

051663252

HOUSE BILL NO. 2862

Offered January 21, 2005

A *BILL* to amend the Code of Virginia by adding in Chapter 3.1 of Title 62.1 an article numbered 4.02, consisting of sections numbered 62.1-44.19:12 through 62.1-44.19:18, relating to the establishment of a nutrient credit exchange program.

Patrons—Bryant, Lingamfelter, Amundson, Athey, Brink, Cline, Cole, Cox, Gear, Hugo, Johnson, Landes, Louderback, Marshall, R.G., McDougle, McQuigg, Morgan, Nutter, O'Bannon, Orrock, Phillips, Plum, Pollard, Reese, Reid, Rust, Saxman, Scott, E.T., Shannon, Sherwood, Shuler, Stump, Ware, R.L., Weatherholtz and Welch; Senators: Hawkins, Newman, Reynolds, Watkins and Williams

Referred to Committee on Agriculture, Chesapeake and Natural Resources

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Chapter 3.1 of Title 62.1 an article numbered 4.02, consisting of sections numbered 62.1-44.19:12 through 62.1-44.19:18, as follows:

*Article 4.02.**Nutrient Credit Exchange Program.*

§ 62.1-44.19:12. *Legislative findings and purposes.*

The 2000 Chesapeake Bay Agreement and related multistate cooperative and regulatory initiatives establish cap load allocations for nitrogen and phosphorus delivered to the Chesapeake Bay and its tidal tributaries to meet applicable water quality standards. These initiatives will require public and private point source dischargers of nitrogen and phosphorus to achieve significant additional reductions of these nutrients to meet these cap load allocations. The General Assembly finds and determines that adoption and utilization of a market-based nutrient credit trading program will assist in meeting these water quality goals cost effectively while accommodating continued growth and economic development.

§ 62.1-44.19:13. *Definitions.*

As used in this article, unless the context requires a different meaning:

"Annual mass load of total nitrogen" (expressed in pounds per year) means the arithmetic average total nitrogen concentration (expressed as mg/L to the nearest 0.01 mg/L) for all the effluent monitoring samples collected in a 24-hour period multiplied by the flow volume of effluent discharged during the 24-hour period (expressed as MGD to the nearest 0.01 MGD), multiplied by 8.34 and rounded to the nearest whole number to convert to pounds per day (lbs/day) units, then totaled for the calendar month to convert to pounds per month (lbs/mo) units, and then totaled for the calendar year to convert to pounds per year (lbs/yr) units.

"Annual mass load of total phosphorus" (expressed in pounds per year) means the arithmetic average total phosphorus concentration (expressed as mg/L to the nearest 0.01mg/L) for all the effluent monitoring samples collected in a 24-hour period multiplied by the flow volume of effluent discharged during the 24-hour period (expressed as MGD to the nearest 0.01 MGD) multiplied by 8.34 and rounded to the nearest whole number to convert to lbs/day units, then totaled for the calendar month to convert to lbs/mo units, and then totaled for the calendar year to convert to lbs/yr units.

"Association" means the Virginia Nutrient Credit Exchange Association authorized by this article.

"Attenuation" means the rate at which nutrients are reduced through natural processes, such as hydrolysis, oxidation, and biodegradation during transport in water.

"Delivered total nitrogen load" means the discharged mass load of total nitrogen from a point source that is adjusted by the delivery factor for that point source.

"Delivered total phosphorus load" means the discharged mass load of total phosphorus from a point source that is adjusted by the delivery factor for that point source.

"Delivery factor" means an estimate of the number of pounds of total nitrogen or total phosphorus delivered to tidal waters for every pound discharged from a permitted facility, as determined by the specific geographic location of the permitted facility, to account for attenuation that occurs during riverine transport between the permitted facility and tidal waters. Delivery factors shall be calculated using the Chesapeake Bay Program watershed model.

"Department" means the Department of Environmental Quality.

