



Anti-Degradation Pre-Rulemaking Meeting #5

DRAFT RULE FRAMEWORK

Vermont Department of Environmental Conservation

May 25, 2010

Challenges for Change

Sec. F34. ANR REPORT ON ANTI-DEGRADATION IMPLEMENTATION RULES

- On or after January 15, 2011, and at least 30 days prior to prefiling the draft anti-degradation policy implementation rules with the interagency committee on administrative rules under 3 V.S.A. § 837, the secretary of natural resources shall submit for review a copy of the draft anti-degradation policy implementation rules to the senate committee on natural resources and energy and the house committee on fish, wildlife and water resources.



Overall structure for protection of Vermont's waters:

- Tier 3 Outstanding Resource Waters**
- Tier 2.5 Very High Quality Waters**
- Tier 2 High Quality Waters**
- Tier 1 Existing Uses**



2x-101 Authority and Purpose

- **General Description of Anti-Deg Policy**
- **Federal Requirement**
- **Purpose of Implementation Rule**

2x-202 Definitions

- **Activity**
- **Application**
- **Assimilative Capacity**
- **Cumulative Impacts**
- **Designated Uses**
- **Existing Uses**
- **High Quality Waters**
- **Limited Reduction**
- **NPDES**
- **New Discharge**
- **Socio-economic Justification**
- **Standards**
- **TMDL**
- **Permit**

2x-203 Applicability

- **Permit applications subject to Rule**
 - **Rule applies to a certification, dam order, other authorization in which during the application review process, compliance with the Water Quality Standards is evaluated pursuant to applicable state or federal law**

2x-203 Applicability (cont.)

- **Specific applications subject to anti-deg review:**
 - **Individual and General NPDES discharge permits for issued pursuant to 10 V.S.A. 1263 and the Vermont Water Pollution Control Regulations**
 - **Water Quality Certifications required by Section 401 of the federal Clean Water Act for a federal license or permit for flow modifying activities (e.g., hydroelectric generating facilities, withdrawals, and flow regulation at dams), stream alterations, encroachments and activities in wetlands.**

2x-203 Applicability (cont.)

- **NPDES stormwater permits and state stormwater permits issued pursuant to 10 V.S.A. 1264 for stormwater discharges**
- **Shoreland encroachment permits**

2x-203 Applicability (cont.)

- **Anti-deg review applies as follows:**
 - **Tier 1 applies to all discharges/activities subject to this Rule.**
 - **Tier 2, and Tier 3 applies to new or increased discharges or activities because they have the potential to degrade waters compared to existing water quality**

2x-203 Applicability (cont.)

- **Discharges are considered to represent an increased activity subject to anti-deg review if:**
 - **A pollutant in such discharge or activity will be released at an increased level which, either in terms of concentration or mass loading may affect water quality and be subject to regulation under an application subject to this Rule**
 - **The mass loading of one or more pollutants to a surface water would be increased beyond current permitting conditions**

2x-203 Applicability (cont.)

- **The degree or extent of a mixing zone for a discharge or activity would be increased to accommodate the discharge or activity**
- **The discharge or activity would result in an increase in any existing adverse impacts on flow conditions or the biological community**

2x-204 Review of Individual Applications and General Permit Applications

- **Anti-deg review will be conducted at time of application for individual permits**
- **Anti-deg review will be conducted for general permits at time of adoption of specifications and conditions of the general permit**

2x-302 Information Required for Evaluation and Determinations

- **The Secretary may request info from applicant on the following:**
 - **Activity or discharge**
 - **Impacts on water quality**
 - **Physical, chemical or biological information for watershed, receiving water, and discharge**

2x-302 Information Required (cont.)

