

ENVIRONMENTAL PROTECTION AGENCY
Office of Water Programs

QUESTIONS AND ANSWERS ON WATER QUALITY STANDARDS

Division of Water Quality Standards
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The water quality standards program is directed by the Environmental Protection Agency, an independent regulatory agency which has responsibility for approving State-adopted standards, evaluating adherence to the standards, and overseeing enforcement of standards compliance.

Standards, the first nationwide strategy for water quality management, contain four major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the interstate water; criteria to protect those uses; implementation plans (for needed industrial-municipal waste treatment improvements) and enforcement plans; and an antidegradation statement to protect existing high quality waters.

Minimum water quality criteria, or numerical specifications of physical, chemical, temperature, and biological levels, are stated in the National Technical Advisory Committee report to the Secretary of the Interior, Water Quality Criteria, dated April 1, 1968, and published by the Government Printing Office, Washington, D. C. Unavailability of the NTAC report before June 30, 1967--the date set by the Water Quality Act of 1965 for formal adoption of State standards--resulted in significant variations between the State-adopted and the NTAC minimum criteria. Some standards were adopted and approved before the NTAC report became available.

The Water Quality Criteria report is presently being updated in light of new scientific and technical information, with schedule publication in June 1972. These criteria compilations are issued to provide information to the public on water quality standards. As further information becomes available, they will be updated.

Water quality standards are subject to change when justified by newly available technical and scientific information. For the latest information refer to the existing approved water quality standards which can be obtained from the individual State water pollution control agency or EPA regional office, listed below.

7. What items comprise water quality standards?

Water quality standards are comprised of numerical and narrative criteria applied to specific stream uses or classifications, and a plan for implementation and enforcement.

8. Exactly what are stream classifications, criteria, and plans?

A) Stream classifications include 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.

B) The numerical criteria are scientific determinations of the specific characteristics or criteria which would permit the appropriate uses agreed on by the State and the Federal Government. Limits on such pollutants as bacteria, toxic materials, and taste- and odor-producing substances in the water are set by the standards.

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

D) Enforcement plans, as the name implies, describe what action will be taken if standards are not complied with.

9. Are all criteria given in numerical form?

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

10. Do water quality standards apply to all waters?

No. Federal-State standards exist only for interstate waters.

11. Are there any standards for intrastate waters?

Yes. All but two States have adopted standards for intrastate waters (Georgia and Wyoming). California, Pennsylvania and Tennessee have partially adopted such standards.

12. What are interstate waters?

The term "interstate waters," as defined in Section 23(e) of the Federal Water Pollution Control Act, means all rivers, lakes, and other waters that flow across or form a part of State boundaries, including coastal waters, and waters forming part of an international boundary. Water quality standards are to be established for and made applicable to the entire stretch of the interstate stream within a State.

13. Are tributaries to interstate streams included?

Tributaries of interstate waters, which are not in themselves interstate waters, are not subject to water quality standards. However, the discharge of any matter into such tributaries which reach interstate waters and reduces the quality of such interstate waters below the established water quality standards is subject to abatement under the law.

14. Are standards for similar stream uses comparable throughout the United States?

Yes.

15. Can water quality standards for streams differ within the same State?

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

16. Is the purpose of water quality standards to return all waters to their pristine state?

No. The purpose of the water quality standards program is to protect the public health or welfare and enhance the quality of water in line with the uses to be made of the stream in question.

17. Can high quality waters, i.e. waters not yet polluted, 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.

18. Do all States have an antidegradation provision in their standards?

No. August 1971, 45 states have approved antidegradation statements. Eventually, all States are expected to have such a statement.

19. Why is the propagation of fish and wildlife used as a basic guide in improving water quality?

Waters sufficient to provide for the propagation of fish and wildlife are suitable for all human uses except public drinking water.

20. What kind of characteristics are covered by the water quality criteria?

Standards include criteria for the physical and microbiological properties of water, inorganic chemicals, organic chemicals, and radioactivity.

21. Where is information available on the approval status of the standards for each State, and what the exceptions are, if any?

This question can be answered by either the State water pollution control agency or the Environmental Protection Agency through its Regional Offices or at its Washington, D. C. headquarters.

22. Are copies of the water quality standards for each State available?

Yes, Copies are available from each State's water pollution control agency.

23. When must every discharger comply with water quality standards?

Each State has established its own final compliance date. Most of these dates are prior to 1975.

