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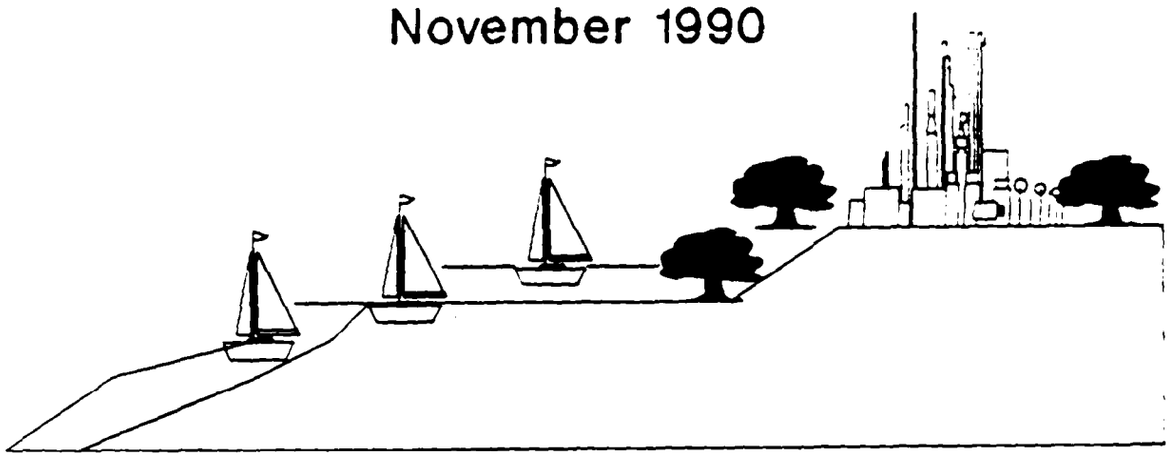
National Assessment of State Variance Procedures

Report

November 1990



Criteria And Standards Division
Office of Water Regulations and Standards

PREFACE

The Criteria and Standards Division (CSD) conducted a National Assessment of State Variance Procedures as part of the Office of Water Regulations'(OWRS) internal control review mandated by the Federal Managers Financial Integrity Act (FMFIA). EPA's Regional Office water quality standards program staff assisted the Division in compiling information for the assessment.

This Report includes an Introduction that describes the background, derivation and authority for States to grant variances from water quality standards, the stimulus for the assessment and the approach the Division used in conducting the assessment. Following the Background, major findings and conclusions of the assessment are outlined. The Report also recommends actions that States, Regional Offices and CSD should take in response to the findings and conclusions of the assessment. In addition, the Report describes the follow-up actions CSD has taken thus far to implement the recommendations.

Several appendices are attached to the Report. Appendix 1 lists the questions used in gathering information for the assessment. Appendix 2 is a summary of the assessment's findings, with a list of those States to which a particular finding applies. Appendix 3 provides a summary of the findings, conclusions and recommendations by Region.

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Standards Branch
Criteria and Standards Division (WH-585)
U. S. Environmental Protection Agency
401 M Street SW
Washington, D. C. 20460

(202) 475-7315

INTRODUCTION

Background

There is no mention of variances in the Clean Water Act (CWA). However, Section 131.13 of the Water Quality Standards Regulation authorizes States to have policies, including variances, in their water quality standards that generally affect the application and implementation of State standards.

The rationale for allowing variances from water quality standards is for a State to maintain standards that are ultimately attainable. By maintaining the standard rather than changing it, the State would assure further progress is made in improving water quality. With the variance provision NPDES permits may be written such that reasonable progress is made toward attaining the standards without violating Section 402(a)(1) of the Act.

The preamble to the Water Quality Standards Regulation (48 FR 51403, Nov. 8, 1983) stipulates that EPA will approve State-adopted variances if each individual variance (emphasis added) is:

- included as part of the water quality standards;
- subject to the same public review as other changes in water quality standards;
- granted based on a demonstration that meeting the standard would cause substantial widespread economic and social impact;
- reviewed specifically for approval, not just an overall State variance policy.

In 1985 the Office of General Counsel (OGC) indicated that in addition to "substantial and widespread economic and social impact" variances may be granted on any of the factors specified in 40 CFR 131.10(g) for removal of a use.

In addition to allowing variances based on any of the factors for changing a use, there are two additional operating assumptions. First, variances would not exceed three years, the time frame for the review of water quality standards and the time frame stipulated in 40 CFR 131.20(a) for the review of any water body segment that does not include uses specified in Section 101(a)(2) of the Act, the "fishable/swimmable" uses. Second, variances would be granted to an individual discharger. The discharger-specific element of the variance policy evolved because the Agency developed the variance mechanism to ensure that permits issued complied with the CWA.

Stimulus for the Assessment

The Criteria and Standards Division (CSD) conducted a national assessment of State water quality standards variances because of a concern that States may be routinely and improperly granting variances.

Approach

The assessment focuses on water quality standards variance and variance-like provisions that allow decisions affecting water quality standards to be made outside the normal water quality standards setting process. The assessment did not pursue the review of other program variance procedures (i.e., air) or fully explore variance-like provisions implemented through TMDLs/WLAs or NPDES permits.

For the purposes of this assessment, we excluded from the definition of a variance short-term exceptions to water quality standards for specific activities lasting a year or less, i.e., aquatic weed control or dredge and fill projects. However, we included in the definition of a variance generic State exceptions to water quality standards for nonpoint source activities unless a State defines nonpoint source pollution as a short-term exception.

In September, 1989, with Region IV's assistance, the Standards Branch conducted a pilot study of Florida's and North Carolina's water quality standards variance provisions to assess the suitability of the assessment procedures and questions (See Appendix 1). On November 3, 1989, the Director, Criteria and Standards Division (CSD) sent a memorandum to the Regional Water Division Directors informing them of the assessment and requesting their comments on the proposed approach. At the same time, the Director, CSD requested participation in the assessment from the Assessment and Watershed Protection Division (AWPD) and the Permits Division.

The Standards Branch assembled each State's water quality standards statutory and regulator authorities and developed responses to as many questions on the implementation of the variance provisions as possible. The Branch sent this material to the Regions for verification and to AWPD and the Permits Division for their review. Some Regional Offices requested additional material and information from their States to clarify the variance provisions and the way in which States applied their variance procedures.

Each Regional Office reviewed a draft of the National Variance Assessment information and information specific to its

Region. In addition, AWPD and the Permits Division were provided copies of the information.

FINDINGS

Figure 1 shows that 32 of the 57 States and Territories have the authority to grant variances, but that only 16 States have used the authority. Most of the variance provisions are in State water quality standards regulations (24 of the 32 provisions or 75 percent).

