

Sec. 22a-426-4. Surface waters

(a) General Standards of Surface Water Quality

(1) It is the state's goal to restore or maintain the chemical, physical and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved. This standard shall be met, unless:

(A) a use attainability analysis prepared pursuant to subsections (g) and (j) of 40 CFR 131.10 demonstrates that the surface water has been irreparably altered to the extent that certain designated uses have been permanently lost; and

(B) quality criteria necessary to protect all other existing and designated uses of the surface water have been adopted by the Commissioner as a revision to the Connecticut Water Quality Standards in accordance with section 22a-426 of the Connecticut General Statutes.

(2) Periodic re-examination of such designated use decisions shall be performed as required by 40 CFR 131.20.

(3) Physical obstructions such as dams, which prevent fish migration for spawning and growth, shall not be considered a valid reason for failure to achieve and maintain water quality conditions necessary to support all designated uses of a surface water unless the Commissioner has approved a Use Attainability Analysis documenting that a designated use is not attainable for such surface water.

(4) Water Quality Criteria do not apply to environmental conditions brought about by natural causes or conditions.

(5) Surface waters and sediments shall be free from chemical constituents in concentrations or combinations which will or can reasonably be expected to result in acute or chronic toxicity to aquatic organisms or otherwise impair the biological integrity of aquatic or marine ecosystems outside of any dredged material disposal area or areas designated by the Commissioner for disposal or placement of fill materials or any zone of influence allowed by the Commissioner, or bioconcentrate or bioaccumulate in tissues of fish, shellfish and other aquatic organisms at levels which will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms or wildlife as determined by the Commissioner unless such sediments are capped with material suitable for unconfined, open water disposal as an appropriate means of ensuring consistency with this standard as approved by the Commissioner in writing. In determining consistency with this Standard, the Commissioner shall at a minimum consider the numeric criteria listed in Table 3 of section 22a-426-9 of the Regulations of Connecticut State Agencies and any other information the Commissioner deems relevant.

(6) Except within dredged material disposal areas or areas designated by the Commissioner for disposal or placement of fill materials, surface waters and bottom sediments 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; or

(C) interfere with the propagation or habitats of shellfish, finfish and wildlife.

(7) Dredged materials disposed of at a dredged material disposal area shall not result in:

- (A) floating residues of any sort;
- (B) release of any substance which may result in long-term or permanent degradation of water quality in surface waters overlying or adjacent to the disposal areas;
- (C) dispersal of contaminated sediments outside a dredged material disposal area other than that occurring as a transient plume during disposal operations; or
- (D) biological mobilization and subsequent transport of toxic substances to food chains.

(8) The Commissioner may consider Best Management Practices including but not limited to capping the dredged material with material suitable for unconfined open water disposal as an appropriate means of ensuring consistency with subdivisions (6) or (7) of this subsection.

(9) The Commissioner, pursuant to chapter 446k of the Connecticut General Statutes and regulations adopted thereunder, will regulate discharges to the surface waters to assure that such discharges do not cause acute or chronic toxicity to freshwater and marine aquatic life and wildlife, do not impair the biological integrity of freshwater and marine ecosystems and do not create an unacceptable risk to human health as determined by the Commissioner.

(A) In making a determination under chapter 446k of the Connecticut General Statutes as to whether a discharge will or can reasonably be expected to cause pollution of surface waters, the Commissioner shall consider the numeric criteria for the chemical constituents listed in Table 3 of section 22a-426-9 of the Regulations of Connecticut State Agencies.

(B) The discharge of radioactive materials to a surface water in concentrations or combinations which would be harmful to human, animal or aquatic life shall not be allowed. The applicable criteria can be found in 10 CFR 20.

(C) Evaluation of a discharge or discharge of dredged or fill material to wetlands shall include consideration of the manner in which such wetlands support existing and designated uses and protect and maintain downstream water quality.

