

1 15A NCAC 05H .0101 is proposed for adoption as follows:

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3 **15A NCAC 05H .0101 PURPOSE AND SCOPE**

4 The rules of this Subchapter regulate the management of oil or gas exploration and development to protect public
5 health, welfare, and the environment.

6

7 History Note: Authority G.S. 113-391(a);

8

Eff.

1 15A NCAC 05H .0102 is proposed for adoption as follows:

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3 **15A NCAC 05H .0102 TERMS OF REFERENCE AND DEFINITIONS**

4 The terms as used in this Subchapter shall have the definitions in G.S. 113-389. In addition, the following terms
5 shall have the following meaning:

- 6 (1) “7Q10 flow” when used in reference to surface water, refers to the minimum average flow for a
7 period of seven consecutive days that has an average occurrence of once in 10 years.
- 8 (2) “Abandon” means to temporarily or permanently cease production from an oil or gas well or to
9 cease further drilling operations.
- 10 (3) “Additive(s)” means any chemical substance or mixture of substances.
- 11 (4) “Affected reach” means the portion of a stream channel where the hydrology may be significantly
12 affected by the cumulative effects of the proposed water withdrawal in combination with existing
13 water withdrawals and point source discharges.
- 14 (5) “Annular flow” means the flow of formation fluids from the formation into a space or pathway in
15 an annulus within an oil or gas well.
- 16 (6) “Annulus” means the space around a pipe in a wellbore, sometimes termed the annular space.
- 17 (7) “API number” means a unique, permanent, American Petroleum Institute numeric identifier
18 assigned by the North Carolina Geological Survey to each well drilled for oil or gas production.
- 19 (8) “Applicant” means the person who submits an Oil or Gas Well Permit Application.
- 20 (9) “Barrel” means 42 U.S. gallons at 60° F at atmospheric pressure.
- 21 (10) “Blowout” means an uncontrolled flow of gas, oil, or other wellbore fluids from the oil or gas
22 well.
- 23 (11) “Blowout preventer (BOP)” means one or more valves installed at the wellhead to prevent the
24 escape of pressure from the annular space or the escape of pressure from the open or cased hole:
- 25 (a) “Annular blowout preventer” means a large valve that forms a seal in the
26 annular space between the pipe and wellbore.
- 27 (b) “Shear ram blowout preventer” means a closing element fitted with hardened
28 tool steel blades designed to cut the drill pipe when closed.
- 29 (12) “Brine” means a liquid solution with a concentration of dissolved salts greater than 35 grams of
30 dissolved constituents per kilogram of water.
- 31 (13) “Bull plug” means a pressure-containing closure for a female-threaded end or outlet connection,
32 which may have an internal counter bore or test port.
- 33 (14) “Casing” means steel pipe placed in a wellbore to prevent the wall of the wellbore from caving in
34 and to prevent movement of fluids from one formation to another.
- 35 (15) “Casing string” means the entire length of all the connected joints of casing inserted into the
36 wellbore.

- 1 (16) “Cellar” means a dug-out area that provides additional height between the drilling rig floor and the
2 wellhead to accommodate the installation of blowout preventers.
- 3 (17) “Cement basket” means a slip-on style device made of high strength, flexible steel staves,
4 mounted on a steel slip-on ring with heavy-duty canvas liners riveted to staves.
- 5 (18) “Cement bond log (CBL)” means an acoustic survey or sonic-logging method that records the
6 quality or hardness of the cement used in the annulus to bond the casing and the formation.
- 7 (19) “Centralizer” means a mechanical device used to position the casing concentrically in the
8 wellbore.
- 9 (20) “Chemical(s)” means any element, chemical compound, or mixture of elements or compounds that
10 has its own specific name or identity such as a Chemical Abstracts Service Registry Number.
- 11 (21) “Chemical Abstracts Service” is a division of the American Chemical Society.
- 12 (22) “Chemical Abstracts Service Registry Number” or “CAS Registry Number” means the unique
13 identification number assigned to a chemical by the Chemical Abstracts Service.
- 14 (23) “Chemical classification” means a grouping that relates a chemical to others with similar features.
- 15 (24) “Chemical disclosure registry” means the chemical registry website known as FracFocus.org
16 developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact
17 Commission.
- 18 (25) “Conductor casing” means a casing string used to support unconsolidated surface deposits.
- 19 (26) “Completion” means the activities that render an oil or gas well capable of producing oil or gas
20 through the wellhead equipment from a producing zone after the production casing string has been
21 set.
- 22 (27) “Containment system” means a synthetic liner, coating, storage structure, other material, or
23 structure used in conjunction with a primary container that prevents any spills onto the ground or
24 spills from leaving the drilling site.
- 25 (28) “Contaminant” means any substance occurring in groundwater, surface water, or soil in
26 concentrations which exceed the standards specified in 15A NCAC 02B, 15A NCAC 02L .0202,
27 or 15A NCAC 02L .0411.
- 28 (29) “Conventional reservoir” means an accumulation of hydrocarbons that are localized in structural
29 or stratigraphic traps.
- 30 (30) “Deepen” means an operation where an oil or gas well is drilled beyond the originally permitted
31 depth of the oil or gas well.
- 32 (31) “Deviated well” means an oil or gas well that is purposely deviated from the vertical using
33 directional drilling methods to reach the objective location other than directly below the surface
34 location.
- 35 (32) “Director” means the Director of the Division of Energy, Mineral, and Land Resources of the
36 Department of Environment and Natural Resources.
- 37 (33) “DLIS” means Digital Log Information Standard.

- 1 (34) “Drill pipe” means the pipe used to rotate the drill bit and circulate the drilling fluid.
- 2 (35) “Drill stem test” means a method of formation testing consisting of a packer or packers, valves, or
3 ports that may be opened or closed from the surface and two or more pressure recording devices.
- 4 (36) “Drilling unit” means an area established by the Commission, which can be efficiently and
5 economically drained by one or more oil or gas wells.
- 6 (37) “Dry hole” means any oil or gas well that does not produce oil or gas in commercial quantities.
- 7 (38) “Emergency responder” means an emergency medical technician, fire fighter, law enforcement
8 officer, public works employee, emergency manager, fire marshal, HAZMAT coordinator,
9 technical specialist, incident commander, fire chief, or a member of State Emergency Management
10 who provides, plans, or directs emergency health or safety services.
- 11 (39) “Exploration and production (E & P) waste” means wastes associated with the exploration,
12 development, and production of oil or gas, which are not regulated by the Subtitle C of the Federal
13 Resource Conservation and Recovery Act, and may include the following: produced brine, sand,
14 and water; drill cuttings; water-based drilling fluids; flowback fluids; stormwater in secondary
15 containment and pits at the well site; and any other deposits or residuals from exploration and
16 production activities.
- 17 (40) “Float collar” means a component that is installed near the bottom of the casing string on which
18 wiper plugs land during the primary cementing operation.
- 19 (41) “Float shoe” means a rounded profile component attached to the down-hole end of the production
20 casing string to prevent reverse flow of cement slurry into the casing string.
- 21 (42) “Flowback fluid” means liquids, and mixtures thereof, consisting of drilling fluid, silt, sand and
22 other proppants, debris, water, brine, oil, paraffin, produced water, or other materials that are
23 removed from the wellbore during the completion or recompletion of an oil or gas well, other
24 additives that flow from an oil or gas well following well stimulation, or during production of an
25 oil or gas well.
- 26 (43) “Floodplain” as defined in 44 CFR 59.1.
- 27 (44) “Floodway” as defined in 44 CFR 59.1.
- 28 (45) “Flow rate” means the volume per unit time of a fluid moving past a fixed point.
- 29 (46) “Formation Integrity Test (FIT)” means a pressure test applied to the formation directly below the
30 base of the casing string to determine the maximum pressure that may be applied without risk of
31 formation breakdown.
- 32 (47) “Fresh groundwaters” means those groundwaters having a chloride concentration equal to or less
33 than 250 milligrams per liter.
- 34 (48) “FRO” means Financial Responsibility Ownership.
- 35 (49) “Green completion” means an oil or gas well completion following fracturing or refracturing
36 where gas flowback that is otherwise vented is captured, cleaned, and routed to the flow line or
37 collection system, re-injected into the oil or gas well or another oil or gas well, used as an on-site

1 fuel source, or used for other useful purpose that a purchased fuel or raw material would serve,
2 with no direct release to the atmosphere.

3 (50) "Groundwaters" means those waters occurring in the subsurface under saturated conditions.

4 (51) "Hazardous chemicals" as defined in 29 CFR 1900.1200(c).

5 (52) "Health professional" means a licensed physician, physician's assistant, industrial hygienist,
6 toxicologist, epidemiologist, nurse, nurse anesthetist, or nurse practitioner; or a local health
7 director.

8 (53) "High occupancy building" means any operating public school, nursing facility, hospital, life care
9 institution, or correctional facility, provided that the facility or institution served 50 or more
10 persons, or an operating child care center as defined in G.S. 110-86.

11 (54) "Hydraulic fracturing" means oil or gas well stimulation by the application of hydraulic pressure
12 using fluids, proppants, and additives under pressure to create artificial fractures or to open
13 existing fracture networks in the formation for the purpose of improving the capacity to produce
14 hydrocarbons.

15 (55) "Hydraulic fracturing stage" means the portion of a wellbore that is isolated by setting packers or
16 plugs during well stimulation operations.

17 (56) "Intermediate casing" means a casing string that is set in place after the surface casing and before
18 the production casing.

19 (57) "Intermittent stream" as determined by North Carolina Division of Water Quality Methodology
20 for Identification of Intermittent and Perennial Streams and Their Origins, Version 4.11, Effective
21 Date: September 1, 2010.

22 (58) "Joint" means a length of drill pipe or casing.

23 (59) "Kelly bushing" means a device that is fitted to the rotary table through which the kelly passes and
24 the means by which the torque of the rotary table is transmitted to the kelly and the drill string.

25 (60) "Kickoff point" means the depth in a vertical wellbore in which a deviation is initiated.

26 (61) "LAS" means Log ASCII Standard.

27 (62) "Licensed Geologist" means a person who has been duly licensed as a geologist in accordance
28 with the requirements of G.S. 89E.

29 (63) "LiDAR" means Light Detection And Ranging.

30 (64) "LIS" means Log Information Standard.

31 (65) "Lost hole" means an oil or gas well that could not be drilled to the originally permitted total
32 depth.

33 (66) "Master valve" means a large valve located on the wellhead and used to control the flow of oil or
34 gas from a well.

35 (67) "Mechanical bridge plug" means a downhole tool, composed primarily of slips, a plug mandrel,
36 and a rubber sealing element, that is run and set in casing to isolate a lower zone while an upper
37 section is being tested or cemented.

- 1 (68) “Mousehole” means a shallow boring under the drilling rig floor, lined with casing, in which joints
2 of drill pipe are temporarily suspended for future connection to the drill string.
- 3 (69) “NC UCC” means the North Carolina Uniform Commercial Code.
- 4 (70) “Occupied dwelling” means a private residence, existing inhabited structure, or a public building
5 that may be used as a place of assembly, education, entertainment, lodging, trade, manufacture,
6 repair, storage, or occupancy by the public, including any outdoor recreational facility, State Park
7 as defined in G.S. 113-44.9, or historic property acquired by the State pursuant to G.S. 121-9 or
8 listed in the North Carolina Register of Historic Places pursuant to G.S. 121-4.1. This definition
9 does not apply to a building or other structure that is incidental to agricultural use of the land on
10 which the building or other structure is located unless the building or other structure is used as an
11 occupied private dwelling or for retail trade.
- 12 (71) “Packer” means a piece of downhole equipment that consists of a sealing device, a holding or
13 setting device, and may contain an inner passage for fluids.
- 14 (72) “Perennial stream” means a channel that contains water year round during a year of normal
15 rainfall with the aquatic bed located below the water table for most of the year as indicated on the
16 most recent versions of U.S.G.S 1:24,000 (7.5 minute) scale topographic maps.
- 17 (73) “Permittee” means a person to whom the Department has issued an Oil or Gas Well Permit.
- 18 (74) “Pit” means any natural or man-made depression in the ground used for storage of liquids.
- 19 (75) “Produced water” means the water that exists in subsurface formations and is brought to the
20 surface during oil or gas production.
- 21 (76) “Plug and abandon” means to place cement plugs into a wellbore and abandon it.
- 22 (77) “Plug back” means to place cement in or near the bottom of an oil or gas well to sidetrack or to
23 produce from a formation higher in the oil or gas well.
- 24 (78) “Production casing” means a casing string that is set across the reservoir interval, within which the
25 completion components are installed.
- 26 (79) “Production facility” means all storage, separation, treating, dehydration, artificial lift, power
27 supply, compression, pumping, metering, monitoring, flowline, and other equipment directly
28 associated with production at oil or gas wells.
- 29 (80) “Production zone” means the rock stratum that will yield hydrocarbons.
- 30 (81) “Professional engineer” means a person who is presently registered and licensed as a professional
31 engineer by the North Carolina State Board of Registration For Professional Engineers and Land
32 Surveyors pursuant to G.S. 89C.
- 33 (82) “PSI” means pounds per square inch.
- 34 (83) “Rathole” means a hole in the drilling rig floor that is lined with casing into which the kelly is
35 temporarily placed.
- 36 (84) “Reclamation” means the process of returning or restoring disturbed land to its condition prior to
37 the commencement of oil or gas operations.

- 1 (85) “Reenter” means accessing a previously completed wellbore.
- 2 (86) “Residuals” means any solid, semisolid, or liquid waste, other than effluent or residues from
3 agricultural products and processing, generated from a wastewater treatment facility, water supply
4 treatment facility, or air pollution control facility permitted under the authority of the
5 Environmental Management Commission.
- 6 (87) “Rotating diverter system” means a system that provides an annular seal around the drill pipe
7 during drilling operations.
- 8 (88) “Safety data sheet” means written or printed materials containing all the information specified in
9 29 CFR 1900.1200(g), which is incorporated by reference including subsequent amendments for
10 regulated hazardous substances.
- 11 (89) “Service company” means a person that conducts work onsite related to the drilling, completion,
12 or production of an oil or gas well.
- 13 (90) “Setback” means the horizontal separation distance, in feet, between the surface location of well
14 site structures and adjacent structures and land features.
- 15 (91) “Shut-in” means to close the valves on a wellhead so that production ceases.
- 16 (92) “Sidetrack” means to use a downhole motor to drill around the original planned path of the oil or
17 gas well.
- 18 (93) “SPCA” means the Sediment Pollution Control Act of 1973.
- 19 (94) “Spud” means to start the oil or gas well drilling process by removing rock, dirt and other
20 sedimentary material with the drill bit.
- 21 (95) “Sub-base” means the layer of material laid on the subgrade.
- 22 (96) “Subgrade” means the native material at the bottom of a subgrade.
- 23 (97) “Surface casing” means a large diameter, casing string set in shallow yet competent formations
24 used to protect groundwaters.
- 25 (98) “Tank” means a stationary vessel constructed of non-earthen materials used to contain fluids.
- 26 (99) “Tank battery” means a group of tanks that are connected to receive production fluids from an oil
27 or gas well or a producing lease.
- 28 (100) “Tracer technology” means technology used to trace well stimulation fluid back to the oil or gas
29 well where fluid was injected.
- 30 (101) “Trade name” means the common name given by industry or a manufacturer to a chemical or
31 product.
- 32 (102) “Trade secret” as defined in G.S. 66-152(3).
- 33 (103) “Unconventional reservoir” means a resource whose porosity, permeability, fluid trapping
34 mechanism, or other characteristics differ from conventional reservoirs.
- 35 (104) “Vendor” means a company that sells or provides a substance or product for use in oil or gas
36 exploration or production.
- 37 (105) “Water source” means any of the following:

- 1 (a) waters of the State;
2 (b) a source of water supply used by a water purveyor;
3 (c) mine pools and discharges; and
4 (d) any other waters that are used for drilling, completing, and stimulating an oil or
5 gas well.

6 (106) “Water supply well” as defined in G.S. 87-85(13).

7 (107) “Water or waters of the State” as defined in G.S. 143-212.

8 (108) “Well” as defined in G.S. 87-85(14).

9 (109) “Wellbore” means a borehole drilled by a bit.

10 (110) “Wellhead” means the upper terminal of the oil or gas well, including adapters, ports, valves,
11 seals, and other attachments.

12 (111) “Well pad” means the area that is cleared or prepared for the drilling of one or more oil or gas
13 wells.

14 (112) “Well site” means the areas that are directly disturbed during the drilling and subsequent operation
15 of any oil or gas well and its associated well pad.

16 (113) “Well spacing” means the minimum distance from any wellbore in the drilling unit to the
17 boundary of the drilling unit.

18 (114) “Well stimulation” means any of several operations or processes to initiate or increase the
19 production of oil or gas from a well, including acidizing, hydraulic fracturing, or other methods.

20 (115) “Wetland” as defined in 40 CFR 230.3.

21 (116) “Wiper plug” means a rubber plug used to separate the cement slurry from other fluids.

22 (117) “Wireline log” means the recording of information about subsurface geologic formations using
23 tools lowered into the wellbore on a wire line.

24 (118) “Withdrawal” means the removal of water from a water body, well, or other fluid storage
25 structure.

26 (119) “Workover” means the performance of one or more of a variety of operations on a producing oil
27 or gas well to attempt to increase production.

28
29 History Note: Authority G.S. 113-391;

30 Eff.

1 15A NCAC 05H .0201 is proposed for adoption as follows:

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3 **15A NCAC 05H .0201 FORMS**

4 (a) An applicant or permittee shall use the following forms, as provided by the Department:

- 5 (1) Form 1 – Financial Responsibility Ownership;
- 6 (2) Form 2 – Oil or Gas Well Permit Application;
- 7 (3) Form 3 – Well Construction Design;
- 8 (4) Form 4 – Water Management Plan;
- 9 (5) Form 5 – Waste Management Plan;
- 10 (6) Form 6 – Well Site Reclamation Plan;
- 11 (7) Form 7 – Irrevocable Letter of Standby Credit;
- 12 (8) Form 8 – Surety Bond;
- 13 (9) Form 9 – Assignment of Savings;
- 14 (10) Form 10 – Cash Deposit;
- 15 (11) Form 11 – Required Notifications to the Department;
- 16 (12) Form 12 – Well Drilling Report;
- 17 (13) Form 14 – Plugging and Abandonment;
- 18 (14) Form 15 – Oil or Gas Well Status;
- 19 (15) Form 16 – Mechanical Integrity Test Results;
- 20 (16) Form 17 – Notification of Return of Oil or Gas Well to Active Status;
- 21 (17) Form 18 – Well Stimulation Report;
- 22 (18) Form 19 – Chemical Disclosure Report;
- 23 (19) Form 20 – Trade Secret Claim;
- 24 (20) Form 21 – Water Supply Investigation Request;
- 25 (21) Form 22 – Water Supply Testing Report;
- 26 (22) Form 23 – Annual Water Use Report;
- 27 (23) Form 24 – Annual E & P Waste Management Report;
- 28 (24) Form 25 – Pit Closure Report;
- 29 (25) Form 26 – Spill and Release Report;
- 30 (26) Form 27 – Site Investigation and Remediation Work Plan;
- 31 (27) Form 28 – Monthly Production Report; and
- 32 (28) Form 29 – Well Site Inspection Report.

33 (b) The use of any forms other than those provided by the Department is prohibited.

34
35 History Note: Authority G.S. 113-391;

36 Eff.

1 15A NCAC 05H .0202 is proposed for adoption as follows:

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3 **15A NCAC 05H .0202 RECORD KEEPING & REPORTING**

4 (a) The Department shall collect data, retain records, and produce reports pursuant to G.S. 113-391(b).

5 (b) If information collected during predrilling exploration activities or geophysical surveys related to oil or gas
6 exploration and development is of a confidential nature, then upon request of the permittee, the State Geologist shall
7 hold such information in confidence until the information is no longer confidential in accordance with Rule .0707 of
8 this Subchapter.

9 (c) The permittee shall retain all data, records, reports, logs, and samples associated with oil or gas well drilling,
10 completion, production, and plugging and abandonment for a period of five years following the release of an Oil or
11 Gas Permit in accordance with Rule .1314 of this Subchapter.

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13 History Note: Authority G.S. 113-391(b); 113-391(b1);

14 Eff.

1 15A NCAC 05H .0203 is proposed for adoption as follows:

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3 **15A NCAC 05H .0203 INSPECTIONS**

4 (a) Each permittee shall, upon notice, make available to the Department for inspection the well site, any other area
5 encompassed by the permit, and any records maintained pursuant to the provisions of this Subchapter.

6 (b) Authorized representatives of the Department may copy any record required to be kept pursuant to provisions of
7 this Subchapter.

8 (c) Any notice of violation resulting from an inspection shall be issued pursuant to Rule .0901 of this Subchapter.

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10 History Note: Authority G.S. 113-391(b);

11 Eff.

1 15A NCAC 05H .0301 is proposed for adoption as follows:

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3 **15A NCAC 05H .0301 VARIANCE PROCEDURES**

4 (a) The Commission may grant a variance, grant a variance with conditions, or deny a variance in writing to any
5 Commission rule for which a variance may be requested pursuant to this Subchapter. The applicant or the permittee
6 requesting the variance shall make a showing that it has made a good faith effort to comply, or is unable to comply,
7 with the specific requirements contained in the rule or rules from which it seeks a variance and that the requested
8 variance does not violate the basic intent of the Oil and Gas Conservation Act in G.S. 113, Article 27.

9 (b) The applicant or permittee shall request the variance by submitting a written request to the Commission. A
10 request for a variance shall include the following information:

11 (1) the name and address of the requesting party;

12 (2) the statute or rule authorizing the request for a variance;

13 (3) all information required by the statute or rule authorizing the request for a variance;

14 (4) a statement of whether an oral argument before the Commission is desired, and if so, the reason(s)
15 for requesting such an oral argument;

16 (5) a concise statement of the matter to be presented, including the nature and duration of the variance
17 requested;

18 (6) arguments or data that support the requesting party's position;

19 (7) a statement of the consequences of failure to grant relief in favor of the requesting party; and

20 (8) any other information believed by the applicant or permittee to be pertinent to the request.

21 (c) The variance request may be submitted with the Form 2 – Oil or Gas Well Permit Application, which is
22 governed by Rule .1304 of this Subchapter. If the variance request is submitted separate from the application, it
23 shall be submitted no less than 30 days before the next regularly scheduled Commission meeting.

24 (d) Any hearing on the variance request shall be denied or conducted in accordance with Section .0700 of this
25 Subchapter.

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27 *History Note: Authority G.S. 113-391(a);*

28 *Eff.*

1 15A NCAC 05H .0401 is proposed for adoption as follows:

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3 **15A NCAC 05H .0401 PROCEDURE FOR SUBMISSION OF PETITION**

4 (a) All requests shall be filed in writing and electronically as follows:

- 5 (1) with the Director of the Division by filing one paper copy for each Commissioner plus five
6 additional copies with the Recording Clerk of the Commission at the following address: 1612 Mail
7 Service Center, Raleigh, NC 27699-1612; and
8 (2) the electronic submission shall be in .pdf format and sent to the Division at Oil&Gas@ncdenr.gov.

9 (b) All requests shall include the following:

- 10 (1) the name and address of petitioner(s);
11 (2) the statute, rule, or order upon which a ruling is desired;
12 (3) a concise statement as to whether the request is for a ruling on the validity of a rule or on the
13 applicability of a statute, rule, or order to a given factual situation;
14 (4) arguments or data demonstrating that the petitioner is aggrieved by the statute, rule, or order or its
15 potential application to the petitioner;
16 (5) a statement of the consequences of failure to issue a declaratory ruling in favor of the petitioner;
17 (6) a draft of the desired outcome; and
18 (7) a statement of whether an oral argument is desired, and if so, the reason(s) for requesting such an
19 oral argument.

20 (c) A petitioner may request a declaratory ruling on the applicability of a statute, rule, or order to the petitioner, or
21 on the validity of a Commission rule. The petitioner may request both types of declaratory ruling in a single request.
22 A request on the applicability of a statute, rule, or order shall include a detailed statement of the facts and
23 documentation supporting such facts, in addition to the requirements of Paragraph (b) of this Rule. A request to
24 determine the validity of a Commission rule shall state the petitioner's reason(s) for the request and a written
25 argument, in addition to the requirements of Paragraph (b) of this Rule.

26 (d) Any other person may petition to become a party by filing a motion to intervene in the manner provided in G.S.
27 1A-1, Rule 24. The Chair of the Commission shall determine whether to grant the motion to intervene in
28 accordance with Rule 24 of the North Carolina Rules of Civil Procedure.

29
30 History Note: Authority G.S. 113-391(a)(14); 150B-4;

31 Eff.

1 15A NCAC 05H .0402 is proposed for adoption as follows:
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3 **15A NCAC 05H .0402 DISPOSITION OF PETITION**

4 (a) The Chair of the Commission shall make a determination on the completeness of the request for declaratory
5 ruling based on Rule .0401 of this Section.

6 (b) The Chair of the Commission shall make a recommendation to the Commission on whether to issue or decline
7 to issue a declaratory ruling.

8 (c) Before deciding the merits of the request, the Commission may:

9 (1) request additional written submissions from the petitioner(s);

10 (2) request a written response from Division staff or any other person; and

11 (3) hear oral arguments from the petitioner(s) and Division staff or their legal counsel.

12 (d) The Commission shall decline to issue a declaratory ruling if it finds any of the following:

13 (1) that there has been a similar determination in a previous contested case or declaratory ruling;

14 (2) that the matter is the subject of a pending contested case hearing or litigation in any North
15 Carolina or federal court;

16 (3) that no genuine controversy exists as to the application of a statute, order, or rule to the specific
17 factual situation presented; or

18 (4) that the factual situation presented as the subject of the declaratory ruling was specifically
19 considered upon the adoption of the rule being questioned, as evidenced by the rulemaking record.

20 (e) The Commission shall keep a record of each request for declaratory ruling, which shall include at a minimum
21 the following items:

22 (1) the request for a ruling;

23 (2) any written submission by a party;

24 (3) the facts on which the ruling was based;

25 (4) any transcripts of oral proceedings, if available, and recordings of oral arguments;

26 (5) any other information such as documents, photographs, recordings, maps, plats, articles, and
27 studies considered by the Commission in making its decision; and

28 (6) the declaratory ruling, or the decision to decline to issue a declaratory ruling, together with the
29 reasons therefore.

30 (f) The Commission shall notify the petitioner in writing of the Commission's decision on the request for
31 declaratory ruling, including the basis for the Commission's decision.

32 (g) For purposes of this Section, a declaratory ruling shall be deemed to be in effect until:

33 (1) the statute or rule interpreted by the declaratory ruling is repealed or the relevant provisions of the
34 statute or rule are amended or altered;

35 (2) any court of the Appellate Division of the General Court of Justice construes the statute or rule
36 that is the subject of the declaratory ruling to be plainly irreconcilable with the declaratory ruling;

37 or

1 (3) any court sets aside the declaratory ruling in litigation between the Commission or the Department
2 and the party requesting the ruling.

3 (h) Any Division of the Department may be a party to any request for declaratory ruling upon written request. Such
4 request shall be made to the Chair of the Commission within five days of receipt of notice of the request for a
5 declaratory ruling.

6 (i) Upon written request, the requesting party and the Division each may be allowed to present oral arguments to the
7 Commission. No party may offer testimony or conduct cross-examination before the Commission.

8 (j) The petitioner may agree to allow the Commission to issue a written ruling to grant or deny consideration of the
9 request beyond 30 days of receipt of the request and may agree to allow the Commission to issue a written ruling on
10 the merits of the request beyond the 45 days allowed by G.S. 150B-4.

11 (k) A declaratory ruling is subject to judicial review as provided in G.S. 150B-4(a1).

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13 History Note: Authority G.S. 113-391(a)(14) and (a4); 150B-4;

14 Eff.

1 15A NCAC 05H .0501 is proposed for adoption as follows:

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3 **15A NCAC 05H .0501 FORM AND CONTENTS OF PETITION**

4 (a) Any person wishing to request the adoption, amendment, or repeal of a rule of the Commission shall petition the
5 Director by submitting the information required in Paragraph (b) of this Rule. The petitioner shall submit one paper
6 copy of the petition for each Commissioner plus five additional copies and a copy in .pdf form to the Recording
7 Clerk of the Commission:

8 Recording Clerk

9 Division of Energy, Mineral, and Land Resources

10 1612 Mail Service Center

11 Raleigh, North Carolina 27699-1612

12 Oil&Gas@ncdenr.gov

13 (b) The petition shall contain the following information:

14 (1) the text of the proposed rule(s);

15 (2) a statement of the reasons for adoption of the proposed rule(s);

16 (3) a statement of the effect on existing rules or orders;

17 (4) any documents and data supporting the proposed rule(s);

18 (5) the name(s) and address(es) of the petitioner(s); and

19 (6) a request to present the petition to the committee in accordance with Rule .0502 of this Section, if
20 desired.

21 (c) The petitioner may include the following information within the request:

22 (1) the statutory authority for the agency to promulgate the rule(s);

23 (2) a statement of the effect of the proposed rule(s) on existing practices in the area involved,
24 including cost factors for persons affected by the proposed rule(s);

25 (3) a statement explaining the computation of the cost factors; and

26 (4) a description, including the names and addresses, if known, of those most likely to be affected by
27 the proposed rule(s).