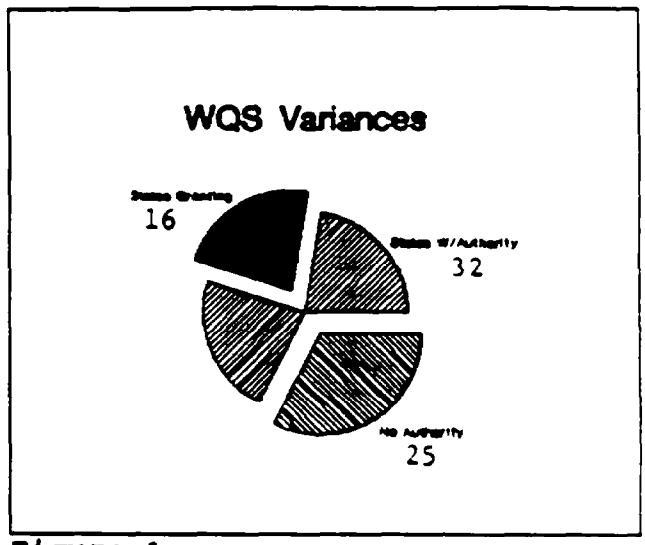

Figure 1

Even though most States' variance provisions are in their water quality standards regulation, Figure 2 shows that States may issue variances through a variety of processes; some States use more than one process. Fourteen States grant water quality standards variances through the water quality standards setting process; 9 States use the permits process; 6 States use other administrative proceedings and 5 States have no specified process for granting variances.

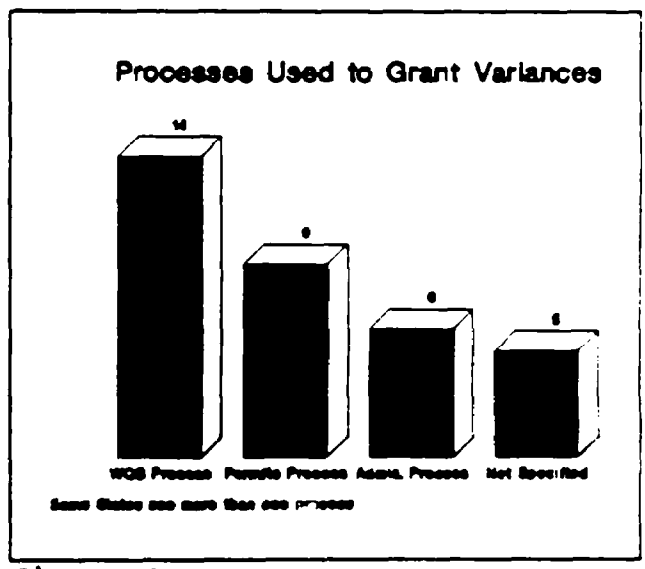

Figure 2

Seven of the 16 States (44 percent) granting variances have granted them through the water quality standards setting process. However, if all 32 entities were to grant variances to water quality standards, potentially 21 of the 32 States (63 percent) could grant variances outside of the water quality standards setting process.

Most State water quality standards variance provisions cover more than one type of situation. Figure 3 shows that 22 States (69 percent of the 32 States with variance authorities) allow variances from water quality criteria for individual dischargers; 2 States allow for degradation of high quality waters if variance procedures are followed. Eight States authorize variances for entire water bodies. Seven States (22 percent) specifically authorize variances for nonpoint source runoff, particularly from agricultural areas. Five States grant variances from permit effluent limits rather than from the underlying water quality standards. Four States do not specify the purposes for which they would grant variances.

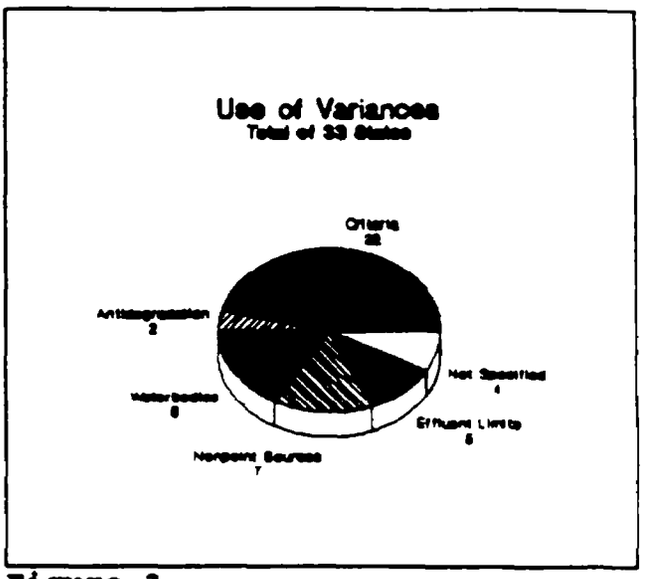

Figure 3

In addition to the factors listed in 40 CFR 131.10(g)(1) - (6) that authorize a variance, States also base variances on:

- nonpoint sources (7 States)
- technological infeasibility (5 States)
- unreasonable relationship between cost and economic impact (5 States)
- other means of disposal are not available (1 State);
- non-specified purposes (4 States)

Fourteen of the 32 States with variance granting authority do not specify the time-period for a variance. This includes 8 of the 16 States that grant variances.

Other than for emergencies, 13 States authorize short-term exceptions to water quality standards. Short-term exceptions are used for:

- fish eradication/aquatic weed control projects (6 States);

- low flow/high flow periods (5 States);
- POTWs waiting for construction grant funds (2 States);
- industrial ponds (1 State).

CONCLUSIONS

The National Variance Assessment data do not support the assertion that States are routinely and improperly granting variances. Only 16 States have granted variances and some of these States have done so only infrequently. Fourteen of the 16 States that have granted variances have done so through the water quality standards setting process.

However, many different types of variances and variance-like provisions exist with little consistency among States on the bases for granting variances. Many of the variance provisions are vague which contributes to the confusion surrounding water quality standards variances and can obscure the action to be taken. States may use the word variance for site-specific criteria, downgrading actions, or specialized permit limits.

Although water quality standards variances are not routinely granted now, there is potential for States to make more extensive use of their variances and variance-like provisions as they develop permit limits for State-adopted or Federally promulgated numeric toxic pollutant standards. Many of these variances could be granted outside of the water quality standards setting process given that 21 States may grant variances outside the water quality standards setting process. Water quality standards variances should be granted only after the State, public and EPA review and evaluate the effect of the variance on the underlying water quality standard.

A significant concern is with States which provide generic exceptions to water quality standards for nonpoint sources of pollution either by specifically exempting nonpoint sources or by defining "natural conditions prevent the attainment of the use" (one of the six factors for justifying a variances) as man's normal use of the land. Potentially, 17 States could exempt nonpoint sources of pollution from water quality standards. In many cases, States took this approach to preclude enforcement actions against those who may be applying appropriate be management practices. However, such provisions thwart incentives to adopt the goal of attaining water quality standards for nonpoint source management control programs and to search for and implement approaches that would meet that goal.

Five States grant variances to permit limits rather than to the underlying standard. Permits that are issued based on variances to effluent limits are inconsistent with Sections 302(b)(1) and 402(a)(1) of the CWA requiring permit limitations meet water quality standards.

RECOMMENDATIONS

State water quality standards should reflect the highest attainable standards. To ensure that decisions effecting State water quality standards are made in accordance with the requirements of the CWA and within the context of the water quality standards setting process:

- o States should correct variance provisions that are inconsistent with Sections 301(b)(1)(C) and 402(a)(1) of the CWA (i.e., variances for effluent limits).

- o Regional Offices should work with States to clarify the intent of State variance and variance-like provisions and to ensure that water quality standards variances are granted through the water quality standards setting process.

- o Regional Offices should formally adopt procedures to ensure that decisions affecting water quality standards are reviewed and evaluated within the context of the water quality standards setting process. A systematic review process will be needed if more States adopt and use variance provisions to develop permit limits implementing State-adopted or Federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.

