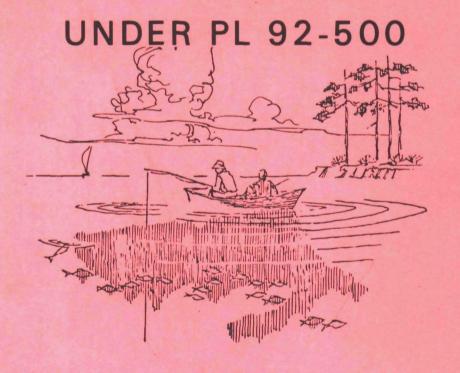


## QUESTIONS AND ANSWERS ON WATER QUALITY STANDARDS



ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

## QUESTIONS AND ANSWERS ON WATER QUALITY STANDARDS

1. When did the water quality standards program begin?

The water quality standards program was provided for in the Water Quality Act of 1965. This Act was part of the Federal Water Pollution Control Act which has since gone through several amendments including the Clean Water Restoration Act of 1966 (89-753), the Water Quality Improvement Act of 1970 and the Federal Water Pollution Control Act Amendments of 1972 (PL92-500).

2. Who administers the water quality standards program?

Administration of the program has been assigned to the Water Planning Division, Office of Water Planning and Standards, Environmental Protection Agency. Previously the Division of Water Quality Standards was assigned this responsibility. Prior to December 2, 1970, the Federal Water Quality Administration, U.S. Department of the Interior, administered the program upon succeeding the Department of Health, Education and Welfare.

3. How many jurisdictions are included in the water quality standards program?

The Water Quality Act of 1965 provided standards coverage for all fifty states, Guam, Puerto Rico, the Virgin Islands, and the District of Columbia. Public Law 92-500 added the Trust Territory of the Pacífic, and American Samoa.

4. Do water quality standards apply to all waters?

Water quality standards now apply to all interstate and intrastate waters; in the 1965 Act, only interstate waters were covered.

5. What did the original law require states to do in order to establish standards?

First, the Governor or water pollution control agency had to file, by October 2, 1966, a letter of intent that the State, after public hearings, would, before June 30 1967, adopt (a) water quality criteria applicable to interstate waters or portions thereof within the state, and (b) a plan for the implementation and enforcement of the criteria. Second, the state had to adopt such criteria and plans and submit them to the Federal Government for approval.

6. What is required of the States under the new law to establish standards?

The new law expands standards coverage to include all intrastate waters and establishes precise timetables for EPA and state action with regard to establishment, review, and approval of standards. The basic procedure of State adoption of standards through public hearings and submittal

to EPA for approval is unchanged. After the initial review period provided in the law, standards are redefined to include only uses and criteria. It also adds additional jurisdictions to the program (see question 3).

7. What are the requirements for standards to be approved?

Water quality standards must be such as to protect the public health and welfare, enhance the quality of the water, and serve the purposes of the Act.

8. Who actually sets the standards?

The states, through public hearings, set stream classifications and appropriate criteria to meet those classifications. They also adopt an implementation plan. The standards are then submitted to EPA for review and approval. The Administrator of EPA may promulgate standards only when a state fails to adopt standards consistent with the Act within the time allowed by the Act.

9. Are water quality standards approved for all states?

Yes. Standards have been approved wholly or in part for all 54 jurisdictions covered in the previous law. The standards for some states were approved with exceptions. As of December 1, 1972, water quality standards were completely approved for 50 jurisdictions; 4 (Ill., La., Ohio, and Michigan) have incomplete approvals.

10. What are water quality standards?

Water quality standards have four components. They are (1) numerical and narrative criteria applied to (2) specific stream use classifications, (3) a plan for implementation and enforcement, and (4) an antidegradation statement which is included through a policy determination made by the Federal Government.

11. What are stream use classifications?

Stream use classifications identify the use to be made of a particular stretch of a river, lake, or coastal water, such as recreation, drinking water, industrial use, agricultural use, fish and wildlife propagation, or a combination of these uses.

12. What is the stream use classification policy?

It is the policy of EPA that all water should be protected for recreational uses in and on the water and for the preservation and propagation of desirable species of aquatic biota. Other lower stream uses are permissable by special exception only.

What are water quality criteria and what kind of water characteristics are covered by the criteria?

