MPCA Guidance for Category 4b Requests Developed by Third Parties

Introduction

The Minnesota Pollution Control Agency (MPCA) has prepared this guidance for stakeholders who are considering submitting a request for a Category 4b determination for an impaired water. Potential proposers are encouraged to review these policies and procedures and discuss 4b requests with the MPCA prior to development of these requests.

Background on Category 4b[1]

Section 303(d) of the Clean Water Act and supporting regulations require states to develop lists of "impaired waters" that are not attaining water quality standards. These 303(d) listed waters require states to develop Total Maximum Daily Loads (TMDLs), which establish pollution reduction goals and load allocations for a water to attain water quality standards. The U.S. Environmental Protection Agency (EPA) regulations also acknowledge other pollution control requirements that may obviate the need for a TMDL, including technology-based effluent limitations, more stringent effluent limitations, or other pollution control requirements (e.g. best management practices) that are stringent enough to achieve water quality standards (see 40 CFR 130.7(b)(1)) within a reasonable period of time. These impaired waters where a TMDL is not required because they are expected to meet standards due to other pollution control requirements are commonly referred to as "Category 4b" waters, as described in EPA Integrated Reporting (IR) guidance[2]. The "4b" categorization occurs during the assessment and listing process, when impaired waters are identified and the need for a TMDL is evaluated.

Process and timeline to request Category 4b

As the authorized implementer of the Clean Water Act in Minnesota, the MPCA is responsible for assessing waters to learn if standards are being met. "Public agencies"[3] may request that the MPCA consider an impaired water for Category 4b. The following is the process and timeline for these requests:

1. Requests to MPCA can be submitted at any time, but to be considered in time for the next 303(d) list and Integrated Report, they must be submitted by *February 1 of odd-numbered years*. For 2011, however, the MPCA will extend the submittal deadline until June to accommodate public agencies who have expressed interest in submitting a 4b request to have an opportunity to review this guidance and prepare their requests accordingly. The deadline is set to allow adequate time for MPCA/EPA review of proposals, conduct consultations with proposers and prepare revisions as necessary, prior to public noticing of the draft 303(d) list

[1] See the MPCA fact sheet, "Category 4b Demonstrations: Answers to Frequently Asked Questions" (link to be inserted), which is an important supplement to this guidance document.

[2] http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html, attachment 2

[3] According to 114D.15 of the Clean Water Legacy Act, "public agencies" include local units of government, state agencies, soil and water conservation districts and other political subdivisions, as well as public education institutions, with the authority, responsibility or expertise for managing water-related projects in the impaired watershed.

and Integrated Report. The public notice period is typically scheduled for the August-October timeframe of odd-numbered years.

2. The proposer must address the six elements set forth in EPA/MPCA guidance (see following pages of this document).

3. The MPCA must make the final decision on submitting a 4b demonstration will be submitted to EPA because the demonstration must ultimately be submitted by the State. Prior to development of a 4b request, therefore, MPCA and the proposer will need to discuss whether a 4b is an appropriate option for a specific waterbody.

4. The 4b demonstration must be a stand-alone document that will be presented to the public during MPCA's public notice and comment period for the draft 303(d) list (TMDL list). Currently the 303(d) list is submitted by States to EPA for approval on even-numbered years.

5. The EPA will evaluate on a case-specific basis a State´s decision to place an impaired water in Category 4b and thereby not require a TMDL. Final designation of a water body segment in Category 4b is contingent upon approval of the 4b demonstration by EPA. In the case where there is no EPA approval, the water body segment will be included in Category 5 and a TMDL plan required.

6. For any water placed in 4b, a progress report must be submitted to MPCA no later than June 1 of every odd-numbered year until such time as the water has been removed from category 4b. In order to maintain a water in category 4b the progress report must demonstrate that the six elements are still addressed and adequate progress has been made toward attainment of water quality standards.

7. If the water quality standards are attained according to schedule, the water can be removed from Category 4b and placed in either category 1 or 2 (waters meeting designated uses) of Minnesota's Integrated Report. However, according to EPA policy, a water can be removed from category 4b and placed in category 5 (requiring a TMDL) if the original 4b demonstration can no longer be supported.

EPA and MPCA Requirements for 4b Demonstrations

The following information on what is to be included in a 4b request is largely based on EPA guidance. Because EPA's 4b guidance is intended for States, rather than third parties, the MPCA has added the information *(in italics)* to address third party requests, and to further clarify expectations and the necessary information and review process. Proposers are also encouraged to contact MPCA to discuss specific cases.

The *third party* requesting the placement of an impaired water body segment/pollutant combination into the USEPA Category 4b is responsible for the development of the demonstration that a Category 4b designation is appropriate for the impaired water body segment/pollutant combination. The structure for a Category 4b demonstration is shown below.