- o Regional Offices should work with States to ensure that, as States develop and implement their nonpoint source management control programs, nonpoint source variance provisions are not used to avoid implementation of more effective BMPs, where necessary, to attain standards.

- o Headquarters should prepare clarifying language on variances for review and comment in proposed amendments to the Water Quality Standards Regulation, discuss a range of alternatives in the preamble and select an approach based on the findings in this assessment and public comments on the proposal. When an approach is selected, prepare implementing guidance for the Water Quality Standards Handbook.

FOLLOW-UP ACTIONS TAKEN

The Director, CSD sent each Regional Water Division Director and the Directors of AWPD and the Permits Division copies of this Report. Accompanying each report sent to the Water Division Directors was a memorandum outlying the findings, conclusions and recommendations appropriate to the particular Region.

In response to questions raised on variances, in draft revisions to the Water Quality Standards Regulation, CSD discusses water quality standards variances, including the potential elimination of the provision altogether. The Regulation proposes to separate waterbody variances from discharger-specific variances.

The intent of the revised variance provision is to: (1) clarify the variance mechanism; (2) provide a mechanism by which permits can be written to meet a modified standard (for waterbody variances) or a modified WLA (for discharger-specific variances) where short-term compliance with the underlying water quality standards is demonstrated to be infeasible; (3) encourage maintenance of the original standards as goals rather than removing uses, where current limiting conditions are considered ultimately correctable; (4) identify conditions under which such variances may be granted; (5) and ensure the highest level of water quality achievable while the variance is in effect. The proposed language for reissuance of a discharger-specific variance would require the discharger to make a showing that the discharger has undertaken reasonable methods to reduce its discharge of the parameters for which the variance is granted.

A water body variance would modify only those standards that are demonstrated to be affected by the conditions on which the variance is based. Similarly, a discharger-specific variance would apply only to those criteria, as implemented through a WLA, that the discharger cannot attain. Discharger-specific variances, based on the substantial and widespread economic and social impact factor, would have to include a demonstration that alternative control strategies were evaluated as part of the showing that standards were not attainable. The draft rule proposes that the State variance policy and the variances issued under that policy are subject to the public participation requirements of the rule and are reviewed and approved by EPA. In addition, the rule proposes that a variance would expire after three years and may be reissued only upon a showing that the conditions for granting a variance still apply.

The questions included in the draft proposal for public comment are: (1) should variances be allowed; (2) should factors for granting variances be different from those for removing a

use; (3) should the sixth factor, "substantial and widespread economic impact", apply to a water body; and (4) should variances be granted for three or five years.

APPENDIX 1

QUESTIONS

1. Is there specific language regarding variances to water quality standards in the State's water quality standards regulation? (Site location, language used, and effective date.)

2. Is there specific language regarding variances to water quality standards in other State regulations, or in State statutes or policies? (Site location, language used, and effective date.)

   Is the State language consistent with EPA's water quality standards regulation and guidance (explain).

3. Does the State make use of the variance option? How many variances are currently in place? (This does not include interim variances.)

   What is the State's process for granting and reviewing variances? Include the following information:

   a. What entity is responsible?
   b. Are variances incorporated into WQS? How?
   c. What is the public participation requirement?
   d. For how long are variances granted?
   e. When are variances submitted to EPA? How?
   f. How are existing variances reviewed by the State? How often?

4. Are there other State actions which could be construed as granting variances (for example, mixing zones on ephemeral streams)?

5. What is the Region's process for reviewing variances? Does the Region have a specific policy?

6. Does the Region believe that all of the State-adopted variances are submitted for review by EPA?

7. How many variances have been disapproved by the Region? What action does the Region take if disapproved?

8. Does the Region track approved variances to ensure timely State review? How?

9. Does the Region incoporate variances to water quality standards into the TMDL WLA LA process? How?

10. How does the Region write/review NPDES permits to ensure that water quality standards are met when those standards include a variance? Include the following information:

    a. How is the 3 year variance provision integrated with the 5 year permit reissuance period (for example, interim and final limits or reopener clause)?
    b. How are variances documented in permits (for example, in the fact sheet or special conditions section)?

11. How is the determination made whether to use a water quality standard variance or some other standards or permits provision?

For this project, the term 'variance' refers to variances to water quality standards, unless otherwise stated.

APPENDIX 2

SUMMARY
FINDINGS BY STATE

FINDING	*NUMBER*
o Number of States that have authority to issue variances from water quality standards (CT, MA, ME, VT, NJ, NY, DE, DC, MD, PA, VA, FL, KY, MS, NC, SC, TN, IL, IN, MI, MN, OH, WI, LA, IA, KS, MO, NE, CO, ND, AL, ID)	32
o Number of States with variance provisions specified for (some States include several types of variances):	
oo criteria (ME, VT, NJ, NY, DC, DE, MD, VA, FL, KY, NC, SC, TN, MI, MN, OH, WI, LA, KS, CO, ND, AL)	22
oo high quality waters (antidegradation) (MA, AL)	2
oo water bodies (CT, PA, FL, KY, MS, MO, CO, AL)	8
oo nonpoint sources (CT, ME, VT, FL, CO, AK, ID)	7
oo permit effluent limits (NJ, NY, PA, FL, KY)	5
o Number of States with the water quality standards variance provisions in (some States have the provision in more than one source):	
oo standards regulation (CT, MA, ME, VT, NJ, NY, DC, MD, VA, FL, KY, MS, NC, SC, IN, MI, MN, OH, LA, KS, ND, NV, AL, ID)	24
oo permit regulation (WI)	1
oo both standards and permit regulations (IL, CO)	2
oo other source (DE, PA, TN, IA, MO, NE)	6

o	Number of States that have granted variances (VT, DE, PA, VA, FL, MS, NC, IL, MI, MN, OH, MO, NE, CO, ND, AL)	16
o	Number of variances granted	>400
o	Number of States that grant variances on the basis of (States may grant variances on more than one basis):	
	oo naturally occurring pollutant concentrations (NJ, DE, MD, FL, KY, MS, NC, TN, WI, LA)	10
	oo natural conditions prevent the attainment of the use (NJ, DC, MD, FL, KY, MS, NC, TN, IN, MI, WI, LA)	12
	oo human caused conditions prevent the attainment of the use and can not be corrected without causing more environmental damage (DC, MD, KY, FL, MS, NC, WI, CO, MO)	9
	oo nonpoint sources (CT, ME, VT, FL, CO, NV, AL, ID)	7
	oo dams/diversions prevent attainment of a use (DC, MD, FL, MS, NC, WI, MO)	7
	oo physical conditions prevent attainment of an aquatic use (NJ, MD, FL, MS, NC, WI, MO)	7
	oo technological infeasibility (DE, PA, FL, MI, MN)	5
	oo economic impact to:	
	- the discharger (NJ, NY, VA, FL, NC, TN, IL)	7
	- the community at large (MA, ME, DC, MD, FL, KY, MS, IN, MI, MN, OH, WI, LA, CO, KS)	15
	oo unreasonable relationship between costs and benefits (DE, FL, NC, IL, MO)	5

oo	other means of disposal are not available (MA)	1
oo	not-specified (ME, IA, ND, AL)	4
o	Number of States that grant variances (the time may vary in a State depending on the type of exceptions) for:	
-	one year (DE, IN)	2
-	three years (NJ, DC, MD, VA, KY, NC, MN, OH, WI, LA, CO)	11
-	five years (MA, PA, VA, FL)	4
-	not specified (CT, ME, VT, NY, NC, MS, TN, IL, MI, KS, MO, NE, AL, ID)	14
o	Number of States that grant variances (process may vary in a State depending on the type of variance) through:	
oo	standards process (DC, MD, VA, KY, MS, NC, IN, OH, WI, LA, MO, KS, CO, ND)	14
oo	permits process (MA, ME, NJ, NY, DE, PA, VA, SC, IL)	9
oo	administrative proceedings (CT, VT, FL, IL, IN, ID)	6
oo	not specified (TN, MI< MN, IA, NE, AL)	6
o	Number of States that specify short-term exemptions from water quality standards, excluding emergencies, (some States have several types of exemptions) for:	
oo	fish eradication/weed control projects (AR, NE, SD, AZ, ID, WA)	6
oo	low flow/high flow (DC, AL, TX, SD, CO)	5
oo	POTWs awaiting construction funds (CO, OR)	2
oo	industrial ponds (AZ)	1

VA granted over 200 variances for chlorine; FL granted 65 variances between 1983 - 1987, but could not provide data on the number of variances granted from 1988 to the present.

