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By: **Delegate Morhaim**

Introduced and read first time: January 29, 2001

Assigned to: Environmental Matters

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A BILL ENTITLED

1 AN ACT concerning

2 **Environment - Water Resources - Nitrogen Removal Technology Required**

3 FOR the purpose of requiring counties to describe in their county water and sewer  
4 plans, by a certain date, certain areas of special concern in which nitrogen  
5 removal technology is required under certain circumstances; requiring the  
6 Department of the Environment to adopt rules and regulations that require that  
7 nitrogen removal technology be installed on certain individual sewage disposal  
8 systems under certain circumstances; prohibiting the Department from  
9 requiring nitrogen removal technology on certain renovation or reconstruction  
10 projects with existing on-site sewage disposal systems; defining certain terms;  
11 and generally relating to sewerage systems.

12 BY repealing and reenacting, with amendments,  
13 Article - Environment  
14 Section 9-501, 9-505, and 9-510  
15 Annotated Code of Maryland  
16 (1996 Replacement Volume and 2000 Supplement)

17 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF  
18 MARYLAND, That the Laws of Maryland read as follows:

19 **Article - Environment**

20 9-501.

21 (a) In this subtitle the following words have the meanings indicated.

22 (B) "AREAS OF SPECIAL CONCERN" MEANS THE FOLLOWING:

23 (1) AREAS OF FAILING ON-SITE SEWAGE DISPOSAL SYSTEMS;

24 (2) DRINKING WATER SUPPLY AREAS, INCLUDING:

25 (I) WELLHEAD PROTECTION AREAS;

26 (II) RESERVOIR PROTECTION AREAS; AND

- 1 (III) AQUIFER RECHARGE AREAS;
- 2 (3) CHESAPEAKE BAY CRITICAL AREAS, AS DEFINED IN § 8-1807 OF THE  
3 NATURAL RESOURCES ARTICLE;
- 4 (4) SOILS WITH HIGH NITROGEN EXPORT POTENTIAL;
- 5 (5) KARST OR CARBONATE GEOLOGIC AREAS;
- 6 (6) COASTAL BAYS WATERSHEDS;
- 7 (7) AREAS OF GROUNDWATER AND SURFACE WATER WITH  
8 DOCUMENTED CONTAMINATION FROM NITROGEN; AND
- 9 (8) ANY OTHER AREAS IDENTIFIED AND DOCUMENTED SCIENTIFICALLY  
10 BY LOCAL OFFICIALS AS REQUIRING THE USE OF NITROGEN REMOVAL  
11 TECHNOLOGY.

12 [(b)] (C) "Community sewerage system" means a publicly or privately owned  
13 sewerage system that serves at least 2 lots.

14 [(c)] (D) "Community water supply system" means a water supply system that  
15 serves at least 2 lots.

16 [(d)] (E) (1) "County plan" means a comprehensive plan for adequately  
17 providing throughout the county, including all towns, municipal corporations, and  
18 sanitary districts in the county, the following facilities and services by public or  
19 private ownership:

- 20 (i) Water supply systems;
- 21 (ii) Sewerage systems;
- 22 (iii) Solid waste disposal systems;
- 23 (iv) Solid waste acceptance facilities; and
- 24 (v) Systematic collection and disposal of solid waste, including  
25 litter.

26 (2) "County plan" includes a revised or amended county plan.

27 [(e)] (F) "Individual sewerage system" means a sewerage system that serves  
28 only 1 lot.

29 [(f)] (G) "Individual water supply system" means a water supply system that  
30 supplies water to only 1 lot.

31 [(g)] (H) "Litter" means any:

- 32 (1) Waste material;

- 1 (2) Refuse;
- 2 (3) Garbage;
- 3 (4) Trash;
- 4 (5) Debris;
- 5 (6) Dead animal; or
- 6 (7) Other discarded material.

7 [(h)] (I) "Lot" means a parcel of land, including a part of a subdivision, that:

- 8 (1) Is used or is intended to be used as a building site; and
- 9 (2) Is not intended to be further subdivided.

10 [(i)] (J) "Multiuse sewerage system" means a sewerage system that:

- 11 (1) Serves only 1 lot;
- 12 (2) Serves a number of individuals;
- 13 (3) Has a treatment capacity of more than 5,000 gallons a day; and
- 14 (4) Is not publicly owned or operated.

15 [(j)] (K) "Multiuse water supply system" means an individual water supply  
16 system that:

- 17 (1) Has the capacity to supply more than 5,000 gallons of water a day;  
18 and
- 19 (2) Serves a number of individuals.

20 [(k)] (L) (1) "Proposed county plan" means a county plan that:

- 21 (i) Has been adopted by the county governing body; and
- 22 (ii) Has not been approved by the Department.