28 (d) Petitions failing to contain the required information shall be returned by the Commission.

29
30 History Note: Authority G.S. 143B-282; 150B-20;

31 Eff.

1 15A NCAC 05H .0502 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0502 REVIEW BY A COMMITTEE OF THE COMMISSION**

4 (a) The Chair of the Commission shall refer complete petitions to the appropriate subject area committee of the
5 Commission for review and recommended action. Copies of petitions for rulemaking shall be distributed to all
6 members of the committee of the Commission.

7 (b) Within 10 days of the assignment of the complete petition, the Chair of the committee assigned to review the
8 submitted petition shall announce the date of a meeting to consider the petition.

9 (c) At least 15 days before the committee meeting, notice of the committee meeting shall be sent to the petitioner,
10 members of the Commission, and persons who have requested notice of petitions for rulemaking.

11 (d) The petitioner shall be afforded the opportunity to present the petition to the committee. The Director, through
12 staff, may make a presentation to the committee.

13 (e) The Chair of the committee shall allow one interested person to present the viewpoint of those who oppose
14 initiating rulemaking. The Chair of the committee shall determine whether additional interested persons are
15 permitted to make oral presentations before the committee. Interested persons shall request the opportunity to make
16 a presentation to the committee through the Director. The request shall:

17 (1) state the interest of the person in the petition for rulemaking;

18 (2) state the person's position on the petition; and

19 (3) be accompanied by supporting materials.

20 (f) During the committee's review, members of the Commission, other than committee members, who are present
21 may participate as a member of the committee in discussions of the petition but shall not vote on the recommended
22 action on the petition.

23

24 History Note: Authority G.S. 143B-282; 150B-20;

25 Eff.

1 15A NCAC 05H .0503 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0503 PRESENTATION TO THE COMMISSION**

4 (a) Petitions for rulemaking, after review by the appropriate committee under Rule .0502 of this Section, shall be
5 presented to the Commission for its consideration and determination at a regularly scheduled meeting of the
6 Commission within 120 days following the date of submission. The Petition for Rulemaking and the committee's
7 recommended action shall be presented through the Chair of the committee or other designated member of the
8 committee during the business session of the Commission. Unless the Chair of the Commission rules otherwise,
9 discussion on the petition shall be limited to the members of the Commission, counsel to the Commission, and the
10 Director.

11 (b) Within 120 days following the date of submission of the petition to the appropriate committee, the Commission
12 shall:

13 (1) initiate rulemaking proceedings in accordance with G.S. 150B-20 and notify the person(s) who
14 submitted the petition of the decision in writing; or

15 (2) deny the petition in writing, stating the reason(s) for the denial, and send the written denial by
16 certified mail with return receipt to the person(s) who submitted the petition.

17

18 *History Note: Authority G.S. 143B-282; 150B-20;*

19 *Eff.*

1 15A NCAC 05H .0504 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0504 RECOURSE FOR DENIAL OF PETITION**

4 If the Commission denies the Petition for Rulemaking, the petitioner(s) may seek judicial review of the denial under
5 G.S. 150B, Article 4.

6

7 History Note: Authority G.S. 143B-282; 150B-20;

8 Eff.

1 15A NCAC 05H .0601 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0601 PURPOSE OF THIS SECTION**

4 These rules authorize the designation of certain employees of the Department as hearing officers, set out the types of
5 hearings which the designated employees are authorized to conduct, delineate, and reference the rules of procedure
6 for conducting public rulemaking hearings.

7

8 *History Note:* Authority G.S. 113-391(b);

9 Eff.

1 15A NCAC 05H .0602 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0602 PROCEDURES FOR PUBLIC COMMENT FOR RULEMAKING HEARINGS**

4 (a) Any person desiring to comment on the proposed rulemaking action may do so either in writing during the
5 comment period or by oral presentation at the hearing held to take public comments. Any person may file a written
6 statement or argument concerning the proposed rulemaking action prior to the close of the record on the date
7 indicated in the notice published in the North Carolina Register.

8 (b) The Commission shall consider all written and oral submissions and submit recommendations concerning the
9 proposed rulemaking action to the Commission following the close of the record as provided in Paragraph (a) of this
10 Rule.

11 (c) Requests for a statement of the Commission's reasons for adoption of the proposed rule or against adoption of
12 the proposed rule shall be responded to in accordance with G.S. 150B-21.2(h).

13

14 History Note: Authority G.S. 150B-21.2(h); 113-391(b);

15 Eff.

1 15A NCAC 05H .0603 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0603 REQUIREMENTS OF RULEMAKING HEARING OFFICER OR PANEL**

4 The Chair of the Commission may designate one or more Commission members to serve as hearing officers for
5 rulemaking hearings, with the exception of hearings related to receiving public comments on regulations necessary
6 to administer the provisions of the Mining Act of 1971 for which the Chair of the Mining Committee shall appoint
7 the hearing officer(s).

8

9 History Note: Authority G.S. 113-391(b);

10 Eff.

1 15A NCAC 05H .0604 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0604 DELEGATION FOR RULEMAKING HEARINGS**

4 The Commission may delegate to the Director the authority to take administrative actions related to rulemaking
5 hearings, including designating hearing officers in accordance with this Section. If the Director is authorized to
6 designate hearing officers, establish the hearings, issue notices and perform other administrative functions related to
7 rulemaking hearings in accordance with this Section, the Director shall advise the Commission at its regularly
8 scheduled meetings of any rulemaking public hearings held or scheduled since the Commission's last regularly
9 scheduled meeting.

10

11 History Note: Authority G.S. 113-391(b);

12 Eff.

1 15A NCAC 05H .0605 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0605 AUTHORIZED HEARING OFFICERS**

4 Any employee of the Department of the grade of regional engineer or above may be designated as a hearing officer
5 for rulemaking hearings held pursuant to this Section.

6

7 History Note: Authority G.S. 113-391(b); 150B-32(f);

8

Eff.

1 15A NCAC 05H .0701 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0701 OPPORTUNITY FOR HEARING**

4 (a) The Commission shall conduct hearings when establishing drilling units and considering an application for a
5 variance. Such hearings shall be conducted pursuant to the rules of this Subchapter.

6 (b) Upon written request, the requesting party and the Division may each be allowed to present oral arguments to
7 the Commission. No party shall offer testimony or conduct cross-examination before the Commission.

8

9 History Note: Authority G.S. 113-391(a); 113-391(b); 113-392; 113-393;

10 Eff.

1 15A NCAC 05H .0702 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0702 PARTIES**

4 (a) Any person authorized by statute or rule to request a hearing before the Commission shall be a party to any
5 hearing granted. The Division also shall be a party to any hearing granted. The Chair of the Commission shall rule
6 on motions by any other persons seeking leave to intervene in the pending proceeding or seeking leave to file *amicus*
7 *curiae* briefs. Persons seeking to intervene shall establish through their motion that they qualify for intervention
8 under G.S. 1A-1, Rule 24.

9 (b) Any Division of the Department shall be a party to the hearing upon written request. Such request shall be made
10 to the Chair of the Commission within five days of receipt of notice of the request for hearing.

11

12 *History Note:* Authority G.S. 113-393(a); 150B-23(a);

13 *Eff.*

1 15A NCAC 05H .0703 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0703 PROCEDURE FOR SUBMISSION**

4 (a) An application to establish a drilling unit shall be submitted in accordance with Rule .1202 of this Subchapter.

5 All other requests for a hearing shall be submitted in accordance with this Rule.

6 (b) All requests for a hearing shall be filed no less than 30 calendar days before the next regularly scheduled
7 Commission meeting.

8 (c) All requests shall be filed in writing and electronically as follows:

9 (1) with the Director of the Division by filing one paper copy for each Commissioner plus five
10 additional copies with the Recording Clerk of the Commission at the following address: 1612 Mail
11 Service Center, Raleigh, NC 27699-1612; and

12 (2) the electronic submission shall be in .pdf format sent to the Division at Oil&Gas@ncdenr.gov by
13 5:00 p.m. on the date specified in Paragraph (b) of this Rule.

14 (d) All requests shall include the following:

15 (1) the name and address of the requesting party;

16 (2) the rule or statute authorizing the request for a hearing;

17 (3) a statement of whether an oral argument is desired, and, if so the reason(s) for requesting an oral
18 argument;

19 (4) if requesting a variance, the rule or statute under which a variance is desired;

20 (5) a concise statement of the matter to be presented;

21 (6) arguments or data that support the requesting party's position; and

22 (7) a statement of the consequences of failure to grant relief in favor of the requesting party.

23

24 History Note: Authority G.S. 113-391(a)(14) and (a4);

25 Eff.

1 15A NCAC 05H .0704 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0704 COMPLETENESS AND REQUEST FOR ADDITIONAL INFORMATION**

4 (a) The Chair of the Commission shall make a determination on the completeness of the request for hearing based
5 on the requirements of this Section. Incomplete requests shall be returned to the requesting party.

6 (b) Before deciding the merits of the request, if necessary the Commission may:

7 (1) request additional written submissions from the requesting party;

8 (2) request a written response from the Division staff or any other person; and

9 (3) hear oral arguments from the requesting party and Division staff or their legal counsel.

10

11 *History Note: Authority G.S. 113-391(b);*

12 *Eff.*

1 15A NCAC 05H .0705 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0705 ORDER AND RECORD OF PROCEEDING**

4 The Commission shall keep a record of each hearing, which shall include the following items:

5 (1) the request for a hearing;

6 (2) any written submission(s) by a party;

7 (3) the facts on which the Commission's decision was based;

8 (4) any transcripts of oral proceedings, if available, and recordings of oral arguments;

9 (5) any other information such as documents, photographs, recordings, maps, plats, articles, and

10 studies considered by the Commission in making the decision; and

11 (6) the Commission's written decision, which shall include the reasons therefore.

12

13 *History Note: Authority G.S. 113-391(b);*

14 *Eff.*

1 15A NCAC 05H .0706 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0706 ADMINISTRATIVE AND JUDICIAL REVIEW OF COMMISSION DECISION**

4 The Commission shall notify the requesting party in writing of the Commission's decision, including information
5 about the requesting party's right to a contested case under G.S. Chapter 150B.

6

7 History Note: Authority G.S. 150B;

8

Eff.

1 15A NCAC 05H .0707 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0707 FORM AND CONTENTS OF REQUEST TO MAINTAIN CONFIDENTIAL**
4 **INFORMATION**

5 (a) Any person wishing to protect information submitted to the Commission or the Department as confidential
6 information shall make a showing to the Commission in accordance with the requirements of G.S. 113-391.1 and
7 this Section.

8 (b) The requesting party shall submit one paper copy for each Commissioner plus five additional copies with the
9 Recording Clerk of the Commission at the following address: 1612 Mail Service Center, Raleigh, NC 27699-1612
10 and a copy in .pdf form submitted to Oil&Gas@ncdenr.gov.

11 (c) Requests shall be submitted no less than 30 calendar days prior to the next regularly scheduled Commission
12 meeting.

13 (d) The request shall contain the following information:

14 (1) the name and address of the requesting party;

15 (2) a description of the information to be afforded confidential treatment;

16 (3) a statement of whether an oral presentation is desired, and, if so, the reason(s) for requesting such
17 an oral presentation;

18 (4) an affidavit with each of the following elements:

19 (A) a statement of whether the confidential information is in the public domain and
20 information illustrating the extent to which the confidential information is known outside
21 the business;

22 (B) evidence that the information has been treated in the same manner as other confidential
23 information in the company, said manner being detailed in the affidavit;

24 (C) agreement to notify the Commission if said information loses confidential status;

25 (D) if applicable to the category of information, certification that the chemical for which
26 confidential protection is sought is not regulated under the Federal Safe Drinking Water
27 Act's National Primary Drinking Water Standards or National Secondary Drinking Water
28 Standards, including subsequent amendments, or if regulated is not present in
29 concentrations greater than the EPA-listed maximum contaminant level for that chemical
30 in any fluid inserted into the oil or gas well;

31 (E) if applicable to the category of information, certification and evidence that the chemical
32 for which trade secret protection is sought meets the definition of a trade secret under the
33 N.C. Trade Secrets Protection Act in G.S. 66-152(3), including that the chemical is not
34 "generally known or readily ascertainable through independent development or reverse
35 engineering by persons who can obtain economic value from its disclosure or use;"

36 (F) which states have issued confidential information status to this specific information;

- 1 (G) which states have refused to issue confidential information status to this specific
2 information and why was confidential information status denied;
3 (H) if applicable to the category of information, a list of all chemicals for which the affiant is
4 seeking confidential protection and whether any such chemicals are prohibited in North
5 Carolina; and
6 (I) if applicable to the category of information, certification that the information is protected
7 by Federal statute, including statutory authority.
8 (5) if required by G.S. 113-391.1, a statement that the State Geologist has reviewed the confidential
9 information and transmitted the certification to the requestor; and
10 (6) the business contact information, including the company name, name of authorized representative,
11 mailing address, and phone number for the business organization claiming entitlement to trade
12 secret protection on Form 20 – Trade Secret Claim.
13
14 History Note: Authority G.S. 113-391(a)(5)h; 150B;
15 Eff.

1 15A NCAC 05H .0708 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0708 DISPOSITION OF CONFIDENTIAL INFORMATION REQUEST**

4 (a) The Chair of the Commission shall make a determination on the completeness of the request. If the request is
5 not complete, the Chair shall return the request to the requesting party.

6 (b) Before deciding the merits of the request, the Commission may:

7 (1) request additional written submissions from the requesting party;

8 (2) request additional information from the State Geologist or other Department staff; and

9 (3) hear oral presentations from the requesting party or the Department.

10 (c) The Commission shall consider the request in a closed session in accordance with G.S. 143-318.11.

11 (d) The Commission shall consider the merits of the request and may approve or deny the request.

12 (e) If the Commission determines that the information is not entitled to confidential protection, the Commission
13 shall provide notice in accordance with G.S. 113-391.1(e).

14 (f) Confidential information so designated by the Commission shall be held by the State Geologist in accordance
15 with G.S. 113-391.1.

16

17 History Note: Authority G.S. 113-391(a)(5)h; 150B;

18 Eff.

1 15A NCAC 05H .0709 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0709 NOTICE TO THE COMMISSION OF LOSS OF CONFIDENTIAL STATUS**

4 Any person receiving confidential information status shall provide updated information to the Commission no more
5 than 30 calendar days of the date any of the information described in this Section becomes inaccurate or incomplete.

6

7 History Note: Authority G.S. 113-391(a)(5)h; 150B;

8

Eff.

1 15A NCAC 05H .0801 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0801 PURPOSE AND SCOPE**

4 The rules of this Section establish procedures to be used by the Commission in reviewing petitions for limited
5 preemption of a local ordinance pursuant to the authority set forth in G.S. 113-415.1.

6

7 History Note: Authority G.S. 113-415.1; 150B;

8

Eff.

1 15A NCAC 05H .0802 is proposed for adoption as follows:
2

3 **15A NCAC 05H .0802 COMMENCEMENT OF PROCEEDINGS**

4 (a) An operator shall commence a proceeding by filing a petition with the Commission.

5 (b) The petition shall contain:

6 (1) the name, address, and telephone number of the petitioner;

7 (2) the city and county in which the oil or gas operations is or is proposed to be located; and

8 (3) a statement of facts and issues, which shall include:

9 (A) the action giving rise to the petition;

10 (B) a copy of the ordinance;

11 (C) the effect of the ordinance on the proposed activities;

12 (D) identification of the provisions of the ordinance alleged to prevent the proposed
13 activities;

14 (E) any actions taken to comply with the ordinance or any of its provisions;

15 (F) status of and compliance with all applicable state and federal permits or
16 approvals;

17 (G) attempts made by the petitioner to resolve the issue with each city and
18 county in which the activities are proposed;

19 (H) opportunities local citizens and elected officials have had to participate in the
20 permitting process;

21 (I) documentation that the proposed activities will not pose an unreasonable health
22 or environmental risk to the surrounding locality. For the purposes of filing this
23 petition, this documentation shall be deemed complete if it describes the
24 information submitted for all applicable state and federal permits or approvals;

25 (J) measures the applicant or permittee has taken or consented to take to avoid or
26 manage foreseeable risks and to comply to the maximum extent feasible with
27 any applicable ordinance;

28 (K) metes and bounds description, site plan, maps or other information
29 describing the facility and its location; and

30 (L) all other information the petitioner believes relevant and which
31 constitutes grounds for relief under G.S. 113-415.1.

32 (c) Within 10 calendar days of receipt of the petition, the Chair of the Commission shall review the petition and
33 determine whether it is complete in accordance with Paragraph (b) of this Rule. If the petition is determined to be
34 incomplete, the Chair of the Commission shall return it to the petitioner with a statement of the reasons it is
35 deficient. Return of the petition for incompleteness in no way precludes the petitioner from re-filing. If the petition
36 is complete, the Chair of the Commission shall send a notice of proceeding in accordance with Rule .0803 of this
37 Section.

1

2 History Note: Authority G.S. 113-415.1; 150B;

3 Eff.

1 15A NCAC 05H .0803 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0803 NOTICE OF PROCEEDING**

4 (a) Within five days after a petition is found complete by the Chair of the Commission, the Chair of the
5 Commission shall serve a notice of proceeding on the petitioner and the governing board of each city and county in
6 which the activities are proposed.

7 (b) The notice of proceeding shall contain:

8 (1) a statement that a complete petition has been received;

9 (2) a statement that a public hearing on the petition will be held on a specific date and at a specific
10 place in accordance with G.S. 113-415.1;

11 (3) a request that within 30 days of receipt, the city or county that adopted the ordinance respond to
12 the petition. Such response shall include all information within its possession regarding the
13 factors in G.S. 113-415.1 and any other information as to why this ordinance should not be
14 preempted;

15 (4) the name of the proceeding and the date of filing;

16 (5) the address and telephone number of the Clerk of the Commission;

17 (6) a citation to the relevant statutes or rules involved;

18 (7) a statement of the factual allegations or issues to be determined;

19 (8) a brief description of the procedure to be followed at the hearing; and

20 (9) a statement of how interested persons may participate in the hearing and where additional
21 information can be obtained.

22

23 History Note: Authority G.S. 113-415.1; 150B;

24 Eff.

1 15A NCAC 05H .0804 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0804 PUBLIC HEARING TO BE HELD**

4 When a complete petition is filed with the Commission, the Commission shall hold a public hearing to consider the
5 petition. The public hearing shall be held in the affected locality within a reasonable time but not to exceed 60 days
6 after receipt of the petition by the Commission.

7

8 History Note: Authority G.S. 113-415.1; 150B;

9 Eff.

1 15A NCAC 05H .0805 is proposed for adoption as follows:
2

3 **15A NCAC 05H .0805 NOTICE OF PUBLIC HEARING**

4 (a) The Commission shall publish notice of public hearing in accordance with G.S. 113-415.1(d).

5 (b) The Commission shall serve the parties to the proceeding with a notice of public hearing no less than 30
6 calendar days before the hearing. The notice shall contain the following:

7 (1) the name of proceeding and the date of filing;

8 (2) the date, time, and place of the hearing;

9 (3) the name, address, and telephone number of the Clerk of the Commission;

10 (4) a citation to the relevant statutes or rules involved;

11 (5) a statement of the factual allegations or issues to be determined;

12 (6) a brief description of the procedure to be followed at the hearing; and

13 (7) a statement of how persons may participate in the hearing and where the information can be
14 obtained.

15

16 History Note: Authority G.S. 113-415.1; 150B;

17 Eff.

1 15A NCAC 05H .0806 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0806 CONDUCT THE HEARING**

4 (a) In accordance with information provided in the notice of hearing, any non-party may appear before the
5 Commission at the hearing to offer testimony or submit written evidence for its consideration.

6 (b) The Commission may set the order of presentation and place reasonable limits on the testimony of each person
7 who appears before the Commission at the hearing.

8 (c) Commission members may ask questions of any person who appears before the Commission at the hearing.

9 (d) The Commission shall hold the record open for 20 days after the termination of the hearing.

10 (e) All parties shall have the right to present evidence, rebuttal testimony, and argument relevant to the issues.

11 (f) A party shall have all evidence to be presented, both oral and written, available on the date for the hearing. In
12 cases when the hearing time is expected to exceed one day, the parties shall be prepared to present their evidence at
13 the date and time ordered by the Commission.

14 (g) The Commission shall serve copies of all orders or decisions on all parties simultaneously. Any party sending a
15 letter, exhibit, brief, memorandum, or other document to the Commission shall simultaneously serve a copy on all
16 other parties.

17 (h) A party need not be represented by an attorney. If a party has notified other parties of that party's representation
18 by an attorney, all communications shall be directed to that attorney.

19 (i) Any non-party offering testimony or other evidence may be questioned by parties to the case and by the
20 Commission.

21

22 *History Note: Authority G.S. 113-415.1; 150B;*

23 *Eff.*

1 15A NCAC 05H .0807 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0807 WITNESSES**

4 Any party may be a witness and may present witnesses on the party's behalf at the hearing. Fourteen days in
5 advance of the public hearing, parties shall serve on the Commission a witness list, a synopsis of testimony, and an
6 estimate of the time required to hear each witness. A party may make reasonable amendments to its witness list. All
7 oral testimony by witnesses at the hearing shall be under oath or affirmation and shall be recorded.

8

9 History Note: Authority G.S. 113-415.1; 150B;

10 Eff.

1 15A NCAC 05H .0808 is proposed for adoption as follows:

2

3 **15A NCAC 05H .0808 COMMISSION'S DECISION**

4 (a) The Commission shall determine whether or to what extent to preempt the ordinance to allow for the
5 construction or operation of oil or gas exploration, development, or production activities in accordance with G.S.
6 113-415.1. In the event the Commission makes all four findings required by G.S. 113-415.1(d) and determines that
7 the provisions of the ordinance are severable, the Commission may determine that a specific provision, rather than
8 the entire ordinance is preempted.

9 (b) A decision shall be based on:

- 10 (1) substantial evidence admissible and arguments presented during the hearing and made part of the
11 official record;
12 (2) stipulations of fact;
13 (3) matters officially noticed; and
14 (4) other items in the official record.

15 (c) A decision shall fully dispose of all issues required to resolve the case and shall contain:

- 16 (1) an appropriate caption;
17 (2) the appearance of the parties;
18 (3) a statement of the issues;
19 (4) references to the specific provisions of the ordinance at issue;
20 (5) findings of fact, with specific reasons given for findings on disputed facts;
21 (6) conclusions of law based on the findings of fact and applicable constitutional principles, statutes,
22 rules, or regulations;
23 (7) a final determination that the challenged ordinance, or specific parts thereof, is preempted with
24 respect to the proposed activity;
25 (8) in the discretion of the Commission, a memorandum giving reasons for the conclusions
26 of law; and
27 (9) a statement that each party has the right to appeal the final decision.

28

29 *History Note: Authority G.S. 113-415.1; 150B;*

30 *Eff.*

1 15A NCAC 05H .0901 is proposed for adoption as follows:
2

3 **15A NCAC 05H .0901 ENFORCEMENT**

4 (a) A violation of any provision of the Oil and Gas Conservation Act or any rule in this Subchapter may result in a
5 notice of violation, an assessment of a civil penalty pursuant to G.S. 113-410, suspension or revocation of a permit,
6 injunctive action, or any other remedy afforded by law.

7 (b) The Department shall issue a written notice of violation to the permittee for violations of any provision of the
8 Oil and Gas Conservation Act, any rule of this Subchapter, terms and conditions of the permit, or order of the
9 Commission.

10 (1) The written notice shall specify the facts constituting the violation, corrective actions that are
11 required to address the violation, a timeframe to implement such corrective actions, and a
12 statement that failure to comply with the specified corrective action may result in additional
13 enforcement actions.

14 (2) The Department may extend the timeframe for corrective actions upon written request of the
15 permittee demonstrating that the corrective action cannot be completed in the time specified in the
16 notice of violation.

17 (c) Civil penalties shall be assessed in accordance with G.S. 113-410 and Section .1000 of this Subchapter.

18 (d) Permits shall be suspended or revoked in accordance with G.S. 150B-3 and Rule .1313 of this Subchapter.

19 (e) The Department shall request the Attorney General to institute an action in the North Carolina General Courts of
20 Justice seeking injunctive relief pursuant to G.S. 113-408.

21 (f) The Department shall require the permittee to restore waters and land affected by a violation of any provision of
22 the Oil and Gas Conservation Act, any rule of this Subchapter, terms and conditions of the permit, or order of the
23 Commission so as to protect the quality of the water, air, soil, or any other environmental resource against injury,
24 damage, or impairment.

25

26 History Note: Authority G.S. 113-408; 113-410; 113-391(a)(4);

27 Eff.

1 15A NCAC 05H .1001 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1001 PURPOSE AND SCOPE**

4 The rules of this Section govern the Commission, the Division, and their delegates of assessment of civil penalties.

5 They also govern permittee remission and appeal of those penalties.

6

7 History Note: Authority G.S. 113-410;

8

Eff.

1 15A NCAC 05H .1002 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1002 NOTICE OF ASSESSMENT**

4 For all violations for which a penalty is assessed, a notice of such action shall be sent to the violator by U.S. mail,
5 certified mail, or other means calculated to provide actual notice. The notice shall describe the violation, advise that
6 the penalty is due, and provide the violator of the right of appeal as specified in G.S. 150B, Article 3 and the right to
7 request remission in G.S. 143B-293.6 and Rule .1004 of this Section.

8

9 History Note: Authority G.S. 113-410(a) and (c);

10 Eff.

1 15A NCAC 05H .1003 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1003 PAYMENT OF ASSESSMENT**

4 An assessed penalty shall be paid within 60 days of service of notice, unless the violator files a contested case
5 pursuant to G.S. 150B, Article 3 or requests remission pursuant to G.S. 113-410(d) and Rule .1004 of this Section.

6

7 History Note: Authority G.S. 113-410(d);

8

Eff.

1 15A NCAC 05H .1004 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1004 ADMINISTRATIVE REMEDIES**

4 (a) A person who has received a civil penalty assessment may file a contested case petition at the Office of
5 Administrative Hearings pursuant to G.S. 150B, Article 3.

6 (b) A person who has received a civil penalty assessment may request remission of the civil penalty.

7 (1) A request for a civil penalty remission shall be submitted in writing to the Director at the
8 following address: 1612 Mail Service Center, Raleigh, NC 27699-1612.

9 (2) The request shall be considered only if the person requesting remission of a civil penalty stipulates
10 that no facts are in dispute and waives his right to an administrative hearing.

11 (3) In determining whether to approve the remission request, the Commission shall consider the
12 factors in G.S. 143B-293.6.

13

14 History Note: Authority G.S. 113-410(d);

15 Eff.

1 15A NCAC 05H .1005 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1005 REPORT TO THE COMMISSION**

4 The Department shall report any action taken under this Section to the Commission at the Commission's next
5 regularly scheduled meeting. Such reports shall include the following information:

6 (1) the person(s) issued letter(s) of proposed assessment;

7 (2) the person(s) assessed a civil penalty;

8 (3) the person(s) who have paid a penalty as assessed, requested remission, or requested an
9 administrative hearing;

10 (4) the person(s) who have failed to pay; and

11 (5) cases referred to the Attorney General for collection.

12

13 *History Note: Authority G.S. 113-391(a) and (a4); 113-410(d);*

14 *Eff.*

1 15A NCAC 05H .1101 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1101 EXPLORATION AND GEOPHYSICAL SURVEYS**

4 (a) Any person conducting predrilling exploration activities or geophysical surveys related to oil or gas exploration
5 and development shall be in accordance with 15A NCAC 05C.

6 (b) Notification of exploration activities in accordance with G.S. 113-420 (b2).

7

8 History Note: Authority G.S. 113-391(a)(1);

9 Eff.

1 15A NCAC 05H .1201 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1201 SCOPE**

4 The rules of this Section establish the requirements for petitioning the Commission for permission to create or
5 modify a drilling unit. These rules also set forth oil or gas well spacing requirements for conventional and
6 unconventional reservoirs.

7

8 History Note: Authority G.S. 113-391; 143B-293.1(b);

9

Eff.

1 15A NCAC 05H .1202 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1202 APPLICATION FOR DRILLING UNIT REQUIREMENTS**

4 (a) An application shall be submitted to the Commission for permission to do any of the following:

- 5 (1) create a drilling unit; or
6 (2) modify an existing drilling unit.

7 (b) Applications submitted to the Commission no less than 60 calendar days before the next regularly scheduled
8 Commission meeting shall be considered for hearing provided the docket has not been filled. Once the date for
9 hearing has been set by the Commission, the applicant will be notified and instructed to begin the part of the public
10 notification process that requires publishing notice in a newspaper, which is set out in Rule .1203 of this Section.

11 (c) The applicant shall submit the original application and one paper copy for each Commissioner plus five
12 additional copies to the Recording Clerk of the Commission at the following address: 1612 Mail Service Center
13 Raleigh, NC 27699-1612. In addition, the applicant shall submit an electronic copy in .pdf format with the
14 Commission at Oil&Gas@ncdenr.gov.

15 (d) Applicants or permittees petitioning the Commission for the creation of drilling units or modifications of
16 existing drilling units shall be persons who own or have leased an interest in the mineral estate underlying the tract
17 or tracts within the drilling unit.