(D) The discharge of sewage from any vessel to any water is prohibited.

(E) Disinfection shall be required for all treated sewage discharges to surface waters. The period of disinfection shall vary depending on the characteristics of the receiving surface water as described below:

(i) Continuous disinfection shall be required at all sewage treatment plants located south of Interstate Highway 95 (I-95) to protect shellfish resources.

(ii) Disinfection shall be required from May 1 to October 1 at all sewage treatment plants located north of Interstate Highway 95 (I-95). Seasonal disinfection is intended to protect the sanitary quality of bathing waters, and minimize adverse impacts to aquatic life associated with disinfection. An alternative schedule, including continuous disinfection, may be required if found necessary by the Commissioner to protect existing or designated uses.

(iii) For those Class B surface waters located north of Interstate Highway 95 (I-95) and downstream of a sewage treatment plant providing seasonal disinfection as authorized by the Commissioner, criteria for indicator bacteria do not apply during periods when disinfection is not required.

(10) Best Management Practices for control of non-point source pollutants may be required by the Commissioner on a case-by-case basis.

(11) The Commissioner shall require Best Management Practices, including the

imposition of discharge limitations or other reasonable controls on a case-by-case basis as necessary for point and nonpoint sources of phosphorus and nitrogen, including sources of atmospheric deposition, which have the potential to contribute to the impairment of any surface water, to ensure maintenance and attainment of existing and designated uses, restore impaired waters, and prevent excessive anthropogenic inputs of nutrients or impairment of downstream waters.

(12) Such use of Best Management Practices and other reasonable controls on nonpoint sources of nutrients and sediment are preferable to the use of biocides to address a trophic state that has been altered due to excessive anthropogenic inputs.

(13) Biological Condition criteria may be utilized where appropriate for assessment of the biological integrity of surface waters.

(14) Surface water quality monitoring methods shall be consistent with 40 CFR 130.4 or other equivalent monitoring methods approved in writing by the Commissioner.

(15) Surface waters which are not specifically classified shall be considered as Class A or Class SA.

(16) Watercourses which are contained in drainage conduits or pipes and which are not assigned a specific class are considered to be the class of the water body segment into which they discharge.

(b) Class AA Waters and Designated Uses

(1) Surface waters classified as Class AA are those waters shown as such on the map titled Water Quality Classifications on file with the department and that may be amended from time to time in accordance with subsections (d) through (g) of section 22a-426 of the Connecticut General Statutes. The designated uses for Class AA waters are:

- (A) existing or proposed drinking water supplies;
- (B) habitat for fish and other aquatic life and wildlife;
- (C) recreation; and
- (D) water supply for industry and agriculture.

(2) Surface waters identified as potential drinking water supplies in the Long Range Plan for Management of Water Resources prepared and adopted pursuant to section 22a-352 of the Connecticut General Statutes shall be designated Class AA. The Commissioner may, with the concurrence of the Commissioner of the Department of Public Health, designate other surface waters as Class AA including surface waters that:

(A) have been designated a proposed drinking water supply in Connecticut's Conservation and Development Policies Plan;

(B) have been recommended for future use as a drinking water supply in the current approved water supply plan submitted and approved pursuant to section 25-32d of the Connecticut General Statutes;

(C) the Commissioner has issued a Diversion Permit authorizing use as a drinking water supply; or

(D) have been identified in a request from a municipality for designation as a drinking water supply at a public hearing concerning water quality classifications.

(c) Class AA Allowable Discharges

(1) Section 22a-417 of the Connecticut General Statutes imposes an absolute restriction on the discharge of sewage to Class AA reservoirs and their tributaries. The existence of a

discharge to a surface water which occurs outside the state that then flows into the state shall not be considered a valid reason for either relaxing the restriction in Connecticut or changing the Class AA designation. It is a policy of the state to pursue the adoption of compatible Water Quality Standards in neighboring states to assure the protection of Connecticut drinking water supplies.

