

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 1991

CHAPTER 786  
SENATE BILL 1156

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 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 these systems are the most efficient and cost-effective remediation systems, 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:

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

(a) The phrase 'closed-loop groundwater remediation system' means a system and attendant processes for cleaning up contaminated groundwater by pumping groundwater, treating the groundwater to reduce the concentration of or remove contaminants, and reintroducing the treated water beneath the surface so that the treated groundwater will be recaptured by the system.

(b) The Secretary may issue a permit for the siting, construction, and operation of a closed-loop groundwater remediation system. Permits shall be issued in accordance with G.S. 143-215.1 and applicable rules of the Commission. A permit issued under this section constitutes prior permission under G.S. 87-88.

(c) A permit for a closed-loop groundwater remediation system shall specify the location at which groundwater is to be reintroduced and shall specify design,

construction, operation, and closure requirements for the closed-loop groundwater remediation system necessary to ensure that the treated groundwater will be captured by the contaminant and removal system that extracts the groundwater for treatment. The Secretary may impose any additional permit conditions or limitations necessary to:

- (1) Achieve efficient, effective groundwater remediation.
  - (2) Minimize the possibility of spills or other releases from the closed-loop groundwater remediation system.
  - (3) Specify or limit the distance between the point at which contaminated groundwater is extracted and the point at which treated groundwater is reintroduced.
  - (4) Specify the minimum or maximum gradients between the point at which contaminated groundwater is extracted and the point at which treated groundwater is reintroduced.
  - (5) Specify or limit the chemical, physical, or biological treatment processes that may be used.
  - (6) Protect the environment or public health.
- (d) The Commission may adopt rules to implement this section."

Sec. 4. This act is effective upon ratification.

In the General Assembly read three times and ratified this the 29th day of June, 1992.

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James C. Gardner  
President of the Senate

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Daniel Blue, Jr.  
Speaker of the House of Representatives