23 (2) "Proposed county plan" includes any proposed amendment or revision  
24 of the county plan.

25 (M) "NITROGEN REMOVAL TECHNOLOGY" MEANS A SYSTEM APPROVED BY  
26 THE DEPARTMENT CAPABLE OF RELIABLY ACHIEVING A NITROGEN REMOVAL  
27 EFFICIENCY OF 60% OR GREATER.

28 (N) "ON-SITE SEWAGE DISPOSAL SYSTEMS" MEANS AN INDIVIDUAL  
29 SEWERAGE SYSTEM, MULTIUSE SEWERAGE SYSTEM, OR A SHARED FACILITY  
30 PROVIDING SEWERAGE SERVICE.

1     [(l)]     (O)     "Sewage" means any human or animal excretion, street wash,  
2 domestic waste, or industrial waste.

3     [(m)]     (P)     (1)     "Sewerage system" means:

4                     (i)     The channels used or intended to be used to collect and dispose  
5 of sewage; and

6                     (ii)    Any structure and appurtenance used or intended to be used to  
7 collect or prepare sewage for discharge into the waters of this State.

8             (2)     "Sewerage system" includes any sewer of any size.

9             (3)     "Sewerage system" does not include the plumbing system inside any  
10 building served by the sewerage system.

11     (Q)     "SHARED FACILITY" MEANS A WATER OR SEWERAGE SYSTEM WHICH  
12 SERVES MORE THAN ONE LOT OF LAND, OR MORE THAN ONE USER ON A SINGLE LOT  
13 OF LAND, WITH WATER OR SEWERAGE SYSTEMS LOCATED ON THE INDIVIDUAL LOTS  
14 OR ON PARCELS OWNED IN COMMON BY THE USERS OR THE CONTROLLING  
15 AUTHORITY.

16     [(n)]     (R)     "Solid waste acceptance facility" means any sanitary landfill,  
17 incinerator, transfer station, or plant whose primary purpose is to dispose of, treat, or  
18 process solid waste.

19     [(o)]     (S)     (1)     "Solid waste disposal system" means any publicly or privately  
20 owned system that:

21                     (i)     Provides a scheduled or systematic collection of solid waste;

22                     (ii)    Transports the solid waste to a solid waste acceptance facility;  
23 and

24                     (iii)   Treats or otherwise disposes of the solid waste at the solid waste  
25 acceptance facility.

26             (2)     "Solid waste disposal system" includes each solid waste acceptance  
27 facility that is used in connection with the solid waste disposal system.

28     [(p)]     (T)     (1)     "Subdivision" means any division of a tract or parcel of land into  
29 at least 2 lots, for the purpose of sale or building development.

30             (2)     "Subdivision" includes any change in street lines or lot lines.

31             (3)     "Subdivision" does not include any division of land into parcels of  
32 more than 3 acres, if the division:

33                     (i)     Is for agricultural purposes; and

34                     (ii)    Does not involve any new street or easement of access.

1 [(q)] (U) (1) "Water supply system" means a publicly or privately owned or  
2 operated:

3 (i) Source and the surrounding area from which water is supplied  
4 for drinking or domestic purposes; and

5 (ii) Structure, channel, or appurtenance used or intended to be used  
6 to prepare water for use or to deliver water to a consumer.

7 (2) "Water supply system" does not include the plumbing system inside  
8 any building that is served by the water supply system.

9 9-505.

10 (a) In addition to the other requirements of this subtitle, each county plan  
11 shall:

12 (1) Provide for the orderly expansion and extension of the following  
13 systems in a manner consistent with all county and local comprehensive plans  
14 prepared under § 3.05 of Article 66B, § 5(X) of Article 25A, § 13 of Article 25B, and §  
15 7-108 of Article 28 of the Code:

16 (i) Community water supply systems and multiuse water supply  
17 systems;

18 (ii) Community sewerage systems and multiuse sewerage systems;  
19 and

20 (iii) Solid waste disposal systems and solid waste acceptance  
21 facilities;

22 (2) Provide for the sizing and staging of facilities construction that is  
23 consistent with the county plan;

24 (3) Show compliance with paragraphs (1) and (2) of this subsection by  
25 using graphic and tabular information;

26 (4) Provide:

27 (i) For sewage treatment facilities that are adequate to prevent the  
28 discharge of any inadequately treated sewage or other liquid waste into any waters;  
29 or

30 (ii) Otherwise for safe and sanitary treatment of sewage and other  
31 liquid waste;

32 (5) Provide for facilities that are adequate to treat, recover, or dispose of  
33 solid waste in a manner that is consistent with the laws of this State that relate to air  
34 pollution, water pollution, and land use;

35 (6) Contain adequate information about:

