

Water



Questions & Answers on: Water Quality Standards



WATER QUALITY STANDARDS

Questions and Answers

1. UNDER WHAT SECTION OF THE CLEAN WATER ACT (CWA) DOES THE WATER QUALITY STANDARD PROGRAM OPERATE?

Section 303 of the CWA (33 U.S.C. 1313(c)). The implementing Regulation may be found at 48 FR 51400, November 8, 1983.

2. WHAT IS A WATER QUALITY STANDARD?

A water quality standard is a rule or law comprised of the use or uses to be made of the water body or segment and the water quality criteria necessary to protect that use or uses. (See questions 11 and 15). Essentially all of these rules are established by the States, although occasionally a Federal rule will supersede part of a State's rule. Water quality standards are to protect the public health or welfare, enhance the quality of the water and serve the purposes of the Act.

3. WHAT IS THE PURPOSE OF A WATER QUALITY STANDARD?

Standards serve the dual purposes of establishing the water quality goals for a specific water body and serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond the technology-based levels of treatment required by Sections 301(b) and 306 of the CWA.

4. WHAT ARE THE IMPROVEMENTS IN THE REGULATION THAT WILL BE EMPHASIZED IN THE MANAGEMENT OF THE STANDARDS PROGRAM?

- Emphasis on the goals of the Act; i.e., "Water Quality should, wherever attainable, provide for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water" (Section 101(a)(2)).
- Increased emphasis on the control of toxic pollutants.
- Inclusion of a provision for mandatory upgrading of water quality standards.
- Clarification of provisions for changing water quality standards.
- Clarification and expansion of State/EPA roles.
- Refinement of the forms of water quality criteria and their application.

- Clarification and expansion of the antidegradation policy.
- Clarification of the dual role of standards in establishing water quality goals and providing a regulatory basis for treatment beyond that required by §301(b) and §306.

5. DOES THE INCREASED ATTENTION TO THE WATER QUALITY-BASED APPROACH MEAN EPA IS ABANDONING TECHNOLOGY-BASED CONTROLS?

Definitely not. Nothing in the proposed water quality standards regulation amends or modifies in any way the technology-based requirements of the Clean Water Act applicable to municipalities or industries. The water-quality based approach will enable States to provide adequate water quality protection beyond what will be achieved through technology-based control.

6. DOES THE EMPHASIS ON STATE INVOLVEMENT MEAN THE AGENCY IS REDUCING ITS INVOLVEMENT IN THE REVIEW OF STATE-ADOPTED STANDARDS?

No. In fact, to properly implement the new program policies, there needs to be increased active EPA regional participation with the States beginning at the start of the revision process so that the need to disapprove a State-adopted standard is reduced to an absolute minimum.

The Regional Office must ensure, through cooperation with the State, that the process and procedures a State will use to revise standards will result in sufficient data to support a public decision on standards. Regional Administrators, in their review of State standards, are to assure that decisions on standards are adequately supported by scientific and technical evidence. The Administrator's responsibility to promulgate Federal standards is not diminished in any way by the regulation.

7. WILL THE NEW POLICIES RESULT IN INCREASED DOWNGRADING OF STREAM USES?

No. Increased stream "downgradings" are not anticipated because the regulation specifies that designated uses cannot be removed if the uses are existing (unless a use requiring more stringent criteria is added), or if uses can be attained through technology based controls or best management practices. Additionally, when a State desires to change the designated uses of its waters such that the uses of the water body do not include the uses specified in the Act (i.e., the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water), the State will have to demonstrate through a use attainability analysis that these uses are not attainable based on physical, chemical, biological or economic factors. This use attainability

analysis is also required for future changes that the State may make for a water body and for current use designations which do not include the uses specified in the goals of the Act. Also, the antidegradation policy provides special protection for high quality waters and waters which constitute an outstanding national resource.

8. WHAT IMPACT WILL THESE IMPROVEMENTS HAVE ON WATER QUALITY?

Water quality will be improved because attainable standards will be set and realistic control programs will be put in place to achieve those standards. Overall, since the standards are expected to be more appropriate for a particular water body, EPA expects to achieve identifiable water quality improvement. In some cases, standards have been set at unattainable levels and have not provided a realistic basis for treatment and control programs.

