Indiana Water Quality Coalition
Position on Antidegradation Exceptions

> Full antidegradation review should only be required for projects that will result in a significant lowering of water quality. Activities that will only result in insignificant or temporary lowerings of water quality do not warrant the time and expense of detailed review. Including a set of exceptions for activities that do not significantly lower water quality in antidegradation rules provides certainty and ease of administration because interested parties understand that certain activities will not require full antidegradation review.

Background on antidegradation exceptions.

The federal antidegradation policy for tier 2 high quality waters states that the quality of a waterbody shall be maintained and protected unless the State finds that allowing lower water quality is necessary to accommodate important social and economic development in the area. *See* 40 CFR 131.12(a)(2). Activities that will only result in insignificant or temporary lowerings of water quality do not warrant the time and expense of dischargers demonstrating and the State reviewing whether an activity should be allowed. Full antidegradation review should only be required for projects that will likely result in a significant lowering of water quality.[1]

Exceptions to antidegradation review allow specific activities to occur without antidegradation review because these categories of activities do not cause a significant lowering of water quality. Including a set of exceptions in antidegradation rules provides certainty and ease of administration because interested parties understand that certain activities will not require full antidegradation review.

There are several general categories of exceptions:

1. Actions that are excepted from full antidegradation review because they do not result in *any* lowering of water quality.

   Examples:

   - Normal operational variability.
   - New limits based on improved monitoring data or test methods.
   - Increases below current permit limits.

2. Actions that are excepted from full antidegradation review because they result in only an *insignificant* lowering of water quality on a *pollutant-by-pollutant, quantitative basis*. Examples:

   - Actions that result in only a short-term, temporary lowering of water quality.
   - Increases due solely to the presence of pollutants in intake water.

[1] It should be noted that the Tier 1 antidegradation policy provides absolute protection to all waterbodies by ensuring that water quality is not lowered below applicable State water quality standards.

- Activities covered by general permits.

3. Actions that are excepted from full antidegradation review because they result in only an *insignificant* lowering of water quality on a *qualitative basis* and/or will result in a *net benefit* to the environment.

   Examples:
   - Response actions pursuant to CERCLA and similar authorities.
   - Maximizing wet weather flows through POTWs.
   - Increasing the sewered area and eliminating or reducing the use of septic systems.

Legal authority and precedent for antidegradation exceptions.

1. Federal regulations and guidance allow for antidegradation exceptions.

March 23, 1995 - Water Quality Guidance for the Great Lakes System, 40 CFR Part 132, Appendix E:

EPA recognized that certain activities are not subject to, or excluded from, antidegradation review:

- Changes in loadings of any BCC[2] within the existing capacity and processes, and that are covered by the existing applicable control document, are not subject to an antidegradation review. These changes include, but are not limited to:
  1. Normal operational variability.
  2. Changes in intake water pollutants.
  3. Increasing the production hours of the facility (e.g., adding a second shift).
  4. Increasing the rate of production.

- Excluded from antidegradation review are new effluent limits based on improved monitoring data or new water quality criteria or values that are not the result of changes in pollutant loading.

The federal guidance also provides three exemptions to which the antidegradation implementation procedures do not apply:

[2] The federal guidance only provides procedures for implementing antidegradation review of bioaccumulative chemicals of concern ("BCCs"). States may design their own programs for antidegradation review for non-BCCs.

1. Short-term, temporary (i.e., weeks or months) lowering of water quality.
2. Bypasses that are not prohibited at 40 CFR 122.41(m).
3. Response actions pursuant to CERCLA, or similar Federal, State or Tribal authorities, undertaken to alleviate a release into the environment of hazardous substances, pollutants or contaminants which may pose an imminent and substantion danger to public health or welfare.

July 7, 1998 - Advanced Notice of Proposed Rulemaking to revise the water quality standards regulation, 63 Fed. Reg. 36783.

> EPA recognized that State antidegradation implementation "procedures often include guidelines which are used to determine when the water quality degradation that will result from a proposed activity is significant enough to warrant further antidegradation review. Where the degradation is not significant, the antidegradation review is typically terminated for that proposed activity. .... *Applying antidegradation requirements only to activities that will result in significant degradation is a useful approach that allows States and Tribes to focus limited resources where they may result in the greatest environmental protection. .... In some cases, States have also created categorical exemptions from tier 2 review (e.g., they have exempted entire categories of activities from antidegradation reviews based on a general finding that such activities do not result in significant degradation).*"

[Emphasis added.]