APPENDIX 3

SUMMARY
FINDINGS BY REGION

REGION I

FINDINGS AND CONCLUSIONS

Except for New Hampshire and Rhode Island, Region I States allow for variances from water quality standards. Unlike many other States, Region I States clearly identify the purposes of their variance provisions. For the purposes of this Assessment, we defined generic State exemptions to water quality standards for nonpoint source pollution as variances.

- Connecticut
  - The State variance provisions exempt nonpoint sources from water quality standards, as long as BMPs are applied. In addition, the State exempts from water quality standards "natural conditions," defined as man's normal use of the land.
- Maine
  - The State allows for exemptions from water quality standards nonpoint sources of pollution and for limited duration activities, such as for road salt, and sand and salt storage piles.
- Massachusetts
  - The State's variance provision applies to lowering the quality of high quality waters as long as uses are not adversely affected and other means of disposal are not available.
  - Variances are authorized for five years, but should be limited to three years.
- Rhode Island
  - The State allows variances to effluent limits for insignificant dischargers where no violations of water quality standards occur. Since the State's language did not provide for exceedances of water

quality standards, the provision was not defined as a variance.

- o <u>Vermont</u>

  - oo The State exempts agriculture and silviculture activities and stormwater runoff from meeting water quality standards as long as BMPS are applied. The Region is pressuring Vermont to disallow exemptions from water quality standards for CSOs because of wet weather flow.

RECOMMENDATIONS

- o The Region's policy of using Administrative Orders and compliance schedules rather than variances to comply with water quality standards is acceptable.

- o If the Region finds that their States begin to use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards, the Region should adopt formal procedures to carefully monitor variances. We need to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process so that variances do not undermine recent progress on toxic water quality standards.

- o The Region should work with their States during the States' next triennial review to rectify deficiencies in State variance provisions including Maine's lack of specificity on identifying the bases for granting a variance and the potential for granting variances outside of the water quality standards setting process by Connecticut, Maine, Massachusetts and Vermont.

- o The Region should ensure that as States develop and implement their nonpoint source management control programs, their variance provisions are not used to avoid implementation of more effective BMPs, where necessary, to attain water quality standards.

REGION II

FINDINGS AND CONCLUSIONS

Information was not always available to fully understand the way in which the entities in Region II implement their water

quality standards program. New York and New Jersey are the two entities in Region II that specifically authorize variances and both of these States focus on the effluent limits rather than on the underlying standards that serve as the basis of the permit limits. As noted below, the Commonwealth of Puerto Rico's intermittent stream variance provision also could be construed as exempting dischargers from meeting water quality standards.

New Jersey

- Section 7:9-4.8 (Procedure for modifying water quality based effluent limitations for individual dischargers to Category One waters) provides the bases for lowering the quality of high quality waters. The bases are similar to those in 40 CFR 131.10(g). The provision does not clearly articulate whether:

  (1) water quality criteria are adopted to reflect and protect the quality of the high quality waters; or

  (2) water quality criteria are adopted to maintain and protect the uses.

- Rather than focus on the effluent limitation, the provision should focus on a variance to the criteria upon which a new effluent limit would be based. As required in Sections 301(b)(1)(C) and 402(a)(1) of the CWA, effluent limits must be established to meet water quality standards. During the three years in which the variance and effluent limits are in place, the State should conduct the necessary analyses to determine the attainability of the original criteria. If these criteria are not attainable, the appropriate analyses and processes would be initiated that would revise the applicable standard.

- Section 7:9-4.9 (Procedure for modifying water quality based effluent limitations for individual dischargers to Category Two waters) also is an antidegradation type of provision for waters whose quality currently is better than the water quality criteria. The provision authorizes the State to allow some "degradation" as opposed to "some change in ambient water quality" for the Category One waters. For Category Two waters the bases of the decision are similar to 40 CFR 131.10(g). Again, rather than focusing on the effluent limitation, the provision should focus on the criteria that will protect the use. From the revised criterion, the State should establish an effluent limit. Where the criteria are not met, the State should initiate analyses to make a determination on whether the standard should be maintained or changed.

- Neither the State nor the Region consider modifications in water quality based effluent limitations based on Sections 7:9-4.8 and 7:9-4.9 as variances to New Jersey's water quality standards. Therefore, these modifications are not included in New Jersey's water quality standards and the Region has no information on the extent to which the State has used these provisions.

New York

- New York State Codes, Rules, and Regulations, Title 6, Chapter X, Part 701.16 allows the Department of Environmental Conservation to grant variances from one or more effluent limitations that are based on ambient water quality standards for aquatic, life, fish, and fish propagation if the proposed effluent limitation would result in substantial and widespread economic and social impacts. In granting such variances, the Department may impose specific conditions, including, but not limited to, additional monitoring and biological studies, extending through the life of the permit, as necessary. While the modified limitation may not result in a limit less stringent than a limit derived to protect human health or derived from the technology-based requirements, the provision does not ensure the protection of existing aquatic life uses of the waterbody. Therefore, Part 701.16 is inconsistent with the requirements in 40 CFR 131.10(g) that uses attained must be maintained (i.e., water quality may not be allowed to degrade below that necessary to protect existing uses). The provisions also is inconsistent with Sections 301(b)(1)(C) and 402(a)(1) of the CWA that permit limits meet water quality standards. If the State make a determination that the designated use can not be attained, the appropriate processes should be initiated to change the use.

- Par 701.15 of New York State Rules and Regulations, Ti . 6, C pter X provides that if water quality-based effluent limits derived from an ambient water quality standard established for aquatic consideration would be clearly unreasonable, the Department may substitute biological monitoring alone in lieu of the water quality-based effluent limitation. EPA's national program guidance on the use of biological assessments and biological criteria (April, 1990) contains a section on the independent application of biological criteria. This section states that "Biological criteria supplement, but do not replace, chemical and toxicological methods..." and "...[biological criteria]

are not used in lieu of, or in conflict with, current regulatory efforts."

Puerto Rico

- Article 4 of Puerto Rico's Water Quality Standards provides for relief from water quality standards for discharges to intermittent streams. This provision was not defined as a variance for this Assessment. Point source dischargers submit an application that includes a certified evaluation of the physical and hydrological characteristics. Dischargers are required to comply with narrative criteria and must meet water quality standards at the point where the intermittent stream meets the nearest downstream natural or artificial pond. In addition, the provisions prohibits the discharge from being toxic, requires public participation prior to relief, and limits the initial relief to one year and renewals to five years.

