

## C Appendix C: Maryland's Tier II Antidegradation Implementation Procedures

Maryland's antidegradation policy follows the national model required by the US EPA. The antidegradation policies can be found in the Code of Maryland Regulations (COMAR) at 26.08.02.04, 04-1, and 04-2. The key sections are presented below. The entire implementation policy can be found at Division of State Documents (DSD) website: <http://www.dsd.state.md.us/comar/26/26.08.02.04%2D1.htm>

### E. Designation for Specific Water Quality Measures:

Where a waterbody is designated a Tier II water based on a specific water quality measure, potential impacts to only that specific characteristic shall be subject to Tier II review. For example, where a waterbody is designated Tier II because of high dissolved oxygen, only potential impacts to dissolved oxygen are subject to Tier II review<sup>23</sup>.

### F. Need for Tier II Antidegradation Review:

(1) Permits. Before submitting an application for a new discharge permit or major modification of an existing discharge permit (for example, expansion), the discharger or applicant shall determine whether the receiving waterbody is Tier II or, if a Tier II determination is pending, by consulting the list of Tier II waters.

(2) Water and Sewer Plans (County Plans). As part of its continuing planning process, the Department shall review proposed amendments to county plans for any new or major modifications to discharges to Tier II bodies of water. If a proposed amendment to a County Plan results in a new discharge or a major modification of an existing discharge to a Tier II water, the applicant shall perform a Tier II antidegradation review.

(3) Exemptions. The requirement to perform a Tier II antidegradation review does not apply to individual discharges of treated sanitary wastewater of less than 5,000 gallons per day, if all of the existing and current uses continue to be met.

### G. Tier II Antidegradation Review:

(1) If a Tier II antidegradation review is required, the applicant shall provide an analysis of reasonable alternatives that do not require direct discharge to a Tier II waterbody (no-discharge alternative). The analysis shall include cost data and estimates to determine the cost effectiveness of the alternatives.

(2) If a cost effective alternative to direct discharge is reasonable, the alternative is required as a condition of the discharge permit or amendment to the county plan.

---

<sup>23</sup> Because all of Maryland's current Tier II waters were designated on the basis of biological indices of integrity, all potentially impacting substances and stressors are subject to the Tier II Review.

(3) If the Department determines that the alternatives that do not require direct discharge to a Tier II waterbody are not cost effective, the applicant shall:

(a) Provide the Department with plans to configure or structure the discharge to minimize the use of the assimilative capacity of the waterbody, which is the difference between the water quality at the time the waterbody was designated as Tier II (baseline) and the water quality criterion<sup>24</sup>; and

(b) If an impact cannot be avoided, or no assimilative capacity remains as described in §G(3)(a) of this regulation, provide the Department with a social and economic justification for permitting limited degradation of the water quality.

(4) An applicant shall update an antidegradation review when applying for a new permit or major modification to an existing permit.

#### H. Potential Determinations Resulting from Antidegradation Reviews.

(1) If there is a cost-effective alternative to direct discharge, the applicant shall implement the no discharge alternative and it shall be a condition of the discharge permit.

(2) If there is no cost-effective alternative to direct discharge, but there is potential for further minimization of the use of assimilative capacity, the applicant shall revise the initial application to further minimize the use of assimilative capacity.

(3) If there is no cost-effective, no-discharge alternative, and minimization of the use of assimilative capacity is adequate, but the social and economic justification (SEJ) is not adequately performed, the applicant shall revise the SEJ.

(4) If there is no cost-effective alternative to direct discharge, minimization of the use of assimilative capacity is adequate, the SEJ is adequately performed but does not justify the water quality impact, the proposed amendment to the county plan or discharge permit application shall be denied.

(5) If there is no cost-effective alternative to direct discharge, all reasonable efforts have been made to minimize the use of assimilative capacity, and the SEJ is adequate and justifies the discharge, the proposed amendment to the county plan or discharge permit shall be granted subject to other applicable requirements.

#### I. Wetlands Permits and Water Quality Certifications.

Maryland's wetlands and waterways regulatory process, governed by the Tidal Wetlands (COMAR 26.24.01—26.24.05), Nontidal Wetlands (COMAR 26.23.01—26.23.06), and

---

<sup>24</sup> For example, if dissolved oxygen is presumed necessary to meet the biological threshold, and the water quality criteria for DO is 5.0 mg/L and the Tier II baseline is 7.0 mg/L, the threshold for using the assimilative capacity would be 6.5 mg/L.