The numerical criteria are scientific determinations of the specific characteristics of water which would permit the appropriate uses agreed upon by the state and EPA. Limits on such pollutants as bacteria, toxic substances, and taste and odor producing substances in the water are included.

14. Are all criteria given in numerical form?

No. Some criteria are narrative; where possible, numerical criteria are used.

15. Are criteria for similar stream uses comparable throughout the United States?

Yes. Criteria may vary from place to place reflecting natural conditions.

16. Can water quality criteria differ within the same state?

Yes. Water quality criteria vary within the state depending upon the use to be made of the receiving water. Water quality criteria may also vary on each stream depending on the use to be made of each section of the stream.

What kind of characteristics are covered by the criteria?

Standards include criteria for the physical and microbiological properties of water, inorganic chemicals, organic chemicals, and radicativity. These water properties, constituents, and pollutants are described by parameters, i.e., color; odor; turbidity; settleable and dissolved solids; temperature; pH; fecal coliform; dissolved oxygen; radiation; toxic substances; chemicals; oil; etc. Criteria are set for each parameter to protect the water use assigned.

18. What does the EPA use to determine the acceptablility of criteria?

The basis for such judgements are the recommendations made by the National Technical Advisory Committee in its report to the Secretary of the Interior on Water Quality Criteria, April 1, 1968.

19. Are there any exceptions to the recommendations made by the National Technical Advisory Committee?

Yes. Standards may be lower, or less stringent, than recommended criteria levels if it can be proven that the water in its natural state has such lower criteria.

20. Are the NTAC criteria scientifically sound, or are they out of date?

They are scientifically sound, although as with all specific measures they are subject to debate. At the present time, they are the best measures available. They are continually being reviewed.

21. What are implementation plans?

Implementation plans are step-by-step plans specifying what actions are to be taken by polluters to enable them to meet Federal/State standards by a certain date.

22. Can high quality waters be permitted to deteriorate as long as approved water quality standards are met?

No. An antidegradation provision in standards prohibits the deterioration of high quality waters, except as a result of necessary economic and social development as agreed to by both the State and EPA.

23. Do all states have an antidegradation provision in their standards?
Yes.

- 24. (a) Have any states adopted standards for intrastate waters as yet, and (b) are those states that have not done so required to adopt intrastate standards?
  - (a) Yes (b) Yes

All but a few states have adopted standards for intrastate waters. Others have adopted such standards for some of their streams. Those states that have not adopted standards for intrastate waters have until March 18, 1973 to do so. The states whose intrastate standards were adopted earlier, had until November 18, 1972 to submit them to EPA for review and approval.

25. Is the purpose of water quality standards to return all waters to their original state?

No. Water quality standards establish water quality goals based on designated stream uses.

26. Where is information available on the approval status of the standards for each state?

This question can be answered by the State water pollution control agency or EPA though its regional offices or at its Washington D.C. headquarters. The standards for each state also appear in the Federal Register at 40 C.F.R. Part 120.

- 27. Are copies of the water quality standards for each state available?

  Yes, from the state water pollution control agency.
- 28. Can EPA legally disapprove standards adopted by a state?

  Yes.
- 29. What happens to the standards if they are disapproved?

EPA first advises the state what revisions are required. If a state fails to adopt the necessary revisions within the time frames specified in the law, EPA must initiate promulgation procedures.

30. How does EPA promulgate standards?

Proposed standards are published in the Federal Register and final standards are promulgated 190 days later unless the state had adopted approvable standards in the interim. Public comments are solicited on the proposed standards.

- 31. Has EPA or its predecessor agencies ever promulgated standards for a state?
  - No. Proposed standards were published for Iowa and Alabama, but in both cases state action made subsequent promulgation unnecessary.
- 32. Must a state hold a public hearing to establish or review water quality standards?

Yes. In addition, the new law states that the Governor of a State or the state water pollution control agency of such state shall from time to time (but at least once each three year period, beginning on Oct. 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting such standards.

33. Once adopted by the states and approved by EPA, may standards be modified or revised?

Yes.

34. Who can initiate revisions or modifications?

Either at the request of the state or on his own initiative, the Administrator of EPA is empowered to take steps for the revision of standards.