9. TO WHAT WATERS DOES A WATER QUALITY STANDARD APPLY?

The waters of the United States. The term "navigable waters" was changed in the Regulation to "waters of the United States" to avoid confusion. The CWA defines "navigable waters" as "waters of the United States", a broader class of waters than considered "navigable" under some other statutes.

10. DO WATER QUALITY STANDARDS APPLY TO GROUND WATERS?

Ground water standards are not a requirement under the Clean Water Act, although States can adopt standards under their own laws to protect the ground waters of the State.

11. WHAT ARE THE USES OF A WATER BODY?

Section 303(c) of the CWA mentions several uses including: public water supplies, protection and propagation of fish and wildlife, recreation, agricultural and industrial water supplies and navigation. While the statutory listing of uses is not a limitation, EPA does not recognize waste transport as a beneficial use.

12. HOW ARE USES ESTABLISHED?

States have primary responsibility for establishing stream uses through a periodic review process involving consultation with EPA and public hearings which must occur at least once every three years. Section 303(c) of the Act requires that standards "shall

be established taking into consideration their use and value for..." the uses named in question #11. Section 101(a)(2) of the Act indicates that "wherever attainable" water quality standards are to provide for the protection and propagation of fish, shellfish and wildlife and to provide for recreation in and on the water". States designate uses for a water body consistent with the Act by analyzing the existing uses made of the water body and the potential of the water body to attain particular uses based on physical, chemical, biological and hydrological characteristics of the water body. Where designated uses do not include those specified in the goals of the Act, the State is required to conduct a use attainability analysis. Where water quality improvements result in new uses, States must revise their standards to reflect these new uses. In establishing uses, States must protect and maintain downstream standards.

13. HOW ARE USES FOR OUTSTANDING NATIONAL RESOURCE WATERS ESTABLISHED?

As with other uses, the States designate appropriate waters as Outstanding National Resource Waters (ONRW). The selection is based on the need to provide maintenance and protection to high quality waters that constitute an outstanding national resource, such as waters of national and State parks, wildlife refuges and waters of exceptional recreational or ecological significance. The States also establish the criteria that specifically protect the characteristics that make the water an ONRW. Ordinarily most people believe this category protects the highest quality waters; and that is the primary intent. The ONRW category also offers a means to provide special protection to waters of "ecological significance". These are water bodies which are important, unique, or sensitive ecologically, but whose water quality as measured by traditional parameters (dissolved oxygen, pH, etc.) may not be particularly high or whose character cannot be adequately described by these parameters. Such unique waters might include swamps, hot springs, etc.

14. DO ALL STATES HAVE THE SAME USES FOR THEIR WATERS?

Each State has its own classification system. However, the same basic uses of support and propagation of aquatic life and recreation in and on the water are used by all States with variations of different uses for different waters. The States may differentiate the types of uses to be protected, such as coldwater or warmwater fisheries, or specific species that are to be protected, such as trout or bass. They may also designate special uses to protect particularly sensitive or valuable water bodies.

15. WHAT ARE WATER QUALITY CRITERIA?

Criteria are elements of State water quality standards expressed as constituent concentrations or levels, or narrative statements, that represent a quality of water that supports a particular use. When criteria are properly selected and met, it is presumed that water quality will protect the designated use.

16. HOW ARE CRITERIA ESTABLISHED?

Criteria may be established by adopting or modifying EPA's §304(a) guidance, employing bioassay or biological criteria, if appropriate, or using narrative descriptions where numerical values cannot be established. EPA recommends establishing numerical values wherever practical. Site-specific criteria can also be developed in cases where background water quality parameters or aquatic organisms differ from those used in the laboratory to develop criteria. The procedures for development of site-specific criteria are described in EPA's Water Quality Standards Handbook.

17. WHAT IS THE DIFFERENCE BETWEEN SECTION 304(a) CRITERIA GUIDANCE AND CRITERIA INCLUDED IN STATE WATER QUALITY STANDARDS?

