations from the group to reflect a consistent approach with other waters classified as ORW and the location of existing communities and wastewater treatment plants. Because the Port Wing treatment plant is located near the mouth of the Flag River, this change in classification would require the existing treatment plant to be replaced. This would be a serious hardship for this small community. On that basis we did not believe the Flag River proposal should be advanced at this time. For similar reasons, with Thompson Creek emptying into Lake Superior in the City of Washburn, we did not advance that recommendation. Other than these two sites, the ORW recommendations from the group were incorporated into the draft rule changes. The second modification was to change existing antidegradation procedures in NR 207 instead of creating a new classification in NR 102. By changing the antidegradation review process, the result is the same and we eliminated the potential for confusion with a new classification which would overlay the existing classifications thus creating multiple classifications for each water.

Anticipate Private Sector Costs: Under these changes, the private sector would face consistent requirements in Minnesota, Michigan and Wisconsin. Because some of these pollutants are banned pesticides, efforts have been underway to recover any remaining supplies of these substances through hazardous waste collections. The remaining pollutants are so toxic in aquatic environments, that many efforts have been underway to eliminate the use of these pollutants and have created some new business options for alternative products like digital thermometers, home thermostats or fluorescent light recovery. As a result, much of the use of these pollutants has been phased out within the basin. This new requirement will help ensure that new dischargers perform at the same levels as existing dischargers in the basin. The ORW designation proposals will impact the private sector if applying for Chapter 30 permits because specific rather than general permits would be needed for projects on the lakebed.

Effects on Small Business: The likely impact to small business will be to promote broader use of currently available mercury control technologies for medical and dental facilities to prevent amalgam and other wastes from entering municipal wastewater treatment systems. As proposed, the applicants will not have to provide a detailed technical analysis. Instead, the applicant will be required to certify that any new or increased discharge of the target pollutants is necessary after the utilization of best technology in treatment or process. This should not result in any time delays for proposed projects.

Environmental Assessment: For the ORW designation modifications, the existing rules specify the implementation requirements for dischargers so there is no change in Departmental discretion. For the "best technology requirement", the requirement will be limited to a self-certification process rather than a technical review. For both aspects of this proposal, it is determined that this constitutes a Type III action which does not warrant an environmental assessment.

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SECTION 1. NR 102.10(1)(d)8. is amended to read:

NR 102.10(1)(d)8. Douglas County-Bois Brule and its tributaries <u>including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the mouth of the river</u>

SECTION 2. NR 102.10(1)(f)2. is amended to read:

NR 102.10(1)(f)2. Bayfield	
Bark River	All-Class I Portions <u>including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth</u>
Big Brook	All

Cranberry River & Tribs	All-Class I Portion including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth.
East Fork Iron River & Tribs	All-Class I Portion
East Fork White River	All –Class I Portion
Eighteen Mile Cr. & Tribs.	All-Class I Portion
Fish Creek (Main)	All including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth
Long Lake Branch & Tribs.	From below Drummond Lake to White River
No. Fork Fish Creek & Tribs.	All-Class I & II Portion
Onion River & Tribs.	All-Class I Portions including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth
Pikes Creek & Tribs.	All-Class I Portions including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth
Sioux River & Tribs.	All-Class I Portion including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth
So. Fork White River	All-Class I Portion
Thompson Creek	All-Class I Portion
Twenty Mile Creek	All-Class I & II Portions
White River	All-Class I Portion
Whittlesey Creek & Tribs.	All-Class I Portions including the waters of Lake Superior within a ¼ mile semi-circular arc centered at the middle of the river mouth

SECTION 3. NR 102.10(1m)1. and 3. are amended to read:

NR 102.10(lm)1. Ashland	Bad River Slough
	Kakagon Slough
	Lake Superior within ¼ mile of the shoreline of the islands within the Apostle Island National Lakeshore
3. Bayfield	Bark Bay Slough
	Diamond Lake
	Lake Superior within ¼ mile of the shoreline of the islands within the Apostle Islands National Lakeshore
	Middle Eau Claire Lake

Namekagon Lake

Owen Lake

Pike Chain of Lakes (Pike, Millicent, Buskey Bay, Hart, Twin Bear, Eagle, Flynn and Hildur Lakes)

Star Lake

Upper Eau Claire Lake

SECTION 4. NR 102.12(3) is created to read:

NR 102.12(3) The waters of the Lake Superior basin shall be managed to prevent any new or increased discharges of the following pollutants: DDT, DDE and metabolites, chlordane, toxaphene, hexachlorobenzene, 2,3,7,8 TCDD, octachlorostyrene, mercury and PCB's. For purposes of administering ch. NR 207, new or increased discharges of these pollutants shall be prohibited unless the applicant certifies at time of application, that the new or increased discharge is necessary after utilization of best technology in process or control using waste minimization, pollution prevention, municipal pretreatment programs, material substitution or other means of commercially available technologies which have demonstrated capability for similar applications.

SECTION 5. NR 207.03(5) is amended to read:

NR 207.03(5) **Great Lakes system.** If the department determines that a WPDES permit applicant proposes a new or increased discharge to the Great Lakes system, it shall establish effluent limitations using the procedures in ss. NR 207.04 and 207.05; except for proposed new or increased discharges of the pollutants identified in s. NR 102.12(3) to waters of the Lake Superior basin. No new or increased discharge of those pollutants identified in s. NR 102.12(3) may be permitted unless the applicant certifies at time of application that the proposed new or increased discharge is necessary after utilizing best technology in process or control using commercially available techniques with demonstrated performance levels for similar applications.

SECTION 6. EFFECTIVE DATE. The rule shall take effect the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

SECTION 7. BOARD ADOPTION. The rule was approved and adopted by the State of Wisconsin Natural Resources Board on April 26, 2006.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Scott Hassett, Secretary

(SEAL)