All requests to submit a water body segment/pollutant combination in Category 4b to the MPCA and EPA must provide the following information in the demonstration:

1. Identification of water body segment and statement of the problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards (WQS);
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

The Category 4b demonstration should be submitted as a stand-alone document. In situations where data and information for a Category 4b demonstration are contained in existing documents developed under separate programs (e.g., NPDES permit, Superfund Record of Decision), summarize relevant information in the Category 4b demonstration and reference the appropriate supporting documentation that provides that information. The supporting documentation should be included as part of the State's administrative record supporting the Category 4b determination.

1. Identification of *water body* segment and statement of problem causing the impairment

- Segment description: The demonstration should identify the impaired segment, including name, general location in the State, and the *assessment unit identifier (AUID).*
- Impairment and pollutant causing impairment: The demonstration should identify the applicable water quality standard(s) not supported for each segment and associated pollutant causing the impairment.
- Sources of pollutant causing impairment: The demonstration should include a description of the known and likely point, nonpoint, and background (upstream inputs) sources of the pollutant causing the impairment, including the magnitude and locations of the sources. In cases where some portion of the impairment may result from naturally occurring sources (natural background), the demonstration should include a description of the naturally occurring sources of the pollutant to the impaired segment.

2. Description of Pollution Controls and how they will achieve water quality standards

- Water quality target: The demonstration should identify a numeric water quality target(s), which is a quantitative value used to measure whether or not the applicable water quality standard is attained. Generally, the pollutant of concern and the numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical contained in the water quality standard. The demonstration should express the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target.

  Occasionally, the pollutant of concern is different from the pollutant that is the subject of the numeric water quality target (e.g., when the pollutant of concern is phosphorous and

the numeric water quality target is expressed as dissolved oxygen (DO) criteria). In such cases, the Category 4b demonstration should explain the linkage between the pollutant of concern and the chosen numeric water quality target. In other cases, multiple indicators and associated numeric target values may be needed to interpret an individual water quality standard (e.g., multiple fish habitat indicators to interpret acceptable sediment levels).

In cases where the impairment is based on non-attainment of a narrative (non-numeric) water quality criterion, the Category 4b demonstration should identify one or more appropriate numeric water quality target levels that will be used to evaluate attainment of the narrative water quality criteria. The Category 4b demonstration should also describe the basis for selecting the numeric target levels.

- Point and nonpoint source loadings that when implemented will achieve WQS: The demonstration should describe the cause-and-effect relationship between the water quality standard (and numeric water quality target as discussed above) and the identified pollutant sources and, based on this linkage, identify what loadings are acceptable to achieve the water quality standard. The cause-and-effect relationship may be used to determine the loading capacity of the water body for the pollutant of concern. However, a loading capacity may not be relevant in all circumstances. For example, a loading capacity would not be relevant in situations where the pollutant source will be completely removed. The demonstration should identify the loading capacity of the segment for the applicable pollutant or describe why determination of the loading capacity is not relevant to ensure that the controls are sufficient to meet applicable water quality standards. The demonstration should also contain or reference documentation supporting the analysis, including the basis for any assumptions; a discussion of strengths and weaknesses in the analytical process; and results from any water quality modeling or data analysis.

  A 4b demonstration must include calculations showing how proposed practices for point and nonpoint sources will meet standards. In other words, what is the loading capacity of the water body in order to meet water quality standards, what is the needed load reduction for sources contributing to the impairment to achieve standards, what is the corresponding reduction achieved by implementing pollution controls with regard to the contributing sources and over what time period? Models and other analysis tools must be rigorous enough to make this assessment. The level of rigor necessary will vary depending on the complexity of the impairments and corresponding implementation strategies.

- Controls that will achieve WQS: The demonstration should describe the controls already in place, or scheduled for implementation, that will result in reductions of pollutant loadings to a level that achieves the numeric water quality standard. The demonstration should also describe the basis upon which the *third party* concludes that the controls will result in the necessary reductions.

Existing wastewater permit limitations, conditions and compliance schedules, as well as stormwater management practices and stormwater pollution prevention programs should be used to demonstrate attainment of water quality standards. If any changes, revisions or modifications to these existing limitations, conditions, compliance schedules or stormwater management practices are needed to demonstrate attainment of water quality standards, then a 4b is not appropriate until those revisions have been made. In addition, in impaired watersheds where there are expectations of new or expanded permitted point source discharges, the MPCA will review 4b proposals to assure that they will meet federal requirements (40CFR122.4 and 40CFR122.44) that protect waters from discharges that may cause or contribute to an impairment.

