

Tuesday July 7, 1998

Part II

Environmental Protection Agency

40 CFR Part 131 Water Quality Standards Regulation; Proposed Rule approach to the implementation of water quality standards variances must be evaluated in the context of the entire regulation.

EPA is considering whether implementation of the variance provision has been a useful component of the water quality standards program, and the overall program for protection of water quality standards. In 1990, EPA conducted a survey of State variances and variance provisions (National Assessment of State Variance Procedures, Report, November 1990, Office of Water Regulations and Standards). This study showed that variances had been granted on a very limited basis. In fact, only 16 out of 57 States and Territories had granted variances and some of those had done so infrequently. EPA lacks detailed information on why variances are not being significantly utilized in most States and Tribes. EPA is interested in information regarding alternative mechanisms that are being used by States or Tribes in lieu of variances to provide necessary short term and temporary relief from applicable criteria, and how any alternative approaches address the feasibility of ultimately attaining the criteria associated with the underlying designated use.

EPA is considering whether it would be useful to include in the regulation more explicit language reflecting current EPA thinking and practice regarding variances. As explained above, in order to issue variances, States or Tribes must include variances as part of the State's or Tribe's water quality standards. EPA believes, however, that in some instances States may be misusing variances. For example, over the years, there have been instances where a State has improperly granted a "variance" from compliance with NPDES permit limits, failing to include these variances within the water quality standards themselves. There has also been some confusion regarding the necessity of formal adoption of individual variances into State and Tribal water quality standards and whether the public participation process associated with NPDES permit issuance sufficiently addresses those same needs for variance adoption. EPA is also considering whether to specify the degree to which individual dischargers must document the continued need for a variance before the variance can be renewed at each triennial review. EPA is considering whether the water quality standards regulation should provide more specific guidelines on the use and content of variance policies. EPA's current thinking is that the regulation may need

to articulate certain aspects of variances more explicitly, including:

- explicit reference to the criteria listed in 40 CFR 131.10(g) as the criteria for granting a variance;
- explicit statement that the granting of a variance may not result in any loss or impairment of an existing use;
- explicit statement that before a variance can be granted, the applicant must provide documentation that treatment more advanced than that required by sections 303(c) (2) (A) and (B) of the CWA has been carefully considered, and that alternative effluent control strategies have been evaluated and reasonable progress is being made toward meeting the underlying or original standards;
- explicit statement requiring the highest level of water quality achievable under the relaxed, interim standard during the period of the variance.
- explicit statment that a variance shall not be granted if standards will be attained by implementing costeffective and reasonable best management practices for nonpoint source control.

EPA believes that such a clarification of its policy regarding variances could serve to encourage proper use of variances by States and Tribes while at the same time reducing the possibility of inappropriate use.

ii. Temporary Standards. As indicated in the discussion on variances above, the 1985 EPA Office of Water guidance explained that it would be appropriate to grant short-term variances to individual dischargers based on any of the six factors for removing a designated use as listed at §131.10(g). Of the six use removal factors, the first five address water quality and habitat features of the water body as a whole. These same factors are not, however, ideally suited to making decisions about the capabilities of individual dischargers. For example, it is not immediately clear how use removal factor five, "physical conditions related to natural features of a water body

* * * preclude attainment of a use", could be applied to a decision about an individual discharger. On the other hand, the sixth factor, the substantial and widespread economic and social impact factor, is well suited to decisions about individual dischargers which explains why the economic hardship test has been historically applied in evaluating variances.

Several States have applied factors similar to the first five use removal factors in establishing variances for entire water body segments or portions

of water body segments. These States sometimes refer to these as "temporary standards" or "temporary modifications". This has been done where the problems in a water body are significant and widespread, involving point and nonpoint sources of pollution and their impacts on water quality and habitat, that is waters significantly impaired by multiple sources and not just one or a few point sources. For example, where historic mining practices have severely impaired both water quality and habitat throughout a headwater basin, temporary standards have been used. Rather than downgrading these waters, the States have applied temporary standards with specific expiration dates for certain pollutants affected by the historic mining practices. In this way, the States have maintained designated uses and underlying criteria for other pollutants, while recognizing that existing ambient conditions for certain pollutants are not correctable in the short-term. In such cases, the temporary standards provide a basis for permit limits in the shorterterm. The temporary standards approach is then used by these States as the basis for remediation of damaged water resources because the underlying designated use and criteria to protect that use actively drive water quality improvements in the longer-term. EPA Regional Offices have approved the use of such temporary standards.

Temporary standards have been implemented to date with little specific Agency guidance on a water body approach to variances. EPA is considering whether the water quality standards regulation or guidance should specifically address temporary standards. EPA's current thinking is that if the regulation or Agency guidance were to specifically address temporary standards, such regulation or guidance would need to address certain relevant issues including: application criteria to be used in deciding which waters might qualify for temporary standards; a way of identifying the existing, impaired water quality conditions; a mechanism for specifying the water quality needed to fully attain the anticipated uses; and a plan and driving mechanism aimed at achieving needed water quality and habitat improvements to fully support compliance with the designated uses.