24. Can the Environmental Protection Agency disapprove standards legally adopted by a State?

Yes.

25. What happens to the standards if they are disapproved?

If the Administrator of EPA finds some standards adopted by a State unacceptable or that none have been set by a State for an interstate stream, he may, under the law, prepare new or revised standards after giving reasonable notice of his intention. If the State does not submit acceptable standards within six months or petition for a public hearing, the Administrator may put these standards into effect.

26. What happens if the State petitions for a public hearing?

The Administrator must call a hearing before a five-member board. If the hearing board approves the standards established by the Administrator, the standards go into effect upon receipt of the board's recommendation. If the board recommends modification of the standards, the Administrator is required to issue revised standards in line with the board's recommendations.

27. Once adopted by the States and approved by the Federal government, may standards be modified or revised?

Yes.

28. Who can initiate revisions or modifications?

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

29. 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 as of now will be improved from time to time in the years ahead in order to meet mounting demands for clean water for necessary and desirable use. Standards will also be upgraded as increased knowledge and improved analytical techniques become available.

30. If standards might be revised, what is the use of investing money to meet today's standards and running the risk of still additional future investment?

One of the costs of doing business is keeping pace with advances in technology and changes in the market place. As water quality technology changes and the public continues to demand cleaner water, all current and future requirements will have to be met. One of the chief causes of the dilemma we are in today is that we failed to take early action to control or prevent pollution. Delay today simply means added problems for tomorrow.

31. What does the Environmental Protection Agency use to determine the acceptability of standards?

The basis for such judgment 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.

32. Is a copy of this report available?

Yes, from the Government Printing Office at \$3.00 a copy.

33. Are there any exceptions to the guidelines established by the National Technical Advisory Committee?

Yes. Standards may be lower than recommended levels if it can be proven that the stream in its natural state has such lower criteria.

34. Are the NTAC criteria scientifically sound and 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 will be reviewed in mid-1971.

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

Each State has a surveillance or monitoring system to verify compliance with standards.

36. What type enforcement actions can be taken by States?

Enforcement methods available to enforce water quality standards are requiring permits, issuing specific orders for a polluter to take certain action by a prescribed date, public hearings, cease and desist orders, and finally court action.

37. 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. However, the initial responsibility for enforcement of standards rests with the States. If the State fails to exercise this responsibility, the Administrator of EPA may act. If the standards are being violated, he is empowered, after notice and a wait of 180 days, to refer the matter directly to the Department of Justice for filing of a court suit.

38. 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, dredging, pesticides, acid mine drainage, and other sources are included in varying degrees.

39. What are the basic causes of pollution?

The causes of water pollution fall into two broad categories--untreated or inadequately treated wastes from easily identified, 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.

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

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

41. Who is going to have to pay for cleaning up the water?

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

42. Is the U. S. Army Corps of Engineer permit program part of water quality standards?

No, although compliance with water quality standards will be considered in granting a permit for dumping waste into streams.

43. What is the basis of the permit program.

The Refuse Act of 1899.

44. Why didn't the Federal Government use this act before in controlling pollution.

This method wasn't available to the Federal Government until the courts recently construed the wording of the law to cover pollution.

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

Water quality standards apply to the natural aquatic environment of a stream while effluent criteria apply directly to the characteristics of wastes at the point of discharge into the stream.

46. When will effluent standards be introduced?

Criteria for industry wide effluent standards are being developed in 1971 in anticipation that Congress will amend the law and give authority to the Federal Government to legally adopt such standards.

47. Are there standards for ground waters and navigable waters?

No. These may be expected to be developed in the future when the necessary legislation is passed by Congress.

48. When is our water going to be cleaned up?

No polluted rivers or lakes are going to be cleaned up overnight as a result of the standards program. For some forms of pollution, the standards program is expected to produce cleaner water in three to five years. The more difficult situations will take longer, perhaps up to a decade.

49. Has the water quality standards resulted in any meaningful achievements towards the goal of cleaner water?

The standards program, coupled with the expanded Federal grants program for waste treatment construction, has provided a powerful stimulus to the construction or expansion of municipal waste treatment plants. The requirements of the standards program have accelerated the industrial trend of including pollution control as a legitimate and regular part of the cost of production. Efforts are being intensified to prevent or control pollution from diffuse, non-point sources.

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

Yes, but we are paying the price now for our lack of public concern of previous years.