Section 304(a) criteria guidance is published by EPA based on the latest scientific information available on the effect of a pollutant on human health and aquatic life. The section 304(a) criteria are guidance and have no regulatory impact. Criteria adopted by States in their water quality standards are enforceable requirements that are used to regulate pollutants under the Clean Water Act. The most recent publications of criteria guidance by EPA include: Quality Criteria for Water, July, 1976, and Water Quality Criteria Documents, November 28, 1980, 45 FR 79318.

18. FOR WHAT POLLUTANTS OR OTHER WATER QUALITY CONSTITUENTS DO STATES GENERALLY SET CRITERIA IN THEIR WATER QUALITY STANDARDS?

All States currently have criteria in their water quality standards for: dissolved oxygen, pH, fecal coliform bacteria, temperature, toxic substances and aesthetic qualities. Previous EPA guidance recommended these constituents as a minimum.

19. ARE NUMERICAL CRITERIA FOR TOXIC POLLUTANTS REQUIRED TO BE INCLUDED IN STATE WATER QUALITY STANDARDS?

States may use either numerical or narrative criteria in their standards. Although numeric criteria are simpler and easier to apply, there are many cases where conditions dictate the use of narrative criteria.

20. HOW DO STATES DETERMINE WHETHER TO USE NUMERICAL OR NARRATIVE CRITERIA?

States are to review their water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely impacting water quality or the designated uses, or where the level of a toxic pollutant in the water is at a level to warrant concern. States are expected to conduct such reviews beginning with an in-depth analysis of water bodies with known toxic pollutant problems. States are to adopt numerical or narrative criteria for those toxic pollutants of concern. Numerical criteria are appropriate where a few specific pollutants have been identified as the concern, or where human health rather than aquatic life is the controlling factor.

Where the effluent or ambient conditions are complex, due to multiple dischargers or multiple pollutants, site-specific toxic pollutant limits may be legally supported on narrative criteria such as the "free from" statements used in virtually all State standards.

21. HOW ARE WATER QUALITY STANDARDS ESTABLISHED?

The CWA requires States to hold public hearings, at least once every three years, for the purpose of reviewing applicable water quality standards, and to modify and adopt new or revised standards where appropriate. After opportunity for public comment, States are to adopt the water quality standards pursuant to State law.

22. DO ALL STATES HAVE WATER QUALITY STANDARDS?

Yes. All 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, Virgin Islands, the Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Mariana Islands have adopted water quality standards.

23. HOW LONG DOES IT TAKE FOR STATES TO REVIEW, REVISE AND ADOPT WATER QUALITY STANDARDS?

Each State has its own legal procedures for adopting water quality standards. Therefore, the time varies depending upon the complexity of the revision and the procedures that the individual State must follow in adopting standards. In any event, the review process must be completed within a three year period.

24. TO WHOM IN EPA DO THE STATES SEND THEIR WATER QUALITY STANDARDS?

States send their officially adopted water quality standards to the appropriate Regional Administrator.

25. WHAT DOES THE REGIONAL ADMINISTRATOR DO WITH A STATE'S WATER QUALITY STANDARDS?

The Regional Administrator reviews the State's water quality standards to determine compliance with the requirements of the Clean Water Act, and may approve or disapprove State water quality standards based on that determination.

26. WHY IS EPA INVOLVED IN THE WATER QUALITY STANDARDS PROGRAM?

The CWA requires States to submit their new or revised water quality standards to EPA. EPA reviews the scientific and technical analyses to ascertain that a State's standards meet the requirements of the Act and that one State's standards do not interfere with the attainment of standards in another State's waters.

27. WHAT HAPPENS IF THE STATE'S WATER QUALITY STANDARDS DO NOT MEET THE REQUIREMENTS OF THE ACT?

If the Regional Administrator determines that the State water quality standards do not meet the requirements of the Act, the Regional Administrator is to specify the changes necessary for the State's water quality standards to meet the requirements of the Act. If the changes are not made, the Administrator of the Environmental Protection Agency is to begin the promulgation of a Federal regulation setting forth a new or revised water quality standard for the waters involved. The Administrator also has authority to promulgate Federal standards in any case where a new or revised standard is necessary to meet the requirements of the Act. In practice, Federal promulgation has involved only a very small part of the standards effort, usually the promulgation of uses or criteria on one or a few water segments.