(2) Discharges to Class AA surface waters may be permitted by the Commissioner from public or private drinking water treatment systems, dredging activity and dredge material dewatering operations, including the discharge of dredged or fill material and clean water discharges. Such discharges shall be subject to the approval of the Commissioner of Public Health. The Commissioner may authorize other discharges to Class AA surface waters provided the Commissioner finds such discharge will be of short duration and is necessary to remediate surface water or ground water pollution. Any such discharge shall be treated or controlled to a level which, in the judgment of the Commissioner, protects aquatic life and public health.

(d) Class A Waters and Designated Uses

Surface waters classified as Class A are those waters shown as such on the map titled Water Quality Classifications on file with the department and that may be amended from time to time in accordance with subsections (d) through (g) of section 22a-426 of the Connecticut General Statutes. The designated uses for Class A waters are:

- (1) habitat for fish and other aquatic life and wildlife;
- (2) potential drinking water supplies;
- (3) recreation;
- (4) navigation; and
- (5) water supply for industry and agriculture.

(e) Class A Allowable Discharges

(1) The Commissioner may authorize certain treated domestic sewage discharges to Class A surface waters provided the Commissioner finds that:

(A) such discharge is deemed necessary by the Commissioner to abate ground water or surface water pollution from a domestic sewage disposal system that was in use prior to February 28, 2011;

(B) such discharge is treated or controlled to the maximum extent practicable in the subsurface and in all cases to a level that in the judgment of the Commissioner, in consultation with the Commissioner of Public Health, protects the environment, public health, safety and welfare;

(C) such discharge does not constitute a community pollution problem as defined in section 22a-423 of the Connecticut General Statutes;

(D) a demonstration has been made to the satisfaction of the Commissioner that no technically and economically feasible alternative exists for such discharge; and

(E) such discharge is not being sought in connection with a new source, new or expanded building or development, or a change to the design or use of an existing building or development, which change results in, or as designed may result in, an increase in:

- (i) the occupancy of such building or development or
- (ii) the discharge from such building or development.

(2) The Commissioner may require such discharge to be eliminated should future

conditions provide a technically or economically feasible alternative to authorizing such discharge.

(3) Discharges to Class A surface waters may be permitted by the Commissioner from public or private drinking water treatment systems, dredging activity and dredge material dewatering operations, including the discharge of dredged or fill material and clean water discharges. The Commissioner may authorize other discharges to Class A surface waters provided the Commissioner finds such discharge will be of short duration and is necessary to remediate surface water or ground water pollution. Any such discharge shall be treated or controlled to a level which, in the judgment of the Commissioner, protects aquatic life and public health.

(f) Class SA Waters and Designated Uses

Surface waters classified as Class SA are those waters shown as such on the map titled Water Quality Classifications on file with the department and that may be amended from time to time in accordance with subsections (d) through (g) of section 22a-426 of the Connecticut General Statutes. The designated uses for Class SA waters are:

- (1) habitat for marine fish, other aquatic life and wildlife;
- (2) shellfish harvesting for direct human consumption;
- (3) recreation;
- (4) industrial water supply; and
- (5) navigation

(g) Class SA Allowable Discharges

(1) The Commissioner may authorize certain treated domestic sewage discharges to Class SA surface waters provided the Commissioner finds that:

(A) such discharge is deemed necessary by the Commissioner to abate ground water or surface water pollution from a domestic sewage disposal system that was in use prior to February 28, 2011;

(B) such discharge is treated or controlled to the maximum extent practicable in the subsurface and in all cases to a level that in the judgment of the Commissioner, in consultation with the Commissioner of Public Health, protects the environment, public health, safety and welfare;

(C) such discharge does not constitute a community pollution problem as defined in section 22a-423 of the Connecticut General Statutes;

(D) a demonstration has been made to the satisfaction of the Commissioner that no technically and economically feasible alternative exists for such discharge; and

(E) such discharge is not being sought in connection with a new source, new or expanded building or development, or a change to the design or use of an existing building or development, which change results in, or as designed may result in, an increase in:

- (i) the occupancy of such building or development or
- (ii) the discharge from such building or development.

