

(4) Recommendations both for the most appropriate regulatory approaches and for remedial actions where appropriate.

§ 185(b)(5)-93. Requirements to protect public health

If any time the Commissioner gains knowledge of a Class V well which presents a significant risk to the health of persons, he/she shall, under section 185(b)(5)-44, prescribe such action as necessary (including the immediate closure of the injection well) to remove such risk.

*Subchapter 186. Water Quality Standards for Coastal Waters
of the Virgin Islands*

SECTION

- 186-1. General water quality criteria
- 186-2. Class A
- 186-3. Class B
- 186-4. Class C
- 186-5. Thermal policy
- 186-6. Mixing zones
- 186-7. Antidegradation
- 186-8. Analytical procedures
- 186-9. Applicability of standards
- 186-10. Natural waters
- 186-11. Legal limits
- 186-12. Reissuance of this chapter

§ 186-1. General water quality criteria

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.
- (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 produce undesirable aquatic life.

Source. Sections 186-1 to 186-11: Rules and Regulations Relative to Water Quality Standards for Coastal Waters of the Virgin Islands were revised and issued by Commissioner of Health, dated July 20, 1978, and approved by Governor. Filed with Lieutenant Governor July 26, 1978; File No. 750.

Authority. 12 V.I.C. § 184(i).

Prior regulations—1968. Similar regulations of the Commissioner of Health, dated Oct. 4, 1968, and approved by the Governor were filed with Government Secretary Jan. 16, 1969; File No. 570.

§ 186-2. Class A

(a) **Best usage of waters:** Preservation of natural phenomena requiring special conditions, such as the Natural Barrier Reef at Buck Island, St. Croix and the Under Water Trail at Trunk Bay St. John.

(b) **Quality criteria:** Existing natural conditions shall not be changed.

§ 186-3. Class B

(a) **Best usage of waters:** For propagation of desirable species of marine life and for primary contact recreation (swimming, water skiing, etc.).

(b) **Quality criteria:**

(1) **Dissolved oxygen:** Not less than 5.5 mg/l from other than natural conditions.

(2) **pH:** Normal range of pH must not be extended at any location by more than ± 0.1 pH unit. At no time shall the pH be less than 7.0 or greater than 8.3.

(3) **Temperature:** Not to exceed 90° F. at any time, nor as a result of waste discharge to be greater than 1.5° F. above natural. Thermal policy section 186-5 shall also apply.

(4) **Bacteria:** Shall not exceed a geometric (log) mean of 70 fecal coliforms per 100 ml. by MF or MPN count.

(5) **Dissolved gas:** Total dissolved gas pressure shall not exceed 110 percent of existing atmospheric pressure.

(6) **Phosphorus:** Phosphorus as total P shall not exceed 50 ug/l in any coastal waters.

(7) **Suspended, colloidal, or settleable solids:** None from waste water sources which will cause disposition or be deleterious for the designated uses.

(8) **Oil and floating substances:** No residue attributable to waste water nor visible oil film nor globules of grease.

(9) **Radioactivity:**

(A) **Gross beta:** 1000 picocuries per liter, in the absence of Sr 90 and alpha emitters.

(B) **Radium-226:** 3 picocuries per liter.

(C) **Strontium-90:** 10 picocuries per liter.

(10) **Taste and odor producing substances:** None in amounts that will interfere with the use for primary contact recreation, potable water supply or will render any undesirable taste or odor to edible aquatic life.

(11) **Color and turbidity:**

(A) A Secchi disc shall be visible at a minimum depth of one meter.

(B) A maximum nephelometric turbidity unit reading of three (3) shall be permissible.—Amended March 7, 1985; May 30, 1985.

Amendments—1985. Regulation amending subsec. (b)(11) by designating present provisions as (b)(11)(A) and adding (b)(11)(B) was issued by the Commissioner of Conservation and Cultural Affairs and approved by the Governor March 7, 1985 and corrected May 30, 1985. Filed with the Lieutenant Governor March 7, 1985; File No. RR27-85, and May 30, 1985; File No. RR44-85.

Effective date of the 1985 amendment. A gubernatorial certificate preceding the regulations stated that due to compelling circumstances these amendments are to become effective on the day of approval without delay or prior publication (March 7 and May 30, 1985).

§ 186-4. Class C

(a) **Best usage of waters:** For the propagation of desirable species of marine life and primary contact recreation (swimming, water skiing, etc.).

(b) **Quality criteria:**

(1) **Dissolved oxygen:** Not less than 5.0 mg/l from other than natural conditions.

(2) **pH:** Normal range of pH must not be extended at any location by more than ± 0.1 pH unit. At no time shall the pH be less than 6.7 or greater than 8.5.

(3) **Bacteria:** Shall not exceed a geometric (log) mean of 200 fecal coliforms per 100 ml. by MF or MPN count.