- **Water quality monitoring analyses**
- **Socio-economic data analysis**
- **Presence of existing uses**
- **Evaluate magnitude, duration and extent of degradation**

2x-401 Protection of Existing Uses

- **An existing use means a use which has actually occurred on or after November 28, 1975, in or on waters, whether or not the use is included in the standard for classification of the waters, and whether or not the use is presently occurring.**
- **Existing uses of waters, and the level of water quality necessary to protect those existing uses, shall be maintained and protected.**

2x-401 Protection of Existing Uses

- **Interested persons may provide the Secretary with additional information during the application review process regarding an existing use.**
- **The Secretary will make a final determination of existing use protection as part of the final permit or approval action.**

2x-501 Determination of High Quality Waters

- **Waters whose existing ambient water quality exceeds (i.e. is better than) the applicable minimum water quality criteria and indices for the class to which the waterbody is assigned shall be considered high quality water.**

2x-502 Determination of Lowering of Water Quality

- **The purpose of the Tier 2 anti-degradation policy is to ensure that all waters with an existing quality better than the standards and criteria established in the Standards shall be maintained at their existing high quality.**
- **Section 1-03 of the Standards provides that a limited reduction in the existing higher quality of high quality waters may be allowed only when it meets the socio-economic justification test set forth in the Standards.**

2x-502 Determination of Lowering of Water Quality (cont)

- In the course of reviewing an application under this Rule, the Secretary shall determine whether the proposed discharge or activity will result in a limited reduction in water quality in a high quality by utilizing all relevant available data and analyses and the best professional judgment of Agency staff.**

2x-502 Determination of Lowering of Water Quality (cont)

- **By necessity, an analysis of whether or not an activity or discharge will result in a limited reduction in water quality in a high quality water will vary depending on the nature of the activity or discharge. This analysis will generally fall within two broad categories:**

2x-502 Determination of Lowering of Water Quality (cont)

- **Category 1: an analysis of the water quality impacts of steady state discharges, including NPDES and state direct discharge permits for industrial and sanitary discharges, and water quality certifications for flow modifying activities (e.g., hydroelectric generating facilities, withdrawals, and flow regulation at dams); and**

2x-502 Determination of Lowering of Water Quality (cont)

- **Category 2: an analysis of the water quality impacts of non-steady state precipitation-driven discharges, including NPDES and state stormwater permits and water quality certifications for activities controlled through best management practices such as encroachments, stream alterations and activities in wetlands.**

2x-502 Determination of Lowering of Water Quality (cont.)

- **For Category 1 discharges and activities, the Secretary may consider one or more of the following factors when determining if a proposed new or increased discharge or activity can reasonably be expected to result in a limited reduction in water quality:**
 - **percent change in ambient concentrations predicted at the appropriate critical conditions;**
 - **percent change in loadings (i.e. the new or expanded loadings compared to total existing loadings to the segment**
 - **percent reduction in available assimilative capacity**

2x-502 Determination of Lowering of Water Quality (cont.)

- **nature, persistence and potential effects of the parameter**
- **ratio of stream flow to discharge flow (dilution ratio)**
- **duration of discharge**
- **Treatment reliability**
- **Physical/location concerns**
- **Predicted impacts to aquatic biota and habitat**
- **Degree of hydrologic and sediment regime modifications**

2x-502 Determination of Lowering of Water Quality (cont.)

- **For Category 2 discharges and activities, the Secretary may consider one or more of the following discharge or activity-specific factors in determining if there is a limited reduction in water quality in high quality waters**
 - **For stormwater discharges:**
 - **For activities in wetlands:**
 - **For stream alteration activities:**
 - **For encroachments:**

2x-502 Determination of Lowering of Water Quality (cont.)

- **Presumption of No Limited Reduction in Water Quality in High Quality Waters.**
 - **Based on relevant available data and analyses, the nature of the proposed discharge or activity, the treatment and control standards required by law and regulation for the discharge or activity and the best professional judgment of Agency staff, the Secretary has determined that the following discharges or activities will not result in a limited reduction in water quality and are therefore not subject to Tier 2 anti-degradation review:**

2x-502 Determination of Lowering of Water Quality (cont.)

- **Cumulative Impacts.**
 - **The Secretary may determine that a discharge or activity may reasonably be expected to result in a limited reduction in water quality based on the cumulative effect of all other discharges or activities and other repeated or multiple insignificant discharges or activities in the affected reach. In such a case, the Secretary will, when deemed appropriate based on available data, analyses or other information, and in the exercise of best professional judgment, require a socio-economic justification for the proposed discharge or activity**



2x-503 Alternatives Analysis

- **The applicant for a proposed discharge or activity that would result in a limited reduction in the water quality of a high quality water shall demonstrate to the Secretary's satisfaction that appropriate alternatives have been adequately considered.**

2x-504 Socio-Economic Justification Analysis

- **If the Secretary determines that a proposed discharge or activity will result in a limited reduction in the existing water quality of a high quality water, he or she shall not issued a permit or approval unless the Secretary finds that:**
 - **there is no technically or economically feasible alternative to the proposed discharge or activity as determined under Section 2X-503 of this Rule; and**

2x-504 Socio-Economic Justification Analysis (Cont.)