28. HAS EPA EVER PROMULGATED WATER QUALITY STANDARDS?

EPA promulgated Federal standards for the States of Kentucky, Arizona, Nebraska, Mississippi, Alabama, North Carolina and Ohio. However, the promulgations for Alabama, Kentucky, Nebraska, North Carolina and Ohio have been withdrawn.

29. WHY WOULD EPA PROMULGATE FEDERAL STANDARDS AND THEN WITHDRAW THE PROMULGATION?

EPA withdrew the promulgation of Federal standards where the State subsequently adopted State standards which met the requirements of the Act.

30. IF EPA PROMULGATES FEDERAL WATER QUALITY STANDARDS, IS EPA SUBJECT TO THE SAME REQUIREMENTS AS THE STATES?

Generally, EPA is subject to the same substantive requirements in promulgating standards as States are in adopting standards. Procedural requirements may be different.

31. WHERE CAN ONE FIND INFORMATION ON THE WATER QUALITY STANDARDS OF A PARTICULAR STATE?

Information on State water quality standards may be obtained from the State water pollution control agency, from the Environmental Protection Agency through its Regional Offices, or from its Washington, D.C. headquarters. Secondary references include proprietary publications such as those of the Bureau of National Affairs.

32. HOW DO STATES USE WATER QUALITY STANDARDS?

Water quality standards are the foundation of a State's water quality management program. Water quality standards establish water quality goals and requirements for specific water bodies; serve as the basis for regulating and enforcing municipal and industrial pollutants under the Clean Water Act; drive the planning and implementation of water quality-based pollution control programs; and provide a measurement of the effectiveness of pollution control programs through attainment of water quality standards.

33. WHAT IS DONE TO ENSURE THAT STANDARDS ARE MET?

Under the National Pollutant Discharge Elimination System (NPDES), permits are issued to municipal and industrial dischargers to ensure that pollutant discharges do not violate water quality standards. State and Federal monitoring, inspection, and enforcement programs ensure compliance with standards and permits.

34. HOW ARE WATER QUALITY STANDARDS ENFORCED?

The primary mechanism for enforcing water quality standards is through translation into water quality-based permit limitations. Permits are issued under provisions of the National Pollutant

Discharge Elimination System (i.e. NPDES Permits). States also can enforce water quality standards directly. There is no direct Federal enforcement mechanism of water quality standards provided in the CWA.

35. WHO SELECTS THE WATERS TO BE REVIEWED?

States, in consultation with EPA, select the water bodies where water quality standards are to be reviewed in depth. This decision is based on the State 305(b) Reports, the waters identified under section 303(d) of the Act, the construction grant priority list and segments where major permits have expired. Any water body with standards not consistent with the Section 101(a)(2) goals of the Act must be reexamined every three years.

36. AFTER DECEMBER, 1984, MUST ALL WATER QUALITY STANDARDS BE REVIEWED IN A STATE PRIOR TO RECEIVING A CONSTRUCTION GRANT?

No. Section 24 of the "Municipal Wastewater Treatment Construction Grant Amendments of 1981" (33 U.S.C. 1313(a)) is intended to ensure that the water quality standards have been reviewed for the water bodies or segments which receive discharges from applicants for construction grants.

37. SINCE ALL STATES HAVE ADOPTED WATER QUALITY STANDARDS, WHY REVIEW AND REVISE THE STANDARDS?

The law requires that States hold a public hearing to review, and if appropriate, revise their water quality standards at least once every three years. In addition, States may wish to review their standards because many standards were initially set for the protection and propagation of aquatic life and for recreation in and on the water without adequate data and information as to whether these uses were attainable. There may be physical factors including flow, obstructions, or high or low temperatures precluding an aquatic life use, or there may be irreversible natural or man-induced pollutant problems precluding a use. Other reasons for reviewing water quality standards include additional scientific knowledge and improvements in technology which become available, as well as changes which occur in the environment. The States also have the responsibility to ascertain that their standards fulfill the requirements of the revised water quality standards regulation (40 CFR Part 131), the purpose of which is to require that States establish standards that reflect the goals of the CWA.

