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GENERAL PROVISIONS/FREEDOMS

Water Quality Standards
Criteria Summaries
A Compilation of State/Federal Criteria

September 1980

U. S. Environmental Protection Agency
Office of Water Regulations and Standards
Washington, D. C. 20460

**NATIONAL SUMMARY
OF
STATE WATER QUALITY STANDARDS**

GENERAL PROVISIONS

FREEDOMS

SEPTEMBER, 1980

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INTRODUCTION

This digest is compiled to provide general information to the public as well as to Federal, State, and local officials. It contains excerpts from the individual Federal-State water quality standards establishing pollutant specific criteria for interstate surface waters. The water quality standards program is implemented by the U. S. Environmental Protection Agency where responsibility for providing water quality recommendations, approving State-adopted standards for interstate waters, evaluating adherence to the standards, and overseeing enforcement of standards compliance, has been mandated by Congress.

Standards, a nationwide strategy for surface water quality management, contain three major elements: the use (recreation, drinking water, fish and wildlife propagation, industrial, or agricultural) to be made of the navigable water; criteria to protect these uses; and an antidegradation statement to protect existing high quality waters, from degradation by the addition of pollutants.

Water quality criteria (numerical or narrative specifications) for physical, chemical, temperature, and biological constituents are stated in the July 1976 U. S. Environmental Protection Agency publication Quality Criteria for Water (QCW), available from the Government Printing Office, Washington, D. C. The 1976 QCW, commonly referred to as the "Red Book," is the most current compilation of scientific information used by the Agency as a basis for assessing water quality. This publication is subject to periodic updating and revisions in light of new scientific and technical information.

General provisions in State water quality standards, which are the subject of this digest, were instituted as the fundamental basis on which water quality management in the States was initiated. The provisions, often referred to as "freedoms," are general and encompassing statements which provide for the aesthetic beauty of a waterway. They are not based on scientific rationale. The 1976 Quality Criteria for Water recommends the following aesthetic qualities criteria:

All waters free from substances attributable to wastewater or other discharges that:

- (1) settle to form objectionable deposits;
- (2) float as debris, scum, oil, or other matter to form nuisances;
- (3) produce objectionable color, odor, taste, or turbidity;
- (4) injure or are toxic or produce adverse physiological responses in humans, animals, or plants; and
- (5) produce undesirable or nuisance aquatic life.

Since water quality standards experience revisions and upgrading from time to time, following procedures set forth in the Clean Water Act, individual entries in this digest may be superseded. As these revisions are accomplished and allowing for the States to revise their standards accordingly, this digest will be updated and reissued. Because this publication is not intended for use other than as a general information resource, to obtain the latest information and for special purposes and applications, the reader needs to refer to the current approved water quality standards. These can be obtained from the State water pollution control agencies or the EPA or Regional Offices.

Individual State-adopted criteria follow:

REFERENCES

- A California Water Quality Standards by River Basins, c.a. 1975
For more detailed information on selected basins, sub-basins and stretches of streams and coastal areas refer to California State Water Quality Standards.
- B Delaware Water Quality Standards, March 25, 1979
- C Idaho Water Quality Standards, c.a. September, 1979
- D Missouri Water Quality Standards, c.a. February, 1978
- E American Samoa Water Quality Standards,
Revised July, 1973
- F Territory of Guam Water Quality Standards, Sept. 1975
- G Trust Territory of the Pacific Islands Water Quality
Standards, October 21, 1973
- H Virgin Islands Water Quality Standards, Aug. 1973

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- 1 Pages 701:0501-0509, February 16, 1979
- 2 Pages 706:1004-1008, July 20, 1979
- 3 Pages 711:0542-0544, August 5, 1977
- 4 Pages 716:0603, March 26, 1976
- 5 Pages 726:1005, 1011-1013, March 7, 1980
Basic Water Quality Standards adopted May 22, 1979,
have not yet been submitted to EPA for formal approval.
- 6 Pages 731:1002-1009, September 8, 1978
- 7 Pages 746:1008-1014, October 19, 1979
- 8 Pages 751:0504-0505, January 25, 1980
- 9 Pages 765:0512-0515, January 30, 1976
- 10 Page 761:0503-0504, 1973

11 Page 766:0504-0509, October 5, 1979
12 Pages 771:0502-0504, September 29, 1978
13 Pages 776:0504-0506, April 10, 1979
14 Pages 781:0501-0502, May 18, 1979
15 Pages 786:0501-0502, August 29, 1975
16 Page 791:0583, May 26, 1978
17 Pages 796:0103-0108, February 16, 1979
18 Pages 801:1001-1002, Sept. 29, 1978
19 Page 806:1003, March 30, 1979
20 Page 811:1043, 1974
21 Pages 816:0602-0607, 0642-0648, 1974
22 Pages 821:0502-0505, June 30, 1978
23 Pages 831:0501-0510, February 21, 1975
24 Page 836:0502, June 30, 1978
25 Pages 841:0507-0537, December 7, 1979
26 Pages 846:0501-0508, November 17, 1978
27 Pages 851:1001-1023, December 15, 1978
28 Pages 856:1001-1002, July 18, 1978
29 Pages 861:1002-1007, August 11, 1979
30 Pages 866:1004-1009, December 28, 1979
31 Pages 871:0501-0506, November 25, 1977
32 Pages 876:1001-1043, May 26, 1978
33 Pages 881:1001-1007, September 21, 1979
34 Pages 886:0513-0524, August 29, 1975
35 Pages 891:1001-1129, November 16, 1979

- 36 Pages 901:0501-0505, November 3, 1978
- 37 Pages 906:0501-0506, October 13, 1978
- 38 Pages 911:0501-0507, June 22, 1979
- 39 Pages 916:0541-0544, April 14, 1978
- 40 Pages 921:1001-1003, August 13, 1976
- 41 Pages 926:0541-0563, January 26, 1979
- 42 Pages 931:0501-0508, May 26, 1978
- 43 Pages 936:1001-1003, June 27, 1975
- 44 Pages 941:1001-1005, May 26, 1978
- 45 Pages 946:0501-0520, July 14, 1978
- 46 Pages 951:1002-1003, April 28, 1978
- 47 Pages 956:1001-1007, January 11, 1980
- 48 Page 741:1002, November 23, 1979
- 49 Pages 896:0301-0310, March 31, 1978

GENERAL PROVISIONS

FREEDOMS

State

Alabama¹

The following minimum conditions are applicable to all state waters, at all places and at all times, regardless of their uses:

1. State waters shall be free from substances attributable to sewage, industrial wastes or other wastes that will settle to form bottom deposits which are unsightly, putrescent or interfere directly or indirectly with any classified water use.