18 (e) Any application for the creation of a drilling unit or modification of an existing drilling unit shall include the
19 following information:

- 20 (1) a letter to the Commission describing the intent of the application;
21 (2) a list of mineral rights owners within the land area of the proposed drilling unit. The list of
22 mineral rights owners shall include the name, physical address, and mailing address for each
23 owner;
24 (3) a map of the proposed or current drilling unit boundary, along with all property boundaries that
25 occur within the land area of the proposed or current drilling unit, as well as locations of existing
26 oil or gas wells within the proposed drilling unit boundary;
27 (4) copies of lease agreements, affidavits, or pooling orders showing that the applicant has obtained
28 legal rights to recover oil or gas resources within the proposed drilling unit;
29 (5) documentation showing that all mineral rights owners were notified by the applicant of the
30 applicant's intent to establish the proposed drilling unit pursuant to Rule .1203(a)(2) of this
31 Section;
32 (6) at least one subsurface geological map showing the structural configuration of the top of the
33 objective formation within the proposed drilling unit and at least one geological cross-section
34 derived from the geological map showing the stratum or strata from which the applicant expects to
35 extract hydrocarbon resources;
36 (7) a written statement signed by the applicant, supported by geological and engineering data, that the
37 proposed drilling unit would result in optimal and efficient recovery of hydrocarbons;

1 (8) documentation from the applicant(s) or their representative(s) demonstrating prior work
2 experience in the exploration, drilling, and production of oil or gas relevant to the application; and

3 (9) additional information requested by the Commission at the hearing to evaluate the application.

4 (f) The Commission shall assign a new docket number to each application submitted.

5 (g) The Commission shall approve, deny, or modify drilling units pursuant to G.S. 113-392(b) within 30 calendar
6 days after conducting the hearing on the application for creating or modifying a drilling unit.

7 (h) If the Commission approves an application, a drilling unit number shall be issued to the applicant. The drilling
8 unit number is required in accordance with Rule .1304(a)(5) of this Subchapter.

9 (i) The Commission approved drilling units shall expire 36 months after the approval date, if the applicant has not
10 spud the first oil or gas well on the well pad.

11
12 *History Note: Authority G.S. 113-392(b);*

13 *Eff.*

1 15A NCAC 05H .1203 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1203 DRILLING UNIT PUBLIC NOTIFICATION REQUIREMENTS**

4 (a) Public notice of each application shall be circulated in the geographical areas pertaining to the creation of a
5 drilling unit, or the modification of an existing drilling unit, at least 30 calendar days prior to the next regularly
6 scheduled Commission meeting for which the applicant proposes the application to be docketed. The applicant or
7 permittee shall make notice of each drilling unit application by:

8 (1) publishing the notice one time in newspaper(s) having general circulation in the county or counties
9 where the drilling unit, either proposed or existing, is located; and

10 (2) providing direct notice to all mineral rights owners within the land area of the proposed or existing
11 drilling unit.

12 (b) The notice shall include the following:

13 (1) the name, address, and telephone number, fax number, and e-mail address of applicant or
14 permittee;

15 (2) a description of the intent of the application;

16 (3) the date the Commission is scheduled to review the application; and

17 (4) the location and time of the Commission meeting.

18 (c) The applicant or permittee shall submit a newspaper certified copy of the public notice published in the
19 newspaper, as certified by the newspaper, to the Department at least 15 calendar days prior to the next regularly
20 scheduled Commission meeting for which the applicant proposes the application to be docketed.

21

22 History Note: Authority G.S. 113-393(a);

23 Eff.

1 15A NCAC 05H .1204 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1204 DENIAL OR MODIFICATION OF DRILLING UNIT APPLICATION**

4 (a) The Commission shall deny a request for the creation of a drilling unit or deny a request to modify an existing
5 drilling unit to any person on finding that the proposed or existing drilling unit is in violation of any of the rules
6 contained in this Subchapter or that establishment or modification would result in a violation of this Subchapter or
7 other applicable law or rule.

8 (b) The Commission may also deny a request according to these criteria:

9 (1) the application is incomplete pursuant to Rule .1202(e) of this Section; or

10 (2) the application contains erroneous information.

11 (c) The Commission may modify a drilling unit application based on geologic, geographic, and environmental
12 factors or to satisfy conflicting interests between adjacent drilling unit applicants or permittees.

13

14 History Note: Authority G.S. 113-392(b); 143B-293.1(b);

15 Eff.

1 15A NCAC 05H .1205 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1205 WELL SPACING REQUIREMENTS FOR RESOURCES IN**

4 **UNCONVENTIONAL RESERVOIRS**

5 (a) The drilling of a new oil or gas well in an unconventional reservoir, the reopening of an oil or gas well
6 temporarily abandoned pursuant to Rule .1621 of this Subchapter, the deepening, plugging back, or sidetracking of
7 an existing oil or gas well shall conform to the requirements in this Section.

8 (b) No portion of the wellbore recovering hydrocarbons shall be less than 500 horizontal feet from the boundary of
9 the drilling unit.

10 (c) A variance may be granted by the Commission to reduce the distance from the boundary of the drilling unit
11 based on reservoir characteristics including permeability, porosity, and surrounding production history to optimize
12 production and minimize waste.

13

14 *History Note: Authority G.S. 113-391(a)(12); 143B-293.1(b);*

15 *Eff.*

1 15A NCAC 05H .1206 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1206 WELL SPACING REQUIREMENTS FOR RESOURCES IN CONVENTIONAL**
4 **RESERVOIRS**

5 (a) The drilling of a new oil or gas well in a conventional reservoir, the reopening of an oil or gas well temporarily
6 abandoned pursuant to Rule .1621 of this Subchapter, the deepening, plugging back, or sidetracking of an existing
7 oil or gas well shall conform to the requirements in this Section.

8 (b) In conventional reservoirs, no portion of the wellbore shall be less than 200 horizontal feet from the boundary of
9 the drilling unit.

10 (c) A variance may be granted by the Commission to reduce the distance from the boundary of the drilling unit
11 based on reservoir performance to optimize production and minimize waste of the reservoir.

12

13 History Note: Authority G.S. 143B-293.1(b); 113-391(a)(12);

14 Eff.

1 15A NCAC 05H .1301 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1301 SCOPE**

4 The rules of this Section set forth the registration and permitting requirements for new oil or gas wells. These rules
5 also establish procedures for review, modification, transfer, expiration, suspension or revocation, and release of an
6 Oil or Gas Well Permit.

7

8 History Note: Authority G.S. 113-391; 113-395; 113-410;

9

Eff.

1 15A NCAC 05H .1302 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1302 OIL OR GAS OPERATIONS FINANCIAL RESPONSIBILITY OWNERSHIP**

4 (a) The applicant or permittee, and all service companies who are conducting oil or gas exploration or development
5 activities, shall either be incorporated under the laws of North Carolina or, if a foreign corporation, obtain a
6 certificate of authority from the North Carolina Secretary of State. If the applicant or permittee is a partnership or
7 other person engaging in a business in this State under an assumed name, the applicant or permittee shall have filed
8 a certificate of assumed name in the county in which it is doing business.

9 (b) The applicant or permittee, and any person providing financial assurance for oil or gas operations, shall submit
10 the completed Form 1 – Financial Responsibility Ownership (FRO) with the Department. The Form 1 – FRO shall
11 include the following information:

12 (1) the applicant or permittee’s name, address, telephone number, fax number, and email address;

13 (2) the county and nearest city or town where the oil or gas well is located;

14 (3) the property street address or nearest address to the ingress or egress point leading from a public
15 road to the well pad;

16 (4) the lease name and the oil or gas well name and number;

17 (5) the Commission issued drilling unit number;

18 (6) the approximate date that land disturbing activity will commence;

19 (7) the total acreage of disturbed or uncovered areas;

20 (8) the person to contact onsite if any problems occur with erosion control, stormwater, and any well
21 site operations;

22 (9) the name, address, telephone number, fax number, and email address for person(s) who are
23 financially responsible for the oil or gas operations;

24 (10) a copy of the Certificate of Assumed Name if the financial responsible party is a partnership or
25 other person engaging in business under an assumed name;

26 (11) the signature of the financially responsible party; and

27 (12) the seal of a Notary Public of North Carolina.

28 (c) The applicant or permittee shall list all Employees approved to submit documents on behalf of the applicant or
29 permittee on a completed Form 1 – FRO. A person other than the applicant or permittee may be designated as an
30 agent of the financially responsible party, and person’s representatives shall be listed on the completed Form 1 –
31 FRO.

32 (d) If the applicant or permittee is not a resident of North Carolina, the applicant or permittee shall designate a
33 North Carolina agent for the purpose of receiving notices from the Commission or the Department.

34 (e) All changes of address for the parties required to submit a Form 1 – FRO shall be reported within 14 calendar
35 days of the change by submitting a new Form 1 – FRO. All changes to reported agent information shall be reported
36 within 14 calendar days of the change by submitting a Form 1 – FRO.

1 History Note: Authority G.S. 113-391(a)(5)a;

2 Eff

1 15A NCAC 05H .1303 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1303 OIL OR GAS WELL PERMIT APPLICATION**

4 (a) The applicant or permittee shall submit Form 2 – Oil or Gas Well Permit Application to the Department prior to
5 commencement of the following operations: drilling, recompleting, re-stimulating, deepening, reentering,
6 sidetracking, plugging back, or revising the location of any oil or gas well.

7 (b) The applicant or permittee shall submit the fee for a new Oil or Gas Well Permit as indicated on Form 2 – Oil or
8 Gas Well Permit Application in accordance with Rule .1306 of this Section.

9 (c) The applicant or permittee shall submit an environmental compliance history to the Department in accordance
10 with G.S. 113-395.3.

11

12 History Note: Authority G. S. 113-391(a)(5)a; 113-395;

13 Eff.

1 15A NCAC 05H .1304 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1304 CONTENTS OF OIL OR GAS WELL PERMIT APPLICATION**

4 (a) All applications to drill, recomplete, re-stimulate, deepen, reenter, sidetrack, plug and abandon, plug back, or
5 revise a location shall be submitted using a Form 2 – Oil or Gas Well Permit Application. The Form 2 – Oil or Gas
6 Well Permit Application shall include the following:

7 (1) the applicant or permittee’s name, address, telephone number, fax number, and email address;

8 (2) the county and nearest city or town where the oil or gas well is proposed to be located or is
9 located;

10 (3) the property street address or nearest address to the ingress or egress point leading from a public
11 road to the proposed or existing well pad;

12 (4) the lease name and the oil or gas well name and number for the proposed or existing oil or gas
13 well;

14 (5) the Commission issued drilling unit number;

15 (6) any variance request(s) approved by the Commission;

16 (7) the latitude and longitude (in decimal degrees) of the proposed or existing oil or gas well
17 location(s) with a minimum of five decimal places of accuracy and precision using the North
18 American Datum (NAD) of 1983. The location coordinates shall be a field measurement and not a
19 calculated or conversion measurement;

20 (8) the name of any incorporated city, town, village or respective extra-territorial jurisdiction, if the
21 oil or gas well is proposed to be located or is located within its limits;

22 (9) if known, the name(s) of the proposed drilling contractor, cementing service company, and well
23 stimulation company at the time of application submittal;

24 (10) an indication that the local emergency management coordinator has received an emergency
25 response plan in accordance with Rule .1305 of this Section;

26 (11) an indication that the applicant or permittee intends to scan all equipment at the well site to
27 measure for methane emissions;

28 (12) an indication that the applicant or permittee plans to address methane emissions detected; and

29 (13) an indication that the applicant or permittee is submitting an estimate of the number and type of
30 engine(s) to be used onsite, the size of engine(s), and the fuel source of engine(s) that will be used
31 during drilling or completion activities.

32 (b) The following plat(s) and maps shall be attached to Form 2 – Oil or Gas Well Permit Application:

33 (1) A plat showing:

34 (A) the subject drilling unit on which the oil or gas well is to be drilled and the property lines
35 with surface and mineral owner name(s);

1 (B) the location of the proposed oil or gas well in the drilling unit, based on a field survey
2 showing the distances in feet from the proposed well site to the boundary lines of the
3 drilling unit;

4 (C) the location and distances of the nearest buildings, public roads, railroads, private water
5 supply wells, public water supply sources, surface water bodies, utility rights-of-way, and
6 drilling or producing oil or gas wells from the proposed oil or gas well in accordance with
7 Rule .1601 and Rule .1205 or .1206 of this Subchapter; and

8 (D) any areas with known environmental contamination within the area of influence in
9 accordance with Rule .1901 of this Subchapter.

10 (2) All plats submitted as a part of the application for a Form 2 – Oil or Gas Well Permit Application
11 shall contain the following identifying information and be signed and sealed by a Professional
12 Land Surveyor (PLS) or Professional Engineer (PE) licensed by the North Carolina Board of
13 Examiners for Engineers and Surveyors pursuant to G.S. 89C:

14 (A) the name of the applicant or permittee;

15 (B) the oil or gas well name and number;

16 (C) a north arrow;

17 (D) the county;

18 (E) a map scale of 1 inch equals 50 feet to 1 inch equals 500 feet with two foot topographic
19 contours depending on the total disturbed area;

20 (F) a legend with symbols used and corresponding names;

21 (G) the date the plat or map was prepared and revised; and

22 (H) the name and title of person preparing the plat.

23 (3) A topographic and site overlay on a base color aerial map for the well site based on a LiDAR
24 derived map showing the location of the well site, corners of well pad, oil or gas wells, tank
25 battery, pits, access roads, all other proposed production equipment, and any other existing
26 structures and features onsite; and

27 (4) The total estimated true vertical and measured depths of the wellbore and proposed well path
28 report showing inclination and azimuth every 100 feet with the North American Vertical Datum of
29 1988 (NAVD88) as the vertical control.

30 (c) The applicant or permittee shall submit the following attachments with Form 2 – Oil or Gas Well Permit
31 Application:

32 (1) Form 3 – Well Construction Design that includes the following:

33 (A) the applicant or permittee’s name, address, telephone number, fax number, and email
34 address;

35 (B) the county and nearest city or town where the oil or gas well is located;

36 (C) the property street address or nearest address to the ingress or egress point leading from a
37 public road to the well pad;

- 1 (D) the lease name and the oil or gas well name and number;
2 (E) the anticipated diameter of each wellbore segment;
3 (F) the casing grade, weight, outside diameter, and setting depth for each proposed casing
4 string;
5 (G) the method of drilling, including the fluids that will be used during the drilling for each
6 proposed casing string;
7 (H) the cement type, additives, density, yield, and volume for each proposed casing string;
8 (I) a list of the blowout prevention equipment and other wellhead equipment;
9 (J) a wellbore diagram or other documentation detailing the proposed oil or gas well
10 construction design; and
11 (K) the method of well stimulation for the oil or gas well, the proposed number of well
12 stimulation stages, the proposed maximum surface treating pressures, and the estimated
13 true vertical depth to the top of fractures.
14 (2) A Well Site Development Plan that includes the Sedimentation and Erosion Control and
15 Stormwater Management Plans as a part of the site construction sheets and details for review in
16 accordance with Section .1500 of this Subchapter;
17 (3) Form 4 – Water Management Plan shall include documentations and maps in accordance with
18 Section .1900 of this Subchapter;
19 (4) Form 5 – Waste Management Plan shall include documentations and maps in accordance with
20 Section .2000 of this Subchapter;
21 (5) Form 6 – Well Site Reclamation Plan showing reclamation phases in accordance with Section
22 .2100 of this Subchapter;
23 (6) Form 1 – FRO filled out in its entirety;
24 (7) any variance request(s) approved by the Commission;
25 (8) a plan that mitigates damage to roads by truck traffic and heavy equipment. Plans must include at
26 a minimum:
27 (A) procedures to restore roads to their condition that existed prior to the drilling activity
28 undertaken by the permittee or applicant;
29 (B) identification of trucking routes that minimize road surface travel; and
30 (C) route travel hours that avoid otherwise heavy traffic volume, to include avoidance of
31 hours during which school buses will be traveling on the roads.
32 (9) documentation that the local emergency management coordinator has received emergency
33 response plan information in accordance with Rule .1305 of this Section;
34 (10) a statement describing how often the permittee intends to scan all equipment at the well site to
35 measure for methane emissions;
36 (11) a statement that describes if methane emissions are detected and the time period during which the
37 permittee intends to repair any leaks discovered; and

1 (12) an estimate of the engine(s) to be used on site during exploration and development including the
2 following information:

3 (A) the number and type of engine(s), such as compression ignition, two stroke lean burn
4 ignition, four stroke lean burn ignition, rich burn spark ignition;

5 (B) the size of engine(s) (maximum site-rated horsepower); and

6 (C) the fuel source of engine(s).

7

8 History Note: Authority G. S. 113-391(a)(5)a; 113-391(a)(5)b ;113-391(a)(5)l; 113-391(a)(8); 113-395;

9 Eff.

1 15A NCAC 05H .1305 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1305 EMERGENCY RESPONSE PLANNING**

4 In order for State and local governments to effectively plan for emergency incidents, the applicant or permittee shall
5 provide the following information to the local emergency management coordinator:

6 (1) the property street address or nearest address to the ingress or egress point leading from a public
7 road to the well pad. If nearest street address is used, “nearest address” shall be designated and the
8 latitude and longitude (in decimal degrees) with a minimum of five decimal places of accuracy
9 and precision using the North American Datum (NAD) of 1983 of the proposed access road
10 entrance at the ingress or egress point;

11 (2) the nearby location of occupied dwellings, high occupancy buildings, streams, rivers,
12 watercourses, ponds, lakes, or other natural and artificial bodies of water, and transportation
13 corridors necessary for the development of the plans required by Item (6) of this Rule;

14 (3) the emergency contacts for the well site that include the telephone numbers of the applicant or
15 permittee, which can be accessed 24-hours per day in accordance with the Rule .0707 of this
16 Subchapter;

17 (4) identification of the types and quantities of chemicals, fuels, and wastes which will be used at a
18 production facility in accordance with Section .1700 of this Subchapter;

19 (5) identification of an emergency well control response contractor, its contact information, and the
20 estimated time of arrival after dispatch;

21 (6) plans for the following minor to catastrophic scenarios:

22 (A) Level 4: A spill onsite that requires a cleanup company to be contracted;

23 (B) Level 3: A spill on other property that requires a cleanup company to be
24 contracted, or an uncontrolled fire adjacent to the site impacting normal
25 operations due to smoke or chemical dispersal;

26 (C) Level 2: A spill onsite that requires a full site evacuation or an uncontrolled
27 explosion or fire on site that does not involve any wellhead onsite, or loss of
28 well control not involving an explosion or fire; and

29 (D) Level 1: Loss of well control involving an explosion or fire, or incidents
30 requiring the immediate evacuation of the site.

31
32 *History Note: Authority G.S. 113-391(5)i;*

33 *Eff.*

1 15A NCAC 05H .1306 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1306 FEES**

4 (a) The applicant or permittee shall remit the non-refundable fees in the amounts prescribed under G.S. 113-395,
5 113A-54.2, and 143-215.3D(e).

6 (b) Payment of fees shall be made payable to the “North Carolina Department of Environment and Natural
7 Resources.” The payment shall refer to the new permit or the plugging and abandonment of the oil or gas well. The
8 payment shall include a reference to the oil or gas well name listed on the application or the API number.

9

10 History Note: Authority G.S. 113-395;

11 Eff.

1 15A NCAC 05H .1307 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1307 APPLICATION REVIEW PROCESS**

4 (a) After Department review, if the application is incomplete, the Department shall notify the applicant or permittee
5 in writing, noting each deficiency. The applicant or permittee shall have 60 calendar days from the date the letter
6 was sent to submit the required information to the Department or the application shall be denied.

7 (b) Upon receipt of a complete application for a new Form 2 – Oil or Gas Well Permit Application or for a
8 modification of an Oil or Gas Well Permit, the Department shall send a notice of the application to each of the
9 following agencies with a request that each agency review and provide written comment on the application within
10 30 calendar days of the date on which the request is made:

11 (1) Division of Air Quality, Department of Environment and Natural Resources;

12 (2) Division of Parks and Recreation, Department of Environment and Natural Resources;

13 (3) Division of Water Resources, Department of Environment and Natural Resources;

14 (4) North Carolina Geological Survey, Division of Energy, Mineral, and Land Resources, Department
15 of Environment and Natural Resources;

16 (5) Natural Heritage Program, Department of Environment and Natural Resources;

17 (6) North Carolina Wildlife Resources Commission;

18 (7) Office of Archives and History, Department of Cultural Resources;

19 (8) United States Fish and Wildlife Service, United States Department of the Interior; and

20 (9) Any other Federal or State agency that the Department determines to be appropriate based on the
21 location of the proposed well site, including the Division of Coastal Management, Department of
22 Environment and Natural Resources; the Division of Marine Fisheries, Department of
23 Environment and Natural Resources; the Division of Waste Management, Department of
24 Environment and Natural Resources; Division of Public Health; and the Department of
25 Transportation.

26 (c) Pursuant to the SPCA and 15A NCAC 04, the Department shall review the erosion control plan for approval,
27 approval with modifications, or disapproval.

28 (d) The Department shall have 60 calendar days from receipt of the complete application, which shall include all
29 approved variance requests to review and approve, approve with conditions, or deny the application. The
30 Department shall consider all input submitted by the reviewing agencies outlined in Paragraph (b) of this Rule when
31 approving, approving with conditions, or denying any application.

32 (e) If the Department denies an application for a permit pursuant to Rule .1309 of this Section, the Department shall
33 notify the applicant or permittee in writing and stating the reasons for the denial. The applicant or permittee may
34 thereupon modify and resubmit the application or file an appeal; the Department shall have 60 calendar days from
35 receipt of the resubmitted application to complete the review process.

36 (f) On approval of an application, the Department shall set the amount of the performance bond or other security
37 that is to be required pursuant to G.S. 113-378, 113-391 (a)(13a), and 113-421(a2) and (a3)(2) and mail notice of the

1 required bond to the applicant or permittee. The applicant or permittee shall have 60 calendar days after the
2 Department mails the notice to deposit the required bond or security with the Department. The Oil or Gas Well
3 Permit shall not be issued until receipt of this deposit.

4 (g) On approval of a Form 2 – Oil or Gas Permit Application for a new oil or gas well the North Carolina
5 Geological Survey shall assign an API number for the oil or gas well.

6 (h) The permittee shall not commence any operation at the well site prior to receiving an approved Oil or Gas
7 Permit and meeting the requirements of this Rule.

8

9 *History Note: Authority G.S. 113-391(a)(5)l;*

10 *Eff.*

1 15A NCAC 05H .1308 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1308 PERMIT CONDITIONS**

4 A Form 2 – Oil or Gas Well Permit Application may be approved with conditions based on the individual well site,
5 such as:

6 (1) additional erosion control measures to be installed during oil and gas well operations;

7 (2) a natural buffer to be left between any stream and the disturbed land;

8 (3) visual screening such as existing natural vegetation, vegetated earthen berms, tree plantings at
9 staggered spacing, to be installed and maintained between any disturbed land and any adjoining
10 property containing occupied buildings or public access within view of the disturbed land;

11 (4) erosion control measures to be implemented during the construction and operation of all roads to
12 minimize off-site damage from sediment; or

13 (5) other conditions as determined by the Department to safeguard public health, welfare, and the
14 environment.

15

16 History Note: Authority G.S. 113-391(a)(5); 113-395(5)c-1;

17 Eff.

18

1 15A NCAC 05H .1309 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1309 DENIAL OF APPLICATION**

4 (a) The Department shall have the authority to deny a permit application to any person on finding that the well site for
5 which a permit is requested is in violation of any of the rules contained in this Subchapter, the issuance of the permit
6 would result in a violation of any rule of this Subchapter or other applicable law or rule, or for any of the following
7 factors:

8 (1) the permit application is incomplete and the time has lapsed for resubmission in accordance with
9 Rule .1307 of this Subchapter;

10 (2) the requirements of Section .1400 of this Subchapter have not been met;

11 (3) the operation will have significant adverse effects on surface water, groundwaters, wildlife,
12 habitats of rare and endangered flora and fauna and other critical communities, or freshwater,
13 estuarine, or marine fisheries;

14 (4) the operation will constitute a direct physical hazard to public health and safety or to a neighboring
15 dwelling house, school, church, hospital, commercial or industrial building, public road, or other
16 public property;

17 (5) the operation will have a significant adverse effect on the uses of a publicly-owned park, forest,
18 recreation area, or historical and archeological sites listed on the Federal or State list of historic
19 places;

20 (6) previous experience with similar operations indicates a substantial possibility that the operation
21 will result in deposits of sediment in stream beds or lakes in violation of the Sediment Pollution
22 Control Act of 1973 and 15A NCAC 02L .0202 and 15A NCAC 02B, landslides, or acid water
23 pollution in violation of 15A NCAC 02L .0202 and 15A NCAC 02B; or

24 (7) the Department finds that the applicant or permittee, or any parent, subsidiary, or other affiliate of
25 the applicant or permittee has not been in compliance with the Oil or Gas Conservation Act, rules
26 of this Subchapter, other laws or rules of this State for the protection of the environment
27 administered by the Department, any plan approval, permit, or order issued by of the Department
28 or has not corrected all violations that the applicant or permittee, or any parent, subsidiary, or
29 other affiliate of the applicant, permittee, or parent may have committed under this Act or rules
30 adopted under said Act and that resulted in:

31 (A) the revocation of a permit;

32 (B) the forfeiture of part of all of a bond or other security;

33 (C) a conviction of a misdemeanor or any other court order; or

34 (D) the final assessment of a civil penalty.

35 (b) In the absence of any finding set out above, or if adverse effects are mitigated by the applicant or permittee as
36 approved by the Department, a permit shall be granted.

1 History Note: Authority G. S. 113-391(a)(5)a; 113-395; 113-410(a);

2 Eff.

3

1 15A NCAC 05H .1310 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1310 PERMIT MODIFICATIONS**

4 (a) Any permittee may apply at any time for a modification of the permit. The application shall be in writing on
5 Form 2 – Oil or Gas Well Permit Application in accordance with the rules of this Section.

6 (b) The permittee shall provide any additional information required by the Department to satisfy application
7 requirements in accordance with Rule .1307 of this Section. The permittee shall not be required to resubmit
8 information that remains unchanged since the time of the prior application.

9 (c) If a proposed modification of the permit affects the land area covered by the permit or the approved reclamation
10 plan then the permittee shall propose a modification to the Reclamation Plan that meets the requirements of Rule
11 .2102 of this Subchapter.

12 (d) No modification of a permit shall become effective until any required change has been made in the performance
13 bond or other security posted under the provisions of G.S. 113-378, 113-391, and 113-421, so as to assure the
14 performance of obligations assumed by the permittee under the permit and reclamation plan.

15 (e) If at any time it appears to the Department from its inspection of the disturbed land that the activities under the
16 Reclamation Plan and other terms and conditions of the permit are failing to achieve the purposes and requirements
17 of this Subchapter, the Department shall give the permittee written notice of that fact, of its intention to modify the
18 Reclamation Plan, and other terms and conditions of the permit in a stated manner.

19
20 History Note: Authority G.S. 113-391(a)(5)a; 113-395; 113-410(a);

21 Eff.

1 15A NCAC 05H .1311 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1311 PERMIT TRANSFERS**

4 (a) A permit transfer may result from a sale, assignment by a court, a change in operating agreement, or other
5 transaction.

6 (b) Within 30 calendar days of the sale or other transfer, the new owner shall notify the Department, in writing, of
7 the transfer of ownership. The notice shall include:

8 (1) the names, addresses and telephone numbers of the former and new owner, and the agent if
9 applicable. The new permittee information shall be attached to the notice on Form 1 – FRO;

10 (2) the Oil or Gas Well Permit and assigned API number;

11 (3) the effective date of the transfer of ownership; and

12 (4) an affidavit from the new owner verifying that the information on the original application is still
13 accurate and complete. If the information on the original application is no longer accurate or
14 complete, then a new Form 2 – Oil or Gas Well Application shall be submitted to the Department
15 for review and approval.

16 (c) The new owner shall secure the required bond prior to the Department approving the permit transfer.

17 (d) A permit transfer may be denied by the Department based on previous revocation, unaddressed or outstanding
18 violations on a previous permit by the transferee, in accordance with Rule .1309(a) of this Section.

19

20 History Note: Authority G.S. 113-391(a)(5)a; 113-391(a6); 113-395; 113-410(a);

21 Eff.

1 15A NCAC 05H .1312 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1312 PERMIT EXPIRATION**

4 (a) A permittee shall have 12 months from the date of issuance of the permit to spud an oil or gas well or the permit
5 shall expire.

6 (b) A permittee may request a one time, one-year renewal of the permit. The permittee shall provide an affidavit
7 affirming that the information on the original application is still accurate and complete and that the oil or gas well
8 location restrictions are still in effect. Any change in information from the original application shall be treated as a
9 request for a permit modification pursuant to Rule .1310 of this Section. The permittee shall submit the request so
10 that it is received by the Department at least 30 calendar days prior to the expiration of the original permit.

11

12 *History Note:* Authority G.S. 113-391(a)(5)a; 113-395;

13

Eff.