"Existing facility" means a facility for which waste load allocations have been adopted.

"Facility" means a point source discharging or proposing to discharge total nitrogen or total phosphorus to the Chesapeake Bay or its tributaries.

"General permit" means the general permit authorized by this article.

"New facility" means a facility for which waste load allocations have not been adopted.

INTRODUCED

HB2862

56 "Nonpoint source nitrogen credit" means a nitrogen credit acquired in accordance with the
57 guidelines published by the Department pursuant to this article.

58 "Nonpoint source phosphorus credit" means a phosphorus credit acquired in accordance with the
59 guidelines published by the Department pursuant to this article.

60 "Permitted facility" means a facility authorized by the general permit to discharge total nitrogen or
61 total phosphorus. For the sole purpose of generating point source nitrogen credits or point source
62 phosphorus credits, "permitted facility" shall also mean the Blue Plains wastewater treatment facility
63 operated by the District of Columbia Water and Sewer Authority.

64 "Permittee" means a person authorized by the general permit to discharge total nitrogen or total
65 phosphorus.

66 "Point source nitrogen credit" means the difference between (i) the effluent limitation for a permitted
67 facility specified as an annual mass load of total nitrogen, and (ii) the monitored annual mass load of
68 total nitrogen discharged by that facility, where clause (ii) is less than clause (i), and where the
69 difference is adjusted by the applicable delivery factor and expressed as pounds per year of delivered
70 total nitrogen load.

71 "Point source phosphorus credit" means the difference between (i) the effluent limitation for a
72 permitted facility specified as an annual mass load of total phosphorus, and (ii) the monitored annual
73 mass load of total phosphorus discharged by that facility, where clause (ii) is less than clause (i), and
74 where the difference is adjusted by the applicable delivery factor and expressed as pounds per year of
75 delivered total phosphorus load.

76 "Tributaries" means those river basins for which separate tributary strategies were prepared
77 pursuant to § 2.2-218 and includes the Potomac, Rappahannock, York, and James River Basins, and the
78 Eastern Coastal Basin, which encompasses the creeks and rivers of the Eastern Shore of Virginia that
79 are west of Route 13 and drain into the Chesapeake Bay.

80 "Waste load allocation" means the water quality-based annual mass load of total nitrogen or annual
81 mass load of total phosphorus allocated to individual facilities pursuant to the Water Quality
82 Management Planning Regulation (9 VAC 25-720) or its successor, § 62.1-44.19:15 for new or
83 expanded facilities, or applicable total nitrogen or total phosphorus total maximum daily loads.

84 § 62.1-44.19:14. General permit for nutrients.

85 A. On or before January 1, 2006, the Board shall issue a General Virginia Pollutant Discharge
86 Elimination System Permit, hereafter referred to as the general permit, authorizing point source
87 discharges of total nitrogen and total phosphorus to the waters of the Chesapeake Bay and its
88 tributaries. The general permit shall control in lieu of technology-based, water quality-based and best
89 professional judgment interim or final effluent limitations for total nitrogen and total phosphorus in
90 individual Virginia Pollutant Discharge Elimination System permits for facilities covered by the general
91 permit where the effluent limitations for total nitrogen and total phosphorus in the individual permits
92 are based upon standards, criteria, waste load allocations, policy or guidance established to restore or
93 protect the water quality and beneficial uses of the Chesapeake Bay or its tidal tributaries.