(2) The Commissioner may require such discharge to be eliminated should future conditions provide a technically or economically feasible alternative to authorizing such discharge.

(3) Discharges to Class SA surface waters may be permitted by the Commissioner from public or private drinking water treatment systems, dredging activity and dredge material

dewatering operations, including the discharge of dredged or fill material and clean water discharges. The Commissioner may authorize other discharges to Class SA surface waters provided the Commissioner finds such discharge will be of short duration and is necessary to remediate surface water or ground water pollution. Any such discharge shall be treated or controlled to a level which in the judgment of the Commissioner protects aquatic life and public health.

(h) Class B Waters and Designated Uses

Surface waters classified as Class B are those waters shown as such on the map titled Water Quality Classifications on file with the department and that may be amended from time to time in accordance with subsections (d) through (g) of section 22a-426 of the Connecticut General Statutes. The designated uses for Class B waters are:

- (1) habitat for fish and other aquatic life and wildlife;
- (2) recreation;
- (3) navigation; and
- (4) industrial and agricultural water supply.

(i) Class B Allowable Discharges

(1) Discharges may be permitted for all those discharges allowed in Class AA, A and SA surface waters, cooling water discharges, discharges from municipal and industrial wastewater treatment systems and other discharges subject to the provisions of Section 22a-430 of the Connecticut General Statutes.

(2) Class B* is a subset of Class B waters applicable to Candlewood Lake and is identical in all ways to the designated uses, criteria, and standards for Class B waters except no direct wastewater discharges are allowed other than those consistent with Class AA, A and SA surface waters.

(j) Class SB Waters and Designated Uses

Surface waters classified as Class SB are those waters shown as such on the map titled Water Quality Classifications on file with the department and that may be amended from time to time in accordance with subsections (d) through (g) of section 22a-426 of the Connecticut General Statutes. The designated uses for Class SB waters are:

- (1) habitat for marine fish, other aquatic life and wildlife;
- (2) commercial shellfish harvesting;
- (3) recreation;
- (4) industrial water supply; and
- (5) navigation.

(k) Class SB Allowable Discharges

Discharges may be permitted for all those allowed in Class AA, A and SA surface waters, cooling water discharges, discharges from municipal and industrial wastewater treatment systems and other discharges subject to the provisions of section 22a-430 of the Connecticut General Statutes.

(l) Zone of Influence

(1) The Commissioner may, on a case-by-case basis, establish zones of influence when authorizing discharges to surface waters under sections 22a-430 and 22a-133(k) of the Connecticut General Statutes in order to allocate a portion of the receiving surface waters for mixing and assimilation of the discharge. In establishing a zone of influence the

Commissioner shall consider without limitation:

(A) the characteristics of the discharge, such as its volume, strength, temperature and the persistence of any substances in the discharge, potential bioaccumulation or bioconcentration of these substances in aquatic organisms, and the potential for any substances, either singly or in combination with other substances present in the discharge or receiving surface water body to result in an unacceptable risk to human health or the environment;

(B) an allowance for a continuous zone of passage for free swimming and drifting organisms;

(C) the effect of the discharge on spawning grounds or nursery areas of sensitive aquatic organisms or areas utilized by aquatic organisms for shelter and living space;

(D) the effect of the discharge on the aesthetic quality of the receiving water including but not limited to the potential to cause objectionable deposits, floating debris, oil, scum, and other materials that form nuisances or produce objectionable color, odor, taste, or turbidity, or that may attract undesirable aquatic life or wildlife, or result in the dominance of nuisance species;

(E) the location of other discharges in the receiving surface water body to insure that the cumulative effect of adjacent zones of influence will not significantly reduce the environmental value or preclude any existing or designated uses of the receiving surface water.