2. State waters shall be free from floating debris, oil, scum and other floating materials attributable to sewage, industrial wastes or other wastes in amounts sufficient to be unsightly or interfere directly or indirectly with any classified water use.

3. State waters shall be free from substances attributable to sewage, industrial wastes or other wastes in concentrations or combinations which are toxic or harmful to human, animal or aquatic life to the extent commensurate with the designated usage of such waters.

Alaska²

Residues: Floating Solids, Debris, Sludge, Deposits, Foam, Scum (not applicable to groundwater supplies). Shall not alone or in combination with other substances or wastes make water unfit or unsafe for use; cause a film, sheen, or discoloration on the surface of the water or adjoining shoreline; cause leaching of toxic or deleterious substances; or cause a sludge, solid or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.

Arizona³

All surface waters shall be:

Free from substances attributable to domestic or industrial waste or other controllable sources that will settle to form sludge or bottom deposits in amounts sufficient to be unsightly, putrescent or odorous, or in amounts sufficient to interfere with beneficial uses defined and designated in R9-21-205.

Free from floating debris, oil, grease, scum, and other floating materials attributable to domestic or industrial

Arizona (con't)

waste or other controllable sources in amounts sufficient to be unsightly or in amounts sufficient to interfere with beneficial uses defined and designated in R9-21-205.

Free from materials attributable to domestic or industrial waste or other controllable sources in amounts sufficient to produce taste or odor in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to change the existing color, turbidity or other conditions in the receiving stream to such degree as to create a public nuisance, defined and designated in R9-21-205.

Free from toxic, corrosive, or other deleterious substances attributable to domestic or industrial waste or other controllable source at levels or combinations sufficient to be toxic to human, animal, plant or aquatic life defined and designated in R9-21-205.

Arkansas⁴

Color — True color attributable to municipal, industrial, agricultural or other waste discharges shall not be increased in any waters to the extent that it will interfere with present or projected future uses of these waters.

Taste and Odor — Taste and odor producing substances attributable to municipal, industrial, agricultural, or other waste discharges shall be limited in receiving waters to concentrations that will not interfere with the production of potable water by reasonable water treatment processes, or impart unpalatable flavor to food, fish or result in offensive odors arising from the waters, or otherwise interfere with the reasonable use of the water.

Solids, Floating Material, and Deposits — Receiving waters shall have no distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits or sludge banks, attributable to municipal, industrial, agricultural, or other waste discharges.

Oil and Grease - Oil, grease, or petrochemical substances, attributable to municipal, industrial, agricultural or other waste discharges shall not be present in receiving waters to the extent that they produce globules or other residue or any visible color film on the surface, or coat the banks and/or bottoms of the water course or adversely affect any of the associated biota.

Toxic Substances — Toxic materials attributable to municipal, industrial, agricultural, or other waste discharges, shall not be present in receiving waters in such quantities as to be toxic to human, animal, plant or aquatic life or to

Arkansas (con't)

interfere with the normal propagation of aquatic life. For any toxicants, concentrations in the receiving waters after mixing shall not exceed 0.01 of the ninety-six (96) hour - Median Tolerance Limit (TLm), unless they can be shown to be nonpersistent and noncumulative, and to exhibit no synergistic interactions with other waste or stream components. In no case shall concentrations exceed 0.05 of the 96-hour TLm.

California^A

Color — Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.

Tastes and Odors — Waters shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or adversely affect beneficial uses.

Floating Material — Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

Suspended Material — Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

Settleable Material — Waters shall not contain substances in concentrations that result in deposition of materials that causes nuisance or adversely affect beneficial uses.

Oil and Grease — Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.

Biostimulatory Substances - Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

Sediment - The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Turbidity - Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific

California
(con't)

discharges upon the issuance of discharge permits or waiver thereof.

Toxicity - All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the Regional Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary for other control water that is consistent with the requirements for "experimental water" as described in "Standard Methods for the Examination of Water and Wastewater", latest edition. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data becomes available, and source control of toxic substances will be encouraged.

Colorado⁵

Substances attributable to human-induced discharges, as indicated below, not otherwise controlled by permits, BMP's or plans of operation approved by the Division, shall not be introduced into the waters of the State:

- (a) which can settle to form bottom deposits detrimental to the beneficial uses. Deposits are stream bottom buildup of materials which include but are not limited to anaerobic sludges, mine slurry or tailings, silt, or mud; or
- (b) which form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses; or
- (c) which produce color, odor, or other conditions in such a degree as to create a nuisance or harm existing beneficial uses or impart any undesirable taste to significant edible aquatic species or the the water; or
- (d) in amounts, concentrations, or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life; or
- (e) in amounts, concentrations or combination which produce a predominance of undesirable aquatic life; or

Colorado (con't)

(f) in concentrations which cause a film on the surface or produce a deposit on shorelines.

Connecticut⁶

Except within designated dredged material disposal areas, water shall be substantially free of pollutants that: (a) unduly affect the composition of bottom fauna; (b) unduly affect the physical or chemical nature of the bottom; and (c) interfere with the propagation and habitats of shellfish, finfish, and wildlife. Dredged materials dumped at approved disposal areas shall not pollute the waters of the State and shall not result in (a) floating residues of any sort; (b) release of any substance, biological or chemical constituents which may result in long-term or permanent degradation of Water Quality Standards overlying or adjacent to the dumping grounds; (c) unintentional dispersal of sediments outside a mixing zone enclosing the designated dump points; and (d) biological mobilization and subsequent transport of toxic substances to food chains.