1 15A NCAC 05H .1313 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1313 PERMIT SUSPENSION OR REVOCATION**

4 (a) The Department may suspend or revoke a permit if:

5 (1) the permittee fails to meet the conditions specified in the permit;

6 (2) the permittee falsified or otherwise withheld necessary information required in the application; or

7 (3) if the Department issued the permit in error because the submitted information was incorrect and
8 the error was not identified during the Department's review but came to light after the permit was
9 issued and the correct information affected the validity of the issued permit.

10 (b) Notification of suspension or revocation of the permit, including specific justification for the revocation, shall be
11 issued in writing. The permittee shall temporarily abandon the oil or gas well pursuant to Rule .1621 of this
12 Subchapter until final disposition of appeal. If the revocation is upheld the permittee shall permanently plug and
13 abandon the oil or gas well pursuant to Rule .1618 of this Subchapter.

14

15 History Note: Authority G.S. 113-391(a)(5)a; 113-395; 113-410(a);

16 Eff.

1 15A NCAC 05H .1314 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1314 PERMIT RELEASE**

4 (a) The permittee may request the Department to release the oil or gas well and all affected areas associated within
5 the well site and return any remaining bond in accordance with Rule .1406 of this Subchapter.

6 (b) The Department shall not approve an oil or gas well permit release unless the requirements for Rule .1406 of
7 this Subchapter have been met and all oil or gas well plugging and abandonment fees and notices have been
8 received.

9 (c) The Department shall release any remaining bond to the permittee on finding that that the well site has been
10 reclaimed as stated in the Reclamation Plan.

11

12 History Note: Authority G.S. 113-391(a6);

13 Eff.

1 15A NCAC 05H .1401 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1401 SCOPE**

4 Each applicant or permittee for a permit, modification, or transfer of an Oil or Gas Well Permit shall file and
5 maintain in force a bond in favor of the State of North Carolina or surface owner, executed by a surety approved by
6 the Commissioner of Insurance, based on the requirements set forth in the rules of this Section.

7

8 History Note: Authority G.S. 113-391(a)(5); 113-421(a3);

9

Eff.

1 15A NCAC 05H .1402 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1402 BONDING REQUIREMENTS**

4 (a) After an application for a permit, a modification, or a transfer of an Oil or Gas Well Permit is considered
5 complete by the Department, the applicant or permittee shall provide an approved financial assurance instrument to
6 the Department or each surface owner, as applicable in accordance with Rules.1403, .1404, and .1405 of this
7 Section. The applicant or permittee shall not commence operations to drill, recomplete, restimulate, deepen, reenter,
8 sidetrack, plug and abandon, plug back, or revise the location of any oil or gas well prior to providing an approved
9 financial assurance instrument to the Department or surface owner(s).

10 (b) The permittee shall submit financial assurance to the Department using one of the following forms:

11 (1) Form 7 – Irrevocable Letter of Standby Credit shall include the following information:

12 (A) the applicant or permittee’s name, address, telephone number, fax number, and email
13 address as needed;

14 (B) the letter of credit number, effective date, and amount;

15 (C) the name and address for the issuing institution;

16 (D) the date of expiration and date and frequency of renewals; and

17 (E) the issuing institution’s representative’s dated and notarized signature.

18 (2) Form 8 – Surety Bond shall include the following information:

19 (A) the applicant or permittee’s name, address, telephone number, fax number, and email
20 address as needed;

21 (B) the name and the principal and local address of the issuing surety company;

22 (C) the bond number as assigned by the surety company;

23 (D) the amount of bond to be held by the State of North Carolina;

24 (E) the seal of the surety company;

25 (F) the signatures by the secretary or assistant secretary; principal; president, vice president,
26 partner, or owner of the surety company;

27 (G) the signature of the resident agent of North Carolina and the agent or attorney in fact.

28 (3) Form 9 – Assignment of Savings Account shall include the following information:

29 (A) the applicant or permittee’s name, address, telephone number, fax number, and email
30 address as needed;

31 (B) the name, address, and county of the bank;

32 (C) the dollar amount to be held to be payable to the Department on demand of the
33 Department;

34 (D) the method and a copy of the instrument of assignment such as a passbook or deposit
35 book;

36 (E) the signature, date, and notary seal for the applicant or permittee; and

1 (F) an acknowledgement of the bank on the assignment that includes the date of assignment,
2 signature of authorized agent of the bank, date of signature, and notarization.

3 (4) Form 10 – Cash Deposit shall include the following information:

4 (A) the applicant or permittee’s name, address, telephone number, fax number, and email
5 address as needed;

6 (B) the county and nearest city or town where oil or gas well is located;

7 (C) the lease name and the oil or gas well name and number;

8 (D) the Commission issued drilling unit number; and

9 (E) a cashiers or certified checks made payable to the North Carolina Department of
10 Environment and Natural Resources.

11 (c) The amount of the bond shall be determined by the Department or the Commission consistent with Rules .1403,
12 .1404, and .1405 of this Section.

13 (1) If the Oil or Gas Well Permit is modified to increase the total depth of the oil or gas well or the
14 total disturbed land acreage increases, the bond shall be increased in accordance with Rules .1403
15 and .1404 of this Section, respectively; and

16 (2) As areas at a well site are reclaimed in accordance with the Reclamation Plan required by Section
17 .2100 of this Subchapter and approved and released by the Department, the permittee may
18 substitute a new bond for the bond previously filed in an amount covering the remaining oil or gas
19 wells and disturbed land acreage at the site.

20 (d) If the applicant, permittee, or surface owner disagrees with the bond amount determined by the Commission, the
21 applicant, permittee, or surface owner may appeal the bond amount pursuant to G.S. 113-421(a3)(1).

22 (e) The bond herein provided shall be continuous in nature and shall remain in force until cancelled by the surety.
23 Cancellation by the surety shall be effectuated only on 60 days written notice thereof to the Department or surface
24 owner and to the permittee.

25 (f) The bond shall be conditioned on the faithful performance of the requirements set forth in the rules of this
26 Subchapter. On filing the bond with the Department, the permittee shall lose all right, title, and interest in the bond
27 while the bond is held by the Department. Liability under the bond shall be maintained as long as reclamation is not
28 completed in compliance with the approved Reclamation Plan or acceptance by the Department of a substitute bond.
29 In no event shall the liability of the surety exceed the amount of the surety bond required by this Section.

30 (g) In lieu of the surety bond required by this Section, the permittee may file with the Department a cash deposit, an
31 irrevocable letter of credit, a guaranty of payment in a form that is reasonably acceptable to the Department and held
32 by a financial institution consistent with the Uniform Commercial Code of North Carolina (NC UCC).
33 Alternatively, a permittee may file with the Department an assignment of a savings account in a financial institution
34 consistent with the NC UCC. Cash deposits, irrevocable letters of credit, guaranties of payment, and assignments of
35 savings accounts shall be filed using forms in accordance with Paragraph (b) of this Rule. Security shall be subject
36 to the release provisions of Rule .1406 of this Section.

1 (h) If the Commissioner of Insurance suspends or revokes the license to do business in North Carolina of any surety
2 on a bond filed pursuant to this Subchapter, the permittee shall, within 60 calendar days after receiving notice
3 thereof, substitute for the surety a good and sufficient corporate surety authorized to do business in this State. On
4 failure of the permittee to substitute sufficient surety within the time specified, the permit shall be revoked.

5

6 History Note: Authority G.S. 113-391(a)(5)l; 113-421(a2);

7 Eff.

1 15A NCAC 05H .1403 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1403 OIL OR GAS WELL PLUGGING AND ABANDONMENT BOND**

4 (a) The applicant or permittee shall submit an oil or gas well plugging and abandonment bond in the amount of five
5 thousand dollars (\$5,000) plus one dollar (\$1.00) per linear foot of the permitted oil or gas well pursuant to G.S.
6 113-378.

7 (b) The oil or gas well plugging and abandonment bond may be submitted as a separate bond or as an aggregate
8 bond amount with the environmental damage bond, as required by Rule .1405 of this Section.

9 (c) The permittee may request this bond to be released by the Department when final site reclamation is completed
10 in accordance with Section .2100 of this Subchapter and for which the oil or gas well is permanently plugged and
11 abandoned in accordance with Rule .1618 of this Subchapter.

12

13 History Note: Authority G. S. 113-378; 113-391(a)(5); 113-421(a2);

14

Eff.

1 15A NCAC 05H .1404 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1404 DISTURBED LAND BOND**

4 (a) The permittee shall provide to each surface owner a bond that is sufficient to cover the cost of completing the
5 requirements of the approved Reclamation Plan in accordance with Rule .2102 of this Subchapter and any
6 reclamation conditions of the approved permit.

7 (b) The bond amount for disturbed land shall be based on costs for corrective action(s) that the Department may
8 require to include costs to reclaim well site features, such as the haul road, drainage and roadway ditches and berms,
9 pits, stockpiles, and production facilities at the well pad as set out in the Reclamation Cost Table approved by the
10 Commission.

11

12 *History Note:* Authority G. S. 113-391(a)(5); 113-391(a)(13a); 113-421(a2);

13

Eff.

1 15A NCAC 05H .1405 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1405 ENVIRONMENTAL DAMAGE BOND**

4 (a) The applicant or permittee shall submit an environmental damage bond in the amount pursuant to G.S. 113-
5 421(a3)(2).

6 (b) The environmental damage bond may be submitted as a separate bond or as an aggregate bond amount with the
7 oil or gas well plugging and abandonment bond, as required by Rule .1403 of this Section.

8 (c) If the Commission determines that an operation would be sited in an environmentally sensitive area, the
9 Commission may increase the bond amount pursuant to G.S. 113-421(a3)(2). In making the determination the
10 Commission shall consider the following factors:

11 (1) the proximity of the oil or gas well or well site to the environmentally sensitive area;

12 (2) the character of the environmentally sensitive area;

13 (3) the topography of the environmentally sensitive area;

14 (4) special soil or geologic conditions in the environmentally sensitive area; and

15 (5) any other factors the Commission determines to be relevant in determining an environmentally
16 sensitive area.

17

18 History Note: Authority G. S. 113-391(a)(5); 113-421(a3)(2);

19 Eff.

1 15A NCAC 05H .1406 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1406 INSPECTION AND APPROVAL OF RECLAMATION FOR BOND RELEASE**
4 **OR FORFEITURE**

5 (a) The permittee shall proceed with reclamation as scheduled in the approved Reclamation Plan pursuant to Rule
6 .2102 of this Subchapter.

7 (b) The permittee shall notify the Department in writing that it has completed reclamation of an area of disturbed
8 land in accordance with Rule .2103 of this Subchapter.

9 (c) On receipt of notice as required by Paragraph (b) of this Rule, and at any other time the Department may elect,
10 the Department shall conduct an inspection in accordance with Rule .0203 of this Subchapter to determine whether
11 the permittee has complied with the Reclamation Plan, the rules of this Subchapter, the statute, and the terms and
12 conditions of the Oil or Gas Well Permit.

13 (1) If the Department determines from its inspection of the area in accordance with this Rule that
14 reclamation has been properly completed, it shall notify the permittee in writing.

15 (2) If the Department determines from its inspection of the area that reclamation is deficient based on
16 Rule .2102 of this Subchapter, then the Department shall notify the permittee in writing of all such
17 deficiencies. The permittee shall thereupon commence action within 30 days to rectify these
18 deficiencies and shall take corrective actions until the deficiencies have been corrected.

19 (d) The Department shall initiate enforcement actions if it finds any of the following conditions in accordance with
20 Rule .0901 of this Subchapter:

21 (1) the reclamation of the disturbed land within the permitted area is not proceeding in accordance
22 with the Rule .2103 of this Subchapter or the Reclamation Plan;

23 (2) the permittee has failed within 30 days after notice to commence corrective action; or

24 (3) the final reclamation has not been properly completed in conformance with the Reclamation Plan
25 and G.S. 113-421(a3).

26

27 History Note: Authority G. S. 113-391(a)(5); 113-391(b); 113-410;113-421(a3)

28 Eff.

1 15A NCAC 05H .1407 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1407 BOND FORFEITURE PROCEEDINGS**

4 (a) If the Department determines there is a violation necessitating bond forfeiture or the revocation of a permit, it
5 shall send the permittee and surety a written notice. Upon receipt of the written notice of violation, the permittee
6 shall have 60 calendar days to take corrective action. If the permittee does not correct the violation within the 60
7 day period, the Department may request the Attorney General to initiate forfeiture proceedings against the bond or
8 other security filed by the permittee in accordance with Rule .0901 of this Subchapter.

9 (b) Such proceedings shall be brought in the name of the State of North Carolina for the face amount of the bond or
10 other security, less any amount already released by the Department, shall be treated as liquidated damages and
11 subject to forfeiture.

12 (c) All funds collected as a result of such proceedings shall be placed in a special fund and used by the Department
13 to carry out, to the extent possible, the required final reclamation which the permittee has failed to complete. If the
14 amount of the bond or other security filed pursuant to this Section proves to be insufficient to complete the required
15 final reclamation pursuant to the approved Reclamation Plan, the permittee shall be liable to the Department for any
16 excess above the amount of the bond or other security which is required to defray the cost of completing the
17 required final reclamation.

18 (d) If a permit is revoked by the Department, the Department shall proceed with efforts to collect the bond(s) or
19 other financial assurance that was submitted to the Department at the time of permitting for oil or gas well plugging
20 and abandonment and environmental damage in accordance with the rules of this Section.

21
22 History Note: Authority G.S. 113-391(a)(5); 113-421(a2);

23 Eff.
24

1 15A NCAC 05H .1501 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1501 SCOPE**

4 The rules in this Section establish requirements for well site construction standards.

5

6 History Note: Authority G.S. 113-391(a)(4); 113-391(a)(5)c;

7 Eff.

1 15A NCAC 05H .1502 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1502 WELL SITE CONSTRUCTION STANDARDS**

4 (a) The applicant or permittee shall submit a Well Site Development Plan to the Department pursuant to Rule .1304
5 (c)(2) of this Subchapter. The Well Site Development Plan shall be signed and sealed by a North Carolina
6 Professional Engineer and shall include the following information:

- 7 (1) the name, address, telephone number, fax number, and email address of applicant or permittee;
- 8 (2) the lease name and the oil or gas well name and number;
- 9 (3) the name and address of surface and mineral owners;
- 10 (4) the latitude and longitude (in decimal degrees) of the proposed access road entrance, corners of the
11 well pad, wellhead(s), tank battery, pits, and all other production equipment reported to five
12 decimal places of accuracy and precision using the North American Datum of 1983 (NAD83);
- 13 (5) a well site location map depicting the well pad and access road using a scale of one inch equals
14 2,000 feet;
- 15 (6) maps depicting the proposed well site, well pad, tank battery, pits, access road, and topsoil
16 stockpiles along with existing roads, surface water bodies, wetlands, and other surface features
17 affected by the construction using a scale ranging between one inch equals 50 feet to one inch
18 equals 500 feet with two foot topographic contours, depending on the total disturbed area;
- 19 (7) the details of the leak detection system, either electrical or piped, that will be installed on any
20 proposed pit including a plan of action to mitigate leakage;
- 21 (8) the proposed cut and fill areas with two foot grading contours depicting slope ratios and
22 identifying elevation at the top and bottom of slopes using the North American Vertical Datum of
23 1988 (NAVD88);
- 24 (9) the cross-sections of the length and width of the well site, well pad, and access road that include
25 cut and fill volumes posted in cubic yards;
- 26 (10) a description of the well site construction sequence and stabilization techniques;
- 27 (11) the erosion and sedimentation control measures that are designed and constructed to prevent
28 sedimentation to water bodies and adjacent properties from any land disturbing activities related to
29 the construction of the well site in accordance with the SPCA and 15A NCAC 04, and the “North
30 Carolina Erosion and Sediment Control Planning and Design Manual,” which is incorporated by
31 reference, including subsequent amendments and editions. The North Carolina Erosion and
32 Sediment Control Planning and Design Manual may be viewed online at
33 <http://portal.ncdenr.org/web/lr/publications>;
- 34 (12) the stormwater management control measures shall be designed and constructed in accordance
35 with 15A NCAC 02H and the “North Carolina Division of Water Quality Stormwater Best
36 Management Practices Manual,” which is incorporated by reference, including subsequent

1 amendments and editions. The Stormwater Best Management Practices Manual may be viewed
2 online at <http://portal.ncdenr.org/web/lr/bmp-manual>;

3 (13) the maintenance procedures for the access road and well pad; and

4 (14) the pre-construction conditions at the proposed well site, including aerial photographs,
5 topographic maps, and pre-construction site inspection data.

6 (b) The permittee shall notify the Department at least 48 hours via telephone or email prior to the commencement of
7 construction of a new well site or prior to the implementation of an approved permit modification. The permittee
8 shall submit Form 11 – Required Notifications to the Department, by mail, email, or fax within five calendar days
9 and shall include the following information:

10 (1) the permittee’s name, address, telephone number, fax number, and e-mail address;

11 (2) the county and nearest city or town where the oil or gas well is located;

12 (3) the property street address or nearest address to the ingress or egress point leading from a public
13 road to the well pad;

14 (4) the API number, the lease name and the oil or gas well name and number; and

15 (5) the scheduled date and approximate time of day for commencement of construction activities.

16 (c) Well site disturbed areas shall be minimized. Taking into consideration the geologic target, setbacks, and safety,
17 the well site shall be located in accordance with API Recommended Practice 51R “Environmental Protection for
18 Onshore Oil and Gas Production Operations and Leases,” and the United States Department of the Interior, Bureau
19 of Land Management (BLM) “Surface Operating Standards and Guidelines for Oil and Gas Exploration and
20 Development, the Gold Book,” which are incorporated by reference, including subsequent amendments and editions.
21 Recommended Practice 51R, published by API, may be viewed online at no charge at
22 <http://publications.api.org/default.aspx>.

23 (d) Well sites shall be designed and located pursuant to G.S. 113A, Article 4 and in accordance with the North
24 Carolina Erosion and Sediment Control Planning and Design Manual.

25 (e) All topsoil shall be stockpiled for reuse during reclamation. Topsoil shall be segregated and stored separately
26 from subsurface materials. Stockpiles shall be located and protected to minimize wind and water erosion in
27 accordance with the North Carolina Erosion and Sediment Control Planning and Design Manual.

28 (f) Well pads shall be designed and constructed to support the maximum weight of all vehicles, equipment, and
29 material on the site.

30 (g) Well pads shall be designed and constructed using surface or subsurface containment systems that prevent spills
31 or releases of any substances from escaping the well pad.

32 (1) Containment systems shall be required on the well pad for all equipment used for any phase of
33 drilling, casing, cementing, hydraulic fracturing or flowback operations and for all substances
34 including drilling mud, drilling mud additives, hydraulic oil, diesel fuel, hydraulic fracturing
35 additives or flowback fluid.

36 (2) Containment systems shall have a coefficient of permeability no greater than 1×10^{-10} centimeters
37 per second (cm/sec) and shall be at least 30 millimeters (mils) in thickness.

1 (3) Adjoining sections of containment systems shall be sealed together in accordance with the
2 manufacturer's directions to prevent leakage.

3 (4) All components of the containment system that could potentially come into direct contact with any
4 substances shall be compatible with those substances and be resistant to physical, chemical and
5 other failure during handling, installation and use pursuant to American Society for Testing and
6 Materials (ASTM) D5747/D5747M-08 (2013) e1 "Standard Practice for Tests to Evaluate the
7 Chemical Resistance of Geomembranes to Liquids," which is incorporated by reference, including
8 subsequent amendments and editions. This document, published by ASTM International, 100
9 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428, may be purchased at a cost of
10 forty-two dollars (\$42.00) at <http://www.astm.org/Standards/D5747.htm>.

11 (5) The permittee shall inspect all containment systems with sufficient regularity to ensure integrity is
12 maintained. Containment systems shall be maintained in such manner to prevent an impact to
13 public health, welfare, and the environment. Containment system inspection and maintenance
14 records shall be available at the well site for review by the Department.

15 (6) The permittee shall notify the Department if a spill or release occurs at the well site and take
16 necessary remedial actions in accordance with Rule .2005 of this Subchapter.

17 (7) The permittee shall provide primary and secondary containment when storing additives,
18 chemicals, oils, or fuels. The secondary containment shall have the capacity to contain 110 percent
19 of the volume being stored.

20 (h) Well sites shall be constructed to prevent stormwater runoff from entering the well pad. All stormwater control
21 measures shall be designed and managed in accordance with 15A NCAC 02H and the "North Carolina Division of
22 Water Quality Stormwater Best Management Practices Manual."

23 (i) All erosion control or stormwater measures shall be maintained according to the approved Well Site
24 Development Plan.

25
26 *History Note: Authority G.S. 113-391(a)(4); 113-391(a)(5); 150B-2(8a)h*

27 *Eff.*

1 15A NCAC 05H .1503 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1503 ACCESS ROAD CONSTRUCTION STANDARDS**

4 (a) Prior to construction of the access road, the permittee shall post an identification sign pursuant to Rule .1615 of
5 this Subchapter.

6 (b) Access roads shall be located, designed, and constructed to minimize environmental impact and meet the
7 requirements of the SPCA, 15A NCAC 04, “North Carolina Erosion and Sediment Control Planning and Design
8 Manual,” 15A NCAC 02H, “North Carolina Division of Water Quality Stormwater Best Management Practices
9 Manual,” and the North Carolina Department of Transportation “Standard Specifications for Roads and Structures,”
10 which are incorporated by reference, including subsequent amendments and editions. The “North Carolina Erosion
11 and Sediment Control Planning and Design Manual,” may be viewed online at no charge at
12 <http://portal.ncdenr.org/web/lr/publications>. The Stormwater Best Management Practices Manual may be viewed
13 online at no charge at <http://portal.ncdenr.org/web/lr/publications>. The Standard Specifications for Roads and
14 Structures, published by the Department of Transportation, may be viewed online at no charge at
15 http://www.ncdot.org/doh/preconstruct/ps/specifications/specifications_provisions.html.

16 (1) Existing roads shall be used as access routes when feasible.

17 (2) Access roads shall be constructed and maintained so emergency response vehicles may enter the
18 well site at all times.

19 (3) Public roads shall be kept clear of mud and debris from the well site.

20 (4) Turnarounds or pull-off areas shall be installed for single-lane access roads exceeding 150 feet in
21 length.

22

23 History Note: Authority G.S. 113-391(a)(4); 391(a)(5);

24 Eff.

1 15A NCAC 05H .1504 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1504 PIT AND TANK CONSTRUCTION STANDARDS**

4 (a) All pits, series of pits, tanks, and tank batteries shall be constructed and maintained to contain all Exploration
5 and Production (E & P) wastes from the drilling, completing, recompleting, producing, servicing, and plugging of an
6 oil or gas well.

7 (b) The pit, series of pits, tanks, and tank batteries shall be installed and maintained in accordance with the
8 following requirements:

9 (1) the location of pit(s) and tanks(s) shall be in accordance with the minimum setbacks as required in
10 Rules .1601 and .1602 of this Subchapter, or in an approved variance pursuant to Rule .1603 of
11 this Subchapter;

12 (2) pits shall be located in cut material to the fullest extent possible. Pits shall be constructed adjacent
13 to the high wall for sloping well sites. If the pit cannot be constructed in cut material, at least 50
14 percent of the pit shall be constructed below original ground level to prevent failure of the pit dike.
15 Pit dikes constructed of fill material shall be compacted according to soil texture and moisture
16 content pursuant to 15A NCAC 02K .0208, which is incorporated by reference, including
17 subsequent amendments and editions;

18 (3) all pits and open tanks shall maintain a minimum of two feet of freeboard at all times;

19 (4) if Paragraph (3) of this Rule is violated, the permittee shall notify the Department within two
20 hours of discovery and take the necessary actions to ensure the structural stability of the pit or
21 open tank, prevent spills, and restore the two feet of freeboard; and

22 (5) tank design, installation, and use shall comply with API Specifications 12B “Specification for
23 Bolted Tanks for Storage of Production Liquids,” Specification 12D “Specification for Field
24 Welded Tanks for Storage of Production Liquids,” and Specification 12F “Specification for Shop
25 Welded Tanks for Storage of Production Liquids,” which are incorporated by reference, including
26 subsequent amendments and editions. Specifications 12B, 12D, and 12F, published by API, may
27 be viewed online at no charge at <http://publications.api.org/default.aspx>.

28 (c) Any pit that contains E & P waste shall comply with the following standards:

29 (1) pits shall have an upper and lower synthetic liner;

30 (2) each synthetic liner shall have a coefficient of permeability no greater than 1×10^{-10} cm/sec and
31 shall be at least 30 mils in thickness for polyvinyl chloride or at least 40 mils in thickness for high-
32 density polyethylene;

33 (3) each synthetic liner shall be designed, constructed and maintained so that the physical and
34 chemical characteristics of the liner are not adversely affected by the E & P waste or by ultraviolet
35 light pursuant to ASTM D5747/D5747M-08 (2013) e1 “Standard Practice for Tests to Evaluate
36 the Chemical Resistance of Geomembranes to Liquids,” which is incorporated by reference,
37 including subsequent amendments and editions. This document, published by ASTM

1 International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428, may be
2 purchased at a cost of forty-two dollars (\$42.00) at <http://www.astm.org/Standards/D5747.htm>;

3 (4) the synthetic liner shall be resistant to failures or damage during transportation, handling,
4 installation, and use;

5 (5) adjoining sections of synthetic liners shall be sealed together to prevent leakage in accordance
6 with the manufacturer's directions;

7 (6) the synthetic liner shall be trenched and anchored into the top of the berm;

8 (7) the pit shall be constructed with a leak-detection zone between the upper and lower synthetic
9 liners designed to:

10 (A) reduce the maximum predicted head acting on the lower membrane liner to less than one
11 inch and to detect a leak within 24 hours;

12 (B) function without damaging the liners; and

13 (C) designed to allow permittee to monitor, record, and remove any leakage within the zone.

14 (8) the liner sub-base shall be smooth, uniform, and free from debris, rock, and other materials that
15 may puncture, tear, cut, or otherwise cause the liner to fail. The liner sub-base and subgrade shall
16 be capable of bearing the weight of the material above the liner without causing settling that may
17 affect the integrity of the liner;

18 (9) the pit shall have a perimeter berm that is a minimum of two feet in width along the crest of the
19 berm, to prevent stormwater runoff from entering the pit; and

20 (10) the bottom of the pit shall be at least four feet above the seasonal high groundwater table and
21 bedrock.

22 (d) If a liner becomes torn or otherwise loses integrity, the pit shall be managed to prevent the pit contents from
23 leaking out of the pit, or the pit contents shall be removed and disposed of in accordance with the Waste
24 Management Plan.

25 (e) If the liner drops below the two feet of freeboard, the pit shall be managed to prevent the pit contents from
26 leaking from the pit and the two feet of lined freeboard shall be restored.

27 (f) The permittee shall provide and maintain secondary containment for all pits, tanks, and production equipment of
28 sufficient capacity to contain 110 percent of the volume of either the largest tank within the containment system or
29 the total volume of all interconnected tanks, whichever is greater. Secondary containment structures shall be
30 constructed of a material compatible with the fluids being stored and maintained to prevent loss of fluids.

31 (g) Tanks for the storage of produced hydrocarbons shall not be buried and shall contain the following components:

32 (1) activated charcoal filters installed on vent stacks. Activated charcoal filters shall be maintained
33 and replaced according to manufacturer's specifications;

34 (2) low-pressure relief valves installed on vent stacks. Relief valves shall remain functioning at all
35 times;

36 (3) hatch lids shall have a functioning seal and shall be secured at all times unless the permittee is on-
37 site; and

1 (4) lightning arrestors installed on each tank to comply with API Recommended Practice 2003,
2 “Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents,” which is
3 incorporated by reference, including subsequent amendments and editions. Recommended
4 Practice 2003, published by API, may be viewed online at no charge at
5 <http://publications.api.org/default.aspx>.

6 (h) The Commission may grant or deny a variance from any construction standard of this Rule. The applicant or
7 permittee shall submit a request for a variance in accordance with Rule .0301 of this Subchapter. In granting or
8 denying the request the Commission shall consider factors such as:

9 (1) the requested variance to deviate from the standards and rule will provide equal or greater
10 protection of public health, welfare, and the environment; and

11 (2) construction in accordance with the standards of this Rule is not technically or economically
12 feasible.

13
14 History Note: Authority 113-391(a)(5)c, 113-391(a)(5)d;

15 Eff.

1 15A NCAC 05H .1601 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1601 SETBACK DISTANCES**

4 (a) Each oil or gas well, tank, tank battery, or pit shall comply with the following setback distances as measured
5 from the center of a wellhead and the edge of the pit, production facility equipment, tank, or tank battery closest to
6 the features below:

7 (1) occupied dwellings and high occupancy buildings: 650 feet;

8 (2) edge of a public road, highway, utility or railroad

9 track right-of-way, or other right-of-way: 100 feet;

10 (3) a perennial stream, river, watercourse, pond, lake, or other

11 natural and artificial bodies of water including

12 wetlands and trout stream: 200 feet;

13 (4) intermittent stream: 100 feet; and

14 (5) a public or private water well intended for human

15 consumption or household purpose: 650 feet.

16 (b) The permittee shall ensure a minimum setback of 100 feet from each oil or gas wellhead, tank, tank battery, or
17 pit to the edge of the mapped 100-year floodplain and floodway.

