## 15A NCAC 02C .0240 ABANDONMENT AND CHANGE-OF-STATUS OF INJECTION WELLS AND SYSTEMS

(a) Injection wells and injection well systems shall be abandoned by the well owner in accordance with one of the following procedures or other alternatives approved by the Director that ensures compliance with G.S. 87-84:

- (1) Wells other than closed-loop geothermal wells shall be temporarily or permanently abandoned as required by Rule .0113 of this Subchapter.
- (2) Closed-loop geothermal wells that are temporarily abandoned shall be maintained so that they are not a source or channel of contamination during the period of abandonment.
- (3) Closed-loop geothermal wells shall be permanently abandoned as follows:
  - (A) all casing, tubing, or piping and associated materials shall be removed prior to abandonment if that removal will not cause or contribute to contamination of groundwater;
  - (B) the boring shall be filled from bottom to top with grout through a hose or pipe that extends to the bottom of the well and is raised as the well is filled;
  - (C) for tubing with an inner diameter of one-half inch or greater, the entire vertical length of the inner tubing shall be grouted;
  - (D) for tubing with an inner diameter less than one-half inch that cannot feasibly be grouted, the tubing shall be refilled with potable water and capped or sealed at a depth not less than two feet below land surface; and
  - (E) any protective or surface casing not grouted in accordance with the requirements set forth in this Section shall be removed and the well shall be grouted in accordance with the requirements set forth in this Section.
- (4) If a subsurface cavity has been created as a result of the injection operations, the well shall be abandoned in a manner that will prevent the movement of fluids into or between aquifers and in accordance with the terms and conditions of the permit.

(b) An injection well that acts as a source or channel of contamination shall be brought into compliance with the standards and criteria of these Rules, repaired, or permanently abandoned. Repair or permanent abandonment shall be completed within 15 days of the discovery of the noncompliance.

(c) Exploratory or test wells, constructed for the purposes of obtaining information regarding an injection well site, shall be permanently abandoned in accordance with Rule .0113 of this Subchapter within two days after drilling or two days after testing is complete, whichever is later. However, if a test well is being converted to a permanent injection well, this conversion shall be completed within 30 days after drilling.

(d) An injection well shall be permanently abandoned by the drilling contractor before removing his or her equipment from the site if the well casing has not been installed or has been removed from the well bore.

(e) The well owner shall be responsible for permanent abandonment of a well except that:

- (1) the well contractor shall be responsible for well abandonment if abandonment is required because the well contractor improperly locates, constructs, repairs or completes the well;
- (2) the person who installs, repairs or removes the well pump shall be responsible for well abandonment if that abandonment is required because of improper well pump installation, repair or removal; or
- (3) the well contractor (or individual) who conducts a test boring shall be responsible for its abandonment at the time the test boring is completed.

(f) Groundwater remediation systems that include infiltration galleries shall be abandoned as follows:

- (1) 30 days prior to initiation of closure of a groundwater remediation system, the permittee shall submit the following documentation to the Division:
  - (A) the reasons for closure;
  - (B) a letter from the oversight agency authorizing closure of the system; and
  - (C) a description of the proposed closure procedure.
- (2) The infiltration gallery shall be closed such that it:
  - (A) will be rendered permanently unusable for the disposal of fluids; and
  - (B) will not serve as a source or channel of contamination.
- (3) Within 30 days following upon completion of the closure, the permittee shall submit the following documentation to the Division:
  - (A) a description of the completed closure procedure;
  - (B) the dates of all actions taken for the procedure; and

(C) a written certification a by North Carolina licensed engineer or geologist that the closure has been accomplished, and that the information submitted is complete, factual, and accurate.

History Note: Authority G.S. 87-87; 87-88; 143-211; 143-215.1A; 143-215.3(a)(1); 143-215.3(c); Eff. May 1, 2012; Readopted Eff. September 1, 2019.