Sludge deposits - solid refuse - floating solids, oils and grease - scum - silt or sand deposits - color and turbidity - taste and odor - allowable temperature: None other than of natural origin. (AA, A, & SA)

Delaware^B

The water shall not contain substances attributable to municipal, industrial, agricultural or other discharges in concentrations or amounts sufficient to be harmful or adverse to water uses to be protected, or to humans, fish, aquatic life and wildlife;

Water quality shall not disturb ecological food webs nor exceed standards for reproduction and growth of fish normally present;

Water shall be free of floating solids, sludge deposits, debris, oil and scum.

Florida⁷

All waters of the State shall at all places and at all times be free from: Domestic, industrial, agricultural, or other man-induced non-thermal components of discharges which, alone or in combination with other substances or in combination with other components of discharges (whether thermal or non-thermal):

(a) Settle to form putrescent deposits or otherwise create a nuisance; or

(b) Float as debris, scum, oil, or other matter in such amounts as to form nuisances; or

Florida (con't)

- (c) Produce color, odor, taste, turbidity, or other conditions in such degree as to create a nuisance; or
- (d) Are acutely toxic; or
- (e) Are present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant, locally occurring, wildlife or aquatic species; or
- (f) Pose a serious danger to the public health, safety, or welfare.

Georgia⁸

The following criteria are deemed to be necessary and applicable to all waters of the state:

- (a) All waters shall be free from materials associated with municipal or domestic sewage, industrial waste or any waste which will settle to form sludge deposits that become putrescent, unsightly or otherwise objectionable.
- (b) All waters shall be free from oil, scum and floating debris associated with municipal or domestic sewage, industrial waste or other discharges in amounts sufficient to be unsightly or to interfere with legitimate water uses.
- (c) All waters shall be free from material related to municipal, industrial or other discharges which produce turbidity, color, odor, or other objectionable conditions which interfere with legitimate water uses.
- (d) All waters shall be free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries or other sources in amounts, concentrations or combinations which are harmful to human, animals or aquatic life.

Hawaii⁹

All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, and subject to verification by monitoring as may be prescribed by the Director of Health, as follows:

- A. Materials that will settle to form objectionable sludge or bottom deposits.
- B. Floating debris, oil, grease, scum, or other floating materials.
- C. Substances in amounts sufficient to produce taste or odor in the water or detectable off flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity, other conditions in the receiving waters.

Hawaii (con't)

D. High temperature: biocides, pathogenic organisms, toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.

As a minimum, evaluation by use of a 96-hour bioassay as described in the most recent edition of Standard Methods for the Examination of Water and Wastewater shall be conducted, Survival of test organisms shall not be less than in controls which utilize appropriate experimental water.

Substances and conditions or combinations thereof in concentrations which produce undesirable aquatic life.

All waters shall also be free from soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands. This standard shall be deemed met if it can be shown that the land on which the erosion occurred or is occurring is being managed in accordance with soil conservation practices acceptable to the Director, and that a comprehensive conservation program is being actively pursued, or that the discharge has received the best degree of treatment or control practicable under existing technology. The determination of compliance with the standard shall be made to the Director, consistent with the Hawaii Administrative Procedure Act and the Rules of Practice and Procedure of the Department of Health.

Idaho¹⁰

General Water Quality Standards - The following general water quality standards will apply to waters of the State, both surface and underground, in addition to the water quality standards set forth for specifically classified waters. Manual Sections 1-2200.04 - 1.2200.06 will, however, apply only to surface waters. As a result of man-caused point or nonpoint source discharge, water of the State must not contain:

Hazardous Materials - Hazardous materials (see Manual Section 1-2203.17) in concentrations found to be of public health significance or to adversely affect designated or protected beneficial uses.

Deleterious Materials - Deleterious materials (see Manual Section 1-2003.06) in concentrations that impair designated or protected beneficial uses without being hazardous.

Idaho (con't)

Radioactive Materials - Radioactive materials or radioactivity which:

- (a) Exceed one-third (1/3) of the values listed in Appendix A, Table II, Column 2, "Rules Governing Radiation Control," Title 1, Chapter 9, Rules and Regulations of the Department of Health and Welfare.
- (b) Exceed the concentrations specified in Manual Section 1-8012.01, "Rules Governing Public Drinking Water Systems," Title 1, Chapter 8, Rules and Regulations of the Department of Health and Welfare.
- (c) Exceed concentrations required to meet the "Radiation Protection Guides" for maximum exposure of critical human organs recommended by the former Federal Radiation Council in the case of foodstuffs harvested from these waters for human consumption.

Floating, Suspended or Submerged Matter - Floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may adversely affect designated or protected beneficial uses.

Excess Nutrients - Excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated or protected beneficial uses.

Oxygen-Demanding Materials - Oxygen-demanding materials in concentrations that would result in an anaerobic water condition

Illinois¹¹

Freedom from unnatural sludge or bottom deposits, floating debris, visible oil, odor unnatural plant or algal growth, unnatural color or turbidity, or matter in concentrations or combinations toxic or harmful to human, animal, plant or aquatic life of other than natural origin.

Indiana¹²

All waters at all times and at all places, including the mixing zone, shall meet the minimum conditions of being free from substances, materials, floating debris, oil or scum attributable to municipal, industrial, agricultural, and other land use practices or other discharges:

1. That will settle to form putrescent or otherwise objectionable deposits,
2. That are in amounts sufficient to be nsightly or deleterious,

Indiana (con')

3. That produce color, odor or other conditions in such degree as to create a nuisance.

4. Which are in amounts sufficient to injure, be toxic to or produce adverse physiological responses in humans, animals, aquatic life or plants. As a guideline, toxic substances should be limited to the 96-hour median lethal concentration (LC50) for biota significant to the indigenous aquatic community. This subsection shall not apply to the chemical control of aquatic plants or animals when that control is subject to approval by the Indiana Department of Natural Resources as provided by the Fish and Wildlife Act (IC 1971, 14-2-1),

5. Which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae in such a degree as to create a nuisance, be unsightly or deleterious or be harmful to human, animal, plant, or aquatic life or otherwise impair the designated uses.

Iowa¹³

The following apply to all surface waters at all places at all times:

(a) Waters shall be free from substances attributable to point source wastewater discharges that will settle to form sludge deposits.

