



General Assembly

January Session, 2001

Raised Bill No. 1012

LCO No. 3157

Referred to Committee on Environment

Introduced by:
(ENV)

AN ACT CONCERNING NITROGEN REDUCTION IN LONG ISLAND SOUND.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) As used in sections 2 to 5, inclusive, of this act:

2 (1) "Equivalency factor" means a ratio of the unit response of
3 dissolved oxygen to nitrogen in Long Island Sound for each publicly
4 owned treatment works based on the geographic location of the
5 specific publicly owned treatment works' discharge point divided by
6 the unit response of the geographic area with the highest impact;

7 (2) "Equivalent nitrogen credit" means a nitrogen credit multiplied
8 by the equivalency factor;

9 (3) "Equivalent pounds" means the actual pounds of nitrogen
10 discharged by a publicly owned treatment works multiplied by the
11 equivalency factor for that publicly owned treatment works;

12 (4) "Individual waste load allocation" means that portion of the
13 state-wide waste load allocation apportioned to an individual publicly
14 owned treatment works;

15 (5) "Nitrogen" means the total of ammonia nitrogen, organic
16 nitrogen, nitrite nitrogen and nitrate nitrogen;

17 (6) "Nitrogen Credit Advisory Board" means the board appointed
18 by the Commissioner of Environmental Protection pursuant to section
19 3 of this act;

20 (7) "Nitrogen credit exchange program" means the program within
21 the Department of Environmental Protection established pursuant to
22 section 4 of this act;

23 (8) "Nitrogen credit" means the difference between the annual total
24 nitrogen load specified for a publicly owned treatment works in the
25 general permit for nitrogen discharges and the annual total nitrogen
26 load discharged by that publicly owned treatment works expressed as
27 pounds of nitrogen per day;

28 (9) "Nonpoint source" means any source of nitrogen originating
29 from other than a readily discernable end of pipe source;

30 (10) "Publicly owned treatment works" means a system used for the
31 collection, treatment or disposal of sewage from one or more parcels of
32 land and that discharges to the waters of the state and is owned by a
33 municipality or the state;

34 (11) "State-owned equivalent nitrogen credits" means the difference
35 between the annual state-wide waste load allocation established in the
36 total maximum daily load and the sum of the annual discharges for all
37 publicly owned treatment works;

38 (12) "State-wide waste load allocation" means the maximum
39 allowable nitrogen load from publicly owned treatment works into
40 Long Island Sound that will meet water quality standards as specified
41 in the total maximum daily load;

42 (13) "Total maximum daily load" means the total maximum daily
43 load analysis to achieve water quality standards for dissolved oxygen

44 in Long Island Sound, as established by the Department of
45 Environmental Protection and as approved by the United States
46 Environmental Protection Agency; and

47 (14) "Unit response" means the reaction of dissolved oxygen in Long
48 Island Sound to a change in nitrogen loading of 1.0 pound.

49 Sec. 2. (NEW) Notwithstanding any provision of section 22a-430 or
50 22a-430b of the general statutes and notwithstanding nitrogen limits
51 specified in individual discharge permits issued pursuant to said
52 section 22a-430, the Commissioner of Environmental Protection shall
53 issue a general permit specifying effluent limits for nitrogen in
54 accordance with the total maximum daily load. In order to meet water
55 quality standards, the commissioner may incorporate compliance
56 schedules into permits issued under this section and said sections
57 22a-430 and 22a-430b. The general permit shall establish effluent limits
58 for nitrogen and shall establish an annual compliance schedule for
59 nitrogen for each publicly owned treatment works. Under the general
60 permit, the commissioner may require publicly owned treatment
61 works to (1) meet effluent limits and other conditions for discharging
62 nitrogen to the waters of the state pursuant to their individual waste
63 load allocations, (2) comply with monitoring requirements as set forth
64 in the general permit, and (3) comply with any other requirements as
65 determined by the commissioner necessary to carry out the provisions
66 of this section. Publicly owned treatment works may participate in the
67 nitrogen credit exchange program in order to comply with effluent
68 limits for nitrogen specified in the general permit.