2. <u>Indiana's Great Lakes rules already contain a set of antidegradation exceptions, and IDEM has proposed exceptions in its draft antidegradation procedures for the entire State.</u>

Indiana's antidegradation implementation procedures for the Great Lakes system contain a set of exceptions to antidegradation review for both tier 2 high quality waters and outstanding state resource waters. *See* 327 IAC 5-2-11.3 and 5-2-11.7. EPA has reviewed Indiana's Great Lakes rules, and approved the antidegradation implementation procedures, including the set of exceptions.

IDEM also has proposed to adopt a set of exceptions for all waters of the State in its draft triennial review revisions to the State water quality standards. *See* 22 IR 1659, February 1, 1999, specifically 327 IAC 2-1-2.3, p. 1673-75. In a comment letter dated May 4, 1999 concerning IDEM's draft rules, EPA did take issue with the proposed list, because IDEM characterized the activities as exemptions to the antidegradation policy. However, EPA clearly recognized that IDEM could craft a set of exceptions for activities that either do not lower or insignificantly lower water quality:

> "What are identified as "exemptions" from antidegradation are either activities that don't lower water quality (and therefore don't trigger antidegradation), or factors to be considered in either the significance or alternative technology components of the review. *It would be more accurate and preferable to address these issues as the basis for*

determining whether or not a significant lowering of water quality will exist that triggers antidegradation review."

[Emphasis added.]

3. Senate Enrolled Act 431 (P.L. 140-2000) authorizes the concept that insignificant lowerings of water quality do not warrant full antidegradation review.

SEA 431 recognizes the concept that antidegradation review for outstanding state resource waters only applies to significant lowerings of water quality. *See* P.L. 140-2000, Section 17, codified at Ind. Code 13-18-3-2(b):

> "Degradation" means, with respect to a National Pollutant Discharge Elimination System permit, the following:
>
> ...(2) With respect to an outstanding state resource water or an exceptional use water, any new or increase discharge of a pollutant or pollutant parameter that results in a *significant* lowering of water quality....

[Emphasis added.] *See also* Ind. Code 13-18-3-2(m):

> The [antidegradation implementation] procedures provided by rule ... must include the following:
>
> (1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:
> (A) for which a new or increased permit limit is required; and
> (B) *below which antidegradation implementation procedures do not apply*.

[Emphasis added.]

4. Other States also have adopted antidegradation rules that contain a set of exceptions.

Michigan's rules contain 13 specific actions that the State has identified do not constitute a lowering of water quality. *See* Mich. Admin. Code r. 323.1098(8) and (9). Besides those that are similar to Indiana's set of exceptions, Michigan's rules also contain an exception for new or increased loadings authorized by certificates of coverage under NPDES general permits and notices of coverage for stormwater from construction activities.

Ohio has a set of 16 exclusions and waivers to the antidegradation submittal and review requirements. *See* Ohio Admin. Code § 3745-1-05(D). In addition to several exceptions similar to those in Indiana's rules, Ohio also has exceptions for:

> 1) Any source discharging to limited quality waters.

2) Any disposal system built and operated exclusively for the treatment of volatile organic compounds at response action clean-up sites.
3) Any disposal system built and operated as a land application and controlled system.
4) Any construction permit for a project designed exclusively to restore, maintain or ensure design capacity and associated pollutant discharge levels already authorized in an NPDES permit.
5) Any net increase in the discharge of a regulated pollutant resulting in a change in fuel.
6) General permits for stormwater associated with construction activity.
7) General permits for stormwater associated with industrial activity.
8) General permits for coal mining activities.
9) Discharges covered by Ohio's statewide mercury variance.

Several other States have similar sets of antidegradation exceptions.

Recommendation to the Water Quality Advisory Group and IDEM concerning antidegradation exceptions.

At the November 30, 2000 Water Quality Advisory Group meeting, IDEM indicated its intent to repropose in new antidegradation rules those exceptions already contained in existing Indiana rules. A list of these exceptions from 327 IAC 5-2-11.3 and 5-2-11.7 is attached. We believe this decision is wise: the list of exceptions in 327 IAC 5-2-11.3 and 5-2-11.7 have been subject to public notice and comment, and were approved by the Indiana Water Pollution Control Board. Additionally, we believe that when proposing an antidegradation rule to cover the entire State, IDEM should include the new exceptions that it proposed in the February 1, 1999 draft triennial review rule:

1. All activities subject to general permits should be excepted from antidegradation review because these activities do not result in a significant lowering of water quality. IDEM already has authority to require an individual permit for an activity if IDEM determines that a general permit is not adequate to assure compliance with water quality standards.

All discharges covered by general permits should be included as antidegradation exceptions. The types of activities covered by general permits are:

1) episodic in nature because discharges only occur during wet weather events (e.g., stormwater discharges associated with construction or industrial activity);

2) temporary (e.g., hydrostatic testing at commercial pipelines); or

3) otherwise do not significantly lower water quality (e.g., non-contact cooling water discharges).