(b) Waters shall be free from floating debris, oil, grease, scum and other floating materials attributable to wastewater discharges or agricultural practices.

(c) Waters shall be free from materials attributable to wastewater discharges or agricultural practices producing objectional color, odor or other aesthetically objectionable conditions.

(d) Waters shall be free from substances attributable to wastewater discharges or agricultural practices in concentrations or combinations which are toxic or harmful to human, animal, or plant life.

(e) Waters shall be free from substances, attributable to wastewater discharges or agricultural practices, in quantities which would produce undesirable or nuisance aquatic life.

Kansas¹⁴

All waters shall be essentially free of visible oil and grease. Dissolved or emulsified grease concentrations shall be kept below levels which will interfere with use as designated in these standards.

Kansas (con't)

There shall be no man-made deposits of solids in waters of the state, either organic or inorganic, which will be detrimental to the designated use. All waters shall be free of floating debris, scum, and other floating materials attributable to municipal, industrial, or other waste disposal practices in amounts sufficient to be unsightly or detrimental to the designated use.

Taste and odor producing substances from man-made sources shall be limited to concentrations in the receiving water that will not interfere with the production of potable water by reasonable water treatment processes, or impart unpalatable flavor to fish, or result in noticeable offensive odors in the vicinity of the water, or otherwise interfere with the designated use of the water.

Man-made sources of color producing substances shall be limited to concentrations which will not be detrimental to the designated use of the receiving water.

Toxic substance or toxic synergistic effects of substances from man-made sources shall be limited to concentrations in the receiving water that will not be harmful to animal, plant, or aquatic life, or otherwise interfere with the designated use of the water.

Pollutional substances contributed by man-made sources shall be controlled so that all waters are free from public health hazards or nuisance conditions at all time.

Kentucky¹⁵

All waters of the Commonwealth shall be:

1. Substantially free from substances attributable to municipal, industrial or other discharges or agricultural practices that will settle to form putrescent sludge deposits;
2. Free from floating debris, oil, scum and other floating materials attributable to municipal, industrial or other discharges or agricultural practices in amounts sufficient to be unsightly or deleterious;
3. Free from materials attributable to municipal, industrial or other discharges or agricultural practices producing color, odor or other conditions in such degree as to create a nuisance; and
4. Free from substances attributable to municipal, industrial or other discharges or agricultural practices in concentrations or combinations which are toxic or harmful to human, animal, plant or aquatic life.

Kentucky (con't)

5. In the standards established by subsections (1) to (4), every person as defined in KRS Chapter 224 shall remove from their discharges those substances described in subsections (1) through (4) to the lowest practicable level attainable under current technology.

Louisiana¹⁶

All waters shall be free from such concentrations of substances attributable to waste water or other discharges sufficient to:

1. settle to form objectionable deposits;
2. float as debris, scum, oil, or other matter to form nuisances;
3. result in objectionable color, odor, taste, or turbidity;
4. injure or are toxic or produce adverse physiological response in humans, animals, fish, shellfish, wildlife, or plants; and
5. produce undesirable or nuisance aquatic life.

Maine¹⁷

These waters shall be free from sludge deposits, solid refuse and floating solids such as oils, grease or scum. There shall be no disposal of any matter or substance in these waters which would impart color, turbidity, taste or odor other than that which naturally occurs in said waters, nor shall such matter or substance alter the temperature or hydrogen-ion concentration of these waters or contain chemical constituents which would be harmful or offensive to humans or which would be harmful to animal or aquatic life. (See Title 38, Chapter 3, Maine Water Quality Standards - October, 1977 for stream use specifics)

Maryland¹⁸

The water of the State shall at all times be free from:

1. Substances attributable to sewage, industrial waste, or other waste that will settle to form sludge deposits that are unsightly, putrescent or odorous to such degree as to create a nuisance, or that interfere directly or indirectly with water uses;
2. Floating debris, oil, grease, scum, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to be unsightly to such a degree as to create a nuisance, or that interfere directly or indirectly with water uses;

Maryland (con't)

3. Materials attributable to sewage, industrial waste, or other waste which produce taste, odor, or change the existing color or other physical and chemical conditions in the receiving waters to such a degree as to create a nuisance, or that interfere directly or indirectly with water uses; and
4. High-temperature, toxic, corrosive or other deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere directly or indirectly with water uses, or which are harmful to human, animal, plant or aquatic life.

Massachusetts¹⁹

All waters shall be free from pollutants in concentrations or combinations that:

- (a) settle to form objectionable deposits;
- (b) float as debris, scum, or other matter to form nuisances;
- (c) produce objectionable odor, color, taste or turbidity; or
- (d) result in the dominance of nuisance species.

Michigan²⁰

The waters of the state shall not contain unnatural turbidity, total suspended solids, color, oil films, floating solids, foams, settleable solids, or deposits in quantities which are, or may become injurious to any designated use.

Suspended solids - All waters of the State shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids or deposits in quantities which are or may become injurious to any designated use.

Taste and odor producing substances - The waters of the State shall contain no unnatural substances in concentrations which are or may become injurious to their use for public, industrial or agricultural water supply, or in concentrations which lower the palatability of fish as measured by test procedures acceptable to the commission.

Plant nutrients - Nutrients originating from domestic, industrial, municipal or domestic animal sources shall be limited to the extent necessary to prevent stimulation of growths of aquatic rooted, attached and floating plants, fungi or bacteria which are or may become injurious to the designated uses of the waters of the State. Phosphorus which is or may readily become available as a plant nutrient shall be controlled from point source discharges by

Michigan (con't)

the application of methods utilizing best practicable waste treatment technology for control of total phosphorous, with the goal of achieving a monthly average effluent concentration of one milligram per liter as P.

Minnesota²¹

No sewage, industrial waste or other wastes shall be discharged into any waters of the state so as to cause any nuisance conditions, such as the presence of significant amounts of floating solids, scum, oil slicks, excessive suspended solids, material discoloration, obnoxious odors, gas ebullition, deleterious sludge deposits, undesirable slimes or fungus growths, or other offensive or harmful effects.

Mississippi²²

1. Free from substances attributable to municipal, industrial, agricultural or other discharges that will settle to form putrescent or otherwise objectionable sludge deposits.