- Description of requirements under which pollution controls will be implemented: The demonstration should describe the basis for concluding that the pollution controls are requirements or why other types of controls already in place may be sufficient, as discussed below.

  As discussed in the 2006 Integrated Report (IR) guidance, EPA will consider a number of factors in evaluating whether a particular set of pollution controls are in fact "requirements" as specified in EPA´s regulations, including: (1) authority (local, State, Federal) under which the controls are required and will be implemented with respect to sources contributing to the water quality impairment (examples may include: self-executing State or local regulations, permits, and contracts and grant/funding agreements that require implementation of necessary controls); (2) existing commitments made by the sources to implement the controls (including an analysis of the amount of actual implementation that has already occurred); (3) availability of dedicated funding for the implementation of the controls; and (4) other relevant factors as determined by EPA depending on case-specific circumstances.

  Since the overriding objective of the 4b alternative is to promote implementation activities designed to achieve water quality standards in a reasonable period of time, for all of the factors listed above, EPA will evaluate each 4b alternative on a case-by-case basis, including in particular the existence of identifiable consequences for the failure to implement the proposed pollution controls.

  Depending on the specific situation, "other pollution control requirements" may be requirements other than those based on statutory or regulatory provisions, as long as some combination of the factors listed above are present and will lead to achievement of WQS within a reasonable period of time. For example, established plans of government agencies that require attainment of WQS within a reasonable period of time may qualify even when their components include incentive-based actions by private parties. States may also choose to rely on controls that have already been implemented where there is sufficient certainty that implementation will continue until WQS are achieved and will not be reversed. Because the controls are already in place and achieving progress, EPA may consider such controls to be requirements even if their implementation did not occur pursuant to binding legal authority.

3. Estimate or projection of time when water quality standards will be met

EPA expects that segments impaired by a pollutant but not listed under Section 303(d) based on the implementation of existing control requirements will attain WQS within a reasonable period of time. The demonstration should provide a time estimate by which the controls will result in WQS attainment, including an explanation of the basis for the conclusion. *A 4b demonstration should provide interim milestones if phased implementation and adaptive management is expected to be used to attain water quality standards, and an explanation of how the milestones move the water towards attaining standards.*

The demonstration should also describe why the time estimate for the controls to achieve WQS is reasonable. EPA will evaluate on a case-specific basis whether the estimated time for WQS attainment is reasonable. *For point sources, including NPDES stormwater, a schedule must be established under the NPDES permit program demonstrating that the program requirements will be sufficient to bring about attainment of WQS in a reasonable time; possible time frames could be the next listing cycle or the life of the permit.*

What constitutes a "reasonable time" will vary depending on factors such as the initial severity of the impairment, the cause of the impairment (e.g., point source discharges, in place sediment fluxes, atmospheric deposition, nonpoint source runoff), riparian condition, channel condition, the nature and behavior of the specific pollutant (e.g., conservative, reactive), the size and complexity of the segment (e.g., a simple first-order stream, a large thermally stratified lake, a density-stratified estuary, and tidally influenced coastal segment), the nature of the control action, cost, public interest, etc.

4. Schedule for Implementing Pollution Controls

The demonstration should describe, as appropriate, the schedule by which the pollution controls will be implemented and/or which controls are already in place.

5. Monitoring Plan to Track Effectiveness of Pollution Controls

The demonstration should include a description of, and schedule for, monitoring milestones *and interim measures of progress* to track effectiveness of the pollution controls. The demonstration should describe water quality monitoring that will be performed to determine the combined effectiveness of the pollution controls on ambient water quality. If additional monitoring will be conducted to evaluate the effectiveness of individual pollution controls, EPA encourages *the inclusion of* a description of these efforts as well. The demonstration should identify how and when assessment results from the monitoring will be reported to the *MPCA. As noted above, at a minimum, progress reports are required by June of odd-numbered years.*

6. Commitment to Revise Pollution Controls, as Necessary

The demonstration should provide a statement that the *third party* commits to revising the pollution controls, as necessary, if progress towards meeting water quality standards is not being shown. Also, the demonstration should identify how any changes to the pollution controls, and any other element of the original demonstration, will be reported to *MPCA*.

If water quality monitoring or the progress report indicate adequate progress is not being met, the third party must submit a plan (see requirements under elements 2-4 above) on how pollution controls will be revised and a schedule for getting back on track by the next progress report. If progress milestones remain unmet, the impaired water is moved back to Category 5 and a TMDL is required.

References

- EPA. 2001. 2002 Integrated Water Quality Monitoring and Assessment Report Guidance, November 19, 2001.
- EPA. 2003. Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act, TMDL-01-03, July 21, 2003.
- EPA. 2005. Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 29, 2005.
- EPA. 2006. Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, October 12, 2006.