Waterway Construction (COMAR 26.17.04) regulations, satisfies the requirements of this regulation.

#### J. Social and Economic Justification (SEJ).

(1) An SEJ shall be submitted if:

- (a) No cost effective alternative to the discharge is available; or
- (b) The cumulative degradation resulting from nonpoint source pollution and any other permitted discharges would diminish water quality.

(2) To allow for natural variability, water quality shall be considered diminished only if the assimilative capacity as defined in §G(3)(a) of this regulation is cumulatively reduced by more than 25 percent from the baseline water quality determined when the waterbody was listed as Tier II.

#### K. Demonstrating Social and Economic Justification for an Impact to Tier II Waters.

(1) In order to promote compact development, maintain habitat and open lands, and minimize water impacts in undeveloped areas, the requirement for social and economic justification is met if the following demonstrations are made:

- (a) The watershed affecting the Tier II water is located in a priority funding area as defined in State Finance and Procurement Article, §5-7B-02, Annotated Code of Maryland;
- (b) The Department determines, in consultation with the Maryland Department of Planning, that the local jurisdiction in which the watershed affecting Tier II waters are located, is using to the extent reasonably practical, innovative development approaches to minimize impacts to water quality from development;
- (c) Physical development after the date of the Tier II listing is necessary to accommodate the projected growth within the watershed, and use of innovative development approaches are maximized to the extent reasonably practicable to encourage redevelopment, reuse and infill development; and
- (d) If the Department of Planning's growth projections for the watershed affecting the Tier II waters demonstrate that additional physical development of undeveloped land is required to accommodate the projected growth and that development is consistent with the applicable county master plan.

(2) The approaches described in §K(1)(b) of this regulation include, but are not limited to, innovative stormwater management and sediment and erosion control design practices, green building design techniques, nutrient removal technology for septic systems, innovative technologies designed to reduce point source discharges of pollutants, uniform building codes designed to remove impediments to rehabilitation projects, model infill development guidelines designed by the Maryland Department of Planning, and transit-oriented development.

#### L. Components of the Social and Economic Justification.

- (1) Components of the SEJ may vary depending on factors including, but not limited to, the extent and duration of the impact from the proposed discharge and the existing uses of the waterbody.
- (2) The economic analyses shall include impacts that result from treatment beyond the costs to meet technology-based or water quality-based requirements.
- (3) The economic analysis shall address the cost of maintaining high water quality in Tier II waters and the economic benefit of maintaining Tier II waters.
- (4) The economic analysis shall determine whether the costs of the pollution controls needed to maintain the Tier II water would limit growth or development in the watershed including the Tier II water.

#### M. Department [of Environment] Responsibilities.

- (1) The Department shall determine whether the SEJ demonstrates that the costs of water pollution controls are reasonable and would not limit development or growth and, if not, shall determine whether lowering of the water quality is necessary for development or growth to take place in the watershed.
- (2) The Department shall determine whether the SEJ demonstrates that the impact to water quality is necessary for development or growth to take place in the watershed. Evaluation of the SEJ shall consider the relative magnitude of costs and benefits of development, recognizing the difficulty in quantifying benefits, and the extent to which denial of the amendment or permit would substantially impact future development within the watershed.
- (3) The Department shall propose a tentative determination to either issue or deny the permit application. If the tentative determination is made to issue a permit, the notice of tentative determination shall state that these waters are designated as Tier II and, if applicable, that a social and economic justification is available for review.
- (4) Existing in-stream water uses and the level of water quality necessary to protect existing uses shall be maintained and protected.
- (5) All required point and nonpoint source controls under State statutes and regulations shall be achieved.

#### N. Public Participation.

- (1) Public participation for a permit to discharge to a Tier II water is the same as that required for any permit subject to the Administrative Procedure Act or the requirements of Environment Article, Title 1, Subtitle 6, Annotated Code of Maryland.
- (2) If an SEJ is not required, the public notice shall reflect the Tier II status of the waterbody and note that an SEJ is not required and note the justification.