2. Free from floating debris, oil, scum, and other floating materials attributable to municipal, industrial, agricultural or other discharges in amounts sufficient to be unsightly or deleterious.

3. Free from materials attributable to municipal, industrial, agricultural or other discharges producing color, odor, or other conditions in such degree as to create a nuisance.

4. Free from substances attributable to municipal, industrial, agricultural or other discharges in concentrations or combinations which are toxic or harmful to humans, animal or other aquatic life.

Missouri^D

At all times, from all waters, the following shall apply:

A. Free from substances that will cause the formation of putrescent or otherwise objectionable bottom deposits.

B. Free from oil, scum and floating debris in sufficient amounts to be unsightly or deleterious.

C. Free from materials that cause color, odor, or other conditions in such degree as to create a nuisance.

D. Free from substances or conditions that have a harmful effect on human, animal, or aquatic life.

Montana²³

State surface waters are to be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will:

Montana (con't)

- (i) Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines.
- (ii) Create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials.
- (iii) Produce odors, colors, or other conditions as to create a nuisance or render undesirable tastes to fish flesh or make fish inedible.
- (iv) Create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life.
- (v) Create conditions which produce undesirable aquatic life.

Nebraska²⁴

All surface waters shall meet general standards and shall be capable of supporting the assigned beneficial use. These waters shall be free of substances attributed to wastewater discharges or the activities of man that will form objectionable deposits, floating debris, oil scum and other matter producing objectionable color, odor, taste or turbidity. Also, all materials shall be free of radionuclides in concentration or combinations which are toxic or which produce undesirable, physiological responses in human, fish and all other animal or plant life associated with these waters.

Aesthetic Conditions: Substances shall not be in such an amount which would degrade the water quality, create a nuisance condition, or be offensive to the senses of sight (including color), touch, smell, or taste.

Suspended, Colloidal, or Settleable Solids: None from wastewater sources which will permit objectionable deposition or be deleterious for the assigned beneficial uses.

Toxic and Deleterious Substances: None alone or in combination with other substances or wastes in concentrations rendering the receiving water unsafe or unsuitable for the assigned beneficial uses.

Residue, Oil and Floating Substances: No residue attributable to wastewater or visible film of oil or globules of grease shall be present.

Nevada²⁵

(a) Free from substances attributable to domestic or industrial waste or other controllable sources that will settle to form sludge or bottom deposits in amounts sufficient to be unsightly, putrescent or odorous, or in amounts sufficient to interfere with any beneficial use of the water.

(b) Free from floating debris, oil, grease, scum, and other floating materials attributable to domestic or industrial waste or other controllable sources in amounts sufficient to be unsightly or in amounts sufficient to interfere with any beneficial use of the water.

(c) Free from materials attributable to domestic or industrial waste or other controllable sources in amounts sufficient to produce taste or odor in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to change the existing color, turbidity or other conditions in the receiving stream to such degree as to create a public nuisance, or in amounts sufficient to interfere with any beneficial use of the water.

(d) Free from high temperature, biocides, organisms pathogenic to human beings, toxic, corrosive, or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations sufficient to be toxic to human, animal, plant or aquatic life or in amounts sufficient to interfere with any beneficial use of the water.

New Hampshire²⁶

Class A waters shall be of the highest quality and shall contain not more than fifty coliform bacteria per one hundred milliliters. There shall be no discharge of any sewage or wastes into waters of this classification. The waters of this classification shall be considered as being potentially acceptable for water supply uses after disinfection.

Class B waters shall be of the second highest quality and shall have no objectionable physical characteristics. There shall be no disposal of sewage or waste into said waters except those which have received adequate treatment to prevent the lowering of the physical, chemical or bacteriological characteristics below those given above, nor shall such disposal of sewage or waste be inimical to fish life or to the maintenance of fish life in said receiving waters. The waters of this classification shall be considered as being acceptable for bathing and other recreational purposes and, after adequate treatment, for use as water supplies.

New Hampshire (con't)

Class C waters shall be of the third highest quality and shall be free from slick, odors, turbidity, and surface-floating solids of unreasonable kind or quantity, and shall be free from chemicals and other materials and conditions inimical to fish life or the maintenance of fish life. The waters of this classification shall be considered as being acceptable for recreational boating, fishing, or for industrial water supply uses either with or without treatment depending upon individual requirements.

Class D waters shall be the lowest classification and shall be free from slick, sludge deposits, odors, and surface-floating materials of unreasonable kind, quantity or duration, taking into consideration the necessities of the industries involved. The waters of this classification shall be aesthetically acceptable. Such water shall also be suitable for certain industrial purposes, power and navigation.

All surface waters of the State classified A, B, or C "shall be free from chemicals and other materials and conditions inimical to fish life or the maintenance of fish life."

New Jersey²⁷

Floating, Suspended, Colloidal and Settleable Solids; Color; Petroleum Hydrocarbons and Other Oils and Greases: None noticeable in the water or deposited along the shore or on the aquatic substrata in quantities detrimental to the natural biota. None which would render the waters unsuitable for the designated uses.

Toxic or Deleterious Substances, Including But No Limited to Mineral Acids, Caustic Alkali, Cyanides, Heavy Metals, Carbon Dioxide, Ammonia or Ammonium Compounds, Chlorine, Phenols, Pesticides, Etc.: None, either alone or in combination with other substances, in such concentrations as to affect humans or be detrimental to the natural aquatic biota, produce undesirable aquatic life, or which would render the waters unsuitable for the designated uses. None which would cause standards for drinking water to be exceeded after appropriate treatment.

Taste and Odor Producing Substances: None offensive to humans or which would produce offensive tastes and/or odors in water supplies and biota used for human consumption. None which would render the waters unsuitable for the designated uses.

New Mexico²⁸

Stream Bottom Deposits — The stream shall be free of water contaminants from other than natural causes that will settle and adversely inhibit the growth of normal flora and fauna or significantly alter the physical or chemical properties of the bottom.

New Mexico (con't)

Siltation resulting from the reasonable operation of irrigation and flood control facilities is not subject to these standards.

