



## Minnesota Department of Natural Resources

500 Lafayette Road  
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April 30, 2007

Ms. Carol R. Nankivel  
Planner Principal State  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
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RECEIVED  
MPCA Information Center  
# of pieces \_\_\_\_

APR 30 2007

Times in 4:00 a.m. (p.m.) by HB

Dear Ms. Nankivel:

The Minnesota Department of Natural Resources is providing comment for the public noticed REQUEST FOR COMMENTS (January 22, 2007) regarding *Planned Amendments to Rules Governing the Non-Degradation of Minnesota Waters, Minnesota Rules, Chapter 7050*. We understand that the current notice is preliminary to the formal rule making process and that Minnesota Pollution Control Agency (MPCA) staff have not prepared a Statement of Need and Reasonableness or officially noticed a draft of the planned rule amendments. We see the current notice as an important opportunity to briefly detail some of the revisions and additions that we propose are necessary for an appropriate non-degradation rule update. We request notification when a draft of the amendments is available and to be notified when proposed amendments to the rule are published for comment.

Within the current notice, the MPCA has indicated an intention to consider amendments to the non-degradation rule to reflect changes that have occurred since the existing rules were adopted and to address the effects of stormwater discharge. Recent development of the MPCA guidance manual for applying non-degradation requirements to Municipal Separate Storm Sewer Systems (MS4) should assist in the non-degradation amendment process, as will the proposal to conduct a national survey of stormwater rules and other ongoing initiatives of the Stormwater Steering Committee. We will be particularly interested in how the MPCA proposes to address cumulative water quality and temperature impacts.

The public notice also indicates that the MPCA may consider state consistency with federal anti-degradation policies as identified by the U.S. Environmental Protection Agency (USEPA). We strongly encourage this analysis as part of the rule revision process. Rapid population growth in areas of Minnesota, cumulative effects of endocrine disrupting chemicals, and the emergence of new contaminants point to the need for load allocation modeling, from a watershed perspective, to conserve the assimilative capacity of our state's high quality waters.

The discussion points that follow outline some of the necessary components we have identified for amendment of the non-degradation rule of Chapter 7050:

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## 1. Policy Application

- Minnesota has had two levels of consideration for non-degradation – *All Waters* and *Outstanding Resource Value Waters (ORVW)*. ORVW designation is reserved for a very limited number of waters having exceptional recreational, cultural, aesthetic, or scientific resources. This affords additional water quality protection through non-degradation review. Most of the state's waters are considered under the less restrictive *All Waters* level, which includes many high quality waters with valuable reserve assimilative capacity. Numerous warmwater streams and lakes in forested watersheds would fit this category. These waters require added protection from individual or cumulative point and non-point source pollution to avoid being degraded to or near an impaired state. We request that MPCA staff consider addition of a third level of non-degradation to provide an enhanced level of assessment for high quality waters, similar to Tier II in USEPA guidance.
- Because of the unique attributes of trout streams and lakes, we request that these waterbodies be categorized as level/Tier III. Many coldwater lakes also support important fisheries for whitefish and tullibee. With the additional threat of global warming, these precarious resources require the highest level of protection to maintain their biological integrity and protect other coldwater obligate species.
- Policy statements for the three levels should provide a specific definition of non-degradation. This would include intent, water quality characteristics, alteration of natural hydrology, management objectives, range of impacts including non-point source pollution and water withdrawal, and level of assessment for cumulative impacts.
- The ORVW rule defines discrete places on the landscape but does not effectively define what source classes of pollutant loading are considered under non-degradation, or the relationship of source to waterbody (e.g., direct discharge, watershed discharge).
- The design of the rules creates a framework for controversy. Parties disagree on whether a new or expanding discharge is significant, if prudent and feasible alternatives exist, and how to deal with discharge constituents that were not regulated pollutants when the non-degradation rule was originally drafted. The non-degradation language should outline a framework for defining solutions.
- The concept of freezing pollutant loadings from *significant* point source dischargers, at a level that existed at some point in time, will not provide assurance that continued degradation will not occur. Under the current non-degradation rule, new non-significant discharges and increasing non-point sources will reduce assimilative capacity, which can ultimately result in additional impairments. Addressing this and other current rule deficiencies may be best approached by utilizing a watershed assessment of loading allocations in relation to assimilative capacity.

## 2. Significance

- Minnesota and some other states use an assessment benchmark to define a loading trigger point (>200,000 gallons/day) to initiate non-degradation review. In earlier years of pollution management, this approach worked well for focusing resources on single larger municipal and industrial sources.