- 1 (i) The existing sewage treatment capacity in each drainage basin  
2 or sewage treatment plant service area in the county;
- 3 (ii) The present level of use of sewage treatment plants in each  
4 drainage basin; and
- 5 (iii) Projections for use of sewage treatment plant capacity based on:
- 6 1. Outstanding building permits and subdivision plats if the  
7 county has subdivision authority; or
- 8 2. Zoning commitments if the county does not have  
9 subdivision authority;
- 10 (7) Taking into account all relevant planning, zoning, population,  
11 engineering, and economic information and all State, regional, municipal, and local  
12 plans, describe, with all practical precision, those parts of the county that reasonably  
13 may be expected to be served in the next 10 years by any:
- 14 (i) Community water supply system;
- 15 (ii) Multiuse water supply system;
- 16 (iii) Community sewerage system;
- 17 (iv) Multiuse sewerage system;
- 18 (v) Solid waste disposal system; and
- 19 (vi) Solid waste acceptance facility;
- 20 (8) Set procedures for identifying and acquiring, on a time schedule that  
21 conforms to the time requirement in paragraph (7) of this subsection, any  
22 rights-of-way or easements that are necessary for any:
- 23 (i) Community water supply system;
- 24 (ii) Multiuse water supply system;
- 25 (iii) Community sewerage system;
- 26 (iv) Solid waste disposal system; or
- 27 (v) Solid waste acceptance facility;
- 28 (9) Taking into account all relevant planning, zoning, population,  
29 engineering, and economic information and all State, regional, municipal, and local  
30 plans, describe, with all practical precision, any parts of the county in which it is not  
31 reasonably foreseeable to have service in the next 10 years by any:
- 32 (i) Community water supply system;

- 1 (ii) Multiuse water supply system;
- 2 (iii) Community sewerage system;
- 3 (iv) Multiuse sewerage system;
- 4 (v) Solid waste disposal system; and
- 5 (vi) Solid waste acceptance facility;

6 (10) Set a time schedule and a proposed method for financing the  
7 construction and operation of each planned:

- 8 (i) Community water supply system;
- 9 (ii) Multiuse water supply system;
- 10 (iii) Community sewerage system;
- 11 (iv) Solid waste disposal system; and
- 12 (v) Solid waste acceptance facility;

13 (11) Set forth the estimated cost of constructing and operating each  
14 planned:

- 15 (i) Community water supply system;
- 16 (ii) Multiuse water supply system;
- 17 (iii) Community sewerage system;
- 18 (iv) Solid waste disposal system; and
- 19 (v) Solid waste acceptance facility;

20 (12) Indicate:

- 21 (i) Any source of supply from the waters of this State;
- 22 (ii) The approximate amount of water to be withdrawn from the  
23 waters of this State; [and]
- 24 (iii) The quantity and quality of waste to be discharged into the  
25 waters of this State; AND

26 (IV) BEGINNING ON OR BEFORE OCTOBER 1, 2002, AREAS OF  
27 SPECIAL CONCERN IN WHICH NITROGEN REMOVAL TECHNOLOGY IS REQUIRED FOR:

28 1. INSTALLATION OF A NEW INDIVIDUAL SEWERAGE  
29 SYSTEM FOR A NEW CONSTRUCTION PROJECT; AND



1 (17) Document compliance with and report on actions taken and plans to  
2 enforce §§ 12-605 and 12-606 of the Business Occupations and Professions Article;

3 (18) For a county with a population greater than 150,000 according to the  
4 latest Department of Planning projections, include a recycling plan by July 1, 1990  
5 that:

6 (i) Provides for a reduction through recycling of at least 20 percent  
7 of the county's solid waste stream by weight or submits adequate justification,  
8 including economic and other specific factors, as to why the 20 percent reduction  
9 cannot be met;

10 (ii) Provides for recycling of the solid waste stream to the extent  
11 practical and economically feasible, but in no event may less than a 10 percent  
12 reduction be submitted; and

13 (iii) Requires full implementation of the recycling plan by January  
14 1, 1994; and

15 (19) For a county with a population less than 150,000 according to the  
16 latest Department of Planning projections, include a recycling plan by July 1, 1990  
17 that:

18 (i) Provides for a reduction through recycling of at least 15 percent  
19 of the county's solid waste stream or submit adequate justification, including  
20 economic and other specific factors, as to why the 15 percent reduction cannot be met;

21 (ii) Provides for recycling of the solid waste stream to the extent  
22 practical and economically feasible, but in no event may less than a 5 percent  
23 reduction be submitted; and

24 (iii) Require full implementation of the recycling plan by January 1,  
25 1994.

26 (b) A plan created under subsection (a)(15) of this section may include the use  
27 of prisoners from the State correctional system or from county jails or detention  
28 centers.