38. WHAT ANALYSES ARE CONDUCTED TO DETERMINE WHETHER A WATER QUALITY STANDARD IS APPROPRIATE?

Analyses are made of the water body to determine whether impaired uses are attainable based on physical, chemical, biological or economic factors, and whether the criteria are appropriately based on site-specific water quality characteristics (temperature, pH, etc.) or adaptation of local species.

39. WHAT DOES A "USE ATTAINABILITY ANALYSIS" CONSIST OF?

A use attainability analysis is a multi-step assessment of the physical, chemical, biological and economic factors affecting the attainment of a use. It includes a water body survey and assessment, a wasteload allocation, and an economic analysis, if appropriate.

40. WHAT QUESTIONS ARE STATES TRYING TO ANSWER IN CONDUCTING A USE ATTAINABILITY ANALYSIS?

A use attainability analysis assists States in answering: (1) What is the use to be protected? (2) To what extent does pollution (as opposed to physical factors) contribute to the impairment of the use? (3) What is the level of point source control necessary to restore or enhance the use? (4) What is the level of nonpoint source control necessary to restore or enhance the use.

41. HOW WILL THE USE ATTAINABILITY ANALYSIS ASSIST A STATE IN DETERMINING APPROPRIATE USES OF A WATER BODY?

By conducting a use attainability analysis, States will be able to:

a) designate uses for a water body which will not have all uses that are included in Section 101(a)(1) of the Act (goals), (b) maintain uses for a water body which do not include all of the uses in Section 101(a)(2), (c) remove a use included in Section 101(a)(2) or (d) modify a use included in Section 101(a)(2).

A State need only conduct a use attainability analysis once for a given water body and set of uses. States also have the option of conducting a use attainability analysis even when not required to, if they believe that there will be questions as to whether the protection and propagation of fish, shellfish and wildlife and recreation in and on the water is, in fact, attainable.

42. WHAT ARE THE CIRCUMSTANCES UNDER WHICH A STATE MAY CHANGE A USE?

States may modify or reclassify uses if attaining the use is not feasible because:

(1) naturally occurring pollutant concentrations prevent the attainment of the use, (2) natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, (3) 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, (4) dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, (5) physical conditions related to the natural features of the water body, and unrelated to quality that preclude attainment of aquatic life protection uses and (6) controls more stringent than those required by Sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

43. WHEN MUST A STATE CONDUCT A USE ATTAINABILITY ANALYSIS?

A State must conduct a use attainability analysis whenever (1) the State designates or has designated uses that do not include the uses specified in Section 101(a)(2) of the Act, or (2) the State wishes to remove a designated use that is specified in Section 101(a)(2) of the Act or to adopt subcategories which require less stringent criteria. A State is not required to conduct a use attainability analysis when it designates uses which include those specified in Section 101(a)(2) of the Act.

44. WHEN MAY STATES NOT RECLASSIFY A USE TO ONE REQUIRING LESS STRINGENT CRITERIA?

Uses may not be changed to a less restrictive one if: they are existing uses, as defined in Section 131.3, unless (1) a use requiring more stringent criteria is added, or, (2) such uses will be attained by implementing effluent limits required under Sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control. In addition, uses may not be modified or changed if the revision would result in the impairment of downstream standards.

45. WHAT IS MEANT BY THE STATEMENT, ONCE A USE IS ATTAINED IT MUST BE MAINTAINED?

Each state must include in its water quality standards a Statewide antidegradation policy statement that uses attained are maintained. This policy is necessary to protect the Nation's substantial investment in water pollution control. It also affirms the philosophical commitment embodied in the CWA to protect the Nation's waters.

