

**Iowa's Use of a 115% economic efficiency criteria**

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In the context of antidegradation analysis, the idea to use a percentage cost test to determine the reasonableness of requiring a less degrading treatment option dates back to at least EPA Region 8's Antidegradation Implementation Guidance issued in August 1993. This guidance is the model for all subsequent antidegradation policies adopted by the States. The guidance states:

(3) Preliminary Determination

Once the Division has determined that feasible alternatives to allowing the degradation have been adequately evaluated, the Division shall make a preliminary determination regarding whether reasonable non-degrading or less-degrading alternatives are available. This determination will be based primarily on the alternatives analysis developed by the project applicant, but may be supplemented with other information or data. As a non-binding rule of thumb, non-degrading or less-degrading pollution control alternatives with costs that are less than 110 % of the costs of the pollution control measures associated with the proposed activity shall be considered reasonable. If the Division determines that reasonable alternatives to allowing the degradation do not exist, the Division shall continue with the tier 2 review and document the substance and basis for that preliminary determination using the antidegradation review worksheet.

The following states have some form of a cost comparison test:

Source/Entity	Economic Efficiency Criteria (Based on Present Worth Costs)	Binding/Non-binding
Iowa (existing)	115%	Non-binding
Iowa (proposed)	115%	Binding
U.S. EPA Region VIII Guidance (August 1993)	110%	Non-binding
Alabama	110%	Binding
Arizona	110%	Binding
Delaware	115%	Non-binding
Mississippi	110%	Binding
Missouri	120%	Non-binding
North Dakota	100% ("similar" costs)	Non-binding
Utah	120%	Non-binding
West Virginia	110%	Non-binding
Wisconsin	115% (or 110% of capital costs)	Binding

Based upon the existing EPA guidance and a review of other states' implementation methods, the original diverse stakeholder group that worked on Iowa's antidegradation implementation procedures in 2009 chose 115% as the economic efficiency criteria to be used. The primary change that Iowa made in 2016

was to go from a non-binding 115% test to a binding 115% test. In other words, we went from excluding options that increase the cost of treatment by 15% or more in almost every case to excluding them in every case.

In response to this 2016 rulemaking, EPA has demanded that Iowa disprove the hypothetical that there could be some instance in which a treatment option which costs 115% or more would provide such great benefit that it would be worth additional costs beyond the 115% threshold. In other words, EPA has demanded that we prove that 115% is the point at which the cost must necessarily always exceed the benefit. Iowa has responded with multiple arguments:

1. The determination of reasonableness is an inherently subjective and political decision. In a challenge to Alabama's binding 110% test, the Alabama Court of Appeals stated "As adopted, the "110 percent rule," like many regulations and parts of regulations, reflects a compromise between environmental and broader economic concerns, a compromise that the judiciary should be loath to disturb" *ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT and Alabama Environmental Management Commission v. LEGAL ENVIRONMENTAL ASSISTANCE FOUNDATION, INC.*, 2030878 and 2040311 (August 12, 2005). Iowa agrees with the Court's reasoning and asserts that, if faced with a judicial challenge, the fact that Iowa is within the range of antidegradation economic tests adopted by the States (100-120%) is per se proof of the reasonableness of Iowa's 115% standard, in fact it is the only measure by which the court could make such a reasonableness determination.
2. EPA not only originally proposed the use of a cost percentage test for reasonableness, they have repeatedly approved the use of such tests. While some are binding and some are only used for guidance, in all cases they are determinative in the approval of most of the antidegradation analyses submitted to a state. To the best of Iowa's knowledge, EPA has never required a state to prove in any manner that the percentage chosen represents an objectively verifiable determination of the point at which costs exceed benefits. Such a requirement would be just as applicable to a non-binding test (which applies most of the time) and just as impossible. It is impossible because reasonableness is inherently subjective. Iowa chose 115% based upon stakeholder input and a review of other States' procedures. EPA has responded that the prior approvals were under the pre-2015 rule but cannot identify any language in the newer rule which would change the evaluation of such a binding or non-binding cost percentage test.
3. EPA cannot identify any specific language in the federal language which is contradicted by Iowa's 115% economic efficiency test.
4. EPA has asserted that the binding 115% test is not within the scope of the term "economically viable" in the federal rule. That term is not defined in the federal rules. Unless or until EPA defines the term, Iowa is free to do so.

It is not possible for Iowa, EPA or any of the state's with a percentage cost comparison test or guideline to objectively prove that their determination of reasonableness is the correct and only determination possible for their state or region. By demanding such proof, EPA is asserting that all such test (binding or non-binding) are unapprovable. There is no legal basis for such a position. EPA must approve Iowa's Antidegradation Implementation Procedure based upon the reasoning set forth in the recently submitted justification.