For the aforementioned reasons of demographics and waste stream complexity, this approach no longer advances or adequately maintains the quality of the state's waters. It does not factor the highly variable size of the receiving waterbody or effectively consider cumulative effects of multiple sources and types of discharge.

- In an August 2005 memorandum from Mr. Ephraim S. King, director of the Office of Science and Technology, USEPA, to Region 1-10 Water Management Division Directors, Mr. King provided the following guidance for considering significance thresholds.

*" . . . it is important that states and tribes set their significance thresholds at a level that can be demonstrated to be consistent with the purpose of tier 2 antidegradation requirements. Otherwise, a new or increased discharge may result in significant degradation that will not be subject to antidegradation review, and decisions about the lowering of water quality in high quality waters may be made without public consideration of necessity and importance, resulting in the loss or diminishment of a valuable natural resource."*

- Presently in Minnesota, new or increased stormwater and non-point discharges are contributing to the degradation of high quality waters around the state. Many of these discharges are associated with residential developments that do not trigger individual permit requirements and therefore public consideration, and yet cumulatively they are eroding assimilative capacity of the state's waters without individually reaching a significance threshold. The public deserves an opportunity to weigh the necessity and importance of various development proposals with the desire to protect high quality water in lakes and streams.
- A watershed or lakeshed scale of analysis would identify actual capacity and determine significance of existing, proposed, and potential future discharges and load allocations, while preserving future capacity. We request the MPCA consider adopting a watershed approach that does not use a load trigger (significant discharge), but identifies assimilative capacity spatially and only allows a cumulative fraction of that capacity to be utilized. We support use of the following guidance provided by the USEPA.
- The same memorandum from Director King referenced above delineates procedures for states and tribes to follow in applying antidegradation review requirements for Tier II waters. It refers to the eight state Great Lakes Initiative – *They believed that any individual decision to lower water quality for non-bioaccumulative contaminants (BCCs) that is limited to 10% of the available assimilative capacity represents minimal risk to the receiving water and is fully consistent with the objectives and goals of the Clean Water Act . . . EPA considers this approach to be workable and protective in identifying those significant lowerings of water quality that should receive a full Tier II antidegradation review, including public participation . . . To address situations where there are multiple or repeated increases in discharges. , OST recommends that states and tribes incorporate a cumulative cap on the use of total assimilative capacity.*



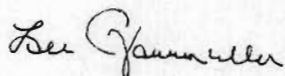
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3. Assessment

- The non-degradation rule should clearly define the difference in assessment methods between conservative and non-conservative pollutants.
- Current Minnesota rules do not fully protect aquatic related birds and mammals or adequately assess non-degradation with respect to their water habitats. Only the Lake Superior watershed, as part of the Great Lakes Initiative, uses wildlife-based chronic standards for toxic pollutants. For the majority of the state, the generally less restrictive chronic standards for *direct toxicity* and *human health-based toxicity* (such as fish consumption limits or drinking water standards) are applied. Many wildlife species have a far greater exposure in their fish and aquatic life consumption patterns and consequently can accumulate much higher levels of contaminants. There is less information on bioaccumulation in wildlife, but studies of a number of species show reproductive impairment and mortality (note research attachment). The more subtle impairments also need to be protected against, and the first step is to utilize wildlife-based standards throughout Minnesota.

We appreciate the opportunity to comment and look forward to further coordination with the MPCA on the Chapter 7050 rule revision process.

Sincerely,



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LF/DRS/JM/jls

Attachment: Effects of Environmental Methylmercury on the Health of Wild Birds, Mammals, and Fish

c Mr. Bradley M. Moore, Commissioner, Minnesota Pollution Control Agency

Mr. Kent Lokkesmoe, Director, Division of Waters

Mr. Steve Hirsch, Assistant Director, Division of Ecological Services

Mr. Steve Colvin, Program Supervisor, Division of Ecological Services

Mr. Jack Enblom, River Surveys Project Supervisor, Division of Ecological Services

Mr. Dave Wright, Unit Supervisor, Division of Ecological Services

Mr. Ronald D. Payer, Chief, Fisheries Management Section, Division of Fish and Wildlife

Mr. Jason Moeckel, Fisheries Operations Manager, Fisheries Management Section

Mr. Mark Ebbers, Trout and Salmon Program Consultant, Fisheries Management Section

Mr. Mike Duval, Regional Fisheries Projects Coordinator, Fisheries Management Section