(4) **Taste and odor producing substances:** None in amounts that will interfere with the use for potable water supply or will render any undesirable taste or odor to edible aquatic life.

(5) **Color and turbidity:** A Secchi disc shall be visible at a minimum depth of one (1) meter.

(6) Other provisions for Class B waters shall apply.—Amended March 7, 1985; May 30, 1985.

Amendments—1985. Regulation amending subsec. (a) by substituting "primary" for "secondary" and "swimming, water skiing" for "boating, fishing, wading"; subsec. (b)(3) by substituting 200 for 1,000; by adding a new subsec. (b)(5) and redesignating present subsec. (b)(5) as subsec. (b)(6) was issued by the Commissioner of Conservation and Cultural Affairs and approved by the Governor and corrected May 30, 1985. Filed with the Lieutenant Governor March 7, 1985; File No. RR27-85, and May 30, 1985, File No. RR44-85.

Effective date of the 1985 amendment. See note under section 186-3 of this title.

§ 186-5. Thermal policy

(a) Fish and other aquatic life shall be protected from thermal blocks by providing for a minimum 75 percent stream or estuarine cross-section and/or volumetric passageway, including a minimum of one half of the surface as measured from water edge to water edge at any stage of tide.

(b) In non-passageway the surface water temperature shall not exceed 93° F.

(c) No heat may be added except in designated mixing zones which would cause temperatures to exceed 90° F., or which would cause the monthly mean of the maximum daily temperature at any site, prior to the addition of any heat, to be exceeded by more than 1.5° F.

(d) No discharge or combination of discharges shall be injurious to fish or shellfish or the culture or propagation of a balanced indigenous population thereof.

(e) Rate of temperature change outside the mixing zone shall not be more than 1° F. per hour nor to exceed 5° F. in any 24-hour period except when natural phenomena cause these limits to be exceeded.

(f) Unless specific conditions, such as spawning ground, migratory routes, or other sections of conditions from these regulations are applicable, the mixing zone should be defined by a sphere with a specified point as the center (not necessarily the outfall but limited to one point for each installation) and a radius equal to the square root of the volume of discharge (A) expressed as millions of gallons per day, times 200 feet; and in no case exceed 3/8 mile. The formula is:

$$\frac{2}{\sqrt{A}}$$

200 = radius of mixing zone.

—Amended Sept. 1, 1978, File No. 1053, §§ 1.2, 1.3.

Amendments—1978. Section 186-5(b) and (f) was amended by the Department of Conservation and Cultural Affairs August 31, 1978, and approved Sept. 1, 1978 by the Governor. Filed with Lieutenant Governor Sept. 1, 1978; File No. 1053. Amendment became effective without prior publication by gubernatorial certification dated Sept. 1, 1978.

§ 186-6. Mixing zones

The need, location, size and depth of the mixing zones in surface waters and estuaries shall be established according to the following mixing zone criteria and boundaries.

(a) **Mixing zone criteria:**

(1) Mixing zones shall be provided solely for mixing. Mixing must be accomplished as quickly as possible through the use of devices which insure that the waste is mixed with the allocated dilution water in the smallest practicable area.

(2) For the protection of aquatic life resources, the mixing zones must not be used for, or be considered as, a substitute for waste treatment facilities.

(3) At the boundary of the mixing zone the water should comply with all the water quality standards set forth for its classification. If, after complete mixing with the available dilution water, these requirements are not met, the effluent must be adequately pretreated until the standards are met.

(4) No conditions shall be permitted to exist within the mixing zone, (A) that are rapidly lethal (i.e. exceed the 96-hour median tolerance limit) to locally important and desirable indigenous aquatic life, (B) that prohibit planktonic organisms from being carried through the mixing zone. These organisms will be exposed to its conditions only for the period of time required to drift through the mixing zone and will survive without undue damage or stress while they are passing through.

(5) Maximum vertical dispersion of waste water discharge flow shall be provided for in the mixing zone.

(6) Mixing zones shall not intersect spawning or nursery areas, migratory routes, water intake nor mouths of rivers.

(7) Suspended solids in waste waters being discharged shall not settle in measurable amounts in the mixing zones.

(b) Mixing zone boundaries:

(1) The mixing zone must be located in such manner as to allow at all times, passageways for the movement on drift of the biota (pelagic or invertebrate organisms). The width of the mixing zone and the volume of flow in it shall depend on and will be determined by the nature of the water current and/or the estuary. The area, depth, and volume of the flow must be sufficient to provide a usable and desirable passageway for fish and other aquatic organisms.

(2) The passageway must contain at least 75 percent of the cross sectional area and/or volume of flow of the estuary, and should extend to at least 50% of the width.

(3) A mixing zone shall not overlap with an adjacent mixing zone.