94 B. The general permit shall be issued, modified or terminated using the procedures for case
95 decisions under the Administrative Process Act (§ 2.2-4000 et seq.), and shall contain the following:

96 1. Effluent limitations for total nitrogen and total phosphorus for each permitted facility expressed as
97 annual mass loads. The limitations for each permitted facility must be achieved no later than the
98 applicable compliance date, and shall reflect the applicable individual water quality-based total nitrogen
99 and total phosphorus waste load allocations established under the Water Quality Management Planning
100 Regulation or its successor, § 62.1-44.19:15, for new or increased discharges, or applicable total
101 nitrogen or total phosphorus total maximum daily loads for the tributary in which the permitted facility's
102 discharge is located. Owners or operators of two or more facilities located in the same tributary may
103 apply for and receive an aggregated effluent limitation for total nitrogen and an aggregated effluent
104 limitation for total phosphorus for multiple facilities reflecting the total of the water quality-based total
105 nitrogen and total phosphorus waste load allocations established for such facilities individually.

106 2. A requirement that within 12 months after the initial effective date of the general permit, the
107 permittees shall submit a compliance plan to the Department for approval. The compliance plan shall
108 contain, at a minimum, any capital projects and implementation schedules needed to achieve total
109 nitrogen and phosphorus reductions sufficient to comply with the combined waste load allocations of all
110 the permittees in each tributary. This initial compliance plan may rely on the exchange of point source
111 credits in accordance with this article, but not the acquisition of nonpoint source credits authorized by
112 § 62.1-44.19:17, to achieve compliance by the applicable compliance date. The compliance plan shall be
113 updated annually and submitted to the Department no later than February 1 of each year.

114 3. Lists by tributary of all permittees and permitted facilities under the general permit, together with
115 each permitted facility's effluent limitations, and total nitrogen and total phosphorus delivery factors.

116 4. A requirement that each permittee under the general permit join and maintain membership in the
117 association authorized by § 62.1-44.19:16 as a condition of coverage under the general permit.

5. Such monitoring and reporting requirements as the Board deems necessary to carry out the provisions of this chapter.

6. Such other conditions as the Board deems necessary to carry out the provisions of this chapter and section 402 of the federal Clean Water Act (33 U.S.C. § 1342), except that the general permit shall not contain technology-based effluent limitations or conditions, or requirements that are duplicative of the conditions or requirements in the individual Virginia Pollutant Discharge Elimination System permits issued to permittees under the general permit.

C. An owner or operator of an existing facility who wishes to secure general permit coverage for such facility shall do so by filing a registration statement with the Department within 30 days after the initial effective date of the general permit, or thereafter, within 30 days after the effective date of each reissuance of the General Permit.

D. An owner or operator of a new facility who wishes to secure general permit coverage for such facility may do so by filing a registration statement with the Department at the time it makes application for an individual Virginia Pollutant Discharge Elimination System permit authorizing a new or expanded discharge from the facility and by complying with the provisions of § 62.1-44.19:15.

§ 62.1-44.19:15. New or expanded facilities.

A. An owner or operator of a new facility proposing a new discharge from the facility may obtain coverage under the general permit provided it has demonstrated to the Department that the facility has secured waste load allocations sufficient to offset its delivered total nitrogen and delivered total phosphorus loads. Such allocations may be secured through one or a combination of the following:

1. Acquisition of all or a portion of the waste load allocations of one or more point source dischargers in the same tributary;

2. Acquisition of nonpoint source load allocations in accordance with guidelines to be published pursuant to subsection E; or

3. Acquisition of waste load allocations through such other means as may be approved by the Department.

B. An owner or operator of a new facility proposing to expand and increase the discharge from the facility may obtain coverage under the general permit provided the facility has demonstrated to the Department that it has secured sufficient waste load allocations in accordance with subsection A to offset any increase in delivered total nitrogen and delivered total phosphorus loads attributable to the expansion.

C. An owner or operator of a permitted facility may increase the discharge from the facility through expansion provided he has demonstrated to the Department that the facility has secured sufficient waste load allocations in accordance with subsection A to offset that portion of the increased delivered total nitrogen and delivered total phosphorus loads that would exceed the facility's existing waste load allocations.

D. Following approval of new or increased discharges in accordance with this section, the Department shall modify the effluent limitations in the general permit to reflect new waste load allocations established under this section.