Where EPA has provided guidance to individual States on use of State temporary standards provisions, EPA has advised that any temporary standard should:

-be granted only where there is a demonstration that one of the use removal factors (40 CFR 131.10(g)(1) through (6) has been satisfied;

- be granted for a specific water body or portion of a specific water body as defined in State standards;
- identify and justify the numerical criteria that will apply during the existence of the temporary standard and identify a "remediation plan" aimed at compliance with the underlying designated uses and criteria;
- be established as close to the underlying numerical criteria as is possible;
- be reviewed every three years, at a minimum, and extended only where the conditions for granting the temporary standard still apply;
- —be in effect only for the specified term of the temporary standard (or extension thereof), and upon expiration of the temporary standard, the underlying numerical criteria have full regulatory effect;
- not exempt any discharge to the water body from compliance with applicable technology or water quality-based limits (based on the temporary standards) or best management practices;
- not apply to any new discharger to the water body; and
- —protect existing uses.

EPA is considering whether the use of temporary standards represents a viable alternative to use refinement or removal. EPA is also considering whether the regulation or guidance should explicitly address use of temporary standards, including specific limitations on the use of temporary standards like those listed above.

iii. Ambient-based Criteria. On a limited basis, States have developed and EPA has approved "ambient-based criteria." These ambient-based criteria have been developed for specific water bodies and pollutants where such criteria are shown to protect the designated use and the existing use. EPA believes that ambient-based criteria can be preferable to a "downgrade" of a use because the underlying designated use is retained and because they may be limited to only a small subset of pollutants.

EPA has issued a policy memorandum concerning one type of ambient-based criteria, site-specific criteria for aquatic life protection that are based on natural conditions. (See Memorandum from Tudor T. Davies, Director Office of Science and Technology, Subject: Establishing Site-Specific Aquatic Life Criteria Equal to Natural Background, November 5, 1997.) This policy states that States and Tribes may establish site-specific aquatic life criteria equal to natural

background conditions, but such criteria must be scientifically defensible. Additionally, the State's or Tribe's water quality standards should contain or provide specific authority for sitespecific criteria based on natural background. States and Tribes should also identify procedures for determining natural background. EPA's current policy also states that the State or Tribal procedure for determining natural background needs to be specific enough to establish natural background concentration accurately and reproducibly. States and Tribes should also provide for public notice and comment on the provision, the procedure and the site-specific application of the procedure. The States or Tribes will also need to document the resulting site-specific criteria in its water quality standards, including specifying the water body segment the site-specific criterion applies to. This can be accomplished through adopting the site-specific criteria into the State and Tribal water quality standards, or, alternatively by appending the sitespecific criteria to the water quality standards.

In addition, a second approach that some States have used and EPA has approved is where the State or Tribe could have met the test for downgrading a use under 40 CFR 131.10(g)(3) i.e., "Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place", but instead of downgrading the use, the State or Tribe established certain criteria based on ambient conditions where those ambient conditions were shown to be irreversible. In addition to assuring that the existing use is protected, EPA is interested in assuring that where the ambient concentration of a pollutant cannot be improved, i.e., it is irreversible, that such condition be maintained and not made worse. When this occurs, EPA believes that for other pollutants in the same water body for which applicable criteria are being or can be met, those criteria should remain in place and not be made less protective via a use downgrade. EPA's current thinking is that the ambient-based criteria need to be the best attainable. In addition, EPA's current thinking is that in order to establish ambient-based criteria, the State or Tribe should conduct an analysis equivalent to a use attainability analysis for a downgrade that should include a thorough description of the biota that will be protected via applicable water quality criteria (both the unchanged preexisting criteria and the ambient-based criteria).

EPA is interested in hearing comments regarding these ambientbased criteria mechanisms, and specifically whether the regulation should discuss these mechanisms more specifically, and whether the regulation should be more explicit about the biological evaluation necessary to describe the aquatic life use being protected. EPA is also interested in comments on whether the other relief mechanisms based on the §131.10(g) reasons, such as variances and temporary standards, should also require criteria which reflect the best attainable conditions.

Request for Comments on Alternatives to Downgrading a Designated Use

EPA seeks comment on the following questions:

1. EPA requests comment on whether variances, temporary standards and/or ambient-based criteria can under certain circumstances offer an environmentally preferable alternative to refinement or removal (downgrade) of the designated use? Under what circumstances?

2. Does the current water quality standards regulation or Agency guidance or policy discourage persons from seeking variances and/or discourage States and Tribes from granting variances (including temporary standards)? What components of the procedures are most problematic?

3. Reflecting EPA's current interpretation of the regulation, should the regulation make explicit that individual variances and temporary standards must be documented in a State's or Tribe's water quality standards before implementation as part of NPDES permits?

4. Reflecting EPA's current interpretation of the CWA and the regulation, should the regulation contain express reference to the factors listed in 40 CFR 131.10(g) as the criteria under which a variance (including temporary standards) from water quality standards will be allowed? Should any of these factors be deleted? Should any new factors be added?

5. Reflecting EPA's current interpretation of the CWA and the regulation regarding existing uses, should the variance portion of the regulation at 40 CFR 131.13 underscore that the granting of a variance must not result in any loss or impairment of an existing use, for example by crossreferencing the requirement at 40 CFR 131.12(a)(1) that existing uses must be protected?

6. To reflect current practice and EPA guidance, should the regulation be