## 15A NCAC 05H .1607 WELL INSTALLATION

- (a) The Department may establish by permit conditions additional oil or gas well construction standards that provide greater protection of human health, safety, and the environment based on site-specific conditions such as the geology of the area.
- (b) The permittee shall notify the Department at least 48 hours via telephone or email prior to spudding the oil or gas well. The contact information is set forth in Rule .0201 of this Subchapter. The permittee shall submit Form 11 Required Notifications to the Department, by mail, email, or fax within five calendar days of the telephone or email notice and shall include the following information:
  - (1) the permittee's name, address, telephone number, fax number, and email address;
  - (2) the county and nearest city or town where the oil or gas well is located;
  - (3) the property street address, or nearest address to the ingress and egress point leading from a public road to the well pad;
  - (4) the API number, the lease name, and the oil or gas well name and number; and
  - (5) the scheduled date and approximate time for spudding the oil or gas well.
- (c) The permittee shall notify the Department at least 48 hours prior to setting and cementing any casing string via telephone or email, in order to allow the Department to participate in pre-job safety and procedural meetings, independently test cement mix water, evaluate casing condition, and observe and document the execution of the cementing operation. The contact information is set forth in Rule .0201 of this Subchapter. The permittee shall submit Form 11 Required Notifications to the Department, by mail, email, or fax within five calendar days of the telephone or email notice and shall include the following information:
  - (1) the permittee's name, address, telephone number, fax number, and email address;
  - (2) the county and nearest city or town where the oil or gas well is located;
  - (3) the property street address, or nearest address to the ingress and egress point leading from a public road to the well pad;
  - (4) the API number, the lease name, and the oil or gas well name and number; and
  - (5) the scheduled date and approximate time for setting and cementing any casing string.
- (d) If a mousehole or rathole is used, it shall be constructed of liquid-tight steel pipe with a welded-basal plate.
- (e) A wellbore shall be drilled using air, water, water-based drilling fluid, or a combination thereof until all fresh groundwaters have been isolated.
  - (1) Drilling fluids that cause a violation of 15A NCAC 02L, which is incorporated by reference including subsequent amendments, shall not be used until all groundwaters have been isolated.
  - (2) Only freshwaters shall be used for mixing all drilling fluids.
- (f) A wellbore shall be drilled to provide a minimum of a one-inch annulus, as measured from the casing.
- (g) The wellbore shall be conditioned prior to cementing to ensure an adequate cement bond between the casing and the formation by circulating the total volume of drilling fluid in the wellbore a minimum of two times. The drilling fluid rheology shall be adjusted to optimize conditions for displacement of the drilling fluid and to ensure that the wellbore is stable.
- (h) All casing strings shall be rotated and reciprocated during the emplacement of cement to circulate the cement surrounding the casing string to fill the annulus.
- (i) Stormwater shall be prevented from infiltrating the wellbore by crowning the location around the wellbore to divert fluids as approved in the Well Site Development Plan in accordance with Rule .1502(a) of this Subchapter.

History Note: Authority G.S. 113-391(a)(5)c; Eff. March 17, 2015.