E. Within one year after the effective date of the general permit and following public notice and opportunity for comment, the Department shall, in consultation with the Department of Conservation and Recreation, publish guidelines governing the acquisition of nonpoint source nitrogen and phosphorus waste load allocations for new or increased discharges under this section. These guidelines shall provide for the acquisition of allocations through payments into a fund dedicated to installing, operating, and maintaining best management practices for reducing nitrogen and phosphorus from nonpoint sources. These guidelines shall base the cost of each pound of allocation on the actual cost of achieving and maintaining a reduction of two pounds of nitrogen or phosphorus from nonpoint sources for each pound of allocation acquired plus the cost of administering the fund.

§ 62.1-44.19:16. Virginia Nutrient Credit Exchange Association authorized; duties; composition; appointment; terms.

A. The permittees under the general permit may establish a nonstock corporation under Chapter 10 (§ 13.1-801 et seq.) of Title 13.1, to be known as the Virginia Nutrient Credit Exchange Association, to coordinate and facilitate participation in the nutrient credit exchange program by its members. The Virginia Nutrient Credit Exchange Association, which is hereafter referred to as the Association, shall (i) submit on behalf of its members the compliance plan required by § 62.1-44.19:14, (ii) develop a standard form of agreement for use by permittees when buying and selling nitrogen and phosphorus credits, (iii) assist permittees in identifying buyers and sellers of nitrogen and phosphorus credits, (iv) coordinate planning to ensure that to the extent possible, sufficient credits are available each year to achieve full compliance with the general permit, (v) assist individual municipal permittees in utilizing public-private partnerships and other innovative measures to achieve the Commonwealth's water quality goals, and (vi) perform such other duties and functions as may be necessary to the effective and efficient

179 implementation of the credit exchange program. The Association shall not assume any of the permittees'
180 compliance obligations under the general permit.

181 B. Membership in the Association shall consist of permittees under the general permit. The
182 Association shall operate through a board of directors, which shall consist of 10 members, with at least
183 one member representing each tributary covered by the general permit, at least one member
184 representing industrial permittees, and at least one member representing publicly-owned wastewater
185 treatment facilities with average annual flows of less than one million gallons per day. Association
186 board members shall be employees of Association members, shall be elected by the Association
187 membership at the beginning of each term of the general permit, and shall serve through the end of the
188 permit term to which they were elected. Vacancies for unexpired Association board terms shall be filled
189 in the same manner in which members are originally elected to the Association board.

190 C. The Association board shall elect a president, vice president, secretary and treasurer from among
191 its members at the beginning of each permit term. Officers and Association board members shall receive
192 no compensation for their services as officers and board members of the Association.

193 § 62.1-44.19:17. Nutrient Credit Exchange Program.

194 A. Each permitted facility shall be in compliance with its applicable effluent limitations if: (i) its
195 annual mass load is less than the applicable effluent limitation in the general permit, (ii) the permitted
196 facility secures sufficient point source nitrogen or phosphorus credits in accordance with the Virginia
197 Nutrient Credit Exchange Program, or (iii) in the event it is unable to achieve compliance pursuant to
198 clauses (i) or (ii), the permitted facility secures sufficient nonpoint source nitrogen or phosphorus credits
199 through payments made in accordance with this section; provided, however, that the acquisition of
200 nitrogen or phosphorus credits pursuant to this section shall not affect the individual waste load
201 allocations that are the basis for the effluent limitations for each permitted facility.

202 B. On or before February 1, each permittee under the general permit shall file annually a report
203 with the Nutrient Credit Exchange Association. The report shall identify (i) the annual mass load of
204 total nitrogen and the annual mass load of total phosphorus discharged by each of the permittee's
205 facilities covered by the general permit during the previous calendar year, (ii) the delivered total
206 nitrogen load and delivered total phosphorus load discharged by each of the permittee's facilities
207 covered by the general permit during the previous year, (iii) the average capital and operating cost of
208 reducing each pound of influent total nitrogen and each pound of influent total phosphorus incurred by
209 each of the permittee's facilities covered by the general permit for the three-year calendar period
210 immediately preceding the year in which the report is filed, and (iv) the number of total nitrogen or
211 total phosphorus credits for the previous calendar year to be purchased or sold by the permittee.