- **the adverse economic or social impacts on the people of the state specifically resulting from the maintenance of the higher quality waters would be substantial and widespread and these adverse impacts would exceed the environmental, economic, social and other benefits of maintaining the higher water quality; and**
- **there shall be achieved the highest statutory and regulatory requirements for all new or existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control.**

2x-504 Socio-Economic Justification Analysis (Cont.)

- **BMP Specifications and Anti-Degradation**
 - **In order to increase the predictability and efficiency of its permitting programs, while protecting the water quality of high quality waters, the Secretary reserves the right to develop BMP specifications and design criteria for the control of activities subject to anti-degradation review that take into account anti-degradation, and that include findings of socio-economic justification. Permittees implementing such identified BMPs through general or individual permits would be presumed to meet anti-degradation requirements absent valid case-specific information and data rebutting the presumption.**

2x-601 Tier 2.5 – Protection of Very High Quality Waters (VHQW)

- **Purpose**
- **Qualities of Very High Quality Waters**
- **Process**
- **Prioritization**
- **Management Implications**

2x-601 Tier 2.5 – Protection of Very High Quality Waters (VHQW)(Cont.)

- Waters exhibiting sufficiently high quality may be identified as “very high quality waters” (VHQW).
 - VHQW could be identified using ecological characteristics assessed with biological metrics specific to macroinvertebrate, nongame-fish, and gamefish populations.
 - There is a higher water quality “floor” for VHQW, meaning the available assimilative capacity is correspondingly lesser than were the water to be protected simply as HQW.
 - The socio-economic test required to allow a limited lowering in VHQW could be more stringent.

2x-601 Tier 2.5 – Protection of Very High Quality Waters (VHQW)(Cont.)

- There will be a public process for designating VHQW protections, which may take one of four approaches:
 - Waters meeting VHQW characteristics are identified a-priori in the Antidegradation rule promulgation based on current information;
 - During the Basin Planning Process, waters would be identified by the Secretary as VHQW;
 - In conjunction with an application, a water identified as VHQW may be brought to the attention of the Panel for codification as VHQW;
 - During the biennial assessment and listing process, parties may provide the Secretary with data substantiating attainment of VHQW status, and these waters will be brought to the attention of the Panel for codification as VHQW.

2x-701 Tier 3 - Protection of Water Quality for Outstanding Resource Waters

- The purpose of Tier 3 antidegradation review is to ensure that existing and designated uses and the water quality necessary for their protection is maintained and protected and that the existing high quality of designated Outstanding Resource Waters is protected and maintained.**

2x-701 Tier 3 (Cont.)

- **Under 10 V.S.A. §1424a, the Vermont Water Resources Panel may designate waters as Outstanding Resources Waters if it finds that they have exceptional natural, recreational, cultural or scenic values. Section 1-03 (D) of the Standards provides that where the Panel designates Outstanding Resource Waters “because of their water quality values, their existing high quality shall be protected and maintained.”**

2x-801 Public Participation Requirements

- **The Secretary shall assure that public participation pursuant to the federal Clean Water Act (Title 40 Part 131.12(a)(2)) is provided for all actions for which a review for consistency with Vermont's Antidegradation Policy is conducted. The Secretary shall also assure that any limited reduction in water quality will be reviewed by other appropriate government agencies and that the public will be given an opportunity to comment.**

2x-801 Public Participation Requirements (Cont.)

- The public process will be conducted in accordance with the public notice and hearing requirements for the individual and general permits under consideration. Any such notice or notice of a hearing shall include the Secretary's finding with regard to compliance with Vermont's Anti-Degradation Policy.**

Wrap-Up

- Questions?
- Where do we go from here?
 - Procedure
 - January 2011 – to Legislature
- www.vtwaterquality.org
- Thank You