Virgin Islands

- The Virgin Islands does not have the authority to grant water quality standards variances.

RECOMMENDATIONS

- The Region should complete a detailed review of State actions that could be construed as granting variances to water quality standards so that we both more fully understand how New Jersey, New York, Puerto Rico and the Virgin Islands are implementing their water quality standards programs.

- The Region should require that New Jersey and New York revise their rules and regulations to eliminate provisions allowing variances from permit effluent limits and to ensure that permits issued are consistent with Sections 301(b)(1)(C) and 402(a)(1) of the CWA.

- The Region should ensure that actions affecting water quality standards are evaluated through the water quality standards setting process. In addition to the deficiencies noted above, during its next triennial review, New York should specify the time frame for a variance.

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed

for water quality standards variances if States use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.

- The Region should obtain information from the State of New Jersey sufficient to answer the following question:

  (1) How many water quality-based permit effluent limits have been modified pursuant to 7:9-4.8 and 7:9-4.9?

- The Region should obtain information from the State of New York that would answer the following questions:

  (1) Does the implementation of Part 701.15(c) ever result in permits modifying a water quality standard? If so, how many?

  (2) How does the State define biological monitoring? Is that definition consistent with the Agency's policy?

  (3) Are there other State actions that could be construed as exempting water quality standards requirements?

REGION III

FINDINGS AND CONCLUSIONS

West Virginia is the only State within the Region that does not have the authority to grant variances from water quality standards or have variance-like provisions. Delaware, Pennsylvania and Virginia all grant variances through their permits process. Thus far, Maryland and the District of Columbia have not used their variance authorities. Although Region III staff assures us that water quality based permits are issued to meet water quality standards, some of the variance language is vague. Therefore, the Region must ensure that permit limits are developed consistent with Section 301(b)(1)(C) and 402(a)(1) of the CWA.

<u>Delaware</u>

- State statutory authority allows variances from regulations of the Secretary, Department of Natural

Resources and Environmental Control. Recent revisions to Delaware's water quality standards regulations reference the statutory provision and other regulations governing the control of water pollution as sufficient authority to issue schedules of compliance and accompanying variances from water quality standards.

- Although variances are issued through the permits process, Delaware presently limits variances to one year.

- The number of variances granted by Delaware was estimated at less than five.

- Delaware is among the States that grant variances on the basis of "technological infeasibility" and "unreasonable relationship between cost and economic benefit," two factors that are not listed in 40 CFR 131.10(g)(1)-(6). However, it is our understanding that (1) Delaware has indicated that it will grant variances for surface water dischargers only if consistent with applicable Federal regulations and (2) the Region will hold the State to that commitment.

District of Columbia

- The Region believes that the two factors on which the District of Columbia would grant variances, (1) irretrievable and irreversible conditions exist that prevent the attainment of the standard and (2) application of technology sufficient to attain the standard would result in substantial and widespread adverse economic and social impact, are consistent with 40 CFR 131.10(g)(3) and (6).

- Thus far the District of Columbia has not granted any variances.

- Since the District does not plan to include variances within its water quality standards regulations, it is unclear how variances, if granted, would be reviewed and evaluated after three years.

Maryland

- In Maryland's recently revised water quality standards, the State included a provision allowing a temporary modification of permit limits for toxic substances based on the water quality criteria for toxic substances. The temporary modification may be granted for up to three years and may be granted if the

rationale for the variance is based on the same factors as those listed in 40 CFR 131.10(g).

Pennsylvania

- Pennsylvania's water quality standards variance provision is in the Commonwealth's wastewater treatment regulations do. The Wastewater Treatment rules allow dischargers up to five years to meet a water quality-based effluent limitations applicable to a pollutant. Pennsylvania implements this provision by putting discharger on a three year compliance schedule. If the limitations required to meet standards can not be met after three years, a five year variance is granted through the permit process.

- Section 95.5 of the Wastewater Treatment rules allow the Commonwealth to substitute "Best Available Technology Economically Achievable" requirements in lieu of water quality standards where the receiving streams have been degraded by acid mine drainage. This provision is inconsistent with Sections 301(b)(1)(C) and 402(a)(1) of the CWA.

Virginia

- Virginia allows a "variance" from the chlorine standard if it can be affirmatively demonstrated that: (1) the change is justifiable to provide necessary economic or social growth, (2) the degree of treatment necessary to preserve the existing quality cannot be economically or socially justified and (3) the present and anticipated uses of the water will be preserved and protected. If this demonstration is made, effluent limits are set on a site-specific basis. Similarly fecal coliform may be set on a site-specific basis. These changes appear to be permanent, but without the changes reflected in the water quality standards.

- The State, as part of its 1990 water quality standards review, is planning to propose provisions allowing waterbody and discharger-specific variances consistent for the most part with provisions in 40 CFR 131.10(g). Where Virginia's draft language is inconsistent with 40 CFR 131.10(g), the Region has pointed out the weaknesses in comments to the State.

- Virginia has granted variances and variance-like modifications for zinc, silver, chlorine and ammonia. These modifications vary from 15 months to five years, depending on whether they were granted through the water quality standards or the permit process. The

zinc variance is permanent. Most of the modifications have been for chlorine and have been granted through the permits process.

- Neither the State nor the Regional Office tracks the status of variances. Variances are reviewed by the permits staff, if the variance is granted through the permits process for a major discharger and by the water quality standards staff, if submitted through the water quality standards setting process.

West Virginia

- West Virginia does not grant variances, but does develop site-specific changes in their water quality standards. These site-specific standards are adopted in the same manner as other water quality standards.

RECOMMENDATIONS

- The Region should complete a detailed review of State actions that could be construed as granting variances from water quality standards so that we both more fully understand how States are implementing the water quality standards program.

- Pennsylvania's variance provision modifying the effluent limits rather than the underlying standard should be revised to ensure that permits issued are consistent with Sections 301(b)(1)(C) and 402(a)(1) of the CWA.

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if States use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. In addition, such a review process will enable the Region to track the status of variances that States grant. We must ensure that variances do not undermine recent progress on toxic water quality standards.

- The Region should work with their States to clarify variance provisions, their States' next triennial review so that variance provisions are consistent with 40 CFR 131.10(g). Virginia needs to revise the economic basis of their variance provision to be consistent with 40 CFR 131.10(g)(6) (i.e., that meeting

the standard would cause substantial and widespread social and economic impact.

- Pennsylvania and Virginia need to revise their variance provisions so that variances are not issued for periods exceeding three years without a review.

- The Region needs to ensure that the variances from standards or modifications in standards are reviewed and evaluated in a manner similar to any other water quality standards revisions.

REGION IV

FINDINGS AND CONCLUSIONS

The number of States within the Region and the different types of State variance provisions make it difficult to provide general observations on variance procedures in Region IV. Except for Alabama and Georgia, Region IV States have the authority to grant variances from water quality standards and Florida, Mississippi and North Carolina do so. Even Alabama's and Georgia's rules, as noted below, may be interpreted by some as authorizing variances.

Alabama

- Alabama Water Quality Criteria and Use Classifications, 335-6-10.05(4) could be interpreted as a blanket variance for waters, if natural conditions on occasion cause the water to have characteristics outside the limits of the criteria.