18

19 History Note: Authority G.S. 113-391(a)(5)d;

20 Eff.

1 15A NCAC 05H .1602 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1602 PRODUCTION FACILITY SAFETY SETBACK DISTANCES**

4 (a) A pit, tank, or tank battery shall be a minimum of 75 feet from any wellhead.

5 (b) A tank shall be a minimum of five feet from another tank.

6 (c) A mechanical separator or compressor shall be located the minimum distance from any of the following:

7 (1) a wellhead: 50 feet; and

8 (2) a tank: 75 feet.

9 (d) All production facility equipment, excluding gathering lines, whose contents may be heated shall be located a
10 minimum distance of 75 feet from a tank or a wellhead.

11

12 History Note: Authority G.S. 113-391(a)(5)d;

13 Eff.

1 15A NCAC 05H .1603 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1603 VARIANCE FOR SETBACKS**

4 (a) An applicant or permittee may request a variance to reduce the setback distances for an oil or gas wellhead, a
5 tank or tank battery, and a pit from an occupied dwelling required by Rule .1601 of this Section. Variances from
6 setbacks established for high occupancy buildings are prohibited. The Commission shall consider the following
7 factors in granting or denying variances:

8 (1) the variances shall include additional measures that eliminate, minimize, or mitigate potential
9 adverse impacts to public health, welfare, and the environment, such as the use of non-diesel fuels
10 with lower emissions; and

11 (2) the Commission shall require site-specific mitigation measures to address location specific
12 considerations.

13 (b) The Commission shall require the following conditions in any approved variance from an occupied dwelling:

14 (1) the wellhead, tank or tank battery, or production facility shall be a minimum of 400 feet from an
15 occupied dwelling;

16 (2) no variance is allowed for any E & P waste pit setback from an occupied dwelling; and

17 (3) freshwater storage pits, reserve pits to drill surface casing, and emergency pits, shall be a
18 minimum of 400 feet from an occupied dwelling.

19 (c) An applicant or permittee may request a variance to reduce the setback distances for an oil or gas wellhead, a
20 tank or tank battery from an intermittent stream, or a pond, or other natural or artificial water body, that is not a
21 water of the State, wholly contained within the drilling unit required by Rule .1601 of this Section. The
22 Commission shall consider the following factors in granting or denying variances:

23 (1) the variances shall include additional measures that eliminate, minimize, or mitigate potential
24 adverse impacts to public health, welfare, and the environment, such as the use of secondary or
25 backup containment measures;

26 (2) the measures proposed to eliminate, minimize or mitigate potential adverse impacts to public
27 health, welfare and the environment are adequate to address all the risks at the well site and justify
28 the reduction of setback distances as requested in the variance;

29 (3) the oil or gas wellhead, freshwater storage pit, tank, tank battery, or production facility shall be a
30 minimum of 50 feet from any intermittent stream, pond, or other natural or artificial water body,
31 that is not a water of the State, wholly contained within the drilling unit;

32 (4) no variance is allowed for any E & P waste pit setback from an intermittent stream; and

33 (5) oil or gas wellheads, tanks or a tank battery, or pits less than 650 feet from, and up-gradient of, a
34 surface water body shall use tertiary containment, such as an earthen berm.

35 (d) The Commission shall require green completions in any approved variance:

36 (1) flow lines, separators, and sand traps capable of supporting green completions shall be installed;

37 (2) uncontrolled venting shall be prohibited; and

1 (3) temporary flowback flaring and oxidizing equipment shall include the following:

2 (A) adequately sized equipment to handle one and one half times the largest flowback volume
3 of gas experienced within a 10-mile radius;

4 (B) valves and porting available to divert gas to temporary equipment or to permanent flaring
5 and oxidizing equipment; and

6 (C) auxiliary fuel with sufficient supply and heat to sustain combustion or oxidation of the
7 gas mixture when the mixture includes noncombustible gases.

8 (e) An applicant or permittee may submit a surface use agreement from a surface landowner as justification to
9 request a variance to setback distances for the wellheads, tank or tank battery, and pits from occupied dwellings.

10 The surface use agreement may include additional site-specific mitigation measures. The surface use agreement
11 shall include written consent of the landowner, which may be provided by any of the following:

12 (1) a copy of an original lease agreement text that provides for the reduction of the distance of the
13 location of an oil or gas wellhead, well pad, tank battery, or pit, as applicable, from an occupied
14 dwelling;

15 (2) a copy of a deed severing the oil and gas mineral rights, as applicable, from the owner's parcel of
16 land as filed with the county Registrar of Deeds that expressly provides for the reduction of the
17 distance of the location of an oil or gas wellhead, well pad, tank battery, or pit, as applicable, from
18 an occupied dwelling; or

19 (3) a copy of a written surface use agreement signed by the property owner that consents to the
20 proposed location of an oil or gas wellhead, well pad, tank, tank battery, or pit(s), as applicable.
21 An applicant or permittee may submit a copy of a written statement filed with the county Register
22 of Deeds that expressly provides for the reduction of the distance of the location of an oil or gas
23 wellhead, well pad, tank battery, or pit, as applicable, from an occupied dwelling in lieu of a copy
24 of a written surface use agreement.

25 (f) Variance requests shall be submitted in accordance with Rule .0301 of this Subchapter. In addition to the
26 information required by Rule .0301 of this Subchapter, any permittee seeking to use surface use agreement as a basis
27 for a variance shall submit a copy of the surface use agreement containing the information in Paragraph (c) of this
28 Rule.

29
30 History Note: Authority G.S. 113-391(a)(5)d;

31 Eff.

1 15A NCAC 05H .1604 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1604 DIESEL FUEL USE**

4 (a) The Commission shall incorporate by reference, including subsequent amendments and editions, the “Permitting
5 Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels – Draft: Underground Injection
6 Control Program Guidance #84,” published by the United States Environmental Protection Agency. Copies of this
7 document may be obtained online at no charge at:

8 <http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/upload/hfdieselfuelsguidance.pdf>.

9 (b) Any substance identified by one or more of the following Chemical Abstract Service Registry Numbers listed in
10 the United States Environmental Protection Agency’s “Permitting Guidance for Oil and Gas Hydraulic Fracturing
11 Activities Using Diesel Fuels” shall not be used in the subsurface:

12 (1) 68334-30-5, Primary Name: Fuels, diesel;

13 (2) 68476-34-6, Primary Name: Fuels, diesel, Number 2;

14 (3) 68476-30-2, Primary Name: Fuel oil Number 2;

15 (4) 68476-31-3, Primary Name: Fuel oil, Number 4;

16 (5) 8008-20-6, Primary Name: Kerosene; and

17 (6) 68410-00-4, Primary Name: Distillates (petroleum), crude oil.

18

19 History Note: Authority G.S. 113-391(a)(5)g;

20 Eff.

1 15A NCAC 05H .1605 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1605 CASING AND EQUIPMENT REQUIREMENTS**

4 (a) All casing and tubing installed in oil or gas wells shall be steel, steel alloy, or other material that has been
5 manufactured to meet the American Petroleum Institute (API) standards. All casing and tubing material shall be
6 manufactured according to API standards; all previously used casing shall comply with design parameters for the oil
7 or gas well, pass a hydrostatic test, a drift test, and a wall thickness test pursuant to API Specification 5CT
8 “Specification for Casing and Tubing,” and API Specification 5B “Specification for Threading, Gauging, and
9 Thread Inspection of Casing, Tubing, and Line Pipe Threads,” which are incorporated by reference, including
10 subsequent amendments and editions. These documents, published by API, may be purchased at a cost of two
11 hundred thirty-seven dollars (\$237.00) at <http://www.techstreet.com/api/products/1802047> and one hundred
12 eighteen dollars (\$118.00) at <http://www.techstreet.com/api/products/1555125> respectively, or by mail at
13 Techstreet, 3916 Ranchero Drive, Ann Arbor, MI 48108. The casing shall be marked to verify the test results and
14 the permittee shall provide a copy of the test results to the Department before the casing is installed in the wellbore.

15 (1) Casing shall be designed to have a minimum internal yield pressure rating that is 20 percent
16 greater than the maximum anticipated pressure to which the casing may be subjected to during
17 drilling, completion, or production operations.

18 (2) Where subsurface reservoir pressure is unknown and cannot be reasonably anticipated, the
19 permittee shall assume a pressure gradient of 0.433 pounds per square inch (psi) per foot in a fully
20 evacuated hole, under shut-in conditions.

21 (3) All casing and tubing connections shall be torqued to the manufacturer’s specifications and shall
22 comply with API Recommended Practice 5A3 “Recommended Practice on Thread Compounds for
23 Casing, Tubing, Line Pipe, and Drill Stem Elements,” and API Recommended Practice 5C5
24 “Recommended Practice on Procedures for Testing Casing and Tubing Connections,” which are
25 incorporated by reference, including subsequent amendments and editions. These documents,
26 published by API, may be purchased at a cost of one hundred forty-five dollars (\$145.00) at
27 <http://www.techstreet.com/api/products/1657246> and one hundred sixty-three dollars (\$163.00) at
28 <http://www.techstreet.com/api/products/1087582> respectively, or by mail at Techstreet, 3916
29 Ranchero Drive, Ann Arbor, MI 48108.

30 (b) The permittee shall verify casing integrity by pressure testing each cemented casing string greater than 200 feet
31 in length in accordance with the following test method:

32 (1) test the casing string, prior to drilling the cement plug or stimulating the oil or gas well, at a
33 minimum pump pressure in psi, that is calculated by multiplying the length of the casing string, in
34 feet, by 0.2; but in no event shall the pressure test exceed 1,500 psi;

35 (2) this pressure test shall be conducted for 30 minutes; if the pressure has dropped by more than 10
36 percent, then the casing string has failed to meet the integrity requirements;

1 (3) the permittee shall not drill the cement plug or stimulate the oil or gas well until the condition has
2 been corrected; and

3 (4) the casing string has met the integrity requirements if the pressure has dropped by no more than 10
4 percent of testing pressure.

5 (c) The wiper plug and float collar assembly shall be set with a minimum cement displacement pressure of 500 psi.

6 (d) All casing shall be centralized to allow the cement to fill the annular space to the surface in order to isolate
7 critical zones including: aquifers, flow zones, voids, lost circulation zones, coal layers, and hydrocarbon production
8 zones. Casing strings shall comply with API Recommended Practice 10D-2 “Recommended Practice for Centralizer
9 Placement and Stop Collar Testing,” which is incorporated by reference, including subsequent amendments and
10 editions. This document, published by API, may be purchased at a cost of seventy-seven dollars (\$77.00) at
11 <http://www.techstreet.com/api/products/1173247> or by mail at Techstreet, 3916 Ranchero Drive, Ann Arbor, MI
12 48108.

13 (1) All bow-spring centralizers shall comply with API Specification 10D “Specification for Bow-
14 Spring Casing Centralizers,” which is incorporated by reference, including subsequent
15 amendments and editions. This document, published by API, may be purchased at a cost of
16 eighty-nine dollars (\$89.00) at <http://www.techstreet.com/api/products/957236> or by mail at
17 Techstreet, 3916 Ranchero Drive, Ann Arbor, MI 48108.

18 (2) All rigid centralizers shall comply with API Technical Report 10TR4 “Considerations Regarding
19 Selection of Centralizers for Primary Cementing Operations,” which is incorporated by reference,
20 including subsequent amendments and editions. This document, published by API, may be
21 purchased at a cost of sixty-one dollars (\$61.00) at
22 <http://www.techstreet.com/api/products/1568067> or by mail at Techstreet, 3916 Ranchero Drive,
23 Ann Arbor, MI 48108.

24 (e) All packers and bridge plugs shall comply with API Specification 11D1 “Packers and Bridge Plugs,” which is
25 incorporated by reference, including subsequent amendments and editions. This document, published by API, may
26 be purchased at a cost of ninety-eight dollars (\$98.00) at <http://www.techstreet.com/api/products/1634486> or by mail
27 at Techstreet, 3916 Ranchero Drive, Ann Arbor, MI 48108.

28
29 History Note: Authority G.S. 113-391(a)(5)c;
30 Eff.

1 15A NCAC 05H .1606 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1606 CEMENTING STANDARDS**

4 (a) All cement pumped into the wellbore shall consist of cement that is manufactured and tested pursuant to API
5 Specification 10A “Specification for Cements and Materials for Well Cementing” or the American Society for
6 Testing and Materials (ASTM) Standard Specification “C150/C150M Standard Specification for Portland Cement,”
7 which are incorporated by reference, including subsequent amendments and editions. Specification 10A, published
8 by API, may be purchased at a cost of one hundred forty-five dollars (\$145.00) at
9 <http://www.techstreet.com/api/products/1757666> or by mail at Techstreet, 3916 Ranchero Drive, Ann Arbor, MI
10 48108. Specification C150/C150M, published by ASTM, may be purchased at a cost of forty-one dollars (\$41.00)
11 at <http://www.astm.org/Standards/C150.htm> or by mail at 100 Barr Harbor Drive, West Conshohocken, PA 19428-
12 2959.

13 (b) The permittee, or an authorized representative of the permittee, shall be on site for all cement mixing and
14 placement operations to monitor the cement mixing equipment and to ensure that cement slurry design parameters
15 are followed.

16 (c) Cement shall be pumped at a rate and in a flow regime that minimizes channeling of the cement in the annulus.

17 (d) Cement mixtures for which published performance data are not available shall be tested by the permittee, or the
18 service company. The cement test results shall be included with the Form 2 – Oil or Gas Well Permit Application
19 confirming that the cement mixture meets API Specification 10A “Specification for Cements and Materials for Well
20 Cementing.”

21 (e) The Department may require, by permit condition, a specific cement mixture to be used in any oil or gas well.

22 (f) All cement shall reach a compressive strength of at least 500 pounds per square inch (psi) prior to conducting the
23 casing integrity test required by Rule .1605 of this Section.

24
25 History Note: Authority G.S. 113-391(a)(5);

26 Eff.

1 15A NCAC 05H .1607 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1607 WELL INSTALLATION**

4 (a) The Department may establish, by permit conditions, additional oil or gas well construction standards that
5 provide greater protection of human health, safety, and the environment.

6 (b) The permittee shall notify the Department at least 48 hours via telephone or email prior to spudding the oil or
7 gas well. The permittee shall submit Form 11 – Required Notifications to the Department, by mail, email, or fax
8 within five calendar days and shall include the following information:

9 (1) the permittee’s name, address, telephone number, fax number, and email address;

10 (2) the county and nearest city or town where the oil or gas well is located;

11 (3) the property street address or nearest address to the ingress or egress point leading from a public
12 road to the well pad;

13 (4) the API number, the lease name, and the oil or gas well name and number; and

14 (5) the scheduled date and approximate time for spudding the oil or gas well.

15 (c) The permittee shall notify the Department at least 48 hours prior to setting and cementing any casing string via
16 telephone or email, in order to allow the Department to participate in pre-job safety and procedural meetings,
17 independently test cement mix water, evaluate casing condition, and observe and document the execution of the
18 cementing operation. The permittee shall submit Form 11 – Required Notifications to the Department, by mail,
19 email, or fax within five calendar days and shall include the following information:

20 (1) the permittee’s name, address, telephone number, fax number, and email address;

21 (2) the county and nearest city or town where the oil or gas well is located;

22 (3) the property street address or nearest address to the ingress or egress point leading from a public
23 road to the well pad;

24 (4) the API number, the lease name, and the oil or gas well name and number; and

25 (5) the scheduled date and approximate time for setting and cementing any casing string.

26 (d) If a mousehole or rathole is used, it shall be constructed of liquid-tight steel pipe with a welded-basal plate.

27 (e) A wellbore shall be drilled using air, water, water-based drilling fluid, or a combination thereof until all fresh
28 groundwaters have been isolated.

29 (1) Drilling fluids that cause a violation of standards established in 15A NCAC 02L, which is
30 incorporated by reference including subsequent amendments, shall not be used until all
31 groundwaters have been isolated.

32 (2) Only freshwaters shall be used for mixing all drilling fluids.

33 (f) A wellbore shall be drilled to provide a minimum of a one-inch annulus, as measured from the casing.

34 (g) The wellbore shall be conditioned prior to cementing to ensure an adequate cement bond between the casing and
35 the formation by circulating the total volume of drilling fluid in the wellbore a minimum of two times. The drilling
36 fluid rheology shall be adjusted to optimize conditions for displacement of the drilling fluid and to ensure that the
37 wellbore is stable.

1 (h) All casing strings shall be rotated and reciprocated during the emplacement of cement to circulate the cement
2 surrounding the casing string to fill the annulus.

3 (i) Stormwater shall be prevented from infiltrating the wellbore by crowning the location around the wellbore to
4 divert fluids as approved in the Well Site Development Plan.

5

6 History Note: Authority G.S. 113-391(a)(5)c;

7 Eff.

1 15A NCAC 05H .1608 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1608 WELL INSTALLATION FOR CONDUCTOR CASING**

4 (a) Conductor casing design and setting depth shall be based on the geological conditions at the wellbore location,
5 including the presence or absence of hydrocarbons and potential drilling hazards.

6 (1) Conductor casing shall be cemented from bottom to top. If cement does not return to the surface,
7 the permittee shall consult with and obtain approval from the Department to determine the
8 appropriate method to emplace cement.

9 (2) Conductor casing shall:

10 (A) stabilize unconsolidated sediments;

11 (B) isolate and seal off shallow groundwaters zones;

12 (C) isolate any shallow drilling hazards, hydrocarbon bearing zones, or coal formations;

13 (D) provide a stable platform for oil or gas well construction; and

14 (E) provide solid structural anchorage for a diverter system in air drilling operations.

15 (3) A mechanical or cement seal shall be installed at the surface to block downward migration of
16 surface pollutants.

17

18 History Note: Authority G.S. 113-391(a)(5)c;

19 Eff.

1 15A NCAC 05H .1609 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1609 WELL INSTALLATION FOR SURFACE CASING**

4 (a) Surface casing shall be set into competent bedrock to a depth of at least 100 feet below the base of the deepest
5 groundwaters but above any hydrocarbon strata containing fluids or gases that could negatively impact the quality of
6 the cement or proper functioning of the oil or gas well.

7 (1) Surface casing shall be cemented from bottom to top. If cement does not return to the surface, the
8 permittee shall consult with and obtain approval from the Department to determine the appropriate
9 method to emplace cement.

10 (2) Surface casing shall:

11 (A) isolate and seal off shallow groundwaters;

12 (B) provide a stable platform for oil or gas well construction; and

13 (C) contain pressures and fluids from subsequent drilling, completion, and production
14 operations.

15 (3) The surface casing shall be set into competent bedrock at a depth sufficient to ensure the blowout
16 preventer (BOP) can contain any formation pressure that may be encountered when drilling the
17 next section of the wellbore below the base of the surface casing string.

18 (4) The permittee shall collect correlation logs, core samples, and drill cutting samples to identify
19 groundwaters, zones of formational instability, and competent bedrock to be submitted to the
20 Department with Form 12 – Well Drilling Report required in Rule .1623 of this Section.

21 (5) Surface casing shall be cemented before drilling through any hydrocarbon-bearing stratum.

22 (6) If geologic hazards such as heaving shale, abnormal pressure, annular flow or other potential flow
23 zones are encountered, drilling shall stop, and casing shall be set and cemented before drilling
24 continues.

25 (7) A formation integrity test (FIT) shall be completed after drilling out below the base of the surface
26 casing, into at least 20 feet, but not more than 50 feet of new formation. The FIT shall be
27 completed in accordance with API Standard 65-Part 2 “Isolating Potential Flow Zones During
28 Well Construction,” which is incorporated by reference, including subsequent amendments and
29 editions. This document, published by API, may be viewed online at no charge at
30 <http://publications.api.org/default.aspx>. If the FIT fails, the permittee shall consult with the
31 Department to determine remedial or corrective actions necessary before operations continue.

32
33 History Note: Authority G.S. 113-391(a)(5)c;

34 Eff.

1 15A NCAC 05H .1610 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1610 WELL INSTALLATION FOR INTERMEDIATE CASING**

4 (a) Intermediate casing shall isolate groundwaters that have not been isolated by the surface casing and isolate flow
5 zones, lost circulation zones, or other geologic hazards in accordance with the following:

- 6 (1) if used to isolate groundwaters, the casing shall be set into competent bedrock to a depth of at least
7 200 feet below the deepest groundwaters. The casing string shall be cemented from the bottom to
8 a minimum of 100 feet above the top of the shallowest groundwaters;
- 9 (2) if used to mitigate unanticipated geologic hazards, such as heaving shale, abnormal pressure,
10 annular flow or other potential flow zones, the casing shall be set to a depth appropriate to mitigate
11 the hazard. The casing string shall be cemented from the bottom to 200 feet above the base of the
12 previous casing string;
- 13 (3) the permittee shall collect correlation logs, core samples, and drill cutting samples to identify
14 groundwaters, zones of formational instability, and competent bedrock to be submitted to the
15 Department with the submission of Form 12 – Well Drilling Report as required in Rule .1623 of
16 this Section;
- 17 (4) if the intermediate wellbore penetrates one or more flow zones, the cement used to control annular
18 gas migration from the flow zones shall be designed to comply with API Standard 65-Part 2
19 “Isolating Potential Flow Zones During Well Construction,” which is incorporated by reference,
20 including subsequent amendments and editions. This document, published by API, may be
21 viewed online at no charge at <http://publications.api.org/default.aspx>;
- 22 (5) a cement bond log (CBL) for the intermediate casing string shall be completed after cement has
23 reached a compressive strength of 500 psi to demonstrate the cementing operation was completed
24 in accordance with this Rule and to locate casing collars and centralizers. Drilling shall not
25 commence until the CBL is complete;
- 26 (6) if there is a failure to isolate groundwater zones, the permittee shall submit a plan of remediation
27 to the Department for approval and implement such plan by performing remedial operations prior
28 to continuing drilling operations. If the deficiencies cannot be remedied, the oil or gas well shall
29 be plugged and abandoned in accordance with Rule .1618 of this Section;
- 30 (7) a formation integrity test (FIT) shall be completed after drilling out below the base of the
31 intermediate casing, into at least 20 feet, but not more than 50 feet of new formation. The FIT
32 shall be completed in accordance with API Standard 65-Part 2 “Isolating Potential Flow Zones
33 During Well Construction,” which is incorporated by reference, including subsequent amendments
34 and edition. This document, published by API, may be viewed online at no charge at
35 <http://publications.api.org/default.aspx>. If the FIT fails, the permittee shall consult with the
36 Department to determine remedial or corrective actions necessary before operations continue; and

1 (8) the permittee shall identify the top of cement and submit a plan of remediation to the Department
2 for approval and implementation if operations, such as fluid returns, lift pressure, and
3 displacement indicate inadequate coverage of any flow zones, lost circulation zones, or any strata
4 containing groundwater.

5

6 History Note: Authority G.S. 113-391(a)(5)c;

7 Eff.

1 15A NCAC 05H .1611 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1611 WELL INSTALLATION FOR PRODUCTION CASING**

4 (a) Production casing shall be installed and cemented from the bottom to 200 feet above the base of the previous
5 casing string. Notwithstanding the foregoing, a production zone may be completed using a non-cemented
6 production liner in accordance with Paragraph (b) of this Rule. Installation of production casing or installation of
7 production liners shall comply with the following:

8 (1) logging of the wellbore shall be performed prior to installation of the production casing to measure
9 and evaluate the rock sections;

10 (2) a CBL shall be completed after the cement has reached a compressive strength of 500 psi to verify
11 the cementing operation was completed and to locate the casing collars and centralizers. Well
12 completion shall not commence until the CBL has been completed;

13 (3) the permittee shall submit a plan of remediation to the Department for approval if the cement
14 evaluation indicates a failure to isolate groundwater zones, and if the plan is approved, implement
15 such plan by performing remedial operations prior to continuing drilling operations. If the
16 deficiencies cannot be remedied, the oil or gas well shall be plugged and abandoned in accordance
17 with Rule .1618 of this Section; and

18 (4) for cemented well completions, the base of the production casing shall be cemented into or below
19 the production zone. For open-hole well completions, the base of the production casing shall be
20 cemented into or above the production zone.

21 (b) A production liner may be used as production casing if the following criteria are met:

22 (1) the surface casing is used as the groundwater isolation casing;

23 (2) the intermediate casing is set for a reason other than isolation of groundwater; and

24 (3) the production liner shall be cemented with a minimum of 200 feet of cement above the base of
25 the previous casing string.

26 (c) The production liner top shall be pressure tested to at least 500 psi, for a period of 30 minutes, above the
27 maximum anticipated pressure in the wellbore during well completion and production operations. If after 30
28 minutes the pressure has dropped by more than 10 percent, the permittee shall not resume operations until the
29 condition has been corrected and verified by a subsequent passing pressure test.

30
31 *History Note: Authority G.S. 113-391(a)(5)c;*

32 *Eff.*

1 15A NCAC 05H .1612 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1612 WELL INSTALLATION VARIANCE**

4 The applicant or permittee may request a variance from Rules .1608, .1609, .1610, or .1611 of this Section by
5 submitting a request pursuant to Rule .0301 of this Subchapter. In granting or denying a variance, the Commission
6 shall consider factors such as:

7 (1) increasing the oil or gas well efficiency;

8 (2) minimizing waste; and

9 (3) providing equal or greater protection for public health, welfare, and the environment.

10

11 History Note: Authority G.S. 113-391(a)(5)c;

12 Eff.

1 15A NCAC 05H .1613 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1613 WELL STIMULATION REQUIREMENTS**

4 (a) The applicant or permittee shall indicate on Form 2 – Oil or Gas Well Permit Application the intent to perform
5 well stimulation operations. If well stimulation was not approved as part of the initial application, the permittee
6 desiring to perform such operations shall submit the information required by this Rule via email, fax or mail to the
7 Department for review and approval at least 30 calendar days prior to commencement of well stimulation
8 operations.

9 (b) The production casing shall withstand the maximum anticipated treating pressure of the proposed well
10 stimulation operations. The maximum anticipated treating pressure shall not exceed 80 percent of the minimum
11 internal yield pressure for such production casing.

12 (c) Non-cemented portions of the oil or gas well shall be tested prior to well stimulation operations to ensure that
13 the wellbore can meet one of the following conditions:

14 (1) 70 percent of the lowest activating pressure for pressure actuated sleeve completions; or

15 (2) 70 percent of formation integrity for open-hole completions, as determined by a formation
16 integrity test (FIT).

17 (d) The permittee shall notify the Department via telephone or email a minimum of 48 hours prior to the
18 commencement of all well stimulation operations at the oil or gas well. The permittee shall submit Form 11 –
19 Required Notifications to the Department, by mail, email, or fax within five calendar days and shall include the
20 following information:

21 (1) the permittee’s name, address, telephone number, fax number, and email address;

22 (2) the county and nearest city or town where the oil or gas well is located;

23 (3) the property street address or nearest address to the ingress or egress point leading from a public
24 road to the well pad;

25 (4) the API number, the lease name, and the oil or gas well name and number; and

26 (5) the scheduled date and approximate time for the well stimulation operations.

27 (e) The permittee shall monitor and record all casing annuli via pressure gauges and by visual discharge for any
28 pressure or flow increases or discharges that would be indicative of a potential loss of wellbore integrity during the
29 well stimulation operations. The permittee shall take remedial action to avoid the loss of wellbore integrity and shall
30 notify the Department within 24 hours of discovery via telephone or email.

31 (f) If well stimulation treatment design does not allow the surface casing annulus to be open to atmospheric
32 pressure, then the surface casing pressures shall be monitored with a gauge and pressure relief device. The
33 maximum set pressure on the pressure relief device shall be the lower of:

34 (1) a pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe
35 (expressed in feet);

36 (2) 80 percent of the API rated minimum internal yield for the surface casing; or

37 (3) 80 percent of the surface casing shoe test pressure, adjusted for fluid density.

1 The well stimulation treatment shall be terminated if the pressures exceed the limits set in Subparagraphs (f)(1)
2 through (f)(3) of this Rule. Pressures on any casing string other than the surface casing shall not be allowed to
3 exceed 80 percent of the API rated minimum internal yield pressure for such casing string throughout the
4 stimulation treatment. The permittee shall notify the Department within 24 hours via telephone or email if treatment
5 pressure exceeds 80 percent of the API rated minimum internal yield pressure on any casing string other than
6 surface casing.

7 (g) The permittee shall monitor and record, at all times, the following parameters during well stimulation
8 operations:

9 (1) surface injection pressure, in pounds per square inch (psi);

10 (2) slurry pumping rate in barrels per minute (BPM);

11 (3) proppant concentration in pounds per thousand gallons;

12 (4) fluid pumping rate in BPM;

13 (5) identities, rates, and concentrations of additives used in accordance with Rule .1702 of this
14 Subchapter; and

15 (6) all annuli pressures.

16 (h) Following the notification in Paragraph (f) of this Rule, the Department may require additional documentation
17 or oil or gas well tests to determine if the well stimulation operations potentially endanger any fresh groundwater
18 zones. If either the permittee or the Department determines fresh groundwater zones are endangered, the
19 Department shall require the permittee to perform remedial operations to correct any oil or gas well failure.

20 (i) The Department shall notify the Commission at its next regularly scheduled meeting of any remedial operations
21 conducted pursuant to Paragraph (h) above.