(2) Assessment of environmental value will be based on the characteristics of the receiving surface water including but not limited to:

(A) type of water body;

(B) velocity;

(C) depth;

(D) number and type of aquatic habitats;

(E) migration patterns;

(F) nature of the food chain;

(G) level of productivity;

(H) water temperature;

(I) condition of associated biological communities;

(J) ability of tributaries to provide biological recruitment;

(K) presence of endangered species, known locations of endangered species are identified on maps entitled "State and Federal Listed Species and Significant Natural Communities", as amended. These maps are available at city or town clerk offices and in the Connecticut Department of Energy and Environmental Protection File Room located on the store level of 79 Elm Street, Hartford; and

(L) value to human uses (such as aesthetic, commercial, sport fishing and recreational uses).

(3) Unless otherwise indicated in sections 22a-426-2 to 22a-426-9, inclusive, of the Regulation of Connecticut State Agencies, the applicable water quality criteria apply outside the zone of influence for a discharge.

(4) The zone of influence shall be limited to the maximum extent possible.

(5) Establishment of a zone of influence shall not preclude attainment of any existing or

designated uses of the receiving surface waters.

(6) The area and volume of receiving water allocated to zones of influence shall be determined based on the unique physical, chemical and biological characteristics of the receiving surface water body.

(7) The Commissioner may require applicants to provide information on receiving surface water and wastewater characteristics including the volume of flow and area required for mixing and assimilation of waste.

(8) Unless otherwise approved by the Commissioner, the zone of influence for assimilation of a thermal discharge shall be no greater than 25% of the cross-sectional area or volume of flow of the receiving water.

(m) Critical Low Flow

(1) The 7Q10 is the minimum flow to which the Connecticut Water Quality Standards for surface waters apply, except when a surface water is regulated by dams or water withdrawals sanctioned by law to result in flows below that level. In such cases the Connecticut Water Quality Standards apply to that low flow determined by section 26-141a-1, et seq. of the Regulations of Connecticut State Agencies; sections 22a-365 to 22a-378a, inclusive, of the general statutes; or 16 USC 791a et seq.

(2) Maintaining a long-term flow of 7Q10 or less may result in significant stress on the physical and biological quality of surface waters. In those surface waters at, near or below the naturally occurring 7Q10 flow, more stringent Water Quality Criteria may be required to achieve and maintain existing and designated uses.

(3) The Commissioner may approve discharge limitations based on minimum average daily flow in excess of 7Q10 conditions, provided the Commissioner is satisfied that special measures will be implemented during low flow conditions which provide protection to the environment at least as effective as that protection which would pertain if limitations were based solely on 7Q10 conditions.

(4) Surface waters which are influenced by tidal forces or which experience short-term variation in flow due to periodic or irregular water release from upstream diversions or other causes may require special consideration by the Commissioner when establishing a zone of influence or issuing discharge permits under the provisions of section 22a-430 of the Connecticut General Statutes in order to protect existing and designated uses, including consideration of the minimum flow to which the Connecticut Water Quality Standards apply. Low flow in a tidal water body shall be evaluated under low tide conditions unless another low flow regime is demonstrated to the Commissioner's satisfaction to be protective of water quality and aquatic resources.

(n) Surface Water Reclassification

Any person or municipality requesting a change in surface Water Quality Classification shall demonstrate to the Commissioner that the proposed new Classification is consistent with all existing or designated uses made of, or presently possible in, such surface waters. Any such change in a Water Quality Classification shall be subject to the public participation and the application requirements set forth in subsection (f) of section 22a-426 of the general statutes. The Commissioner shall not approve a reclassification which is not consistent with subsections (c)(2) and (c)(3) of section 22a-426-8 of the Regulations of Connecticut State Agencies.

Regulations of Connecticut State Agencies

(Effective October 10, 2013)