General permits are only allowed for activities with an insignificant water quality impact. Otherwise, IDEM should be requiring dischargers to obtain an individual permit. *See* 327 IAC 15-2-9(b)(1): "(b) ... Cases where individual NPDES permits may be required include the following: (1) The applicable requirements contained in this article are not adequate to ensure compliance with: (A) water quality standards under 327 IAC 2-1 or 327 IAC 2-1.5; or (B) the provisions that implement water quality standards contained in 327 IAC 5." If the concern with including certain general permits as antidegradation exceptions regards specific situations where water quality standards may be jeopardized, it is appropriate for IDEM to require individual permits for these situations. Furthermore, requiring antidegradation review for general permits would negate the fundamental efficiencies of the general permit program, by requiring case-by-case review of in excess of 3,000 activities subject to general permits in Indiana. This number will increase by thousands more as the Phase II stormwater regulations are adopted and implemented by IDEM. Lastly, it should be noted that the neighboring States of Michigan and Ohio have already decided that it is appropriate to except general permits from full antidegradation review.

2. Discharges that have been granted variances should be excepted from antidegradation review because the application and review process for obtaining a variance is substantially the same as the antidegradation demonstration and review process. Furthermore, because variances allow temporary exceptions to water quality standards for certain dischargers, subjecting those dischargers to antidegradation review for high quality waters does not make sense.

All variance applications must review both the types of technology capable of treating the pollutant of concern and the social and economic costs of installing and operating each type of technology. This review is very similar to the technology review and demonstration of social or economic importance that is required for antidegradation review. In fact, U.S. EPA recommends that States use the same process for reviewing social and economic impacts for variances and antidegradation review. *See* Interim Economic Guidance for Water Quality Standards Workbook, March 1, 1995, EPA 823/B-95-002. Thus, if IDEM has granted a variance to a discharger, it makes sense that the discharger should not also need to complete an antidegradation demonstration.

More fundamentally, it makes no sense to apply antidegradation review for high quality waters to situations where a discharger is requesting a variance, because a variance grants conditional permission to exceed a water quality criteria or standard. In these cases, the more appropriate review focuses on ensuring that reasonable progress can be made to meet the water quality criteria or standard in the future. This requirement is an integral function of the granting of variances. *See* 327 IAC 5-3-4.1(i)(4).

3. Discharges of wastewater and water treatment additives subject to certain conditions should be excepted from antidegradation review.

It is important that IDEM continue to support the exception for WTAs that was adopted by the Water Pollution Control Board in its recent amendments to 327 IAC 5-2-11.7, Great Lakes system dischargers interim antidegradation implementation procedures for outstanding state resource waters. That amended rule provides an exception for WTAs subject to certain conditions. *See* 327 IAC 5-2-11.7(c)(1)(D). Those conditions allow the immediate use of

WTAs, other than bioaccumulative chemicals of concern, that have not been previously approved by IDEM:

> (1) If the WTA is not a biocide, the use of the WTA is necessary to comply with permit conditions.
> (2) If the WTA is a biocide, the use of the WTA is necessary to prevent the loss of human life, personal injury, or severe property damage.
> (3) The permittee shall orally report information of the use of the WTA to IDEM within 24 hours of the time the permittee uses or begins to use the WTA.
> (4) The permittee shall provide written notice to IDEM within 5 days of the time the permittee uses or begins to use the WTA.

See 327 IAC 5-2-11.7(f).

4. Certain new or increased discharges from POTWs should be allowed if they achieve best technology or result in an overall improvement in water quality.

These activities should include:

- New or increased discharges of treated sanitary wastewater that are designed to meet the following permit conditions:
  - a. Ten (10) milligrams per liter $CBOD_5$ as a monthly average.
  - b. Ten (10) milligrams per liter total suspended solids (TSS) as a monthly average.
  - c. One (1) milligram per liter ammonia as nitrogen as a monthly average.
  - d. Disinfection by ultraviolet light.

POTWs can be encouraged to design for this high level of treatment technology if they are excepted from further antidegradation review.

- A proposed new discharge from a sanitary wastewater treatment plant constructed to alleviate a public health concern, for example, a connection of existing residences currently on septic systems. The applicant shall demonstrate that the proposed treatment plant represents the best technology available as described in the previous bullet.

This exception represents a clear situation of net improvement to the environment, and likewise should be encouraged.

IDEM should also consider including exceptions for certain other activities that do not result in a significant lowering of water quality, such as research and development projects. These projects are generally short-term and temporary in nature, and produce socially important results.

Incorporation of this set of exceptions into Indiana's antidegradation implementation procedures will ensure that detailed antidegradation review is not required for certain activities that by their very nature do not constitute a significant lowering of water quality.