29 (c) The recycling reductions of 20 percent and 15 percent provided in  
30 subsection (a)(18) and (19) of this section are not intended to be the maximum  
31 percentage that a county can achieve. A county that can practically and economically  
32 achieve a higher rate of recycling is encouraged to submit a recycling plan for a higher  
33 percentage.

34 (d) If a county with a population less than 150,000 increases to a population of  
35 above 150,000, the county shall have 2 years to revise the recycling plan to be  
36 consistent with the recycling goals under subsection (a)(18) of this section.

37 (e) (1) The governing bodies of 2 or more counties may adopt a regional  
38 recycling plan to comply with subsection (a)(18) or (19) of this section.

1 (2) A regional recycling plan which otherwise satisfies the requirements  
2 of this subtitle for each of the participating counties shall constitute the county  
3 recycling plan for each county which participates in the plan.

4 9-510.

5 (a) In addition to the powers set forth elsewhere in this subtitle, the  
6 Department may:

7 (1) Conduct surveys and research to carry out the provisions of this  
8 subtitle; and

9 (2) Specify the location for any sewage treatment facility discharge point  
10 that is included in any county plan.

11 (B) THE DEPARTMENT MAY NOT REQUIRE NITROGEN REMOVAL TECHNOLOGY  
12 ON A RENOVATION OR RECONSTRUCTION PROJECT WITH AN EXISTING ON-SITE  
13 SEWAGE DISPOSAL SYSTEM.

14 [(b)] (C) In addition to the duties set forth elsewhere in this subtitle, the  
15 Department shall adopt rules and regulations:

16 (1) To carry out the provisions of this subtitle;

17 (2) To control, limit, or prohibit the installation and use of:

18 (i) Water supply systems; and

19 (ii) Sewerage systems;

20 (3) To require that, before installation of individual water supply  
21 systems or individual sewerage systems, consideration be given to:

22 (i) Present and future population density;

23 (ii) Size of parcels;

24 (iii) Contour of the land;

25 (iv) Porosity and absorbency of the soil;

26 (v) Ground water conditions;

27 (vi) Availability of water from unpolluted aquifers;

28 (vii) Type of construction of community water supply systems;

29 (viii) Type of construction of community sewerage systems;

30 (ix) Size of the proposed development; and

1 (x) Any other pertinent factors;

2 (4) To require that, giving consideration to the factors in item (3) of this  
3 subsection, areas be served by community facilities if the Department finds them to  
4 be reasonably necessary:

5 (i) By installation of the community water supply system,  
6 community sewerage system, or solid waste disposal system; and

7 (ii) By connection of all premises to or service to all premises by the  
8 community water supply system, community sewerage system, or solid waste disposal  
9 system;

10 (5) To require that community water supply systems, community  
11 sewerage systems, and solid waste disposal systems be constructed to allow the  
12 connection of those systems to a larger system, if that larger system becomes  
13 available;

14 (6) To allow a person to install an individual water supply system or an  
15 individual sewerage system in any area where a community water supply system or a  
16 community sewerage system is not available or required to be installed in the area if:

17 (i) The Department finds that the individual system is adequate  
18 and safe for use before a community system is scheduled to be available in the area;  
19 and

20 (ii) The individual system is constructed in the most economical  
21 and convenient way to permit connection to a community system in the area, and the  
22 person guarantees the connection to a community system:

23 1. When the county governing body where the area is located  
24 sets a time; and

25 2. In accordance with this subtitle, any rules and regulations  
26 adopted under this subtitle, and any other State law or county requirement by:

27 A. Posting a bond to secure actual construction and  
28 installation of the systems with satisfactory surety for the benefit of the county  
29 governing body; or

30 B. Making any other arrangement that the Department  
31 considers necessary and adequate to carry out the provisions of this subtitle;

32 (7) If a solid waste disposal system is not available or required to be  
33 installed in any area as provided in item (4) of this subsection, to allow a person to  
34 provide a solid waste acceptance facility in the area without a systematic collection  
35 and transportation system;

36 (8) To require that, before issuance of a permit for construction of a  
37 community or multiuse sewerage system, a financial management plan sufficient to

1 ensure the dependable and safe operation of the system has been adopted within the  
2 county plan and approved by the Department; [and]

3 (9) To require that:

4 (i) Before issuance of a permit for construction of a privately owned  
5 community water supply system that will serve 4 or more residential lots or 2 or more  
6 other lots, the applicant has proposed a financial management plan sufficient to  
7 ensure the dependable and safe operation of the system, and the plan has been  
8 approved by the Department; and

9 (ii) The applicant shall comply with the plan as approved by the  
10 Department; AND

11 (10) TO REQUIRE NITROGEN REMOVAL TECHNOLOGY IN AREAS OF  
12 SPECIAL CONCERN.

13 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect  
14 October 1, 2001.