§ 186-7. Antidegradation

Waters whose existing quality is better than the established standards as of the date on which such standards become effective will be maintained at their existing high quality. The quality of these and other waters of the United States Virgin Islands shall be maintained and protected unless the Territory's water pollution control agency and the Environmental Protection Agency find, after full satisfaction of the intergovernmental coordination and public participation provisions of the Territory's continuing planning process, that allowing lower water quality is justifiable as a result of necessary economic or social development and will not interfere with or become injurious to any assigned uses made of, or presently possible in such waters. Further, the Territory's water pollution control agency and the Environmental Protection Agency shall assure that there is achieved the highest statutory and regulatory requirements for all new and existing point sources and cost-effective and reasonable best management practice for nonpoint source control.

(b) Where high quality waters constitute an outstanding National resource; such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(c) In those cases where potential water quality impairment associated with thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Clean Water Act.—Amended March 7, 1985; May 30, 1985.

Amendments—1985. Regulation amending this section generally was issued by the Commissioner of Conservation and Cultural Affairs and approved by the Governor March 7, 1985 and corrected May 30, 1985. Filed with the Lieutenant Governor March 7, 1985; File No. RR27-85, and May 30, 1985, File No. RR44-85.

Effective date of the 1985 amendment. See note under section 186-3 of this title.

§ 186-8. Analytical procedures

The analytical procedures used as methods of analysis to determine the chemical, bacteriological, biological, and radiological quality of waters sampled shall be in accordance with the latest edition of "Standard Methods for the Examination of Water and Waste Water" or other methods approved by the Virgin Islands Department of Conservation and Cultural Affairs and the Environmental Protection Agency.—Amended Sept. 1, 1978, File No. 1053, § 1.4.

§ 186-9. Applicability of standards

The proceeding criteria will be applicable to all Virgin Islands Coastal Waters at all places and at all times.

§ 186-10. Natural waters

Natural waters may, on occasion, have characteristics outside of the limits prescribed by these criteria. The criteria contained herein do not relate to violation of standards resulting from natural forces.

§ 186-11. Legal limits

(a) Class "A" (natural phenomena).

(1) Within 0.5 miles of the boundaries of Buck Island's Natural Barrier Reef, St. Croix.

(2) Trunk Bay, St. John.

(b) Class "B" (marine life and primary contact recreation).

(1) All other coastal waters not classified Class "A" or Class "C".

(A) Those Class "B" coastal waters covered by color and turbidity criteria in section 186-3(b)(11) of this chapter include:

(i) St. Thomas coastal waters—Mandahl Bay (Marina), Vessup Bay, Water Bay, Benner Bay, and the Mangrove Lagoon.

(ii) St. Croix coastal waters—Carlton Beach, Good Hope Beach, Salt River Lagoon (Marina), Salt River Lagoon (Sugar Bay), Estate Anguilla Beach, Buccaneer Beach, Tamarind Reef Lagoon, Green Cay Beach and Enfield Green Beach.

(B) All other Class "B" coastal waters included in color and turbidity criteria in section 186-3(b)(11)(B) of this chapter.

(c) Class "C" (marine life and primary contact recreation).

(1) St. Thomas:

(A) St. Thomas Harbor beginning at Rupert Rock and extending to Haulover Cut.

(B) Crown Bay enclosed by a line from Hassel Island at Haulover Cut to Regis Point at West Gregerie Channel.

(C) Krum Bay.

(2) St. Croix:

(A) Christiansted Harbor from Fort Louise Augusta to Golden Rock.

(B) Frederiksted Harbor from La Grange to Fisher Street.

(C) Hess Oil Virgin Islands Harbor.

(D) Martin-Marietta Alumina Harbor.

—Amended March 7, 1985; May 30, 1985.

Amendments—1985. Regulation adding subpars. (A) and (B) to subsec. (b)(1) and substituting "primary" for "secondary" in subsec. (c) was issued by the Commissioner of Conservation and Cultural Affairs and approved by the Governor March 7, 1985 and corrected May 30, 1985. Filed with the Lieutenant Governor March 7, 1985; File No. RR27-85, and May 7, 1985, File No. RR44-85.

Effective date of the 1985 amendment. See note under section 186-3 of this title.

§ 186-12. Reissuance of this chapter

Title 12, chapter 7, sections 186-1 through 186-11, Virgin Islands Rules and Regulations, as previously issued by the Commissioner of Health, are hereby reissued by the Commissioner of Conservation and Cultural Affairs.

Source. Section 186-12: Regulations to reissue this chapter issued by the Commissioner of Conservation and Cultural Affairs Aug. 31, 1978, and approved Sept. 1, 1978 by the Governor. Filed with Lieutenant Governor Sept. 1, 1978; File No. 1053.

Effective date. The regulation, File No. 1053, contained a gubernatorial certificate dated Sept. 1, 1978, which provided such regulation shall take effect without the usual prior publication.

[Page 267 follows]