Attachment:
Antidegradation exceptions from 327 IAC 5-2-11.3 and 327 IAC 5-2-11.7[1]

(1) Increases in loadings of any pollutant or pollutant parameter, including heat, from an existing permitted discharger, that are within the existing capacity and processes and that are covered by the existing applicable permit. These increases include, but are not limited to, the following:

> (A) Normal operational variability, including, but not limited to, intermittent increased discharges due to wet-weather conditions.
> (B) Changes in intake water pollutants not caused by the discharger.
> (C) Increasing the production hours of the facility, for example, adding a second shift.
> (D) Increasing the rate of production.

(2) New limits for an existing permitted discharger that are not a result of increases in pollutant loading and will not allow an increase in pollutant loading including new limits that are a result of the following:

> (A) New or improved monitoring data.
> (B) New or improved analytical methods.
> (C) New or modified water quality criteria or values.
> (D) New or modified effluent limitations guidelines, pretreatment standards, or control requirements for POTWs.

(3) Bypasses that are not prohibited at 40 CFR 122.41(m) or section 8(11) of this rule.
(4) Short term, temporary (weeks or months) lowering of water quality.
(5) New or increased discharges of a pollutant or pollutant parameter due to response actions pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (as defined in IC 13-11-2-24), as amended, corrective actions pursuant to the Resource Conservation and Recovery Act (RCRA), as amended, or similar federal or state authorities undertaken to alleviate a release into the environment of hazardous substances, pollutants, or contaminants that may pose an imminent and substantial danger to public health or welfare.
(6) Increasing the sewered area, connection of new sewers and customers, or acceptance of trucked-in wastes (such as septage and holding tank wastes) by a POTW, provided that the increase is within the existing NPDES permit limits of the facility, there is no increased loading of BCCs from nondomestic wastes, and no significant change is expected in the characteristics of the wastewater discharged.
(7) New or increased discharges of a pollutant due to implementation of department-approved industrial or municipal controls on wet-weather flows, including combined sewer overflows and industrial storm water, when there is no net increase in the loading of the pollutant to the same body of water.
(8) New or increased discharges of a wastewater or water treatment additive.
(9) New or increased discharges of a pollutant or pollutant parameter, when the facility withdraws intake water containing the pollutant or pollutant parameter from the same body of

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[1]The language of these exceptions is based largely on the recently amended 327 IAC 5-2-11.7, which provided greater clarity to the previous rule language.

water, and the new or increased discharge of the pollutant or pollutant parameter is due solely to the presence of the pollutant or pollutant parameter in the intake.

(10) New or increased discharges of heat that will not result in an increase in temperature:

(i) in a stream, outside of the designated mixing zone, where applicable; or

(ii) in Lake Michigan, as allowed in 327 IAC 2-1.5-8(c)(4)(D)(iv), at the edge of a one thousand (1,000) foot arc inscribed from a fixed point adjacent to the discharge.

(11) Discharges of stormwater subject to a general permit under 327 IAC 15-5 (stormwater run-off associated with construction activity) and 327 IAC 15-6 (stormwater run-off associated with industrial activity).

(12) New or increased discharges of a pollutant or pollutant parameter that is not a BCC where there is a contemporaneous enforceable decrease in the actual loading of the pollutant or pollutant parameter from sources contributing to the waterbody such that there is no net increase in the loading of the pollutant or pollutant parameter to the waterbody**.** The commissioner may approve such an action only if:

(i) the reduction in the discharge of the pollutant or pollutant parameter exceeds the new or increased discharge of the pollutant or pollutant parameter; and

(ii) the applicant demonstrates that all reasonable and cost-effective methods for avoiding the new or increased discharge have been taken.

(13) An action that will result in a new or increased discharge of a pollutant or pollutant parameter that is not a BCC if the new or increased discharge is necessary to accomplish a reduction in the discharge of another pollutant or pollutant parameter. The commissioner may approve such an action only if:

(i) the new or increased discharge of the pollutant or pollutant parameter is determined to be either:

(AA) less toxic and no more bioaccumulative; or

(BB) less bioaccumulative and no more toxic; and

(ii) the applicant demonstrates that all reasonable and cost-effective methods for avoiding the new or increased discharge have been taken.

(14) An action that will result in a new or increased discharge of a pollutant or pollutant parameter that is not a BCC if the new or increased discharge is necessary to accomplish a reduction in the release of an air pollutant. The commissioner may approve such an action only if:

(i) the reduction in the discharge of the air pollutant is necessary to meet a state or federal air quality standard or will substantially reduce human exposure to hazardous air pollutants; and

(ii) the applicant demonstrates that all reasonable and cost-effective methods for avoiding the new or increased discharge have been taken.