212 C. On or before March 1, the Association shall submit annually to the Department a report
213 containing the annual mass load of total nitrogen and annual mass load of total phosphorus discharged
214 by each permitted facility, the number of point source nitrogen and phosphorus credits for the previous
215 calendar year for sale or purchase by each such facility, and to the extent there are insufficient point
216 source credits available for exchange to provide for full compliance by every permittee, the number of
217 nonpoint source nitrogen or phosphorus credits to be purchased pursuant to this section. The report
218 shall contain the certification required by federal and state law and signed by each permittee for each
219 of the permittee's facilities covered by the general permit. Upon receipt of the report, the Department
220 shall promptly publish notice of the report and make the report available to any person requesting it.

221 D. Each permittee under the general permit whose annual mass load of total nitrogen or annual
222 mass load of total phosphorus for the calendar year is greater than the respective total nitrogen or total
223 phosphorus effluent limitation for the permittee's facility covered by the general permit shall be in
224 noncompliance with its respective total nitrogen or total phosphorus effluent limitation unless the
225 permittee secures nitrogen or phosphorus credits at least equal to the amount the facility exceeded its
226 respective total nitrogen or total phosphorus effluent limitation.

227 1. A permittee may satisfy his compliance obligations through the exchange of point source credits
228 only if (i) the credits are generated and applied to a compliance obligation in the same calendar year,
229 (ii) the credits are generated by one or more permitted facilities in the same tributary, (iii) the credits
230 are secured no later than June 1 immediately following the calendar year in which the credits are
231 applied, and (iv) no later than June 1 immediately following the calendar year in which the credits are
232 applied, the permittee certifies on a form supplied by the Department that it has secured sufficient
233 credits to satisfy its compliance obligations.

234 2. A permittee may satisfy his compliance obligations through the acquisition of nonpoint source
235 credits only if no later than June 1 immediately following the calendar year in which the credits are
236 applied, the permittee certifies on a form supplied by the Department that he has diligently sought, but
237 has been unable to secure sufficient credits to satisfy his compliance obligations through the exchange
238 of point source credits with other permitted facilities, and that he has acquired sufficient nonpoint
239 source credits to satisfy his compliance obligations through one or more payments in accordance with
240 the guidelines published pursuant to subsection F.

241 E. On or before July 1, the Department shall publish annually notice of all point and nonpoint
242 nitrogen and phosphorus credit exchanges and purchases for the previous calendar year and make all
243 documents relating to the exchanges and purchases available to any person requesting them.

244 F. Within one year after the effective date of the general permit and following public notice and the
245 opportunity for comment, the Department shall, in consultation with the Department of Conservation
246 and Recreation, publish guidelines governing the acquisition of nitrogen and phosphorus credits through
247 payments into a fund dedicated to installing, operating, and maintaining best management practices for
248 reducing nitrogen and phosphorus from nonpoint sources. These guidelines shall base the cost of each
249 nitrogen and phosphorus credit on the actual cost of reducing two pounds of nitrogen or phosphorus
250 from nonpoint sources for each pound of credit acquired plus the cost of administering the fund.

251 § 62.1-44.19:18. Program audits.

252 In addition to its permit compliance and enforcement functions, the Department is authorized to
253 conduct such audits of the Nutrient Credit Exchange Program as it deems necessary to ensure that the
254 reports and data received from permittees and the Association are complete and accurate. The
255 Association and permittees under the general permit shall cooperate with the Department in the conduct
256 of such audits and provide the Department with such information as the Department may require to
257 fulfill its responsibilities under this article.