

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1991

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SENATE BILL 1156

Short Title: Closed-loop Groundwater Remediation.

(Public)

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Sponsors: Senators Blackmon; Simpson, Walker, and Tally.

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Referred to: Environment and Natural Resources.

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June 3, 1992

A BILL TO BE ENTITLED

AN ACT TO ALLOW CLOSED-LOOP GROUNDWATER REMEDIATION SYSTEMS.

The General Assembly of North Carolina enacts:

Section 1. The General Assembly finds that, in order to protect public health and the environment, groundwater contamination should be cleaned up in the most efficient and cost-effective manner possible. To that end, the General Assembly finds that it is in the public interest to allow the use of all types of accepted systems to clean up contaminated groundwater, including the use of closed-loop groundwater remediation systems. The original purpose of G.S. 143-214.2(b) was to prohibit disposal of waste in underground injection wells. The General Assembly finds that the disposal of waste in underground injection wells should continue to be prohibited. However, the General Assembly finds that G.S. 143-214.2(b) has had the unintended effect of prohibiting the use of closed-loop groundwater remediation systems in North Carolina, even though such systems are accepted and used effectively in other states. Thus, the General Assembly finds and declares that the use of closed-loop groundwater remediation systems should be allowed and, where appropriate, encouraged.

Sec. 2. G.S. 143-214.2(b) reads as rewritten:

"(b) The discharge of any wastes to the subsurface or groundwaters of the State by means of wells is prohibited. This section shall not be construed to prohibit the operation of closed-loop groundwater remediation systems in accordance with G.S. 143-215.1A."

Sec. 3. Part 1 of Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

1 **"§ 143-215.1A. Closed-loop groundwater remediation systems allowed.**

2 (a) The phrase 'closed-loop groundwater remediation system' means a system or  
3 systems and attendant processes for cleaning up contaminated groundwater by pumping  
4 groundwater, treating the groundwater to reduce the concentration of or remove  
5 contaminants, and reintroducing the treated water into the groundwater.

6 (b) The Secretary may issue a permit for the siting, construction, and operation of  
7 a closed-loop groundwater remediation system. Permits shall be issued in accordance  
8 with G.S. 143-215.1 and applicable rules of the Commission, except that a temporary  
9 permit valid for a period not to exceed 180 days may be issued without a public hearing  
10 if the Secretary finds that the issuance of a temporary permit is in the public interest and  
11 is necessary to protect the environment or public health.

12 (c) A permit for a closed-loop groundwater remediation system shall specify the  
13 location at which groundwater is to be reintroduced and shall specify design,  
14 construction, operation, and closure requirements for the closed-loop groundwater  
15 remediation system necessary to ensure that the treated groundwater will be captured by  
16 the containment and removal system that extracts the groundwater for treatment. In  
17 addition, the permit shall specify the chemical, physical, or biological treatment  
18 processes that may be used in the closed-loop groundwater remediation system and may  
19 specify minimum and maximum gradients between the point of extraction and the point  
20 of reintroduction. The Secretary may impose any additional permit conditions or  
21 limitations necessary to:

22 (1) Enhance the closed-loop groundwater remediation system efficacy or  
23 rate of operation.

24 (2) Minimize the possibility of spills or other releases from the closed-  
25 loop groundwater remediation system.

26 (3) Minimize the distance between the point at which contaminated  
27 groundwater is extracted and the point at which treated groundwater is  
28 reintroduced.

29 (4) Achieve efficient, effective groundwater remediation.

30 (5) Protect the environment or public health.

31 (d) The Commission may adopt rules to implement this section."  
32 Sec. 4. This act is effective upon ratification.