Florida

- Florida's statutes and rules authorize a number of different types of exemptions and variances from water quality standards. Some of these variance provisions allow five years rather than three years prior to a review.

- Significant numbers of exemptions and variances have been granted by the Department of Environmental Regulation and its District Offices but, as with other decentralized organizations, complete information is not readily available. Further information is needed before making a determination that Florida consistently applies all provisions in accordance with Federal requirements.

- Florida Administrative Code provides for variances from rules of general applicability for two years if the petitioner makes certain demonstrations. In addition, Florida authorizes:

  - site-specific alternative criteria that may be applied as a variance rather than a change in the standard consistent with EPA guidance;

  - exemptions from water quality criteria for artificial waterbodies classified for agricultural water supplies; waterbodies classified for navigation, utility, industrial use and experimental use of wetlands for low-energy water and wastewater recycling; for discharges comprising the principal flow; and for effluent ditches;

  - exemptions from mixing zone limitations;

  - variances from the prohibition that discharges not violate water quality standards.

Georgia

- Section 391-3-6.03(7) of Georgia Water Quality Control Rules recognizes that certain natural waters of the State may have a quality that will not be within the general or specific requirements of the rules, particularly for dissolved oxygen, temperature and pH. Best management practices and NPDES permits are to be used as the primary mechanisms for ensuring that discharges will not create a harmful situation. This provision does not appear to give variances to either NPDES dischargers or nonpoint sources and provides no process for notation in Georgia's water quality standards for waters to which this provision applies. Additional information is needed on whether Georgia uses this provision and, if so, the extent to which it is used. Until further information is forthcoming, we assume that Georgia has no water quality standards variance provision.

Kentucky

- Kentucky combined into 401 KAR 5:031, Section 9 the bases for site-specific criteria and for variances. Analyses must show that the water quality criteria cannot be reasonably achieved either on a seasonal or year-round basis due to natural conditions, or site-specific factors differing from the conditions used to derive the criteria, or a demonstration that meeting

the criteria could cause substantial and widespread economic and social impact. In granting exceptions, the cabinet shall ensure that the water quality standards of downstream waters are attained and maintained. Further, all exceptions to water quality criteria will be subject to review every three years. We understand that Kentucky has not used this provision. Depending on how the State plans to use the provision, the provision appears to authorize a permanent site-specific change in the criteria. Whether the change is permanent or is temporary (i.e., until the States makes a final determination that the criteria are not attainable), the State needs to ensure that the processes for review and approval are the same as for other water quality standards revisions.

- On July 11, 1990, Kentucky adopted regulations pertaining to the issuance of permits for coal remining operations. These regulations are significantly improved over earlier drafts. The regulations allow variances for pH, iron and manganese if (1) the applicant's discharge will not exceed the levels being discharged from the remined area before the coal remining operations begins and (2) the applicant demonstrates that the coal remining operation "...will result in the potential for improved water quality from the remining operation over that existing prior to the remining operation..." Because the State is not changing the standard for the segments involved, the variances appear to be to the permit effluent limits that would be necessary to meet the standards for pH, iron and manganese. Although the standards for these elements may never be attainable in certain segments, the State is at legal risk because the permit limits would not be developed consistent with Sections 302(b)(1) and 402(a)(1) of the CWA.

<u>Mississippi</u>

- Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters, Section I.2 provides that since certain waters may not fall within desired or prescribed limitations, the Commission may authorize exceptions to these limits if (1) the existing designated use is not attainable because of natural background conditions; (2) the existing designated use is not attainable because of irretrievable man-induced conditions; or (3) the application of effluent limitations for existing sources, more stringent than those required pursuant to Section 301(b)(2)(A)and (B) of the CWA in order to attain the existing designated use, would result in substantial widespread adverse

economic and social impact. No time limit or review and approval process is specified. We understand that two waterbody variances have been granted for dissolved oxygen on the basis that natural background conditions preclude the attainment of the use and that the imposition of the necessary controls would result in widespread economic and social impact. When the State and Region complete their analysis of the Escatawpa Creek and the Tallahala Creek with improved models, the State may wish to develop site-specific criteria for these creeks and adopt them into the standards rather than continue to issue variances for these creeks every three years.

North Carolina

- North Carolina G.S. 143-215.3(e) is a generic provision authorizing variances from rules, standards or limitations. The North Carolina Environmental Management Commission may grant such variances for fixed or indefinite periods after public notice and a hearing. The State allows such variances if the limitations can not be achieved without producing serious hardships in comparison to public benefits. It is unclear whether the analysis would be consistent with 40 CFR 131.13(g)(6) that the limitations would cause substantial and widespread social and economic impact to the community at large.

- State rule 12 NCAC 2B.0218, in effect since October 1, 1989, provides that lists of variances will be maintained, made available to the public and reviewed as part of the State's triennial review. During the triennial review of the variance, the Commission may make a recommendation to the NPDES committee, including re-opening and modifying the permit, to reflect the Commission's review.

- North Carolina has issued two permanent variances for nitrogen and color.

South Carolina

- In January, 1989, South Carolina adopted a provision, Section E(7)(b)(3) allowing site-specific effluent limits and alternate criteria if the derived limits are demonstrated to be more stringent than necessary to protect classified and existing uses. It is unclear whether the State developed the provision to allow degradation of high quality waters, in which case the State should conduct an antidegradation review before

developing a permit limit that does not meet water quality standards.

Tennessee

- Tennessee Water Quality Act authorizes exceedances from standards for a limited period of time without changing the standard. This provision serves as the basis for rule 1200-4-3-.03(3) that allows the dissolved oxygen level to go below 5 mg/l in streams designated for fish and aquatic life. If this provision is ever used, the supporting analyses should be carefully reviewed to ensure that the aquatic life uses are not adversely affected.

RECOMMENDATIONS

- The Region should complete a detailed review of State actions that could be construed as granting variances to water quality standards so that we both more fully understand how States are implementing the water quality standards programs. To the extent that State procedures can be simplified as part of the triennial review, particularly in Florida, the simplification would help us, the Region, the public and the State better track actions affecting water quality standards. We understand that Florida is instituting a system to track the variety of variances and exemptions that their District Offices grant. Such a tracking mechanism is a good start.

- Kentucky and Florida with variance provisions that modify the effluent limits rather than the underlying standard should revise their authorities to ensure that permits issued are consistent with Sections 301(b)(1)(C) and 401(a)(1) of the CWA.

- Florida, North Carolina and Tennessee need to revise the economic basis for a variance to be consistent with 40 CFR 131.10(g)(6) (i.e., that meeting t' standard would cause substantial and widespread social and economic impact.

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if States use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant

standards. We need to ensure that variances do not undermine recent progress on toxic water quality standards.

REGION V

FINDINGS AND CONCLUSIONS

All States within the Region have statutory or regulatory authority to grant variances or have the authority to take actions that have the same effect as a variance. Most States' variance provisions are in their water quality standards rules. However, Illinois' variance provision is in the State's Environmental Protection Act and Wisconsin's is in the State's permit regulations.

Illinois

- Title IX, Section 35 of the Illinois Environmental Protection Act provides that the Illinois Pollution Control Board may grant a variance whenever it is found that compliance with any rule, regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship. No time period is provided for the variance and Illinois has not issued rules implementing this provision for water quality standards, although the State has done so for permits.