46. HOW HAS THE ANTIDEGRADATION POLICY CHANGED?

The antidegradation policy included in the regulation has not fundamentally changed. The antidegradation policy represents a three tiered approach to maintaining and protecting various levels of water quality and uses. At its base, the existing uses of a water segment and the quality level necessary to protect the uses must be maintained. This establishes the absolute floor of water quality. The second level provides protection of actual water quality in segments where quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (fishable/swimmable). In such segments limited water quality degradation can be allowed after it has been shown through a demonstration process, which includes public participation, that quality will continue to support the "fishable/swimmable" use. The third tier provides special protection of waters for which the ordinary use classifications may not suffice and are classified as "Outstanding National Resource Waters" (ONRW). The thrust of this special protection is viewed by most as protection for the highest quality waters of the nation but such special protection can be applied to waters of "ecological significance". These are water bodies which are important, unique, or sensitive ecologically, and have quality parameters that vary from the traditional parameters of dissolved oxygen, pH, and etc., (see question 13).

47. WHAT HAPPENS IF THERE ARE CONTINUING VIOLATIONS OF THE CRITERIA FOR PARTICULAR POLLUTANTS BUT THE USES ARE ATTAINED, OR THERE ARE NO VIOLATIONS IN THE CRITERIA BUT THE USES ARE IMPAIRED?

EPA is recommending that States develop site-specific criteria to reflect local conditions. The laboratory-derived section 304(a) criteria guidance, which most States use in their water quality standards, may not accurately reflect the effect of a pollutant because of local water quality characteristics such as temperature, hardness, etc., or because local species have adapted or are less or more sensitive than those used in the laboratory. EPA has developed scientific procedures that States may use to change, on a site-specific basis, the criteria included in their standards to reflect actual instream conditions (see the Water Quality Standards Handbook).

48. DOES SETTING SITE-SPECIFIC CRITERIA MEAN A STATE CAN HAVE DIFFERENT CRITERIA FOR THE SAME POLLUTANTS EVEN THOUGH THE SAME USES MAY BE DESIGNATED FOR DIFFERENT WATER BODIES?

Yes. The different physical, chemical and hydrological characteristics of the water body may affect the impact of a pollutant on the use to be protected.

49. ARE STATES REQUIRED BY THE REGULATION TO CONDUCT USE ATTAINABILITY ANALYSES, AS WELL AS DEVELOP SITE-SPECIFIC CRITERIA?

As indicated in question 43, States are required to conduct and submit to EPA a use attainability analysis if the State (a) is designating uses for the water body such that the water body will not have all uses which are included in Section 101(a)(2) of the Act, (b) maintaining uses for the water body which do not include all of the uses in Section 101(a)(2) of the Act or (c) modifying a use included in Section 101(a)(2) of the Act to require less stringent criteria. States are not required to conduct and submit to EPA a use attainability analysis if adding a use specified in Section 101(a)(2) of the Act or a use requiring more stringent criteria. States are not required to develop site-specific criteria. In cases where the State believes that uses can be maintained under criteria levels less stringent than those recommended by the National Section 304(a) criteria, the States may scientifically develop and establish such criteria.

Site-specific criteria development procedures are not needed in all situations. Many of the procedures are expensive. Site-specific criteria development appears most appropriate on water quality limited water bodies where: (1) background water quality parameters, such as pH, hardness, temperature, suspended solids, etc., appear to differ significantly from the laboratory water used in developing the Section 304(a) criteria; or (2) the types of local aquatic organisms in the region differ significantly from those actually tested in developing the Section 304(a) criteria.

The protocols for establishing site-specific criteria, as well as the test cases illustrating use of the protocols, are included in the Water Quality Standards Handbook.

50. IS IT POSSIBLE FOR OTHER STATE AGENCIES, LOCAL GOVERNMENTS AND THE PUBLIC TO COMMENT ON OR DISAGREE WITH THE PROPOSED STATE WATER QUALITY STANDARDS?

