

DRAFT Summary of State-Adopted “Cumulative Degradation” Provisions

EPA Guidance

See EPA HQs memorandum dated 8/10/2005.

Colorado

Summary: For bioaccumulative toxic pollutants (BAF equal to or greater than 1000 l/kg), degradation is not significant if the new/increased loading is less than 10% of the existing total load, provided that the cumulative increased loading is not more than 10% of the baseline total load. For other pollutants, degradation is not significant if: (a) the low flow dilution ratio is 100 to 1 or more, or (b) the activity will consume, after mixing, less than 15% (cumulatively) of the baseline assimilative capacity (default baseline is as of 9/30/2000), or (c) the activity will result in only temporary or short term changes in water quality.

Approved 11/30/2000.

Kentucky

Summary: Kentucky's antideg regulation allows KPDES permit renewals and modifications that result in less than a 20% increase in pollutant loading from the previously permitted pollutant loading to occur as de minimis increases (and not subject to further antidegradation review) unless the increase will consume 10% or more of the available remaining assimilative capacity. [Cumulative cap above which an antideg review is required].

See explanatory letter from Kentucky to EPA dated 4/11/2005.

Approved by EPA (4/12/2005).

Maryland

Summary: An alternatives analysis must be completed as part of all antidegradation reviews (where antidegradation reviews are required); however, the social and economic justification (SEJ) aspect of the antidegradation review is required only if the result of the discharge would be that assimilative capacity is cumulatively reduced (all sources) by more than 25% percent from the baseline water quality determined when the water body was listed as Tier II.

Missouri

Summary: Degradation of assimilative capacity may be allowed if it is considered minimal degradation or if it is justified in accordance with an antidegradation review. Degradation is considered minimal if the reduction of assimilative capacity as a result of the new or proposed loading (i.e., event-specific) is less than 10 percent, and the loss of assimilative capacity as a result of cumulative degradation is less than 20 percent. "Cumulative Degradation" is the reduction of a segment's assimilative capacity from separate discharges approved by the department following the establishment of the water's existing water quality.

Undergoing State rulemaking; not yet submitted to EPA.

Montana

Summary: Water quality changes considered not significant include but are not limited to:

- For carcinogenic/bioconcentrating parameters, if the discharge concentration is equal to or less than background concentration.
- For toxic parameters, if the discharge will not cause changes that exceed the trigger value; if the trigger value is exceeded, the change is not significant if the resulting concentration outside of the mixing zone does not exceed 15% of the lowest applicable standard.
- For parameters other than nitrogen, phosphorous, and carcinogenic/bioconcentrating, or toxic parameters (e.g., salinity), if the change in concentration outside the mixing zone is less than 10% of the applicable standard and the existing water quality level is less than 40% of the standard.

Approved by EPA.

New Hampshire

Summary: Procedure reserves 10% of total assimilative capacity as not to be degraded. There is a threshold of 20% of available assimilative capacity for individual activities, but NH can determine that the discharge is nonetheless significant based on several factors, including cumulative effects.

Approved by EPA.

New Mexico

Summary: For both municipal and industrial discharges, the procedure requires antidegradation review when the proposed degradation, taken together with all other approved changes, uses more than 10% of the assimilative capacity (cumulatively), once the baseline water quality is established. See Figure 2 in the procedure.

Approved by EPA.

Link to NM's Procedure: <http://www.nmenv.state.nm.us/swqb/cpp/2004cpp.pdf>

North Carolina

Summary: For toxic substances that are discharged to High Quality waters (i.e., a specific supplemental designation that is applied to certain 131.12(a)(2) waters in the State), "The limit for a specific chemical constituent shall be allocated at one-half of the normal standard at design conditions." [Cap over which no additional lowering of water quality is allowed - this essentially resets the toxics criteria for these waters at one-half of the designated water quality criteria]

Approved by EPA.

Tennessee

Summary: If more than one activity has been authorized in a segment and the total of the impacts uses no more than ten percent of the assimilative capacity, available habitat, or 7Q10 low flow, they are presumed to be de minimis. Where total impacts use more than ten percent of the assimilative capacity, available habitat, or 7Q10 low flow they may be treated as de minimis provided that the division finds on a scientific basis that the additional degradation has an insignificant effect on the resource and that no single activity is allowed to consume more than five percent of the assimilative capacity, available habitat or 7Q10 low flow.

Submitted to EPA by the State. Currently under review by EPA.

West Virginia

Summary: Degradation significant if the activity reduces assimilative capacity by 10% or more. In addition, degradation is significant if the proposed activity, together with all other activities allowed after establishing the baseline water quality, result in a reduction of 20% or more of the baseline available assimilative capacity.

Court Vacates: The original EPA approval of the above cumulative degradation provision was vacated (8/29/2003 decision).

http://www.ohvec.org/issues/mountaintop_removal/articles/antideg.pdf

EPA Action on Remand: The provision was re-approved by EPA Region 3 with a 11/14/2006 action letter.

Wisconsin

Summary: Degradation is considered significant and subject to antideg review if the proposed new or increased discharge, along with all other new or increased discharges after March 1, 1989 (taking into account any changes in assimilative capacity over time)

results in an expected level greater than one-third of the assimilative capacity for any indicator parameter other than dissolved oxygen.

Approved by EPA

Wyoming

Summary: Degradation is not significant if new/increased loading is less than 10% of the existing total load; provided that cumulative increased loading from all sources does not exceed 10% of baseline total load for the segment (the baseline total load is established at the time of the first proposed lowering of water quality).

Approved by EPA (1/25/2002)