- Section 27 of the Illinois Environmental Protection Act has a provision that allows the Illinois Pollution Control Board to adjust standards from rules of general applicability if factors relating to the petitioner are substantially different and if the requested standard will not result in environmental or health effects more adverse than the effects considered by the Board in adopting the rule of general applicability.

- Illinois water pollution regulations contain schedules of water quality standards applicable throughout the State as well as site-specific standards.

- Thus far we have been unable to clearly define when and under what circumstances, either the Illinois Pollution Control Board, or the Illinois Environmental Protection Agency would use a variance, an adjusted standard or a site-specific standard. It appears that all three have been used, but the circumstances under which a variance, an adjusted standard or site-specific standard have been used and extent to which they have been used requires further investigation.

Indiana

- Indiana's water quality standards variance provision became effective on March 3, 1990. The variance provision provides that as part of the permit issuance, reissuance or modification process, applicants or permittees may apply for a variance from the water quality standards used to derive the water quality-based effluent limitation. The Commissioner of the Department of Environmental Management may propose a one year variance if attaining the water quality standard is not feasible because:

  - naturally occurring concentrations of the substance prevent attainment of the standard;

  - the standard as applied to the applicant will cause substantial and widespread social and economic impact after showing that (1) no practical technology is available for attaining the standard by means of changes in production process or of treating the substance or (2) the effluent limit is less than the limit of quantification. Limit of quantification is defined as a concentration of an analyte at which one can state with a degree of confidence, using the most sensitive analytical test method approved by EPA, that in the sample matrix, an analyte is present at a specific concentration in the sample tested.

- We understand that IDEM has agreed that it would not issue a variance based on the limit of quantification and that it has under consideration proposals to extend the variance to coincide with the permit limit.

Michigan

- Michigan Rule 64 appears to provide variances to the dissolved oxygen levels of 7 mg/l for cold water fisheries and 5 mg/l for other fisheries to 6 mg/l and 4 mg/l, respectively, pending the outcome of a comprehensive plan that takes into consideration all factors affecting the dissolved oxygen level and the cost-effectiveness of control measures. Further clarification is needed on how extensively Rule 64 is used and whether comprehensive plans identify the effect of lowering the dissolved oxygen levels on attaining the water quality standard.

Minnesota

- One variance remains in effect in Minnesota. The Region has worked with the State in ensuring that the variance provisions are consistent with EPA's regulatory provisions. The State is using a yearly listing of variances that it provides to EPA and to the public as a mechanism to ensure the triennial review of variances.

Ohio

- The Director of Ohio EPA may grant a variance to a discharger from compliance with water quality criteria applicable to a stream segment. Thus far, Ohio only has granted variances to minors and these permits have been for three rather than for five years.

- Ohio has assembled a document that the State uses to judge whether a substantial and widespread economic and social impact is anticipated.

Wisconsin

- Thus far, the Region has not approved any water quality standards variances for Wisconsin. By letter of July 6, 1990 an applicant for a variance approved by the State under Wisconsin Statutes, Section 147.05 protested the Region's right to review/approve the variance request and refused to supply the Region with the information requested. On July 16, 1990, the Region disapproved the variance because the justification for the variance failed to show substantial and widespread social and economic impact.

RECOMMENDATIONS

- The Region should complete a detailed review of State actions, particularly for Illinois, that could be construed as granting variances to water quality standards so that we both more fully understand how States are implementing the water quality standards programs.

- In addition, since none of the States in the Region provide for short-term exceptions to water quality standards for such activities as mosquito and aquatic weed control, construction, etc., the Region may wish to examine how such activities are handled by the States.

- Illinois and Michigan need to strengthen their variance provisions by specifying that variances only would be granted for three years. In addition, Illinois needs to revise the economic basis for a variance consistent with 40 CFR 131.10(g)(6) (i.e., meeting the standard would cause substantial and widespread social and economic impact).

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if States use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.

REGION VI

FINDINGS AND CONCLUSIONS

Except for Louisiana, Region VI States do not have statutory or regulatory authority to issue water quality standards variances. Louisiana's variance provision is based on the concept that a variance provides a period of time during which issues concerning the appropriateness of the criteria or attainment of the standards can be resolved. Louisiana adopted the State's variance provision in the 1989 standards revision. The provision authorizes temporary variances, not to exceed three years, if after appropriate public participation and EPA review and approval, demonstration is made that:

- naturally occurring pollutant concentration prevent the attainment of the standards;

- human-caused conditions or sources of pollution prevent the attainment of the standards and cannot be remedied or would cause more environmental damage to correct than to leave in place;

- controls more stringent than those required by Sections 301(b) and 306 of the CWA would result in substantial and widespread economic and social impact.

Arkansas authorizes short-term exceptions for construction activities, dredge and fill, fishery management, mosquito

abatement and algae control. Texas allows exceptions to water quality standards during low flows and in mixing zones. New Mexico and Oklahoma have no statutory or regulatory provisions allowing standards or permit variances.

RECOMMENDATIONS

- Since only Texas and Arkansas provides for short-term exceptions to water quality standards for such activities as mosquito and aquatic weed control, and construction, the Region may wish to examine how such activities are handled by the other States.

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if other States adopt variance provisions to develop permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.

REGION VII

FINDINGS AND CONCLUSIONS

All States within the Region have statutory or regulatory authority to grant variances. Except for Kansas, the variance provisions are generic exemptions included in the State statutes. These provisions are vague without implementing regulations or policies. Greater specificity will be needed, if, variances are used in developing water quality-based permits for State-adopted or federally promulgated numeric toxic pollutant standards. Both Nebraska and Missouri have granted one variance.

Nebraska

- Nebraska granted an ammonia variance as part of a ground water clean-up. The variance expired in 1989.

Missouri

- Missouri granted a variance for the segment below the Guinotte Dam on the Blue River. This variance will expire when the current standards are revised in December, 1990. Future reissued permits will be written to protect aquatic life uses.

RECOMMENDATIONS

- The Region should work with their States on developing implementing regulations or policies for water quality standards variances to provide more specificity to the variance provisions.

- The Region may need to adopt formal procedures to ensure that water quality standards variances are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if States use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We need to ensure that variances do not undermine recent progress on toxic water quality standards.

REGION VIII

FINDINGS AND CONCLUSIONS

Colorado and North Dakota are the only two States in the Region with a variance provision, although Montana and South Dakota do provide for short-term exemptions from water quality standards. Thus far North Dakota has granted one water quality standards variance. Of the variances that Colorado has granted, 44 temporary modifications from water quality standards remain in effect.

Colorado

- Colorado statutes and regulation authorize variances from rules of general applicability and temporary modifications in standards (variances). The Commission may grant temporary modifications to a discharger or to a waterbody, or a portion of a waterbody, if a numeric standard is not now being met, but could be met within a 20 year time period. Such temporary modifications are for: (1) nonpoint source pollution that can not be controlled using BMPs; (2) dams or hydrological modifications that may be removed or operated to meet water quality standards; (3) instream toxicants could be removed by natural processes; (3) high levels of municipal treatment for which grant funds currently are not available; (5) and the inability of private permit

holders to fund the necessary control measures. Where standards can not be met, the Commission determines what constitutes widespread economic and social impact as a basis for granting the temporary modification. Temporary modifications are to be reviewed every three years and are listed in the State's standards.