Floating Solids, Oil and Grease — Receiving water shall be free of objectionable oils, scum, grease and other floating materials resulting from other than natural causes.

Color — Color-producing materials resulting from other than natural causes shall not create an esthetically undesirable condition nor should color impair the use of the water by desirable aquatic life presently common in New Mexico waters.

Odor and Taste of Fish — Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, or result in offensive odor arising from the stream or otherwise interfere with the reasonable use of the water.

Plant Nutrients — Plant nutrients from other than natural causes shall not be present in concentrations which produce undesirable productivity in receiving waters, or result in a dominance of nuisance species in receiving waters.

Hazardous Substances — Toxic substances such as, but not limited to, pesticides, herbicides, heavy metals, and organics shall not be present in receiving waters in concentrations which will change the ecology of receiving waters to an extent detrimental to man or other organisms of direct or indirect commercial, recreational, or esthetic value. Toxicities of substances in receiving waters will be determined by appropriate bioassay techniques, or other acceptable means, for the particular form of aquatic life which is to be preserved with the concentrations of toxic materials not to exceed 5 percent of the 96-hour LC_{50} , provided that:

Toxic substances which, through uptake in the aquatic food chain and/or storage in plant and animal tissues, can be magnified to levels which are toxic to man or other organisms, shall not be present in concentrations which result in this biological magnification.

Waters used for domestic water supplies shall be protected from hazardous substances in concentrations that exceed drinking water standards established by the New Mexico Regulations covering Water Supply.

New York²⁹

Turbidity — no increase except from natural sources that will cause a substantial visible contrast to natural conditions. In cases of naturally turbid waters, the contrast will be due to increased turbidity.

New York (con't)

Color — none from man-made sources that will be detrimental to anticipated best usage of waters.

Suspended, colloidal or settleable solids - none from sewage, industrial wastes or other wastes which will cause deposition or be deleterious for any best usage determined for the specific waters which are assigned to each class.

Oil and floating substances — no residue attributable to sewage, industrial wastes or other wastes nor visible oil film nor globules of grease.

Taste and odor-producing substances, toxic wastes and deleterious substances — none in amounts that will be injurious to fishlife or which in any manner shall adversely affect the flavor, color or odor thereof, or impair the waters for any best usage as determined for the specific waters which are assigned to each class.

North Carolina³⁰

Drinking water supply (disinfection only):

A. Floating solids, settleable solids, sludge deposits, taste or odor-producing substances: None attributable to sewage, industrial wastes or other wastes.

B. Sewage, industrial wastes, or other wastes: None

C. Toxic wastes: oils, deleterious substances, colored or other wastes: None

Drinking water supply (treatment plus disinfection):

A. Floating solids, settleable solids, sludge deposits: Only such amounts attributable to sewage, industrial wastes or other wastes as will not after reasonable opportunity for dilution and mixture of same with the receiving waters, make the waters unsafe or unsuitable as a source of water supply for drinking, culinary, or food-processing purposes, injurious to fish and wildlife, or impair the waters for any other best usage established for this class.

B. Sewage, industrial wastes, or other wastes: None which are not effectively treated to the satisfaction of the commission and in accordance with the requirements of the Division of Health Service.

C. Odor-producing substances contained in sewage, industrial wastes, or other wastes: Only such amounts, whether alone or in combination with other substances or wastes, as will not, after reasonable opportunity for dilution and mixture of same with receiving waters, cause taste and

North Carolina
(con't)

odor difficulties in water supplies which cannot be corrected by treatment as specified under "Conditions Related to Best Usage," impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class.

Recreation:

A. Floating solids, settleable solids, sludge deposits: Only such amounts attributable to sewage, industrial wastes or other wastes as will not, after reasonable opportunity for dilution and mixture of same with the receiving waters, make the waters unsafe or unsuitable for bathing, injurious to fish and wildlife, or impair the waters for any other best usage established for this class.

B. Sewage, industrial wastes, or other wastes: None which are not effectively treated to the satisfaction of the commission. In determining the degree of treatment required for such waste when discharged into waters to be used for bathing, the commission will take into consideration the quantity and quality of the sewage and wastes involved and the proximity of such discharges to waters in this class.

Fishing, agriculture, fish and wildlife:

Floating solids, settleable solids, sludge deposits: Only such amounts attributable to sewage, industrial wastes or other wastes as will not after reasonable opportunity for dilution and mixture of same with the receiving waters, make the waters unsafe or unsuitable for fish and wildlife, or impair the waters for any other best usage established for this class.

North Dakota³¹

All waters of the State shall be:

02.501 Free from substances attributable to municipal, industrial, or other discharge or agricultural practices that will cause the formation of putrescent or otherwise objectionable sludge deposits.

02.502 Free from floating debris, oil, scum, and other floating materials attributable to municipal, industrial, or other discharges or agricultural practices in sufficient amount to be unsightly or deleterious.

0.503 Free from materials attributable to municipal, industrial, or other discharges or agricultural practices producing color, odor, or other conditions in such a degree as to create a nuisance or render any undesirable taste to fish flesh, or in any way, make food fish inedible.

North Dakota
(con't)

02.504 Free from substances attributable to municipal, industrial, or other discharges or agricultural practices in concentrations or combinations which are toxic or harmful to human, animal, plant or resident aquatic life.

02.505 Free from oil or grease residue attributable to wastewater, which causes a visible film or sheen upon the waters or any discoloration of the surface of adjoining shoreline or causes a sludge or emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines or prevents classified uses of such waters.

02.506 There shall be no materials such as garbage, rubbish, trash, cans, bottles, or any unwanted or discarded material disposed of into the waters of the State.

Ohio³²

A. Free from suspended solids or other substances that enter the waters as a result of human activity and that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life.

B. Free from floating debris, oil, scum and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or cause degradation.

C. Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance.

D. Free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone.

E. Free from nutrients entering the waters as a result of human activity in concentrations that create nuisance growths of aquatic weeds and algae.

Oklahoma³³

To be aesthetically enjoyable, the waters of the State must be free from floating materials and suspended substances produce objectional color and turbidity. The waters must also be free from obnoxious odors and tastes, and from materials that settle to form objectionable deposits, and discharges that produce undesirable or nuisance aquatic life.