69 Sec. 3. (NEW) (a) The Commissioner of Environmental Protection
70 shall establish a Nitrogen Credit Advisory Board to assist and advise
71 the commissioner in administering the nitrogen credit exchange
72 program. The board shall consist of the Commissioner of
73 Environmental Protection or the commissioner's designee, the
74 Secretary of the Office of Policy and Management or the secretary's
75 designee, the State Treasurer or the treasurer's designee and five public

76 members to be appointed by the Commissioner of Environmental
77 Protection. The five public members shall include an official of a major
78 publicly owned treatment works, a municipal public works official and
79 three persons having experience in either wastewater treatment,
80 environmental law or finance. The Commissioner of Environmental
81 Protection shall make all such appointments not later than August 1,
82 2001.

83 (b) The Commissioner of Environmental Protection, or the
84 commissioner's designee, shall serve as chairperson of the board and
85 shall schedule the first meeting of such board not later than September
86 1, 2001. A majority of the members shall constitute a quorum for the
87 transaction of business. The principal office of such board shall be the
88 office of the Commissioner of Environmental Protection. At its first
89 meeting, the board shall determine by lot which members shall serve
90 for one, two or three years, provided the terms of office of not more
91 than fifty per cent of the board shall expire in any one year. Thereafter,
92 each term of office shall be for three years. The board shall choose a
93 secretary by ballot from its membership.

94 (c) Not later than September thirtieth, annually, the board shall
95 submit to the joint standing committee of the General Assembly
96 having cognizance of matters relating to the environment its findings
97 that address the following:

98 (1) A summary of the nitrogen credit exchange program's progress
99 in achieving the total maximum daily load;

100 (2) The adequacy of the Clean Water Fund financing pursuant to
101 section 22a-477 of the general statutes, as amended by this act, to
102 support the nitrogen credit exchange program and the total maximum
103 daily load;

104 (3) Recommendations for changes to the program including, but not
105 limited to: (A) Exchanging nitrogen credits with entities outside the
106 state; (B) expanding the general permit for nitrogen discharges and the

107 nitrogen credit exchange program to include additional point and
108 nonpoint sources; and (C) exchange transactions executed outside of
109 the nitrogen credit exchange program; and

110 (4) Identification of any other issues that need to be resolved.

111 Sec. 4. (NEW) (a) The Commissioner of Environmental Protection
112 shall establish a nitrogen credit exchange program to assist in the
113 implementation of the total maximum daily load. The nitrogen credit
114 exchange program shall apply to all publicly owned treatment works
115 included in the general permit issued pursuant to section 2 of this act.

116 (b) The commissioner, in consultation with the Nitrogen Credit
117 Advisory Board, shall:

118 (1) Establish a schedule and monitor all nitrogen removal
119 construction projects;

120 (2) Establish an equivalency factor for each publicly owned
121 treatment works, which may be revised at the commissioner's
122 discretion consistent with the total maximum daily load. The
123 equivalency factor and any proposed revisions shall be made available
124 for public comment at least thirty days prior to being implemented in
125 the nitrogen credit exchange program;

126 (3) Establish the individual waste load allocation for each publicly
127 owned treatment works utilizing the equivalency factors and taking
128 into consideration the schedule for nitrogen removal construction
129 projects;

130 (4) Monitor annual progress in meeting the fifteen-year
131 implementation schedule in the total maximum daily load;

132 (5) Propose modifications, as may be necessary, to the general
133 permit for nitrogen discharges;

134 (6) Establish the annual value of equivalent nitrogen credits giving

135 consideration to all relevant factors and circumstances including, but
136 not limited to: the equivalent pounds of nitrogen removed from all
137 municipal wastewater treatment facilities operating in Connecticut; the
138 incremental capital costs attributable to the nitrogen removal portion
139 of each municipal wastewater treatment facility initiating operation in
140 Connecticut over the preceding five years; the incremental operation
141 and maintenance costs attributable to the generation of equivalent
142 nitrogen credits by each municipal wastewater treatment facility
143 initiating operation in Connecticut over the preceding five years; and
144 methodologies to appropriately weigh and integrate capital and
145 operation costs for Connecticut's municipal wastewater treatment
146 facilities and to calculate a five-year rolling average for equivalent
147 nitrogen credits available for exchange for all municipal treatment
148 facilities operating in Connecticut;

149 (7) Oversee and execute all equivalent nitrogen credit exchanges;

150 (8) Maintain a separate account of state-owned equivalent nitrogen
151 credits;

152 (9) Purchase all equivalent nitrogen credits created by publicly
153 owned treatment works at the annually established value;

154 (10) Sell available state-owned equivalent nitrogen credits including
155 nitrogen credits purchased from publicly owned treatment works at
156 the annually established value to enable publicly owned treatment
157 works to meet nitrogen limits specified in the general permit for
158 nitrogen discharges;