35. How can approved standards be revised?

Any component of a state's water quality standards may be revised by the individual state, following its own administrative procedures for revision. Failure to react to the Administrator's request within the time frames specified in the law may require EPA to promulgate revisions.

36. How likely is it that standards will be revised?

With continued advances in the science and technology of water pollution control, it is expected that many of the water quality standards approved to date will be improved as required in the years ahead.

37. What is done to ensure that standards are met?

Each state has a surveillance and monitoring system to verify compliance with standards.

38. What type of enforcement actions can be taken by states?

Enforcement methods available to the states include: requiring permits, issuing specific orders for a polluter to take action by a certain date, holding public hearings, issuing cease and desisit orders, and finally, initiating court action.

39. Can the federal government enforce standards?

Yes. Once standards submitted by the states are approved, they become Federal/State standards and are subject to federal enforcement action.

40. How can EPA enforce standards?

The issuance of permits under section 402 of the new law will be the principal method for enforcing standards. They will also be enforceable under section 309, by administrative or judicial order. However, if a discharger has filed a permit application, EPA may not proceed against him prior to December 31, 1974 for failure to comply with water quality standards until final administrative disposition of the application. In addition, municipalities have a 180-day grace period beginning October 18, 1972 in order to file their permit application; and during this grace period, EPA may not take action against them for violation of water quality standards.

41. What sources of pollution are included in implementation plans?

Pollution problems associated with municipal and industrial wastes are included in all plans. Pollution originating from combined sewers, vessels and marinas, agricultural wastes, acid mine drainage, and other sources are included in varying degrees.

42. What are the basic causes of pollution?

The causes of water pollution fall into two broad categories—untreated of inadequately treated wastes from easily indentified, point-of-origin sources such as municipal waste treatment discharges, and waste from diffuse or non-point sources—silt or fertilizers washed into a stream during a heavy rain, for example.

43. What is a "mixing zone" that is called for in some standards?

A mixing zone is a limited area of a receiving water where water quality is permitted to be lower that that prescribed by the standards. Its function is to provide a restricted area where wastes can be assimilated by the water.

44. Who is going to have to pay for cleaning up the waters?

We all will, as corporations, taxpayers, and as consumers. Pollution control is a complex, expensive, and time-consuming process.

45. What is the difference between water quality standards and effluent standards or limitations?

Water quality standards apply to the natural aquatic environment of and conditions within a stream while effluent limitations apply directly to the characteristics of wastes at the point of discharge into the water.

46. Are there effluent limitations now?

Yes in some states. Criteria for industry-wide effluent limits are now being developed by EPA.

47. Can we really ever expect to get cleaner water?

Our national goal is to see that the discharge of pollutants into navigable waters be eliminated by 1985 and as an interim goal, water quality to permit recreation in and on the water and for the propagation and preservation of fish, shellfish, and wildlife by July 1, 1983.

48. Are standards setting or revisions conferences included in the new law?

No.

49. With the new law providing for permits and effluent limits, why do we need water quality standards?

To define our water quality goals.

50. What are the time frames for action on standards as provided by the new law?

See the table included on the next page.

## CHRONOLOGICAL TIMETABLE OF EVENTS AND REQUIREMENTS RELATING TO SECTION 303

November 18, 1972 (30 days): submission by States of existing water quality standards for intrastate waters. 303(a)(2).

January 18, 1973 (90 days): water quality standards for <u>interstate</u> waters remain in effect unless notification of inconsistency. 303(2)(1).

March 18, 1973 (150 days): submitted existing intrastate water quality standards remain in effect unless notification of inconsistency. 303(a)(2).

April 18, 1973 (180 days): revision of inconsistent interstate water quality standards by State or promulgation by EPA. 303(a)(1).

April 18, 1973 (180 days): adoption and submission by State of water quality standards for intrastate waters for which no standards were previously adopted 303(a)(3).

June 18, 1973 (240 days): revision of inconsistent existing intrastate water quality standards by State or promulgation by EPA. 303(a)(2).

July 18, 1973 (270 days): newly adopted and submitted water quality standards for intrastate waters approved unless notification of inconsistency.

303(a)(3).

October 18, 1973 (one year): revision of inconsistent <u>newly adopted</u> and submitted <u>intrastate</u> water quality standards by State or promulgation by EPA. 303(a)(3).