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DEPARTMENT OF PLANNING AND NATURAL RESOURCES

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DAY OF , 2004

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GOVERNOR**

**DEAN C. PLASKETT, ESQ.
COMMISSIONER
DEPARTMENT OF PLANNING AND NATURAL RESOURCES**

Copy below is hereby certified to be a true and correct copy of Rules and Regulations adopted pursuant to authority granted in 12 V.I.C. Section 186, by:

**DEAN C. PLASKETT, ESQ.
COMMISSIONER**

The copy below amends 12 V.I.R.R. Chapter 7, Subchapter 186
DRAFT U.S. VIRGIN ISLANDS WATER QUALITY STANDARDS

Chapter 7. Water Pollution Control

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

SECTIONS

- 186-1. General water quality criteria
- 186-2. Class A
- 186-3. Class B
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- 186-5. Thermal policy
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§ 186-1. General water quality criteria

(a) All waters of the U.S. Virgin Islands shall meet generally accepted aesthetic qualifications and shall be capable of supporting diversified aquatic life. "Waters" of the U.S. Virgin Islands shall be defined as in by Title 12, Chapter 7, Section 182(f) of the Virgin Islands Code. These waters shall be free of substances attributable to municipal, industrial, or other discharges or wastes as follows:

- (1) Materials that will settle to form objectionable deposits.
- (2) Floating debris, oils, scum, and other matter.
- (3) Substances producing objectionable color, odor, taste, or turbidity.
- (4) 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.
- (5) Substances and conditions or combinations thereof in concentrations which produce undesirable aquatic life.

- (b) The applicable numeric water quality standards for toxic pollutants to protect the designated uses of waters of the U.S. Virgin Islands shall be EPA's national recommended Clean Water Act section 304(a) water quality criteria, EPA-822-R-02-047 (November 2002), which is incorporated by reference for: the protection of saltwater aquatic life from acute (criterion maximum concentration) and chronic (criterion continuous concentration) effects; and, the protection of human health from the consumption of organisms.

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, 1973, and approved by Governor. Filed with Lieutenant Governor July 26, 1973; 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.

1985: Amendments 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.

§ 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. In no case shall Class B water quality standards be exceeded.

§ 186-3. Class B

- (a) **Best usage of waters:** For maintenance and propagation of desirable species of aquatic life (including threatened and endangered species listed pursuant to section 4 of the federal Endangered Species Act) and for primary contact recreation (swimming, water skiing, etc.).
- (b) **Quality criteria:** The following criteria apply at and beyond the boundary of the applicable mixing zone as specified in section 186-5(f) or 186-6, as the case may be.
 - (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 32°C at any time, nor as a result of waste discharge to be greater than 1.0°C above natural. Thermal policies (Section 186-5) shall also apply.
 - (4) **Bacteria:**
 - (A) Shall not exceed a geometric (log) mean of 70 fecal coliforms

per 100 ml by MF or MPN count.

(B) Shall not exceed a geometric mean of 35 enterococci per 100 ml., not to exceed a single sample maximum of 104 per 100 ml at any time.

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

(6) **Chlorine:** The 4-day average concentration of Chlorine shall not exceed 7.5 ug/l. The 1-hour average concentration of Chlorine shall not exceed 13 ug/l.

(7) **Suspended, colloidal, or settleable solids:** None from wastewater sources which will cause disposition or be deleterious for the designated uses shall be present in any waters.

(8) **Oil and floating substances:** No residue attributable to wastewater nor visible oil film nor globules of grease shall be present in any waters.

(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) Except for Class B waters listed in section 186-11(b)(1)(A), a Secchi disc shall be visible at a minimum depth of one (1) meter. For waters where the depth does not exceed one (1) meter, the bottom must be visible. (B) Except for Class B waters listed in section 186-11(b)(1)(A), 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 maintenance and propagation of desirable species of

aquatic life (including threatened and endangered species listed pursuant to section 4 of the federal Endangered Species Act) and for primary contact recreation (swimming, water skiing, etc.).

(b) **Quality criteria:** The following criteria apply at and beyond the boundary of the applicable mixing zone as specified in section 186-5(f) or section 186-6, as the case may be.

(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) **Temperature:** Not to exceed 32°C at any time, nor as a result of waste discharge to be greater than 1.0°C above natural. Thermal policies (Section 186-5) shall also apply.