22
23 History Note: Authority G.S. 113-391(a)(5)k; 113-391(a)(10); 113-391(a)(11); 113-391(b); 113-391(b1)

24 Eff.

1 15A NCAC 05H .1614 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1614 WELLHEAD REQUIREMENTS**

4 (a) All wellhead assemblies shall be installed and maintained in accordance with API Specification 6A
5 “Specification for Wellhead and Christmas Tree Equipment,” which is incorporated by reference, including
6 subsequent amendments and editions. This document, published by API, may be viewed online at no charge at
7 <http://publications.api.org/default.aspx>.

8 (b) All wellhead assemblies shall be pressure rated to withstand operating pressures 100 percent above the
9 maximum anticipated operating pressure during drilling, maintenance, remediation, stimulation, and production.

10 (c) All oil or gas wells shall be equipped so that no oil, gas, or condensate is able to leak.

11 (d) All valves shall be installed and be accessible so that pressure readings can be observed on the casing and tubing
12 at any time by the Department. Valves shall be designed to accommodate a one-half (0.5) inch National Pipe
13 Thread pressure connection.

14 (e) All intermediate and production casing annuli shall be equipped with a functioning pressure relief valve that is
15 set at 50 percent of the maximum surface pressure recorded during the formation integrity test (FIT) at the base of
16 the previous casing string.

17 (f) If the annular pressure measured at the surface exceeds 0.303 multiplied by the length of the casing string, or
18 upon discovering the activation of the pressure relief valve, the permittee shall notify the Department within 24
19 hours via telephone or email to determine appropriate action to remedy annular over-pressurization.

20 (g) A check valve shall be installed to prevent the return of fluids into the oil or gas well.

21

22 *History Note: Authority G.S. 113-391(a)(5)c; 113-391(a)(5)i*

23 *Eff.*

1 15A NCAC 05H .1615 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1615 WELL SITE MAINTENANCE AND SECURITY**

4 (a) A functioning blowout preventer (BOP) shall be installed and used during maintenance, remediation, and
5 stimulation operations in accordance with Rule .1616 of this Section.

6 (b) The permittee shall perform well servicing, excluding workovers, and equipment maintenance operations,
7 between the hours of 6:00 a.m. and 9:00 p.m.

8 (c) The permittee may perform emergency repairs at any time.

9 (d) A temporary work zone sign, "Authorized Personnel Only Beyond This Point" shall be posted at all ingress or
10 egress points leading from a public road to the well pad at least 200 feet from the activity area during drilling,
11 maintenance, remediation, and stimulation operations.

12 (e) Fencing no less than three feet in height shall be installed around the outer boundary of the well pad to restrict
13 unauthorized access to the well pad during drilling and completion operations.

14 (f) Equipment that is not used in the production of the oil or gas well shall not be stored within the well site.

15 (g) Equipment, vegetation, and refuse shall be maintained in order to ensure protection of the environment, public
16 health, and safety in accordance with API Recommended Practice 51R "Environmental Protection for Onshore Oil
17 and Gas Production Operations and Leases," which is incorporated by reference, including subsequent amendments
18 and editions. This document, published by API, may be viewed online at no charge at
19 <http://publications.api.org/default.aspx>.

20 (h) A permanent fence shall be installed around the wellhead, tank battery, separator, and all associated production
21 equipment prior to placing any oil or gas well into production. Fencing shall be:

22 (1) placed no closer than 50 feet to the wellhead or any portion of the tank battery;

23 (2) composed of chain link that is no less than six feet in height and shall be topped with restrictive
24 wire to prevent unauthorized access;

25 (3) securely anchored in the ground; and

26 (4) gated with locks and no less than four feet in width. If there are two or more tanks in a tank
27 battery, the permittee shall provide two gates on opposite sides of the production facility.

28 (i) The Commission, upon written request with justification by the permittee, may grant a variance to the permanent
29 fencing requirements in accordance with Rule .0301. In granting or denying the variance request, the Commission
30 shall consider factors such as:

31 (1) zoning of the area;

32 (2) land use; and

33 (3) configuration and size of the well pad.

34 (j) All gates, electrical boxes, and valves shall be locked unless in use, under repair, or if the permittee or an
35 authorized representative of the permittee is on-site. The permittee shall provide keys or combinations to the
36 Department and local emergency responders upon request.

37 (k) All brine and oil pick-up lines shall be secured by bull plugs.

1 (l) All oil or gas wells shall have an identification sign, in accordance with Paragraph (m) of this Rule, posted in a
2 place easily seen or noticed on or near the oil or gas wellhead or the tank battery until final abandonment, in
3 accordance with the following:

- 4 (1) the identification sign shall be posted within 72 hours after drilling activities cease;
- 5 (2) if multiple oil or gas wells are produced into a tank battery, each wellhead shall be identified; and
- 6 (3) any change of ownership shall be shown on the signs at the wellhead or tank battery no later than
7 60 calendar days after the date of the assignment or approval of the transfer.

8 (m) Identification signs shall be constructed of weatherproof and rustproof material and maintained to remain
9 legible at all times. Each sign shall include, at a minimum, the following information in two-inch or larger letters:

- 10 (1) the permittee's name, address, business telephone number, and emergency telephone number;
- 11 (2) the county, city, or town where the oil or gas well is located;
- 12 (3) the property street address or nearest address to the ingress or egress point leading from a public
13 road to the well pad, if nearest street address is used, "nearest address" shall be designated on the
14 sign;
- 15 (4) the API number, the lease name, and the oil or gas well name and number; and
- 16 (5) the local emergency response telephone number.

17 (n) The identification sign shall be posted at the following locations:

- 18 (1) the ingress or egress points leading from a public road to the well pad; and
- 19 (2) the outside of the fence that surrounds the well pad.

20 (o) "Danger, Keep Out" and "No Smoking or Open Flame" signs shall be attached to each side of the fencing
21 surrounding the wellhead and tank battery. If fencing has not been installed, the signs shall be attached to the
22 wellhead and tank battery. A "No Smoking Beyond This Point" sign shall be posted at ingress or egress points
23 leading from a public road to the well pad.

24

25 History Note: Authority G.S. 113-391(a)(5)i;

26 Eff.

1 15A NCAC 05H .1616 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1616 WELL-CONTROL AND BLOWOUT PREVENTION**

4 (a) During drilling, all oil or gas wells shall be equipped with a well-control system that includes a blowout
5 preventer (BOP). The well-control system shall meet the following requirements:

6 (1) be functional at all times and has been tested to working pressures at least 50 percent above the
7 hydrostatic pressures anticipated in the oil or gas well;

8 (2) BOP equipment shall be in compliance with API Standard 53 “Blowout Prevention Equipment
9 Systems for Drilling Wells,” which is incorporated by reference, including subsequent
10 amendments and editions. This document, published by API, may be viewed online at no charge
11 at <http://publications.api.org/default.aspx>;

12 (3) the BOP shall be installed and tested prior to drilling the surface-casing cement plug;

13 (4) during drilling operations, the shear-ram BOP shall be tested by closing the BOP at least once
14 daily in open hole conditions; the annular BOP shall be tested by closing on the drill pipe at least
15 once each week;

16 (b) The permittee shall notify the Department via telephone or email at least 48 hours prior to testing the BOP. Test
17 results shall be posted at the well site for review and available to the Department on request. The permittee shall
18 submit Form 11 – Required Notifications to the Department, by mail, email, or fax within five calendar days and
19 shall include the following information:

20 (1) the permittee’s name, address, telephone number, fax number, and email address;

21 (2) the county and nearest city or town where the oil or gas well is located;

22 (3) the property street address or nearest address to the ingress or egress point leading from a public
23 road to the well pad;

24 (4) the API number, the lease name, and the oil or gas well name and number; and

25 (5) the scheduled date and approximate time for the BOP test.

26 (c) The quantity of drilling fluid of sufficient weight to maintain well control shall be located on the well site during
27 drilling operations.

28 (d) If drilling with a mud system, the drilling-fluid system shall be designed to maintain control of the oil or gas
29 well to minimize the potential of a hydrostatic pressure surge when the drilling assembly is inserted into or removed
30 from the wellbore.

31 (e) If drilling with air, a rotating diverter system shall be installed to divert any wellbore fluids away from the rig
32 floor to a circulation pit at least 80 feet from the wellbore.

33 (f) The permittee shall have an individual certified from an accredited well control training program, such as
34 International Association of Drilling Contractors (IADC) WellCAP, on site during the drilling and completion of an
35 oil or gas well.

36 (g) A wellhead shall be installed after drilling operations are complete and the BOP has been removed.

37

1 History Note: Authority G.S. 113-391(a)(5)i;

2 Eff.

1 15A NCAC 05H .1617 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1617 VISUAL IMPACT MITIGATION**

4 (a) The permittee shall mitigate visual impacts using visual screening. Visual screening shall include existing
5 natural vegetation, vegetated earthen berms, tree plantings at staggered spacing to be installed and maintained
6 between any disturbed land and any adjoining property containing occupied buildings within view of the disturbed
7 land.

8 (b) The Commission, upon written request by the applicant or permittee submitted pursuant to Rule .0301 of this
9 Subchapter, may grant or deny a variance to the visual impact mitigation requirements. The Commission shall
10 consider factors such as:

- 11 (1) zoning of the area;
- 12 (2) surface use agreements;
- 13 (3) land use;
- 14 (4) topography; and
- 15 (5) configuration of the well pad.

16

17 History Note: Authority G.S. 113-391(a)(4);

18 Eff.

1 15A NCAC 05H .1618 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1618 REQUIREMENTS FOR PERMANENT CLOSURE OF OIL OR GAS WELLS**

4 (a) All lost holes, dry holes, and oil or gas wells incapable of production shall be plugged and abandoned. In
5 addition to the requirements detailed within this Rule, all plugging and abandonment activities shall meet the
6 standards in API Recommended Practice 51-R “Environmental Protection for Onshore Oil and Gas Production
7 Operations and Leases,” and API Bulletin E3 “Environmental Guidance Document: Well Abandonment and
8 Inactive Well Practices for U.S. Exploration and Production Operations,” which are incorporated by reference,
9 including subsequent amendments and editions. These documents, published by API, may be viewed online at no
10 charge at <http://publications.api.org/default.aspx>.

11 (b) The permittee shall plug and abandon lost holes and dry holes prior to releasing the drilling rig from the well
12 pad.

13 (c) Non-drillable material that would prevent re-entry of an oil or gas well shall not be placed in any wellbore.

14 (d) Trash or refuse shall not be used as plugging and abandonment material.

15 (e) Conductor casing or surface casing shall not be removed from any wellbore during plugging and abandonment
16 operations.

17 (f) All pits or tanks utilized during oil or gas well plugging and abandonment operations to contain waste shall
18 conform to Rule .1504 of this Subchapter.

19 (g) Cement or mechanical bridge plugs shall be placed within the wellbore to isolate hydrocarbon bearing zones,
20 prevent migration of fluids in the wellbore, protect fresh groundwater aquifers, and prevent surface water from
21 entering the wellbore. All plugs used for plugging and abandonment shall meet the following requirements:

22 (1) all cement used to plug an oil or gas well shall conform to Rule .1606 of this Section;

23 (2) cement plugs shall be placed by circulation using tubing, casing, or drill pipe;

24 (3) all intervals between the cement and mechanical bridge plugs shall be filled with a bentonite-
25 based mud that has a minimum weight of nine and one half pounds per gallon;

26 (4) vertical wellbores shall have cement plugs placed in the following intervals:

27 (A) from the total depth to a minimum of 100 feet above the top of the lowest hydrocarbon
28 bearing zone or alternatively, from a minimum of 50 feet below the base of the lowest
29 hydrocarbon bearing zone penetrated to a minimum of 100 feet above the top of the
30 lowest hydrocarbon bearing zone;

31 (B) from a minimum of 50 feet below to a minimum of 100 feet above each succeeding
32 hydrocarbon bearing or fresh groundwater zone, not isolated by intermediate or surface
33 casing;

34 (C) from a minimum of 100 feet below to a minimum of 100 feet above the base of
35 intermediate and surface casing strings; and

36 (D) from a minimum of 200 feet below ground elevation to three feet below ground
37 elevation.

1 (5) horizontal wellbores shall have cement plugs placed in accordance with Paragraphs (g)(4)(A)
2 through (g)(4)(D) of this Rule with the exception that the bottom plug, as outlined in Paragraph
3 (g)(4)(A) of this Rule, shall be placed at the depth of the well curve kick-off point and extend
4 above that point a minimum of 200 feet; and

5 (6) if mechanical bridge plugs are used, the plug shall be set directly above each zone identified in
6 Paragraphs (g)(4)(A) through (g)(4)(D) of this Rule and covered with a minimum of 50 feet of
7 cement.

8 (h) All casing remaining in the wellbore shall be cut off three feet below ground elevation.

9 (i) The top of the wellbore shall be sealed with a steel plate that is welded in place and the API number for the oil or
10 gas well shall be identifiable on the steel plate.

11 (j) All ratholes and mouseholes shall be filled with bentonite or cement to a depth of three feet below ground
12 surface, and then filled to the surface with soil.

13 (k) All wellheads shall be disconnected from gathering lines.

14
15 History Note: Authority G.S. 113-391(a)(2);

16 Eff.

1 15A NCAC 05H .1619 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1619 NOTIFICATION AND REPORTING REQUIREMENTS FOR PERMANENT**
4 **CLOSURE OF OIL OR GAS WELLS**

5 (a) The permittee shall complete and submit the intent to plug and abandon portion of Form 14 – Plugging and
6 Abandonment, at least 30 calendar days prior to the commencement of plugging and abandonment operations. The
7 Department shall approve or deny Form 14 – Plugging and Abandonment, in accordance with this Rule. The
8 permittee shall submit a fee in accordance with G.S. 113-395(c) for plugging and abandonment of any oil or gas
9 well. Approved plugging and abandonment plans shall remain valid for a period of 12 months. The permittee shall
10 include the following with the completed Form 14 – Plugging and Abandonment:

- 11 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 12 (2) the county and nearest city or town where the oil or gas well is located;
- 13 (3) the property street address or nearest address to the ingress or egress point leading from a public
14 road to the well pad;
- 15 (4) the API number, the lease name, and the oil or gas well name and number;
- 16 (5) the reason for abandonment;
- 17 (6) identification of casing will be removed from wellbore;
- 18 (7) the diameter of each wellbore segment;
- 19 (8) the casing grade, weight, outside diameter, and setting depth for each casing string;
- 20 (9) elevation of cement top and cement bottom for each casing string;
- 21 (10) identification of the cement type, additives, density, yield, and estimated volume used for each
22 plug;
- 23 (11) identification of the type of plug if other than cement;
- 24 (12) identification of non-cemented sections of casing that may be perforated;
- 25 (13) the wellbore diagrams depicting the current oil or gas well configuration;
- 26 (14) the wellbore diagrams depicting the proposed oil or gas well configuration with cement plugs;
- 27 (15) the anticipated beginning and ending date for plugging and abandonment activities; and
- 28 (16) identification of wireline and cementing contractors.

29 (b) The permittee shall notify the Department 72 hours via telephone or email prior to commencement of plugging
30 and abandonment operations for all existing wells and eight hours for lost and dry holes by submitting Form 11 –
31 Required Notifications to the Department. This notification shall be submitted to the Department by mail, email, or
32 fax within five days and shall include the following information:

- 33 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 34 (2) the county and nearest city or town where the oil or gas well is located;
- 35 (3) the property street address or nearest address to the ingress or egress point leading from a public
36 road to the well pad;
- 37 (4) the API number, the lease name, and the oil or gas well name and number; and

1 (5) the scheduled date and approximate time of day for which the plugging and abandonment will be
2 performed.

3 (c) The Department may deny a request to plug and abandon an oil or gas well if the request is in violation of any
4 rule of this Subchapter or any of the following requirements have not been met:

5 (1) Form 14 – Plugging and Abandonment was not complete in accordance with Paragraph (a) of this
6 Rule; or

7 (2) the well abandonment fee has not been paid.

8 (d) No later than 90 days after plugging and abandoning an oil or gas well, the permittee shall complete and submit
9 Form 14 – Plugging and Abandonment, to the Department. The permittee shall include the following with the
10 completed Form 14 – Plugging and Abandonment, confirming that the plugging and abandonment operations were
11 conducted in accordance with the approved plan:

12 (1) the permittee’s name, address, telephone number, fax number, and email address;

13 (2) the county and nearest city or town where the oil or gas well is located;

14 (3) the property street address or nearest address to the ingress or egress point leading from a public
15 road to the well pad;

16 (4) the API number, the lease name, and the oil or gas well name and number;

17 (5) the reason for abandonment;

18 (6) the length and type of casing that was removed from wellbore;

19 (7) the diameter of each wellbore segment;

20 (8) the casing grade, weight, outside diameter, and setting depth for each casing string;

21 (9) the elevation of cement top and cement bottom for each casing string;

22 (10) the cement type, additives, density, yield, and volume used for each plug;

23 (11) the type of plug if other than cement;

24 (12) identification of the non-cemented sections of casing that were perforated;

25 (13) the wellbore diagrams depicting the pre-plugging oil or gas well configuration;

26 (14) the wellbore diagrams depicting the final plugged oil or gas well configuration with cement plugs;

27 (15) the date plugging and abandonment activities commenced and were completed;

28 (16) identification of wireline and cementing contractors that were used; and

29 (17) a copy of wireline logs, cementing tickets, and job summary report as supplied by the wireline and
30 cementing contractors.

31
32 *History Note:* Authority G.S. 113-391(a)(2);

33 Eff.

1 15A NCAC 05H .1620 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1620 REQUIREMENTS FOR SHUTTING-IN OIL OR GAS WELLS**

4 (a) Oil or gas wells that are completed according to Rule .1607, are equipped with a wellhead according to Rule
5 .1614, and are capable of production may be temporarily closed in accordance with this Rule.

6 (b) The permittee shall complete and submit Form 15 – Oil or Gas Well Status to the Department via mail, email or
7 fax within 14 calendar days of closing the master valve on the wellhead. The Form 15 – Oil or Gas Well Status
8 shall include the following information:

9 (1) the permittee’s name, address, telephone number, fax number, and email address;

10 (2) the county and nearest city or town where the oil or gas well is located;

11 (3) the property street address or nearest address to the ingress or egress point leading from a public
12 road to the well pad;

13 (4) the API number, the lease name, and the oil or gas well name and number;

14 (5) indicate if the request is for initial shut-in status or an annual extension of shut-in status;

15 (6) the type of oil or gas well;

16 (7) the diameter and length for each casing string;

17 (8) the diameter and length of tubing string;

18 (9) the type and amount of cement used for each casing string;

19 (10) the current pressure for tubing and casing strings;

20 (11) the current annulus pressure between tubing and production casing;

21 (12) the current annulus pressure between production casing and surface casing;

22 (13) indicate if any annuli are open to atmosphere;

23 (14) a description of how the current condition of the oil or gas well is capable of the following:

24 (A) preventing damage to the production zone;

25 (B) preventing surface leakage of fluids;

26 (C) protecting groundwaters; and

27 (D) protecting health and safety of persons, property or the environment.

28 (15) a description of the future utilization of the oil or gas well; and

29 (16) a description of how the oil or gas well is in compliance with the requirements of Rules .1614 and
30 .1615 of this Section.

31 (c) The master valve shall remain closed and locked until the oil or gas well is permanently plugged and abandoned
32 or placed into production.

33 (d) The permittee shall maintain bonding required by Section .1400 of this Subchapter until the oil or gas well is
34 permanently plugged and abandoned.

35 (e) The permittee shall conduct monthly site inspections of the well site in accordance with Rule .2201 of this
36 Subchapter.

1 (f) The permittee shall conduct an annual mechanical integrity test of each shut-in oil or gas well in accordance with
2 Paragraphs (j), (k), and (l) of Rule .2201 of this Subchapter and submit the test results to the Department using Form
3 16 – Mechanical Integrity Test Results.

4 (g) Shut-in status is valid for a period of one year with an annual renewal required if the permittee desires to
5 maintain shut-in status beyond one year. The annual renewal application shall demonstrate to the Department’s
6 satisfaction one of the following:

7 (1) inadequate infrastructure development; or

8 (2) sub-economic producing conditions.

9 (h) The Department shall revoke shut-in status of an oil or gas well if the permittee fails to maintain all of the
10 requirements of this Rule. The Department shall require the permittee to either place the oil or gas well into
11 production or plug and abandon the oil or gas well at the permittee’s discretion.

12 (i) The permittee shall complete and submit Form 17 – Notification of Return of Oil or Gas Well to Active Status,
13 to the Department by mail, email, fax within 14 calendar days of producing from an oil or gas well that has been
14 shut-in. The permittee shall include the following with the completed Form 17 – Notification of Return of Oil or
15 Gas Well to Active Status:

16 (1) the permittee’s name, address, telephone number, fax number, and email address;

17 (2) the county and nearest city or town where the oil or gas well is located;

18 (3) the property street address or nearest address to the ingress or egress point leading from a public
19 road to the well pad;

20 (4) the API number, the lease name, and the oil or gas well name and number; and

21 (5) the date of return to active status.

22

23 History Note: Authority 113-391(a)(2);

24 Eff.

1 15A NCAC 05H .1621 is proposed for adoption as follows:
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3 **15A NCAC 05H .1621 REQUIREMENTS FOR TEMPORARY ABANDONMENT OF OIL OR GAS**
4 **WELLS**

5 (a) Oil or gas wells that are completed according to Rule .1607 of this Section, but are not equipped with a wellhead
6 according Rule .1614 of this Section and are capable of production may be temporarily abandoned in accordance
7 with this Rule.

8 (b) The permittee shall complete and submit Form 15 – Oil or Gas Well Status to the Department 30 calendar days
9 prior to the temporary abandonment operations. The permittee shall include the following with the completed Form
10 15 – Oil or Gas Well Status:

11 (1) the permittee’s name, address, telephone number, fax number, and email address;

12 (2) the county and nearest city or town where the oil or gas well is located;

13 (3) the property street address or nearest address to the ingress or egress point leading from a public
14 road to the well pad;

15 (4) the API number, the lease name, and the oil or gas well name and number;

16 (5) indicate if the request is for initial temporary abandonment or a renewal of temporary
17 abandonment;

18 (6) the type of oil and gas well;

19 (7) the diameter and length for each casing string;

20 (8) the type and amount of cement that will be used for each casing string;

21 (9) a description of how the current condition of the oil or gas well is capable of the following:

22 (A) preventing damage to the production zone;

23 (B) preventing surface leakage of fluids;

24 (C) protecting groundwaters; and

25 (D) protecting health and safety of persons, property or the environment.

26 (10) a description of the future utilization of the oil or gas well; and

27 (11) a description of how the oil or gas well is in compliance with the requirements of Rule .1614 of
28 this Section.

29 (c) Oil or gas wells shall be temporarily abandoned according to Rule .1618 Paragraph (g)(4)(A) through Paragraph
30 (g)(4)(D) for vertical wellbores and Rule .1618 Paragraph (g)(5) for horizontal wellbores.

31 (d) The permittee shall maintain bonding requirements in Section .1400 until the oil or gas well is permanently
32 plugged and abandoned.

33 (e) Temporary abandonment is valid for a period of five years, with a maximum of one 5-year renewal period
34 authorized by the Commission before the oil or gas well shall be placed into production or permanently plugged and
35 abandoned in accordance with Rule .1618 of this Section.

36 (f) The permittee shall complete and submit Form 17 – Notification of Return of Oil or Gas Well to Active Status,
37 to the Department within 14 calendar days of producing from an oil or gas well that was temporarily abandoned.

1 The permittee shall include the following with the completed Form 17 – Notification of Return of Oil or Gas Well to

2 Active Status:

3 (1) the permittee name, address, telephone number, fax number, and email address;

4 (2) the county and nearest city or town where the oil or gas well is located;

5 (3) the property street address or nearest address to the ingress or egress point leading from a public
6 road to the well pad;

7 (4) the API number, the lease name, and the oil or gas well name and number; and

8 (5) the date of return to active status.

9

10 History Note: Authority G.S. 113-391(a)(5)l;

11 Eff.

1 15A NCAC 05H .1622 is proposed for adoption as follows:

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3 **15A NCAC 05H .1622 DEFECTIVE CASING, DEFECTIVE CEMENTING, AND WELL BLOWOUT**
4 **NOTIFICATIONS**

5 (a) The permittee shall commence corrective actions upon discovery of defective casing or cementing and report the
6 defect to the Department within 24 hours of discovery via telephone or email.

7 (b) The permittee shall take actions in the event of an oil or gas well blowout to comply with the emergency
8 scenarios in Rule .1305 of this Subchapter. Any oil or gas well blowout shall be reported to the Department after the
9 emergency officials and the emergency well control response contractor has been contacted.

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11 *History Note: Authority G.S. 113-391(a)(5)i;*

12 *Eff.*

1 15A NCAC 05H .1623 is proposed for adoption as follows:
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3 **15A NCAC 05H .1623 WELL DRILLING REPORT**

4 Within 30 calendar days after drilling an oil or gas well, the permittee shall submit Form 12 – Well Drilling Report
5 to the Department that includes the following information:

- 6 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 7 (2) the county and nearest city or town where the oil or gas well is located;
- 8 (3) the property street address or nearest address to the ingress or egress point leading from a public
9 road to the well pad;
- 10 (4) the API number, the lease name, and the oil or gas well name and number;
- 11 (5) the type of oil or gas well;
- 12 (6) the date the drilling started and was completed;
- 13 (7) the method of drilling;
- 14 (8) the hole diameter and depth wellbore at each casing setting depth and the total depth, both true
15 vertical and measured of the oil or gas well;
- 16 (9) the size and depth of conductor casing, surface casing, intermediate casing, and production casing,
17 if applicable;
- 18 (10) the type and amount of cement and results of cementing procedures, including copies of all cement
19 tickets and the results of cement evaluations completed pursuant to Rule .1606 and Rule .1607 of
20 this Section;
- 21 (11) the location of casing collars, the location of the top of cement for each casing string, location of
22 centralizers, and the method used to make such determinations;
- 23 (12) the elevation relative to the kelly bushing and total vertical and measured depth of the wellbore;
- 24 (13) a paper and digital copy of all electrical, radioactive, or other standard industry logs:
 - 25 (A) standard electric log with curve data shall be submitted in LAS digital data format and as
26 a pdf, tiff, or pds;
 - 27 (B) specialty logs with array data shall be submitted in LIS or DLIS digital data format and as
28 a pdf, tiff, or pds; and
 - 29 (C) cement bond logs shall be submitted as a pdf, tiff, or pds with the casing collars,
30 centralizers, and top of cement located.
- 31 (14) a drilling log that includes the name, depth, and thickness of formations penetrated from the
32 surface to total depth. The drilling log shall also include the depth of oil or gas producing zone(s),
33 depth of groundwater and brines, and the source of the information. Other data recorded about
34 groundwater zones, anomalous pressure zones, zones with corrosive fluids, lost circulation zones,
35 and other zones with fluids capable of annular flow and how the casing and cementing program
36 was modified in response to the information;

- 1 (15) copies of pressure tests and formation integrity tests that were conducted during installation of the
2 surface, intermediate, and production casing strings pursuant to Rule .1605 and .1607 of this
3 Section;
- 4 (16) a statement of whether methane or other hydrocarbons were encountered in other than a target
5 formation and the depths of the intervals, and how the casing and cementing program was
6 modified in response to the information;
- 7 (17) a summary of events reported to the Department in accordance with Rule .1607 and .1616 of this
8 Section;
- 9 (18) a wellbore inclination and directional survey;
- 10 (19) the engines used on-site during exploration and development, including:
- 11 (A) the number of engines with capacities (maximum site-rated horsepower) less than 750
12 horsepower by engine type such as compression ignition, two stroke lean burn ignition,
13 four stroke lean burn ignition, rich burn spark ignition;
- 14 (B) the number of engines with capacities (maximum site-rated horsepower) greater than or
15 equal to 750 horsepower by engine type such as compression ignition, two stroke lean
16 burn ignition, four stroke lean burn ignition, rich burn spark ignition; and
- 17 (C) the average number of hours of operation for engines in each of the categories above.
- 18 (20) any other information as specified as part of the conditions of the permit, such as drill stem test
19 charts, formation water analysis, porosity, permeability or fluid saturation measurements, core
20 analysis, and lithologic log or sample description, or other similar data as compiled. No
21 interpretation of the data is required to be filed unless specifically required elsewhere in this
22 Subchapter; and
- 23 (21) the signature of the permittee verifying that the oil or gas well has been constructed in accordance
24 with this Subchapter and any permit conditions imposed by the Department.

25

26 History Note: Authority G.S. 113-379; 113-391(a)(5); 113-391(a)(7); 113-391(a)(10); 113-391(a)(11); 113-
27 391(b); 113-391(b1);
28 Eff.