Oregon³⁴

No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause any waters of the state:

Oregon (con't)

The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation or industry.

The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shellfish.

The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation or industry.

Objectionable discoloration, turbidity, scum, oily sleek or floating solids, or coat the aquatic life with oil films.

Aesthetic conditions offensive to the human senses of sight, taste, smell or touch.

Pennsylvania³⁵

Water shall not contain substances attributable to point or nonpoint source waste discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life.

Specific substances to be controlled shall include, but shall not be limited to, floating debris, oil, grease, scum and other floating materials, toxic substances, pesticides, chlorinated hydrocarbons, carcinogenic, mutagenic and teratogenic materials, and substances which produce color, tastes, odors, turbidity, or settle to form deposits.

Rhode Island³⁶

General Criteria - The following minimum criteria are applicable to all waters of the State, unless criteria specified for individual classes are more stringent.

1. At a minimum, all waters shall be free of pollutants in concentrations or combinations that will:

- (a) Adversely affect the composition of bottom aquatic life;
- (b) Adversely affect the physical or chemical nature of the bottom;
- (c) Interfere with the propagation of fish and shellfish;
or

Rhode Island
(con't)

- (d) Undesirably alter the qualitative and quantitative character of the biota.

2. Aesthetics - All waters shall be free from pollutants in concentrations or combinations that:

- (a) Settle to form objectionable deposits;
- (b) Float as debris, scum or other matter to form nuisances;
- (c) Produce objectionable odor, color, taste or turbidity; or,
- (d) Result in the dominance of nuisance species.

Sludge deposits, floating solids, oils, grease and scum shall not be allowed except for such small amounts that may result from the discharge of appropriately treated sewage or industrial waste effluents.

Class B and C waters shall be substantially free of pollutants that:

- a. Undesirably affect the composition of bottom aquatic life.
- b. Undesirably affect the physical or chemical nature of the bottom
- c. Interfere with the propagation of desirable aquatic life.

South Carolina³⁷

The waters of the State shall at all times be free from:

1. substances attributable to sewage, industrial waste, or other waste that will settle to form sludge deposits that are unsightly, putrescent or odorous to such a degree as to create a nuisance, or that interfere directly or indirectly with water uses:

2. floating debris, oil, grease, scum and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to be unsightly to such a degree as to create a nuisance or that interfere directly or indirectly with water uses.

3. materials attributable to sewage, industrial waste, or other waste which produce taste, odor, or change the existing color or other physical or chemical conditions in the receiving stream to such a degree as to create a

South Carolina
(con't)

nuisance, or that interfere directly or indirectly with water uses: and

4. high temperature, toxic, corrosive or other deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere directly or indirectly with water uses, or which are harmful to human, animal, plant or aquatic life.

South Dakota³⁸

Visible pollutants prohibited. There shall not be discharged or caused to be discharged into any lake or stream any raw or treated sewage, garbage, municipal wastes, industrial wastes, or agricultural wastes which produce floating solids, scum, oil slicks, material discoloration, visible gassing, sludge deposits, slimes, fungus growths, or other offensive effects.

Toxic Materials prohibited. No materials shall be discharged or caused to be discharged to any lake or stream, which produce concentrations of chemicals toxic to humans, animals, plants, or the most sensitive stage or form of aquatic life, greater than 0.1 times the median tolerance limit for short residual compounds or 0.01 times the median tolerance limit for an accumulative substance or substances exhibiting a residual life exceeding thirty days in the receiving waters.

Taste and odor producing chemicals. No materials shall be discharged or caused to be discharged into any lake or stream which will impart undesirable tastes or undesirable odors to the receiving water in concentrations such that a beneficial use is impaired.

Nuisance aquatic life. No materials shall be discharged or caused to be discharged into any lake or stream in concentrations which produce aquatic life which impair a beneficial use or create a health problem.

Petroleum products. No nonsoluble materials of petroleum derivation shall be discharged or caused to be discharged into any lake or stream which results in concentrations in excess of 10 mg/l or imparts a visible film or sheen to the surface of the water or the adjoining shorelines.

Tennessee³⁹

There shall be no distinctly visible solids, scum, foam, oily sleek, or the formation of slimes, bottom deposits or sludge banks of such size or character as may impair the usefulness of the water.

There shall be no turbidity or color added in such amounts or of such character that will materially effect water use.

Tennessee
(con't)

There shall be no toxic substances added to the waters that will produce toxic conditions that materially affect man or animals or impair the safety of a conventionally treated water supply.

There shall be no substances added that will result in objectionable taste or odor.

Texas⁴⁰

Taste and odor producing substances shall be limited to concentrations in the waters of the State that will not interfere with the production of potable water by reasonable treatment methods, or impart unpalatable flavor to food fish, including shellfish, or result in offensive odors arising from the waters, or otherwise interfere with the reasonable use of the waters.

The surface waters of the State shall be maintained so as to be essentially free of floating debris and settleable suspended solids conducive to the production of putrescible sludge deposits or sediment layers which would adversely affect benthic biota or other lawful uses.

The surface waters of the State shall be maintained so as to be essentially free of settleable suspended solids conducive to changes in the flow characteristics of stream channels, to the untimely filling of reservoirs and lakes, and which might result in unnecessary dredging costs.

The surface waters in the State shall be maintained in an aesthetically attractive condition.

There shall be no substantial change in turbidity from ambient conditions due to waste discharges.

There shall be no foaming or frothing of a persistent nature.

The surface waters of the State shall be maintained so that no oil, grease or related residue will produce a visible film of oil or globules of grease on the surface, or coat the banks and bottoms of the watercourse.

Utah⁴¹

It shall be unlawful, and a violation of these regulations, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or concentrations or combinations of substances which

Utah (con't)

produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, as determined by bio-assay or other tests performed in accordance with standard procedures determined by the Committee.

Vermont⁴²

Free of pollutants that:

1. affect the composition of bottom fauna; or
2. affect the physical or chemical nature of the bottom; or
3. interfere with the species composition or propagation of fishes.