(4) **Bacteria:**

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

(B) Shall not exceed a geometric mean of 35 enterococci per 100 ml., not to exceed a single sample maximum of 104 per 100 ml at any time

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

(6) **Chlorine:** The 4-day average concentration of Chlorine shall not exceed 7.5 ug/l. The 1-hour average concentration of Chlorine shall not exceed 13 ug/l.

(7) **Suspended, colloidal, or settleable solids:** None from wastewater sources which will cause disposition or be deleterious for the designated uses shall be present in any waters.

(8) **Oil and floating substances:** No residue attributable to wastewater nor visible oil film nor globules of grease shall be present in any waters.

(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 Secchi disc shall be visible at a minimum depth of one (1) meter.

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, providing for a minimum of 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 32 °C.
- (c) No heat may be added except in designated mixing zones which would cause temperatures to exceed 32 °C., 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 1.0 °C.
- (d) No discharge or combination of discharges shall be injurious to aquatic life (including threatened and endangered species listed pursuant to section 4 of the federal Endangered Species Act) 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 0.5 °C per hour nor to exceed 3 °C 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:

$$\text{Radius (mixing zone)} = (\sqrt{A}) * 200 \text{ feet} \leq 3/8 \text{ mile}$$

§ 186-6. Mixing zones

The need, location, size and depth of the mixing zones in all waters 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 (including threatened and endangered species listed pursuant to section 4 of the federal Endangered Species Act), 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 and will survive without undue damage or stress while they are passing through.

(5) Maximum vertical dispersion of wastewater 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 wastewaters 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 established for a specific pollutant shall not overlap with an adjacent mixing zone for the same pollutant.

§ 186-7. Antidegradation

(a) Existing in-stream water uses, including those that protect threatened and endangered species listed pursuant to section 4 of the federal Endangered Species Act, and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(b) Waters whose existing water 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.

(c) 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, the water quality shall be maintained and protected.

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

Effective date to 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 those specified in or approved under 40 CFR Part 136 or other methods approved by the Virgin Islands Department of Planning and Natural Resources and the Environmental Protection Agency.

Amended Sept. 1, 1978, File No. 1053, §1.4.

§ 186-9. Applicability of standards

The preceding criteria will be applicable to all waters of the U.S. Virgin Islands at all places and at all times except as otherwise provided herein.

§ 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 violations of standards resulting from natural forces.

(a) Natural forces refer to chemical, biological, geological, ecological or any other conditions existing at specific sites, not resulting from, or as a consequence of,

human intervention, that may cause the standard for a particular parameter not to be met at those sites.

§ 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" (aquatic life and primary contact recreation).

- (1) All other waters not classified as Class "A" or Class "C".
 - (A) Those Class "B" waters not covered by color and turbidity criteria in section 186-3(b)(11) of this chapter include:
 - (i) St. Thomas waters-Mandahl Bay (Marina), Vessup Bay, Water Bay, Benner Bay, and the Mangrove Lagoon.
 - (ii) St. Croix 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" waters are covered by the color and turbidity criteria in section 186-3(b)(11)(B) of this subchapter.

(c) Class "C" (aquatic 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. Time for compliance; schedules of compliance

Persons who are authorized to discharge pollutants into the waters of the Virgin Islands at the time this subchapter is amended or revised to add or make more stringent any water quality standards shall meet such newly adopted or more stringent water quality standards through compliance with terms and conditions, based upon the applicable water quality standards, set forth in renewed discharge permits subsequently issued pursuant to the Commissioner's authority under Section 185, Chapter 7, Title 12 of the Virgin Islands Code and Subchapter 184, Chapter 7, Title 12 of the Virgin Islands Rules & Regulations (or such other renewal permit issuing authority as may be applicable). The Commissioner or other permit issuing authority shall determine on a permittee-by-permittee basis, when appropriate, whether to include within such renewed permits schedules of compliance as described in Section 185(f)(2)(A), Chapter 7, Title 12 of the Virgin Islands Code and Subchapter 184, Chapter 7, Title 12 of the Virgin Islands Rules & Regulations. Nothing in this Section 186-12 shall limit any authority of the Commissioner to set or revise schedules of compliance pursuant to the statutes and regulations referred to herein.

§ 186-13. 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 the Department of Planning and Natural Resources.

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 regulations shall take effect without the usual prior publication.