1 15A NCAC 05H .1624 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1624 WELL STIMULATION REPORT**

4 (a) Within 30 calendar days after stimulating an oil or gas well, the permittee shall submit Form 18 – Well
5 Stimulation Report to the Department that includes the following information:

- 6 (1) the permittee’s name, address, telephone number, fax number, and email address;
7 (2) the county and nearest city or town where the oil or gas well is located;
8 (3) the property street address or nearest address to the ingress or egress point leading from a public
9 road to the well pad;
10 (4) the API number, the lease name, and the oil or gas well name and number;
11 (5) the type of oil or gas well;
12 (6) the total volume of the base fluid;
13 (7) the total volume of reused water, alternative water, freshwater, or other base fluid that was used in
14 each hydraulic fracturing stage;
15 (8) the maximum pump pressure measured at the surface during each stage of the hydraulic fracturing
16 operations;
17 (9) the types and volumes of the well stimulation fluid and proppant used for each stage of the well
18 stimulation operations;
19 (10) the well stimulation treatment data collected in accordance Rule .1613 of this Section;
20 (11) for hydraulic fracture stimulations, the estimated maximum fracture height and length and
21 estimated true vertical depth to the top of the fracture achieved during well stimulation treatments
22 as determined by a three dimensional model using true treating pressures and other data collected
23 during the hydraulic fracturing treatments;
24 (12) the well shooting or perforation record detailing the true vertical and measured depths, and total
25 number of shots in the wellbore;
26 (13) the wellbore diagram that includes casing and cement data, perforations and a stimulation
27 summary;
28 (14) the initial oil or gas well test information recording daily gas, oil and water rate, and tubing and
29 casing pressure in accordance with Rule .2201 of this Subchapter;
30 (15) the initial gas analysis, performed by a laboratory certified by the State in accordance with 15A
31 NCAC 2H .0800; and
32 (16) the engines used on-site during exploration and development, including:
33 (A) the number of engines with capacities (maximum site-rated horsepower) less than 750
34 horsepower by engine type such as compression ignition, two stroke lean burn ignition,
35 four stroke lean burn ignition, rich burn spark ignition;

1 (B) the number of engines with capacities (maximum site-rated horsepower) greater than or
2 equal to 750 horsepower by engine type such as compression ignition, two stroke lean
3 burn ignition, four stroke lean burn ignition, rich burn spark ignition; and

4 (C) the average number of hours of operation for engines in each of the categories above.

5 (b) The permittee may attach to the completed Form 18 – Well Stimulation Report any information received from a
6 service company regarding the well stimulation operations, as used in the normal course of business to satisfy some
7 or all of the requirements in Paragraph (b) of this Rule.

8
9 History Note: Authority G.S. 113-391(a)(5); 113-391(a)(10); 113-391(a)(11); 113-391(b); 113-391(b1);

10 Eff.

1 15A NCAC 05H .1701 is proposed for adoption as follows:

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3 **15A NCAC 05H .1701 CHEMICAL DISCLOSURE REQUIREMENTS**

4 The rules of this Section set forth the requirements of chemical disclosures for permittees, service companies, and
5 vendors involved in oil or gas exploration and production. This Section delineates information to be posted to the
6 Chemical Disclosure Registry – <http://fracfocus.org/>. These rules also specify the conditions under which trade
7 secret protections apply and the conditions under which trade secret information can be disclosed to health
8 professionals or emergency responders.

9

10 History Note: Authority G.S. 113-391(a)(5)h;

11 Eff.

1 15A NCAC 05H .1702 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1702 REQUIRED DISCLOSURES**

4 (a) The permittee shall notify the local emergency management office of all hazardous chemicals that may be used
5 for any purpose at the well site no later than 30 calendar days prior to the chemicals entering the well site. This
6 notification shall include a Safety Data Sheet for each chemical and the following information:

- 7 (1) the anticipated quantity (mass or volume);
8 (2) method of containment; and
9 (3) chemical classification.

10 (b) The permittee, service company, or vender shall submit to the Department, no less than 30 calendar days prior to
11 the commencement of well stimulation activities, a complete list of all base fluids and additives to be used in well
12 stimulation activities, unless claimed as a trade secret under G.S. 66-152(3), 113-391.1, and Rule .0707 of this
13 Subchapter. This notification shall include:

- 14 (1) the trade or common name of each chemical subject to the Safety Data Sheet;
15 (2) the CAS registry number;
16 (3) the range of anticipated concentrations (by mass or volume) in the mixture for each chemical; and
17 (4) the purpose each chemical or mixture will serve in the well stimulation process.

18 (c) The permittee shall upload all well stimulation data, unless claimed as a trade secret under G.S. 66-152(3), 113-
19 391.1, and Rule .0707 of this Subchapter and said claim determined as satisfactory by the Commission, to
20 <http://fracfocus.org/> and submit a Form19 – Chemical Disclosure Report to the Department within 15 calendar days
21 following the conclusion of well stimulation. The Form 19 – Chemical Disclosure Report shall include:

- 22 (1) the permittee’s name, address, telephone number, fax number, and email address;
23 (2) the county and nearest city or town where the oil or gas well is located;
24 (3) the property street address or nearest address to the ingress or egress point leading from a public
25 road to the well pad;
26 (4) the API number, the lease name, and the oil or gas well name and number;
27 (5) the type of oil or gas well;
28 (6) the date well stimulation operations began;
29 (7) the date well stimulation operations ceased;
30 (8) the latitude and longitude of each wellhead reported to five decimal places of accuracy and
31 precision using the North American Datum of 1983 (NAD83);
32 (9) a certified directional survey of the horizontal oil or gas well;
33 (10) the measured depth of the oil or gas well and the true vertical depth of the oil or gas well;
34 (11) the total volume of water used in the well stimulation operations, including surface water,
35 groundwater, produced water, reused water, reclaimed or recycled water, or the type and total
36 volume of the base fluid used in the well stimulation operation, if a base substance other than
37 water is used;

1 (12) the amount(s) and percent by volume of surface water or groundwater used in the well stimulation
2 operations and the point(s) of withdrawal of that surface water or groundwater;

3 (13) the source amount(s) and location(s) of recycled water, along with percent by volume of recycled
4 water that is used in well stimulation operations;

5 (14) the trade or common name and CAS registry number of each chemical used in the well stimulation
6 operation;

7 (15) the trade or common name, supplier, and a brief description of the intended use or function of each
8 additive in the well stimulation operation;

9 (16) identification of each chemical and additive (and its chemical classification) that is subject to the
10 Safety Data Sheet requirements of 29 CFR § 1910.1200, which is incorporated by reference
11 including subsequent amendments and additions;

12 (17) the actual or maximum concentration of each chemical and additive listed pursuant to
13 Subparagraph (13) and (14) of this Rule expressed in percent by mass;

14 (18) the overall well stimulation mixture; and

15 (19) the chemical classification for each chemical and additive.

16 (d) For disclosures required pursuant to Paragraphs (b) and (c) of this Rule, the permittee is not required to disclose:

17 (1) chemical mixtures or compounds that occur as a consequence of drilling or well stimulation
18 operations or that may be the incidental result of a chemical reaction or process; or

19 (2) naturally occurring materials that become unintentionally combined with well stimulation
20 substances.

22 History Note: Authority G.S. 113-391(a)(5)h;

23 Eff.

1 15A NCAC 05H .1703 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1703 CONFIDENTIAL INFORMATION PROTECTION**

4 (a) If any person asserts any information is entitled to be protected as confidential pursuant to G.S. 113-391.1, the
5 requesting party shall make a showing to the Commission in accordance with Rule .0707 of this Subchapter.

6 (b) In addition, any person requesting protection for confidential information that concerns hydraulic fracturing
7 fluid shall request certification by the State Geologist, or the Geologist's designee in accordance with G.S. 113-
8 391.1.

9

10 *History Note:* Authority G.S. 113-391(a)(5)h; 113-391.1;

11 Eff.

1 15A NCAC 05H .1704 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1704 DISCLOSURE OF CONFIDENTIAL INFORMATION**

4 (a) Confidential information may be disclosed to any officer, employee, or authorized representative of a State
5 agency if disclosure is necessary to carry out a proper function of the Department or other agency or when relevant
6 in any proceeding under G.S. 113-391.1.

7 (b) The Department shall immediately disclose confidential information to a treating healthcare provider upon
8 request in accordance with G.S. 133-391.1.

9 (c) The Department shall immediately disclose confidential information to a Fire Chief, as defined in G.S. 95-174,
10 upon request in accordance with G.S. 113-391.1.

11

12 *History Note:* Authority G.S. 113-391(a)(5)h;

13 Eff.

1 15A NCAC 05H .1801 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1801 SCOPE**

4 The rules in this Section establish requirements for the pre-drilling testing of water supplies, the testing of water
5 supplies after production has commenced, and the reporting of data collected.

6

7 History Note: Authority G.S. 113-391(a)(5)b;

8

Eff.

1 15A NCAC 05H .1802 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1802 WATER SUPPLY TESTING NOTIFICATIONS**

4 (a) The permittee shall provide written notice to all surface owners or owners of a water supply, as defined in
5 G.S.113-389, prior to water supply testing within one-half mile of the proposed wellhead. In addition to the
6 requirements of G.S.113-420(a) and G.S. 113-421(a) the written notice shall include the following:

7 (1) the applicant or permittee's name, address, telephone number, and email address;

8 (2) a statement of the permittee's intent to perform testing of water supplies prior to drilling an oil or
9 gas well;

10 (3) the date, time, and location of when the water supply testing is expected to occur and the estimated
11 number of entries to the property;

12 (4) a statement explaining that if the surface owner or owner of the water supply refuses to contact a
13 certified laboratory from the Wastewater/Groundwater Laboratory Certification program, then
14 such refusal may be used as evidence to rebut the presumption of liability established by G.S. 113-
15 421(a);

16 (5) the name, address, and telephone number of the Department, to which the surface owner or owner
17 of the water supply may respond; and

18 (6) a list of the Department's Wastewater/Groundwater Laboratory Certification program laboratories.

19 (b) The permittee shall provide written notice to the Department, in accordance with Rule .1805 of this Section, if a
20 surface owner or water supply owner refuses to contact a certified laboratory from the Wastewater/Groundwater
21 Laboratory Certification program. The written notice shall be submitted to the Department as an attachment to
22 Form 22 – Water Supply Testing Report and include the following:

23 (1) the permittee's name, address, telephone number, fax number, and email address;

24 (2) a copy of the written notice required in Paragraph (a) of this Rule;

25 (3) the name of the person or firm who requested and was refused access to conduct the testing, the
26 date of the request, and a copy of all documentation including that showing the request for access
27 was denied; and

28 (4) the name, address, and telephone number of the surface owner or owner of the water supply.
29

30 *History Note: Authority G.S. 113-391(a)(3); 113-423(f);*

31 *Eff.*

1 15A NCAC 05H .1803 is proposed for adoption as follows:

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15A NCAC 05H .1803 WATER SUPPLY TESTING PROCEDURES

(a) All water supplies located within one-half mile of the proposed wellhead shall be tested prior to initial drilling activities and after production has commenced. All water supplies shall be tested according to the following:

- (1) the initial water supply testing shall be conducted no earlier than 12 months but no later than 30 calendar days prior to the commencement of drilling operations to establish a baseline;
- (2) when multiple oil or gas wells are permitted and constructed at a well pad, the analytical results for the initial sampling shall serve as the baseline for all future wells drilled on the same well pad; and
- (3) subsequent water supply testing shall be conducted at all initial sample locations:
 - (A) test one: six months after production has commenced;
 - (B) test two: 12 months after production has commenced;
 - (C) test three: 18 months after production has commenced;
 - (D) test four: 24 months after production has commenced; and
 - (E) test five: 30 calendar days after completion of production activities at the well site.

(b) Water supply testing required by G.S. 113-423(f), and in accordance with this Rule, shall be conducted pursuant to the U.S. Environmental Protection Agency (EPA) Region IV Science and Ecosystem Support Division (SESD) “Operating Procedure for Groundwater Sampling,” document number SESDPROC-301-R3, “Operating Procedure for Surface Water Sampling,” document number SESDPROC-201-R3, and the U.S. Geological Survey (USGS) “National Field Manual for the Collection of Water-Quality Data,” Book 9, Handbooks for Water-Resources Investigations, which are incorporated by reference, including subsequent amendments and editions. These documents, published by the U.S. EPA and USGS, may be obtained online at no charge at <http://www.epa.gov/region4/sesd/fbqstp/Groundwater-Sampling.pdf>, <http://www.epa.gov/region4/sesd/fbqstp/Surfacewater-Sampling.pdf>, and <http://water.usgs.gov/owq/FieldManual/>.

(c) If a permittee drills an oil or gas well but does not install production casing and has abandoned the oil or gas well in accordance with the plugging and abandonment requirements outlined in Rule .1618 of this Subchapter, subsequent testing pursuant to Subparagraph (a)(3) of this Rule is not required.

(d) The Department may require additional testing if the current data collected show an increase in concentration from the previous data for any water supply within one-half mile.

(e) All sample analyses required by this Rule shall be made by a laboratory certified in accordance with 15A NCAC 02H .0800 and pursuant to laboratory analytical procedures that comply with 15A NCAC 02L .0112 and 15A NCAC 02B .0103.

(f) The initial samples, required by Paragraph (a)(1), collected in accordance with this Rule shall be analyzed for:

<u>pH</u>	<u>manganese</u>
<u>specific conductance</u>	<u>selenium</u>

<u>total dissolved solids (TDS)</u>	<u>strontium</u>
<u>turbidity</u>	<u>lithium</u>
<u>alkalinity</u>	<u>lead</u>
<u>Calcium</u>	<u>zinc</u>
<u>Chloride</u>	<u>uranium</u>
<u>magnesium</u>	<u>isotopic radium (²²⁶Ra and ²²⁸Ra)</u>
<u>potassium</u>	<u>isotopic strontium (⁸⁷Sr and ⁸⁶Sr)</u>
<u>Fluoride</u>	<u>trihalomethanes</u>
<u>Sodium</u>	<u>benzene</u>
<u>Sulfate</u>	<u>toluene</u>
<u>Arsenic</u>	<u>ethyl benzene</u>
<u>Barium</u>	<u>xylene</u>
<u>Boron</u>	<u>diesel range organics (DRO)</u>
<u>Bromide</u>	<u>gasoline range organics (GRO)</u>
<u>chromium</u>	<u>total petroleum hydrocarbons (TPH)</u>
<u>Iron</u>	<u>polycyclic aromatic hydrocarbons (PAH) (including benzo(a)pyrene)</u>
<u>dissolved methane, propane, and ethane</u>	

1 (g) The test one series of samples collected shall include all parameters listed in Paragraph (f) of this Rule.

2 (h) If the results from the test one series did not exceed the permissible concentrations outlined in 15A NCAC 02L
3 .0202 and 15A NCAC 02B .0200 for the required analytes, then the permittee, at a minimum, shall sample and
4 analyze for pH, specific conductance, TDS, chloride, sodium, divalent cations, and dissolved methane, propane, and
5 ethane to complete the remaining series of sampling and testing in accordance with this Rule.

6 (i) If there is an increase in the concentration, or the occurrence of any analytes set forth in Paragraph (h) the
7 permittee shall test for all analytes set forth in Paragraph (f).

8 (j) If any analysis conducted pursuant to this Rule reveals a concentration of dissolved methane greater than 1.0
9 milligram per liter (mg/l), then a gas compositional analysis and stable isotope analysis of the methane (carbon and
10 hydrogen – ¹²C, ¹³C, ¹H and ²H) shall be conducted to determine the gas type. The permittee shall report the results
11 in accordance with Rule .1805 of this Section.

12

13 History Note: Authority G.S. 113-391(a)(3); 113-391(a)(5)b; 113-423(f);

14

Eff.

1 15A NCAC 05H .1804 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1804 REQUEST FOR INVESTIGATION OF WATER SUPPLY**

4 (a) Any surface owner or owner of a water supply who suspects contamination as a result of the drilling, alteration, or
5 operation of an oil or gas well may submit Form 21 – Water Supply Investigation Request to the Department,
6 requesting that an investigation be conducted. The completed form shall include the following information:

7 (1) the name of surface owner or owner of the water supply, address, telephone number, and email
8 address;

9 (2) the name of the oil or gas well permittee;

10 (3) the API number, the lease name, and the oil or gas well name and number;

11 (4) an indication if the permittee was contacted and if so provide contact name;

12 (5) the date of incident if known; and

13 (6) a description of the incident or problem.

14 (b) At the request of the Department, the permittee shall conduct a test of the water supply and submit the analytical
15 results to the Department within 30 calendar days of receipt.

16 (c) The Department shall require the permittee to replace a water supply pursuant to G.S. 113-421(a4) if the
17 investigation and analytical results indicate that the water supply is contaminated due to the activities of the permittee.

18

19 History Note: Authority G.S. 113-391(a)(3); 113-391(a)(5)b; 113-423(f);

20 Eff.

1 15A NCAC 05H .1805 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1805 REPORTING OF TEST RESULTS**

4 (a) The permittee shall submit Form 22 – Water Supply Testing Report to the Department, Local Health Director,
5 surface owner(s), and owner(s) of the water supply within 30 calendar days of testing. The form shall be signed and
6 sealed by either a Licensed Geologist or Professional Engineer and shall include the following information:

- 7 (1) the permittee’s name, address, telephone number, fax number, and email address;
8 (2) the county and nearest city or town where the oil or gas well is located;
9 (3) the property street address or nearest address to the ingress or egress point leading from a public
10 road to the well pad;
11 (4) the API number, the lease name, and the oil or gas well name and number;
12 (5) the date water supply was sampled;
13 (6) an indication of which water supply testing series is being reported on;
14 (7) the latitude and longitude of each water supply within one-half mile of the wellhead reported to
15 five decimal places of accuracy and precision using the North American Datum of 1983 (NAD83);
16 (8) the name, address, and telephone number of the surface owner or owner of the water supply;
17 (9) identification of the certified laboratory at which analyses required by this Section were
18 conducted, the date(s) on which the analyses were conducted, and identification of the technical
19 personnel who conducted such analyses;
20 (10) a description of where and how the sample was collected and the name of the person who
21 collected the sample;
22 (11) field observations to include odor, water color, sediment, bubbles, and effervescence;
23 (12) a description of the type and age, if known, of the water supply, and water supply treatment, if
24 any;
25 (13) the complete results of the required analyses attached to the report in hard copy, as a .pdf, and as
26 an electronic spreadsheet; and
27 (14) any exceedance of applicable Maximum Contaminant Levels for public drinking water, as set
28 forth in 15A NCAC 18C shall be indicated in the report.

29 (b) Applicants or permittees may share analytical results in accordance with G.S. 113-421(f).
30

31 History Note: Authority G.S. 113-391(a)(1); 113-391(a)(5)k

32 Eff.

1 15A NCAC 05H .1806 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1806 RECORD KEEPING AND REPORTING**

4 (a) The Department shall maintain baseline and subsequent analytical data results required pursuant to this Section,
5 which shall be available to the public through the Department within 30 calendar days of receipt of results.

6 (b) The permittee shall maintain all records in accordance with Rule .0202 of this Subchapter.

7

8 History Note: Authority G.S. 113-391(a)(5)b; 113-391(a)(5)k;

9

Eff.

1 15A NCAC 05H .1807 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1807 TRACER TECHNOLOGY**

4 (a) The Department shall only approve the use of tracer technology for the purposes described in this Rule if the
5 Department determines that the tracer technology is effective in tracing well stimulation fluids back to the oil or gas
6 well where the fluid was injected and can be used without chemical or radiological impacts to groundwaters or other
7 adverse impacts to public health, welfare, and the environment.

8 (b) A permittee shall only use approved tracer technology for the following purposes:

9 (1) as evidence that well stimulation fluid from a particular oil or gas well caused or contributed to an
10 exceedance of the standards set out in 15A NCAC 02L .0202 or 15A NCAC 02B .0200 that is
11 detected as a result of water supply testing required under Rule .1803 of this Section; and

12 (2) to identify well stimulation fluid from a particular oil or gas well as the source of contamination
13 detected as a result of an investigation of water supply conducted under Rule .1804 of this Section.

14
15 *History Note: Authority G.S. 113-391(a)(3); 113-391(a)(5)b; 113-423(f);*

16 *Eff.*

1 15A NCAC 05H .1901 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1901 WATER MANAGEMENT PLAN REQUIREMENTS**

4 (a) An applicant or permittee shall submit a Water Management Plan for proposed oil or gas well(s) to be located at
5 the well pad. This plan shall be submitted to the Department for review and approval in accordance with Rule .1304
6 of this Subchapter and with the rules of this Section prior to the commencement of activities covered under the Form
7 2 – Oil or Gas Well Permit Application.

8 (b) A Form 4 – Water Management Plan shall include the following:

9 (1) the applicant or permittee’s name, address, telephone number, fax number, and email address;

10 (2) the county and nearest city or town where the oil or gas well is located;

11 (3) the property street address or nearest address to the ingress or egress point leading from a public
12 road to the well pad;

13 (4) the lease name and the oil or gas well name and number;

14 (5) identification of the source(s) of water to be used with additional information provided in
15 accordance with Rules .1902 through .1905 of this Section;

16 (6) the name, address, phone number, parcel identification, and written consent from the owner of the
17 real property where any surface water intake, groundwater well, or water transport system
18 components or structures have been, or will be, located, installed, or constructed;

19 (7) the proposed start date and expected ending date of water withdrawals;

20 (8) the proposed average and maximum daily withdrawal in millions of gallons per day and the
21 expected total withdrawal in millions of gallons;

22 (9) a description of all potential sources of water, including flowback and produced water, that were
23 evaluated for this application and the reasons for rejecting those sources as required by Rule .1905
24 of this Section;

25 (10) topographic maps and aerial maps showing the latitude and longitude, in decimal degrees, of the
26 following features and locations:

27 (A) the proposed water source(s) and any existing hydrologic features within the area of
28 influence of the proposed water source, including other streams, springs, and wetlands;

29 (B) any existing water supply, as defined in G.S. 113-389(15), within the area of influence;

30 (C) any areas with known environmental contamination within the area of influence;

31 (D) any current or proposed utility rights-of-way associated with the project area; and

32 (E) any current or proposed structure(s) or appurtenance(s) for the transport or storage of
33 water.

34 (11) a list of alternative water source(s) or practices to be used during times of drought or low flow
35 conditions;

1 (12) a monitoring plan sufficient to accurately record the amount of water used from each source
2 included in this application on a daily basis, including schedules of maintenance to ensure accurate
3 measuring and recording of the water usage; and

4 (13) all other information required by Rule .1906 of this Section.

5 (c) The Department may request additional information necessary to protect public health, welfare, and the
6 environment when reviewing the Form 4 – Water Management Plan.

7

8 History Note: Authority G.S. 113-391(a)(5)e;

9 Eff

1 15A NCAC 05H .1902 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1902 SURFACE WATER SOURCE DOCUMENTATION**

4 (a) For surface water sources, the applicant or permittee shall consult with the Department to determine and
5 evaluate the limits of the affected reach. The exact delineation of the affected reach shall be determined in
6 consultation with and with the approval of the Department and shall depend on factors including:

- 7 (1) the cumulative amount of water to be withdrawn when the proposed withdrawal is combined with
8 existing withdrawals;
9 (2) the hydrologic characteristics of the stream;
10 (3) the presence or absence of downstream point source discharges; and
11 (4) the potential effects on other users and instream flow.

12 (b) Following a determination of the limits of the affected reach the following information shall be provided:

- 13 (1) the river basin designation at the point of withdrawal and the river basin designation where the
14 water will be used as defined by G.S. 143-215.22G, which is incorporated by reference including
15 subsequent amendments;
16 (2) the classification of the water source at the withdrawal point in accordance with 15A NCAC 02B
17 .0301, which is incorporated by reference including subsequent amendments;
18 (3) for free-flowing water sources:
19 (A) list other existing and proposed withdrawals within the affected reach including the
20 maximum withdrawal capacity of each; and
21 (B) provide an estimate of the 7Q10 flow at the proposed intake location and explain the
22 methodology used to derive the estimate. The cumulative maximum instantaneous
23 withdrawal from the affected reach shall be limited to 20 percent of the 7Q10 flow.
24 (4) when flows in the affected reach are at 7Q10 levels, withdrawals conducted under this permit shall
25 cease until flows reach 120 percent of the 7Q10 flow level; and
26 (5) the owner, facility name, National Pollution Discharge Elimination System (NPDES) permit
27 number, and permitted volume of any point source discharges within the affected reach or that
28 discharge to a water impoundment that is listed as a water source.

29 (c) The results of a survey to determine the presence of any state or federally threatened or endangered species or
30 any invasive species that may be affected by the proposed withdrawal shall include:

- 31 (1) the identification of any state or federally threatened or endangered species present;
32 (2) a description of how any detrimental impacts to those species and their critical habitats will be
33 avoided;
34 (3) a description of how the spread of any identified invasive species will be prevented; and
35 (4) the identification of the sources of information used for the determination and contact information
36 for the federal and state agencies consulted.

1 (d) The permittee shall indicate the presence of any known noxious aquatic weeds listed in 15A NCAC 02G .0602,
2 which is incorporated by reference including any subsequent amendments, or other exotic or invasive species in the
3 source water(s).

4 (e) If the surface water source is classified as an Outstanding Resource Water under 15A NCAC 02B .0225, which
5 is incorporated by reference including subsequent amendments, shall document that the outstanding resource value
6 will not be adversely affected.

7

8 History Note: Authority G.S. 113-391(a)(5)e; 113-391(a)(5)k;

9

Eff

1 15A NCAC 05H .1903 is proposed for adoption as follows:

2
3 **15A NCAC 05H .1903 GROUNDWATER SOURCE DOCUMENTATION**

4 (a) For groundwater sources from which water is proposed to be obtained as part of the Water Management Plan,
5 the applicant or permittee shall provide the following information:

6 (1) for pre-existing groundwater wells, a copy of the well construction record filed with the
7 Department in accordance with 15A NCAC 02C .0114(b), which is incorporated by reference
8 including subsequent amendments, or from the local health department;

9 (2) for groundwater wells constructed specifically for the purposes covered by this application, a copy
10 of the Well Construction Permit issued by the Department pursuant to 15A NCAC 02C .0105 and
11 the associated groundwater well construction record form submitted to the Department pursuant to
12 15A NCAC 02C .0114(b);

13 (3) the results of an aquifer pump test for each well included in this application. The aquifer pump
14 test shall be conducted in accordance with 15A NCAC 02C .0110(b), which is incorporated by
15 reference including subsequent amendments;

16 (4) a map showing the extent of the measureable area of influence determined from the aquifer pump
17 test at the proposed rate of withdrawal indicating the locations of all surface waters and water
18 supply wells within the area of influence;

19 (5) a map showing the extrapolated cone of depression based on six months usage; and

20 (6) information required by 15A NCAC 02C .0107(j)(2)(E) and (j)(3)(D), which is incorporated by
21 reference including subsequent amendments, for the construction of water supply and other wells.

22 (b) When the drought indicator well closest to the groundwater source(s) included in this application is designated
23 as D3, indicating that water levels are at or below the 5th percentile of historic water level measurements as reported
24 by the Division of Water Resources, withdrawals from these sources shall cease until the designation is upgraded to
25 D1 or above, indicating water levels above the 10th percentile of historic water level measurements. In consultation
26 with and with the approval of the Department, an applicant or permittee may identify a drought indicator well within
27 the measureable area of influence to be used to monitor the impacts to groundwater and to determine appropriate
28 thresholds on which to base the cessation of groundwater pumping.

29
30 History Note: Authority G.S. 113-391(a)(5)e; 113-391(a)(5)k; 113-391(b);

31 Eff.

1 15A NCAC 05H .1904 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1904 PURCHASED WATER SOURCE DOCUMENTATION**

4 For purchased water sources, the applicant or permittee shall provide the following information:

5 (1) identification of the water supplier, including name, contact information, and water supply facility
6 identification, if such identification is required by G.S. 143-355(l) or G.S. 143-215.22H;

7 (2) a copy of a letter of commitment or contract authorizing the acquisition of water by the applicant
8 or permittee;

9 (3) the type of water to be provided, such as water treated to drinking water standards, treated
10 wastewater, reclaimed water, or raw water;

11 (4) the proposed average and maximum amount of water to be provided daily in millions of gallons
12 per day and the expected total maximum amount to be provided; and

13 (5) the proposed method of transport of the water from the supplier to the point of use.

14

15 *History Note:* Authority G.S. 113-391(a)(5)e; 113-391(a)(5)k;

16 Eff

1 15A NCAC 05H .1905 is proposed for adoption as follows:
2

3 **15A NCAC 05H .1905 ALTERNATIVE WATER SOURCES**

4 (a) The applicant or permittee shall provide a review of the potential alternative sources of water, including the
5 option of using flowback or produced water, evaluated for the Water Management Plan, and indicate the reasons for
6 rejecting those water sources. The applicant or permittee shall include the following in the review:

7 (1) current uses of each alternative water source evaluated, including a list of current withdrawers
8 other than the applicant or permittee;

9 (2) the name and classification of each alternative water source evaluated; and

10 (3) a description of the current or proposed structure or appurtenances for the transport or storage of
11 water from the alternative water source.

12 (b) For reuse of flowback or produced water, the applicant or permittee shall provide the following information:

13 (1) the source of the flowback or produced water;

14 (2) the proposed maximum daily use in millions of gallons per day and the amount expected to be
15 used; and

16 (3) the estimated amount of additional water needed to provide sufficient quantity for activities
17 covered in this application.