Yes. States are required by the CWA to hold public hearings on any revisions to their water quality standards. The analyses that are used as part of the State's determination to maintain, modify or change a use or a criterion in the standard are to be made available to the public prior to the public hearing. This provides an opportunity for open debate of the analyses among scientific peer groups and the public impacted by a water quality standard revision. Additional information or perceptions brought to the public hearing will assist the State rulemaking body to set appropriate site-specific water quality standards. EPA will also review the record of public hearings as part of its standards review process.

51. WHAT GUIDANCE WILL EPA PROVIDE TO STATES?

EPA will make available a Water Quality Standards Handbook that contains a series of guidance documents that cover the technical and administrative aspects of the water quality standards program. Of particular interest are the guidance documents on: Setting Site-Specific Criteria; Water Body Surveys and Assessments for Conducting a Use Attainability Analysis.

52. HOW WILL THESE "GUIDANCE" DOCUMENTS BE USED BY EPA?

The purpose of the guidance documents is to make available to the States a number of alternative methods, procedures and approaches for setting site-specific criteria and conducting use attainability analyses. States may and will likely use alternative ways of analyzing their water quality standards than those outlined in the Handbook. However, the approaches outlined do provide a benchmark or a "guide" for States to use in determining the information EPA believes is sufficient for its review of any revisions to State water quality standards. States are encouraged to consult early and frequently with EPA as assessments and analyses are initiated and carried out. EPA is concerned with assisting States in obtaining the data and information needed for their water quality standards decision-making process.

53. WHAT ARE THE "GENERAL POLICIES" DISCUSSED IN THE PROPOSED WATER QUALITY STANDARDS REGULATION?

These are policies generally applicable to a State's water quality standards program such as policies on mixing zones, variances and low flow exemptions.

54. DO STATES HAVE TO ADOPT GENERAL POLICIES?

No. EPA leaves it up to the States to adopt statewide general policies that provide an understanding of how their water quality standards will be implemented.

55. ARE THE GENERAL POLICIES CONSIDERED TO BE PART OF A STATE'S WATER QUALITY STANDARDS?

Yes. If adopted, the general policies must be submitted to EPA for review.

56. WHAT IS A "MIXING ZONE"?

A mixing zone is a limited area, serving as a zone of initial dilution, in the immediate area of a point or nonpoint source of pollution.

57. WHAT IS A "VARIANCE"?

As an alternative to downgrading standards, States may include a variance as part of a water quality standard rather than change the standard because the State believes that the standard ultimately can be attained. By maintaining the standard rather than changing it, the State will assure further progress is made in improving water quality and attaining the standard. EPA can approve State-adopted variances if, (1) the variance is included as part of the water quality standard, (2) it is subject to the same public review as other changes in water quality standards and, (3) if the variance is granted based on a demonstration that meeting the standard would cause substantial and widespread economic and social impact. A variance may be granted to an individual discharger. However, the determining factor is whether the economic impact on the discharger is sufficient to have a substantial and widespread impact on the affected community and not just on the discharger. With the variance provision, NPDES permits may be written such that reasonable progress is made toward attaining the standard without violating Section 402(a)(1) of the Act which states that NPDES permits must meet the applicable water quality standards. The term "variance", if it is used at all in a State's standards, is not always defined consistently from State to State. Therefore, some State "variance" policies and procedures may not be consistent with the standards regulation but, for example, an "exception" policy might be.

58. WHAT IS A FLOW EXEMPTION?

In setting permit limits for dischargers to comply with the water quality standards, a wasteload allocation is performed based on a specific low flow of the stream. In extreme situations where the flow drops below the flow used in the wasteload allocation, the water quality standards may be violated. The low flow exemption identifies the flow and circumstances where exemptions from meeting the standard might be necessary. As an alternative to low flow exemptions, States, on particular water segments, may adopt seasonal water quality standards which could be met regardless of low flow conditions. This might be appropriate for streams which have a natural ephemeral or intermittent nature.

NOTE: This document is intended only to provide general information on the water quality standards program to the public. It reflects the regulatory provisions and implementing guidance but it does not substitute for the detailed requirements and guidance provisions contained in the regulation or the Water Quality Standards Handbook.