- As noted above, the State has in effect 44 temporary modifications. The Region has disapproved variances for ammonia and dissolved oxygen on the South Platte River. The State has not always reviewed the temporary modifications individually every three years. Regional personnel indicate that they plan to initiate reviews of Colorado's temporary modifications during triennial reviews to ensure that such modifications are reviewed individually by the State.

- Colorado Discharge Permit Rule 6.13 authorizes variances from any standard, control regulation or permit condition. The Water Quality Control Division issues permit variances for the life of the permit, but not necessarily where the Water Quality Control Commission has granted temporary modifications in the water quality standards. The Commission has the authority to review any permit variance decision of the Division. The State claims not to have issued permit variances, but has issued 304(l) permits or WET permits with compliance schedules, some of which the Region disapproved.

Montana

- Montana has an "I" classification in its standards that is a short-term exception to the use classification in the water quality standards. The "I" classification is used where water quality is poor.

- In addition, Montana allows short-term exceptions to the turbidity standard for construction and hydrologic projects. Such exceptions are granted for periods not to exceed three years if the Department of Fish, Wildlife and Parks reviews the short-term construction or hydrologic project and the activity is carried out based on conditions prescribed by the Department.

North Dakota

- The State authorities allow variances to criteria (but not to the designated uses) after public notice, comment and EPA review and approval. Thus far one variance has been granted.

South Dakota

- South Dakota allows short-term exceptions, not to exceed two years for fish eradication projects and for mosquito, algae and aquatic weed control. On a case-by-case basis, the State also authorizes exemptions from criteria for fish propagation during low flows after opportunity for public comment.

Utah

- State regulation does not provide for variances or for short-term exemptions from water quality standards.

Wyoming

- Except for turbidity variances, State authorities do not provide for variances to water quality standards.

RECOMMENDATIONS

- Where States in the Region do not provide for short-term exceptions to water quality standards for such activities as mosquito and aquatic weed control, construction, etc., the Region may wish to examine how such activities are handled by those States. South Dakota may wish to consider adding lake restoration dredging projects to its lists of short-term exemptions to expedite the review and approval of such projects as the Punished Womans Lake Sediment Removal Project.

- Colorado should conduct a use attainability analysis to determine appropriate uses in those circumstances where controlling the pollution in the vicinity of a dam will not achieve the aquatic life use and if the dam is in fact the primary reason why the aquatic life use is not attainable

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process. A systematic review process will be needed for water quality standards variances if States develop and use their variance provisions more extensively in the development of permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.

REGION IX

FINDINGS AND CONCLUSIONS

Region IX State and territorial statutes or regulations do not authorize generic variances from water quality standards. Rather, where variance provisions exist, State authorities provide permanent exemptions from water quality standards for a limited number of highly specific activities.

Hawaii, Guam, Palau and the Commonwealth of the Northern Mariana Islands do not provide for exceptions to their water quality standards. Although American Samoa's Environmental Quality Act has a provision providing generic "variances" to air and water requirements, we did not list America Samoa as having variance granting authority because its variances can not exceed one year and do not appear to be true variances. Rather, they are short-term exceptions.

Arizona

- Arizona provides exceptions to water quality standards for effluent dominated waterways, irrigation water delivery systems and for industrial ponds where the flow does not adversely affect public health or natural waterways of the State.

- The State also provides short-term exceptions for the application of herbicides and piscicides by resource management agencies of the State or Federal Government or those used by districts within their irrigation or water delivery systems.

California

- Although the exception provision in the Oceans Standards appears broad, Regional personnel indicate that it is used only for aquaculture projects and periodic exceedances of suspended solids and chlorine standards. Such exceptions are short-term and by State regulation, require EPA approval.

Nevada

- State statutes exempt normal agricultural rotation, improvements or farming practices from demonstrations that lowering the quality of high quality water is justifiable because of economic or social considerations.

- In addition, Nevada includes in its standards a provision stating "natural water conditions may, on occasion, be outside the limits established by standards." Regional personnel indicate that the provision could be used to exempt nonpoint source activities from water quality standards exceedances.

RECOMMENDATIONS

- Where States provide no exception to water quality standards, even for short-term exceptions to water quality standards for such activities as mosquito and aquatic weed control, construction, etc., the Region may wish to examine how such activities are handled by the States.

- The Region should ensure that as Nevada develops its nonpoint source management control programs, the State's "natural condition" provision is not be used to avoid implementation of more effective BMPs, where necessary, to attain water quality standards.

- If States adopt variance provisions to develop permit limits implementing State adopted or federally promulgated numeric toxic pollutant standards, the Region should adopt formal procedures to review the variances within the context of the water quality standards setting process. We need to ensure that variances do not undermine recent progress on toxic water quality standards.

REGION X

FINDINGS AND CONCLUSIONS

All Region X States provide for short-term exceptions to water quality standards for limited duration activities. Such activities may include dredge and fill activities and aquatic weed control that are not covered by NPDES permits, but could or will necessitate a temporary and limited exceedance of the water quality standards. Generally, the length of time that is considered short-term is left open; however, the period of time is project-specific and rarely exceeds one year. Such short-term exceptions are not reviewed or approved by EPA and for the purposes of this Assessment were not defined as water quality standards variances. Unless the State included in its short-term exceptions nonpoint source activities, we defined generic State exceptions to water quality standards for nonpoint source activities as a variance.

Alaska

- Alaska allows short-term variances from antidegradation requirements or from water quality criteria for one-time temporary activities that are a nonpoint source of water pollution and for placement of dredge or fill material. Short-term variances are treated as permits, and are granted by the Department of Environmental Conservation.

- The State allows variances from antidegradation requirements and from criteria for "zones of deposit" in marine waters. Zones of deposits are defined primarily in permits and are used for seafood industry and log transfer operation discharges. In allowing "zones of deposits" the Department of Environmental Conservation is to consider alternatives, potential impacts on human health and aquatic and other wild life, other uses of the water, and potential transport of pollutants by biological, physical and chemical processes. While standards must be met in the water column outside the "zones of deposit", potential exist for the permanent degradation of significant areas, particularly as there are no guidelines that would limit the size of "zones of deposit".

Idaho

- Idaho's water quality standards regulations exempt nonpoint source activities that fail to meet criteria or fully protect the use from water quality standards violations for enforcement purposes.

- In addition, short-term activities involving weed control, etc., are exempted from water quality standards as are certain treatment requirements for POTWs awaiting construction funds when a lesser degree of treatment protects uses and improves water quality.

Oregon

- The State exempt POTWs from water quality standards that are awaiting construction grant funds and for limited duration activities such as emergencies and dredge and fill activities.

Washington

- The State allows a short-term modification of water quality standards not covered by NPDES provisions for essential activities that would cause an excursion from the water quality standards, such as turbidity criteria

from certain phases of construction or dredging projects.

RECOMMENDATIONS

- The Region needs to continue to work with Idaho to ensure that as the State implements its NPS management control program, the variance provision is not used to avaoid implemention of more effective BMPs, where necessary, to attain water quality standards.

- The Region should adopt formal procedures to ensure that decisions affecting water quality standards are reviewed and evaluated by the Regional Office within the context of the water quality standards setting process, particularly in the case of Alaska if the "zones of deposit" are defined in permits. In addition, a systematic review process will be needed for water quality standards variances if States adopt variance provisions for permit limits implementing State-adopted or federally promulgated numeric toxic pollutant standards. We must ensure that variances do not undermine recent progress on toxic water quality standards.