Sludge, deposits, setteable solids, solid refuse, floating solids, oil, grease and scum:

None other than of natural origin
Drinking water supply

All other uses - None in such concentrations or combinations which may reasonably be expected to impair any usage applicable to the assigned water class or which may reasonably be expected to result in the development of sludge deposits or which will hinder the objective of improving water quality. No waste containing such substances or materials shall be discharged until and unless they have received adequate and appropriate treatment.

Virginia⁴³

All State waters shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with reasonable, beneficial uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life. Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances, substances that produce color, tastes, odors, or settle to form sludge deposits and heated substances.

Washington⁴⁴

Aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.

West Virginia⁴⁵

No sewage, industrial wastes or other wastes present in any of the waters of the State shall cause therein or materially contribute to any of the following conditions thereof:

- (a) Distinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks of unreasonable kind or quality;
- (b) Objectionable deposits or sludge banks on the bottom;
- (c) Objectionable odors in the vicinity of the waters;
- (d) Objectionable taste and/or odor in municipal water supplies;
- (e) Concentrations of materials poisonous to man, animal or aquatic life;
- (f) Objectionable color
- (g) Objectionable bacterial concentrations;
- (h) Requiring an unreasonable degree of treatment for the production of potable water by modern water treatment processes as commonly employed.

Wisconsin⁴⁶

- (a) Substances that will cause objectionable deposits on the shore or in the bed or a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- (b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- (c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- (d) Substances in concentrations or combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

Wyoming⁴⁷

In all Wyoming surface waters substances attributable to or influenced by the activities of man that will settle to form sludge, bank or bottom deposits shall not be present in quantities which could result in significant aesthetic degradation, significant degradation of habitat for aquatic life

Wyoming (con't)

or adversely affect public water supplies, agricultural or industrial water use, plant life or wildlife, etc.

In all Wyoming surface waters floating debris, scum and other floating materials attributable to or influenced by the activities of man shall not be present in quantities which could result in significant aesthetic degradation, significant degradation of habitat for aquatic life, or adversely affect public water supplies, agricultural or industrial water use, plant life or wildlife, etc.

All Class I, II and III waters shall not contain substances attributable to or influenced by the activities of man which produce taste, odor and color and that would:

- a. Of themselves or in combination, impart an unpalatable or off-flavor in fish flesh;
- b. Visibly alter the natural color of the water or impart color to skin, clothing, vessels or structures;
- c. Produce detectable odor; or
- d. Directly or through interaction among themselves, or with chemicals used in existing water treatment processes, result in concentrations that will impart undesirable taste or odor to public water supplies.

American Samoa^E

Free from visible floating materials, grease, scum, foam, and other floating matter attributable to sewage, industrial wastes, or other wastes.

Free from materials attributable to sewage, industrial wastes, or other wastes that will produce visible turbidity or settle to form deposits.

Free from materials attributable to sewage, industrial wastes or other wastes that will produce color, odor, or taste, either of itself or in combination, or in the biota.

Free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or wastes that will induce objectionable aquatic growths or degrade indigenous biota.

Free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or other wastes which may be toxic or cause irritation to humans, other animals, plants, and aquatic life.

District of Columbia⁴⁸

The waters shall at all times be free from substances attributable to sewage, industrial waste, or other waste that will settle to form sludge deposits that are unsightly, putrescent or odorous to such degree as to create a nuisance, or that interfere directly or indirectly with water uses;

Floating debris, oil, grease, scum, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to be unsightly to such a degree as to create a nuisance, or that interfere directly or indirectly with water uses;

Materials attributable to sewage, industrial waste, or other waste which produce taste, odor, or appreciably change the existing color or other physical and chemical conditions in the receiving stream to such degree as to create a nuisance, or that interfere directly or indirectly with water uses; and

High temperature, toxic, corrosive or other deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere directly or indirectly with water uses, or which are harmful to human, animal, plant, or aquatic life.

Guam^F

All waters shall meet generally accepted aesthetic qualifications, shall be capable of supporting desirable aquatic life, and shall be free from substances, conditions or combinations thereof attributable to domestic, commercial and industrial discharges or agricultural, construction and other land-use practices that:

1. cause visible floating materials, debris, oils, grease, scum, foam or other floating matter;
2. produce visible turbidity, settle to form deposits, or otherwise adversely affect desirable aquatic life;
3. produce objectionable color, odor, or taste, directly or by chemical or biological action;
4. are toxic or harmful to humans, animals, plants, or desirable aquatic life; and
5. induce the growth of undesirable aquatic life.

Puerto Rico⁴⁹

The waters of Puerto Rico shall not contain materials attributable to discharges that will settle to form objectionable deposits. Nor will they contain floating debris,

Puerto Rico
(con't)

scum, oil and other floating materials attributable to discharges in amounts sufficient to be unsightly or deleterious;

shall be free from color, odor, taste or turbidity attributable to discharges in such a degree as to create a nuisance;

shall be not contain substances in concentrations or combinations which are toxic or which produce undesirable physiological responses in human, fish or other animal life, and plants.

Trust Territories^G

(a) Free from visible floating materials, oils, grease, scum, foam, and other floating matter attributable to sewage, industrial wastes, or other wastes.

(b) Free from materials attributable to sewage, industrial wastes, or other wastes that will produce visible turbidity or settle to form deposits.

(c) Free from materials attributable to sewage, industrial wastes or other wastes that will produce color, odor, or taste, either of itself or in combination, or in the biota.

(d) Free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or other wastes that will induce undesirable aquatic life.

(e) Free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or other wastes toxic or irritant to humans, animals, plants, and aquatic life.

Virgin Islands^H

All surface waters shall meet generally accepted aesthetic qualifications and shall be capable of supporting diversified aquatic life. These waters shall be free of substances attributable to municipal, industrial, or other discharges or wastes as follows:

(a) Materials that will settle to form objectionable deposits.

(b) Floating debris, oil, scum, and other matter.

(c) Substances producing objectionable color, odor, taste, or turbidity.

Virgin Islands
(con't)

(d) Materials, including radionuclides, in concentrations or combinations which are toxic or which produce undesirable physiological responses in human, fish, and other animal life, and plants.

(e) Substances and conditions or combinations thereof in concentrations which prduce undesirable aquatic life.

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