159 (11) Whenever practicable, sell remaining state-owned equivalent
160 nitrogen credits to any other public or private entity;

161 (12) Establish an annual uniform transaction fee not to exceed five
162 per cent for each equivalent nitrogen credit transaction;

163 (13) Establish accounts of funds created from the purchase and sale
164 of equivalent nitrogen credits and the collection of transaction fees to

165 be used for administration of the nitrogen credit exchange program
166 and which may be used for nitrogen removal projects, habitat
167 restoration projects and research; and

168 (14) Establish any other policies or procedures the commissioner
169 may deem necessary to carry out the nitrogen credit exchange
170 program.

171 (c) (1) Not later than March thirty-first, annually, the commissioner
172 shall audit the performance of each publicly owned treatment works
173 operating from January first to December thirty-first of the preceding
174 year and shall (A) determine the number of equivalent nitrogen credits
175 for sale and the number of equivalent nitrogen credits to be purchased,
176 (B) determine and publish the annual value of equivalent nitrogen
177 credits, and (C) notify each publicly owned treatment works of their
178 equivalent nitrogen credit balance.

179 (2) Not later than July thirty-first, annually, each publicly owned
180 treatment works shall purchase equivalent nitrogen credits necessary
181 to meet its nitrogen limits. Such purchase shall be paid by certified
182 bank check or money order made payable to the "Nitrogen Credit
183 Exchange Program". The check or money order shall state on its face
184 "nitrogen credit purchase".

185 (3) Not later than August fourteenth, annually, the commissioner
186 shall purchase all available equivalent nitrogen credits.

187 Sec. 5. (NEW) The Commissioner of Environmental Protection may
188 audit the annual operating data of publicly owned treatment works
189 participating in the nitrogen credit exchange program in order to
190 assess permit compliance. Publicly owned treatment works that do not
191 meet permit limits through treatment or the purchase of credits shall
192 be subject to the enforcement provisions of chapter 446k of the general
193 statutes.

194 Sec. 6. The Commissioner of Environmental Protection may adopt

195 regulations, in accordance with chapter 54 of the general statutes, to
196 carry out the provisions of sections 2 to 5, inclusive, of this act.

197 Sec. 7. Subsection (h) of section 22a-477 of the general statutes is
198 repealed and the following is substituted in lieu thereof:

199 (h) Amounts in the water pollution control state account of the
200 Clean Water Fund shall be available: (1) To be invested by the
201 Treasurer of the state to earn interest on moneys in such account; (2)
202 for the commissioner to make grants to municipalities in the amounts
203 and in the manner set forth in a project funding agreement; (3) for the
204 commissioner to make loans to municipalities in amounts and in the
205 manner set forth in a project funding agreement for planning and
206 developing eligible projects prior to construction and permanent
207 financing; (4) for the commissioner to make loans to municipalities, for
208 terms not exceeding twenty years, for an eligible water quality project;
209 (5) for the commissioner to pay the costs of environmental studies and
210 surveys to determine water pollution control needs and priorities and
211 to pay the expenses of the department in administering the program;
212 (6) for the payment of costs for administration and management of the
213 Clean Water Fund; (7) provided such amounts are not required for the
214 purposes of such fund, for the Treasurer of the state to pay debt service
215 on bonds of the state issued to fund the Clean Water Fund, or for the
216 purchase or redemption of such bonds; (8) for the commissioner to
217 make grants to municipalities for the development and installation of
218 structural improvements to secondary clarifier operations including,
219 but not limited to, flow distribution mechanisms, baffle-type devices,
220 feed well design and sludge withdrawal mechanisms. Grants under
221 this subdivision shall be for one hundred per cent of the construction
222 cost and not more than three million dollars from the fund shall be
223 used for such grants; [and] (9) for the commissioner to pay the costs for
224 the establishment, administration and management of the nitrogen
225 credit exchange program described in section 4 of this act, including,
226 but not limited to, the purchase of equivalent nitrogen credits from
227 publicly owned treatment works in the event that the account of state

228 funds established pursuant to said section 4 is exhausted; and (10) for
229 any other purpose of the Clean Water Fund and the program relating
230 thereto.

231 Sec. 8. This act shall take effect July 1, 2001.

Statement of Purpose:

To establish a general permit that specifies effluent limits for nitrogen and to establish a nitrogen credit exchange program.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]