18

19 History Note: Authority G.S. 113-391(a)(5)e;

20 Eff.

1 15A NCAC 05H .1906 is proposed for adoption as follows:

2

3 **15A NCAC 05H .1906 REPORTING**

4 (a) For each Water Management Plan, the permittee shall monitor, record and retain, for a period of five years after
5 reclamation of the last oil or gas well for which the plan was submitted as part of the application, all records related
6 to the daily water pumping schedules, received and purchased water, amounts of stored water, and quantities of
7 flowback and produced water for recycling or reuse. The daily monitoring records shall be retained by the permittee
8 for five years. These records shall be made available to representatives of the Department upon request.

9 (b) The permittee shall submit Form 23 – Annual Water Use Report to the Department by April 1st of each year for
10 the period of January 1st to December 31st of the prior year. Form 23 – Annual Water Use Report shall include the
11 following information:

- 12 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 13 (2) the county and nearest city or town where the oil or gas well is located;
- 14 (3) the property street address or nearest address to the ingress or egress point leading from a public
15 road to the well pad;
- 16 (4) the API number, the lease name, and the oil or gas well name and number;
- 17 (5) the daily average water withdrawals from each of the surface water and groundwater source(s)
18 included in this application for each month;
- 19 (6) the maximum daily water withdrawals from each of the surface and groundwater source(s)
20 included in this application for each month; and
- 21 (7) the number of days that water was withdrawn in each month from the surface and groundwater
22 source(s) included in this application.

23 (c) The permittee shall submit Form 23 – Annual Water Use Report electronically to the Department.

24 (d) The applicant or permittee shall provide notice of any land-disturbing activity associated with the Water
25 Management Plan to any owner of real property identified in the plan required by Rule .1901(b)(6) of this Section.
26 The notice shall be sent at least 30 calendar days before the desired date of entry to the property for activities
27 described in Rules .1902 through .1905 of this Section. Notice shall be given by certified mail with return receipt
28 requested and shall include:

- 29 (1) the dates and duration of activities;
- 30 (2) the location where entry will take place; and
- 31 (3) the identity of person(s) entering the property.

32 (e) The applicant or permittee shall provide notice identifying the water source to the local municipality and county
33 where the source is located.

34 (f) The permittee shall notify the Department at least 48 hours via telephone or email prior to first withdrawal from
35 the approved water source(s) identified in the Water Management Plan. The permittee shall submit Form 11 –
36 Required Notifications to the Department, by mail, email or fax within five calendar days and shall include the
37 following information:

- 1 (1) the permittee's name, address, telephone number, fax number, and email address;
- 2 (2) the county and nearest city or town where the oil or gas well is located;
- 3 (3) the property street address or nearest address to the ingress or egress point leading from a public
4 road to the well pad;
- 5 (4) the API number, the lease name, and the oil or gas well name and number; and
- 6 (5) the scheduled date and approximate time of day for the first withdrawal from the water source.

7

8 History Note: Authority G.S. 113-391(a)(5)e;

9 Eff

1 15A NCAC 05H .2001 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2001 SCOPE**

4 The permittee shall manage, control and dispose of all waste associated with exploration and production (E & P) of
5 oil or gas in accordance with the standards set forth in this Section and all applicable laws and regulations.

6

7 History Note: Authority 113-391(a)(5)f;

8

Eff

1 15A NCAC 05H .2002 is proposed for adoption as follows:
2

3 **15A NCAC 05H .2002 EXPLORATION AND PRODUCTION WASTE MANAGEMENT PLAN**
4 **REQUIREMENTS**

5 (a) An E & P Waste Management Plan, approved by the Department in accordance with this Rule, is required prior
6 to the generation of E & P wastes from the drilling, producing, plugging, or any other activity associated with an oil
7 or gas well.

8 (b) The E & P Waste Management Plan shall identify the management, control, and disposal methods for E & P
9 wastes.

10 (c) The E & P Waste Management Plan shall address the storage and handling of wastewater, residuals, solid wastes
11 and any other non-hazardous and hazardous wastes related to exploration and production activities from the point of
12 initial generation of E & P wastes onsite to final disposal of the E & P waste.

13 (d) The E & P Waste Management Plan shall include the following form, documentation, and plan design sheets:

14 (1) a completed Form 5 – Waste Management Plan, as provided by the Department that includes the
15 following information:

16 (A) a description of the pit and tank use and locations onsite;

17 (B) the capacity of pits and tanks onsite;

18 (C) the liner material type, thickness, and manufacturer;

19 (D) the disposal methods for liquid and solid wastes;

20 (E) an operation and maintenance plan for all waste management infrastructure;

21 (F) a description of pit closure and site reclamation methods; and

22 (G) the anticipated date of construction or installation of all waste management infrastructure.

23 (2) construction, installation, operation, and maintenance specifications and details for all pits, tanks,
24 secondary containment, and other ancillary equipment, such as piping, pumps, and valve systems.

25 This shall include site design and capacity of all pits and tanks installed or constructed onsite;

26 (3) an emergency response plan that complies with 40 CFR 112 and Rule .1305 of this Subchapter;

27 (4) a statement of whether E & P wastes produced onsite will be reused at the permitted oil or gas
28 well or reused at other permitted oil or gas wells;

29 (5) a statement of whether the E & P wastes will be pretreated onsite for reuse or disposal;

30 (6) a statement of whether the E & P wastes will be disposed of off-site and the identification of the
31 disposal facility;

32 (7) a pit and tank closure plan that includes final disposal methods for all pit and tank contents within
33 the Reclamation Plan in accordance with the Rule .2004 of this Section and Rule .2102 of this
34 Subchapter; and

35 (8) the contact information for the local county emergency management officials and the State
36 Emergency Operations Center (1-800-858-0368) for where the well site is located shall be
37 included in the plan.

1 (e) A copy of the approved E & P Waste Management Plan shall be available to the Department at the well site
2 during drilling and completion activities upon request.

3 (f) The contact information for the local county emergency management officials and the State Emergency
4 Operations Center (1-800-858-0368) shall be prominently displayed at the well site during exploration, drilling, and
5 completion activities in accordance with Rule .1305 of this Subchapter.

6 (g) The permittee shall submit Form 24 – Annual E & P Waste Management Report to the Department in
7 accordance with Paragraph (d) of Rule .2007 of this Section.

8

9 *History Note: Authority 113-391(a)(5)e; 113-391(a)(5)f; 113-391(a)(5)k; 113-391(b);*

10 *Eff*

1 15A NCAC 05H .2003 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2003 EXPLORATION AND PRODUCTION WASTE DISPOSAL**

4 (a) The permittee shall test produced water and flowback fluids for the following parameters on a frequency and
5 schedule determined by the Department:

6

<u>carbonaceous biochemical oxygen demand (CBOD)</u>	<u>ammonia-nitrogen (NH3-N)</u>
<u>dissolved oxygen (DO)</u>	<u>specific conductance</u>
<u>pH</u>	<u>total suspended solids (TSS)</u>
<u>barium</u>	<u>bromide</u>
<u>chlorides</u>	<u>sulfates</u>
<u>sodium</u>	<u>divalent cations</u>
<u>total dissolved solids (TDS)</u>	<u>oil and grease</u>
<u>arsenic, total recoverable</u>	<u>cadmium, total recoverable</u>
<u>cobalt, total recoverable</u>	<u>copper, total recoverable</u>
<u>cyanide, total recoverable</u>	<u>lead, total recoverable</u>
<u>mercury, total recoverable</u>	<u>nickel, total recoverable</u>
<u>tin, total recoverable</u>	<u>zinc, total recoverable</u>
<u>benzene</u>	<u>bis(2-ethylhexyl)phthalate</u>
<u>butylbenzyl phthalate</u>	<u>carbazole</u>
<u>n-Decane</u>	<u>fluoranthene</u>
<u>n-Octadecane</u>	<u>radium-226 (Dissolved)</u>
<u>strontium-90 (Dissolved)</u>	<u>beta radiation (gross)</u>
<u>chronic wet testing</u>	

7 (1) the water samples shall be collected and analyzed in accordance with Rule .1803 of this
8 Subchapter; and

9 (2) the analytical results shall be submitted to Division within 30 calendar days of receiving the
10 analytical results, unless a different schedule is prescribed by the Department.

11 (b) The Director, in consultation with the Director of the Division of Water Resources, may require additional
12 analysis and scheduling as necessary for the protection of public health, welfare, and the environment.

13 (c) E & P waste shall be managed as:

14 (1) reuse in well stimulation operations;

15 (2) on-site pretreatment for reuse or disposal;

16 (3) disposal at a plant installed for the purpose of disposing of waste within the state permitted in
17 accordance with G.S. 143-215.1; or

18 (4) disposal facility located within another state that is duly permitted to accept flowback fluid and
19 produced water from oil or gas operations.

1 (d) Any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule
2 or from any on-site pretreatment that may be used in conjunction with Subparagraph (c)(2) and (3) of this Rule shall
3 be managed and disposed of pursuant to Subparagraph (c)(3) and (4) of this Rule or with the Resource Conservation
4 and Recovery Act and regulations promulgated pursuant thereto, 42 USC 6901 et seq. and 40 CFR Parts 239-282.
5 In addition, prior to disposal of any sludge or residual resulting from the reuse process authorized pursuant to
6 Subparagraph (c)(1) of this Rule, or from any on-site pretreatment that may be used in conjunction with
7 Subparagraph (c)(2) and (3) of this Rule, the permittee shall demonstrate that the sludge or residual meets all
8 applicable radioactivity standards for the disposal facility.

9 (e) Residuals from onsite pretreatment shall be disposed of in accordance with G.S. 143-215.1, G.S. 130A-294, or
10 transported to another state and disposed of in accordance with the receiving state's rules.

11 (f) Solid E & P waste, including drill cuttings and solidified muds, shall be characterized in accordance with
12 Toxicity Characteristic Leaching Procedure, on a frequency and schedule determined by the Department. In
13 addition, the Director, in consultation with the Director of the Division of Waste Management, may require
14 additional analysis as necessary for the protection of public health, welfare, and the environment.

15 (g) Solid E & P waste shall be disposed of by transfer to an appropriate permitted solid waste management facility
16 in accordance with 15A NCAC 13A or 15A NCAC 13B, which is incorporated by reference including subsequent
17 amendments.

18 (h) E & P waste fluids may be transported to other drilling sites for reuse provided that such fluids are transported
19 and stored in a manner that does not constitute a hazard to water resources, public health, safety or the environment
20 in accordance with 15A NCAC 13B .0105.

21 (i) E & P waste, when transported off-site for treatment or disposal, shall be transported to treatment facilities
22 authorized by the Department, or to waste disposal facilities permitted to receive E & P waste by the Department in
23 accordance with 15A NCAC 13B. When transported to facilities outside of North Carolina for treatment or
24 disposal, E & P waste shall be transported to facilities authorized and permitted by the appropriate regulatory agency
25 in the receiving state.

26 (j) When E & P waste is transported off-site, the permittee shall maintain for five years copies of each invoice, bill,
27 or ticket and such other records necessary to document the following requirements:

- 28 (1) the permittee's name, address, and business telephone number;
- 29 (2) the county, city, or town where the oil or gas well is located;
- 30 (3) the property street address or nearest address to the ingress or egress point leading from a public
31 road to the well pad;
- 32 (4) the API number, the lease name, and the oil or gas well name and number;
- 33 (5) the date and time of the transport;
- 34 (6) the company name and contact information of the E & P waste transporter;
- 35 (7) the location of the E & P waste pickup site if different then a pit or tank located onsite;
- 36 (8) the type and volume of E & P waste;
- 37 (9) the name and location of the treatment or disposal site; and

1 (10) a chronological record showing the date and time of waste collection and the transfer of waste
2 from one person to another during the course of final delivery to a disposal facility. These
3 documents shall be signed and dated by all appropriate parties, and shall include the generator,
4 transporter, and receiving facility representative.

5 (k) All records shall be maintained in accordance with the Rule .0202 of this Subchapter.

6
7 History Note: Authority G.S. 113-391(a)(3) and (4); 113-391(a)(5)f;
8 Eff.

1 15A NCAC 05H .2004 is proposed for adoption as follows:

2
3 **15A NCAC 05H .2004 PIT CLOSURE REQUIREMENTS**

4 (a) The permittee shall notify the Department via telephone or email 48 hours prior to commencing pit closure
5 activities so the Department staff may be onsite to inspect pit closure. The permittee shall submit Form 11 –
6 Required Notifications to the Department, by mail, email, or fax within five calendar days and shall include the
7 following information:

8 (1) the permittee’s name, address, telephone number, fax number, and email address;

9 (2) the county and nearest city or town where the oil or gas well is located;

10 (3) the property street address or nearest address to the ingress or egress point leading from a public
11 road to the well pad;

12 (4) the API number, the lease name, and the oil or gas well name and number; and

13 (5) the scheduled date and approximate time for the pit(s) closure.

14 (b) Synthetic liners shall be removed and disposed of in accordance with applicable laws and regulations.

15 (c) The permittee shall collect a five-point composite sample from the pit sub-base if there are no wet or discolored
16 areas or any other indications of a release of fluids from the pit; or collect individual grab samples from any pit base
17 or sidewall slope areas that are wet, discolored or show other evidence of a release along the pit sidewall slopes or
18 base.

19 (d) The samples collected from the pit sub-base shall be analyzed for benzene, toluene, ethylbenzene, xylene
20 (BTEX), total petroleum hydrocarbons (TPH) and metals, and if requested by the Department, chlorides, bromides
21 and sulfates, according to approved EPA, USGS, or Department methods in accordance with 15 NCAC 02L .0412.

22 (e) If concentrations of BTEX, TPH, or metals exceed the soil to groundwater maximum contaminant
23 concentrations, established by the Environmental Management Commission under 15A NCAC 02L .0202 and
24 published by the Division of Waste Management at
25 [http://portal.ncdenr.org/c/document_library/get_file?uuid=ad84a424-64a3-423c-a34c-](http://portal.ncdenr.org/c/document_library/get_file?uuid=ad84a424-64a3-423c-a34c-8faeb9ffc27b&groupId=38361)
26 [8faeb9ffc27b&groupId=38361](http://portal.ncdenr.org/c/document_library/get_file?uuid=ad84a424-64a3-423c-a34c-8faeb9ffc27b&groupId=38361), or the background concentration, if established, then the Department may require
27 additional delineation upon review of the results to ensure compliance with other applicable environmental
28 regulations for soil and water contamination.

29 (f) All soil that exceeds limits established in (e) shall be removed from the pit and disposed of at a permitted
30 municipal solid waste landfill, hazardous waste facility, or soil reclamation facility.

31 (g) The location where the pit(s) were constructed shall be returned to grade, reclaimed and seeded in accordance
32 with the approved Reclamation Plan. Pit(s) shall be reclaimed no later than 180 calendar days after the drilling rig is
33 removed from the well site, workover operations are complete, or plugging is complete.

34 (h) The permittee shall submit a signed copy of Form 25 – Pit Closure Report to the Department within 30 calendar
35 days after the pit closure has been completed with the following information:

36 (1) the permittee’s name, address, telephone number, fax number, and email address;

37 (2) the county and nearest city or town where the oil or gas well is located;

- 1 (3) the property street address or nearest address to the ingress or egress point leading from a public
- 2 road to the well pad;
- 3 (4) the API number, the lease name, and the oil or gas well name and number;
- 4 (5) the latitude and longitude of the pit reported to five decimal places of accuracy and precision using
- 5 the North American Datum of 1983 (NAD83);
- 6 (6) the pit type and use;
- 7 (7) the date of pit closure;
- 8 (8) the volume of fluid and solid E & P wastes removed from the pit(s);
- 9 (9) a confirmation that the liner was removed in accordance with Paragraph (b) of this Rule;
- 10 (10) copies of analytical results from the required sampling in Paragraph (c) of this Rule; and
- 11 (11) the name, permit number, and contact information for the receiving facilities.

12

13 History Note: Authority 113-391(a)(5)c; 113-391(a)(5)d; 113-391(a)(5)f; 113-391(b);

14 Eff

1 15A NCAC 05H .2005 is proposed for adoption as follows:

2
3 **15A NCAC 05H .2005 SPILLS AND RELEASES OF E & P WASTE**

4 (a) Chemical spills and releases shall be reported in accordance with applicable state and federal requirements,
5 including the Emergency Planning and Community Right-to-Know Act, the Comprehensive Environmental
6 Response, Compensation, and Liability Act, the Resource Conservation and Recovery Act, the Clean Water Act,
7 G.S. 143-215.75 through 215.104U, 15A NCAC 02B, and 02L, as applicable.

8 (b) Spills and releases of E & P waste shall be controlled and contained upon discovery to protect public health,
9 welfare, and the environment.

10 (c) The permittee shall be responsible for controlling, containing, and remediating any spill or release.

11 (d) The Department may require any cleanup activities it determines to be necessary to protect public health,
12 welfare, and the environment.

13 (e) Spills and releases shall be reported as follows:

14 (1) spills and releases of any E & P waste that exceed a volume of one barrel per incident, including
15 those contained within lined or unlined berms, including containment systems, shall be reported
16 on Form 26 – Spill and Release Report in accordance with Paragraph (f) of this Rule;

17 (2) spills and releases that exceed a volume of five barrels of any E & P waste shall be reported by
18 telephone or email to the Director as soon as practicable, but no more than 24 hours after
19 discovery;

20 (3) spills and releases of any size that impact, or threaten to impact, any waters of the State, high
21 occupancy buildings or occupied dwellings, livestock or public roads shall be reported by
22 telephone or email to the Director as soon as practicable, but no more than 24 hours after
23 discovery; and

24 (4) spills and releases of any size that impact or threaten to impact any surface water, water supply
25 area, or water supply intake shall be reported to the Director and the appropriate local emergency
26 management coordinator in accordance with Rule .1305 of this Subchapter. These spills and
27 releases shall be reported by phone to the local emergency management coordinator, Department,
28 and water supply facility within two hours of the discovery. This initial notification to the local
29 emergency management coordinator, Department, and water supply facility shall include a
30 description of actions to be taken to mitigate the spill and release.

31 (f) For all reportable spills, the permittee shall submit Form 26 – Spill and Release Report, to the Department no
32 more than five days after discovery. The form shall include the following:

33 (1) the permittee's name, address, telephone number, fax number, and email address;

34 (2) the county and nearest city or town where the oil or gas well is located;

35 (3) the property street address or nearest address to the ingress or egress point leading from a public
36 road to the well pad;

37 (4) the API number, the lease name, and the oil or gas well name and number;

- 1 (5) an 8 1/2 by 11 inch topographic map showing the location of the spill;
- 2 (6) color photographs of the affected area;
- 3 (7) a description of the initial mitigation, site investigation, and any additional remediation proposed
- 4 by the permittee; and
- 5 (8) additional information or remediation based on the type, size, and extent of the spill or release as
- 6 required by the Department.

7 (g) The permittee shall determine the cause of all spills and releases, and shall implement measures to prevent spills
8 and releases due to similar causes in the future.

9 (h) The permittee shall notify the local emergency management coordinator and State Emergency Operations
10 Center in accordance with Rule .1305 of this Subchapter of reportable spills and releases, pursuant to the
11 requirements in this Rule, as soon as practicable, but not more than 24 hours, after discovery.

12 (i) When a threat of or actual significant impacts on public health, welfare, and the environment from a spill or
13 release exist, or when necessary to ensure compliance with 15A NCAC 02B and 02L under the Environmental
14 Management Commission, the Department may require the permittee to submit a Form 27 – Site Investigation and
15 Remediation Work Plan with the following information:

- 16 (1) the permittee's name, address, telephone number, fax number, and email address;
- 17 (2) the county and nearest city or town where the oil or gas well is located;
- 18 (3) the property street address or nearest address to the ingress or egress point leading from a public
- 19 road to the well pad;
- 20 (4) the API number, the lease name, and the oil or gas well name and number;
- 21 (5) a description of the impact to soils, vegetation, groundwater, or surface water;
- 22 (6) a description of initial actions taken to remediate the spill or release;
- 23 (7) a description of how the spill or release and impacts will be removed or remedied;
- 24 (8) a description of proposed groundwater monitoring plan if groundwater was impacted;
- 25 (9) a description of changes to the well site development plan or reclamation plan if needed;
- 26 (10) a map of the area showing sample locations and extent of spill or release;
- 27 (11) a copy of analytical reports for any samples that have been collected and analyzed;
- 28 (12) the final disposal site of the E & P wastes recovered from the spill or release;
- 29 (13) an implementation schedule detailing the date(s) of the initial spill or release, beginning and end of
- 30 site investigation, date remediation plan was submitted, date remediation plan will be
- 31 implemented, anticipated completion date of remediation, the actual completion date; and
- 32 (14) the signature of the permittee and date signed.

33
34 *History Note:* Authority 113-391(a)(5)i; 113-391(a)(5)k;

35 Eff

1 15A NCAC 05H .2006 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2006 SAFETY AND SECURITY AT PITS AND TANKS**

4 (a) Fencing around any pit or tank shall be constructed and maintained to prevent unauthorized access. Fences are
5 not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or
6 production facility, including the pit(s) or tank(s). Fencing shall comply with Rule .1615 of this Subchapter.

7 (b) All pits or open tanks shall be screened, netted or otherwise rendered non-hazardous to wildlife, including
8 migratory birds. Where netting or screening is not used, the permittee shall on a monthly basis inspect for and,
9 within 48 hours of discovery, report any discovery of dead migratory birds or other wildlife to the Department in
10 order to facilitate assessment and implementation of measures to prevent incidents from reoccurring. All netting,
11 screening, or other measures installed shall comply with the Migratory Bird Treaty Act.

12

13 History Note: Authority 113-391(a)(4);

14

Eff

1 15A NCAC 05H .2007 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2007 MONITORING AND REPORTING**

4 (a) The permittee shall monitor all onsite E & P waste storage and disposal structures and facilities for compliance
5 with the approved E & P Waste Management Plan.

6 (b) The permittee shall inspect all pits or open tanks after a rain event of one half inch or more in a 24-hour period
7 to ensure structures have not been impaired and have the required freeboard. If impairment of a pit or open tank is
8 noted during the course of inspection, the impairment shall be recorded on a monitoring and maintenance log. The
9 log shall include:

- 10 (1) the permittee's name, address, telephone number, fax number, and email address;
- 11 (2) the county and nearest city or town where the oil or gas well is located;
- 12 (3) the property street address or nearest address to the ingress or egress point leading from a public
13 road to the well pad;
- 14 (4) the API number, the lease name, and the oil or gas well name and number;
- 15 (5) the date of inspection, name of the inspector;
- 16 (6) the location of impairment of the pit or tank;
- 17 (7) if a spill or release was observed;
- 18 (8) any necessary repair work along with the date(s) all repairs were completed; and
- 19 (9) the signature of person conducting the inspection.

20 (c) If the impairment of the structure of the pit or open tank results in a spill or release, the permittee shall comply
21 with the requirements for reporting, repair, and remediation in accordance with Rule .2005 of this Section.

22 (d) The permittee shall submit Form 24 – Annual E & P Waste Management Report to the Department no later than
23 April 1st of each year for the previous calendar year, regardless of whether any oil or gas wells are installed at a well
24 pad during the calendar year covered by the report. Form 24 – Annual E & P Waste Management Report shall
25 include:

- 26 (1) the permittee's name, address, telephone number, fax number, and email address;
- 27 (2) the county and nearest city or town where the oil or gas well is located;
- 28 (3) the property street address or nearest address to the ingress or egress point leading from a public
29 road to the well pad;
- 30 (4) the API number, the lease name, and the oil or gas well name and number;
- 31 (5) the quantity of drill cuttings that have been disposed of at off-site solid waste landfills;
- 32 (6) the permit number, name and location of the solid waste facility;
- 33 (7) the monthly quantity, in barrels, of liquid E & P waste produced in the drilling, stimulation,
34 alteration, and production of an oil or gas well; and
- 35 (8) the records of when pits were serviced due to inadequate freeboard, and the actions that were
36 taken to restore the two feet of required freeboard.

37

1 History Note: Authority 113-391(a)(5)i; 113-391(a)(5)k;

2 Eff.

1 15A NCAC 05H .2101 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2101 SCOPE**

4 (a) The permittee shall reclaim all disturbed land associated with the drilling, completion, and production of an oil
5 or gas well by removing any well site structures or equipment from the well site or well pad and establishing
6 permanent vegetative cover, soil stability, water conditions, and safety conditions appropriate to the area.

7 (b) The disturbed land shall be reclaimed unless otherwise designated by the surface owner in a surface use
8 agreement submitted with a Form 2 – Oil or Gas Well Permit Application.

9

10 History Note: Authority G.S. 113-391(a)(5); 113-421(a3);

11 Eff.

1 15A NCAC 05H .2102 is proposed for adoption as follows:

2
3 **15A NCAC 05H .2102 RECLAMATION PLAN REQUIREMENTS**

4 (a) The applicant or permittee for a Form 2 – Oil or Gas Well Permit Application or modification shall submit a
5 Reclamation Plan to the Department for approval. The Reclamation Plan shall be submitted in accordance with
6 Section .1300 of this Subchapter.

7 (b) The Reclamation Plan shall conform to the SPCA, 15A NCAC 04, and 15A NCAC 02H and include
8 information and details on the reclamation of all disturbed land at the well site including the following information:

9 (1) the reclamation activities to be conducted onsite;

10 (2) a plan for subsequent land use and the general methods to be used in reclaiming the disturbed
11 land;

12 (3) the practices to be taken to protect adjacent surface resources;

13 (4) the methods to prevent or eliminate adverse impacts to flora and fauna in, or adjacent to, the
14 disturbed land;

15 (5) the methods of reclaiming the disturbed land associated with pits in accordance with Rule .2004 of
16 this Subchapter;

17 (6) the measures to stabilize slopes; and

18 (7) the plan for re-vegetation and reforestation, or other surface treatment of the disturbed land, which
19 shall be approved in writing by one of the following prior to submission of the application:

20 (A) an authorized representative of the local soil and water conservation district having
21 jurisdiction over lands in question;

22 (B) an authorized representative of the North Carolina Forest Service within the Department
23 of Agriculture and Consumer Services;

24 (C) a county agricultural extension Chair or research and extension personnel headquartered
25 at North Carolina State University in the School of Agricultural and Life Sciences;

26 (D) a North Carolina licensed Landscape Architect pursuant to G.S. 89A; or

27 (E) a private consulting foresters referred by the North Carolina Forest Service within the
28 Department of Agriculture and Consumer Services.

29 (c) The applicant shall submit financial assurance in accordance with the Section .1400 of this Subchapter prior to
30 commencing activity onsite.

31 (d) In addition to performing all activities required by the reclamation plan, the permittee shall stabilize and reclaim
32 all lands disturbed associated with drilling, completion, and production in accordance with the Well Site
33 Development Plan required by Rule .1304(c)(2) of this Subchapter.

34 (e) An approved reclamation plan may be modified, so long as the Department determines that the modified plan
35 fully meets the standards set forth in G.S. 113-391 and that the modifications would be consistent with the basis for
36 issuance of the original permit.

1 History Note: Authority G.S. 113-391(a)(5)l;

2 Eff.

1 15A NCAC 05H .2103 is proposed for adoption as follows:

2

3 **15A NCAC 05H .2103 TIMING AND NOTICE OF RECLAMATION**

4 (a) The permittee shall complete reclamation of all disturbed land within two years pursuant to G.S. 113-421(a3).

5 (b) The permittee shall notify the Department in writing within 30 calendar days following completing reclamation.

6 (c) The Department shall monitor the well site for compliance with the following standards:

7 (1) the vegetative cover shall be maintained for a period of one year after the notice has been given

8 before the disturbed land bond under Rule .1404 shall be released by the surface owner; and

9 (2) the filled or graded areas shall be maintained so as to avoid the formation of depressions or

10 standing pools of water.

11

12 History Note: Authority G.S. 113-391(a)(5)l;

13 Eff.

1 15A NCAC 05H .2201 is proposed for adoption as follows:

2
3 **15A NCAC 05H .2201 OPERATION AND PRODUCTION REQUIREMENTS FOR OIL OR GAS**
4 **WELLS**

5 (a) All oil or gas wells shall comply with API Recommended Practice 74, “Recommended Practice for
6 Occupational Safety for Onshore Oil and Gas Production Operation,” which is incorporated by reference, including
7 subsequent amendments and editions. This document, published by API, may be viewed online at no charge at
8 <http://publications.api.org/default.aspx>.

9 (b) All production equipment shall be maintained to comply with API Recommended Practice 51R “Environmental
10 Protection for Onshore Oil and Gas Production Operations and Leases,” and North Carolina Petroleum and
11 Convenience Marketers (NCPCM) “Above-Ground Petroleum Storage Tank Manual and Fire Codes with data on
12 North Carolina Gasoline Vapor Recovery and EPA Spill Plan Information,” which are incorporated by reference,
13 including subsequent amendments and editions. Recommended Practice 51R, published by API, may be viewed
14 online at no charge at <http://publications.api.org/default.aspx>. The Above-Ground Petroleum Storage Tank Manual,
15 published by NCPCM, may be viewed online at no charge at <http://www.ncpcm.org/pdf/AST-Manual2013.pdf>.

16 (c) All natural gas compressor stations shall be contained within a baffled building in accordance with G.S. 113-
17 395.1.

18 (d) The permittee shall report monthly production data from all producing oil or gas wells, wells capable of
19 producing oil or gas, and all fluids produced during any phase of operation of the oil or gas well to the Department,
20 on Form 28 – Monthly Production Report, within 60 calendar days from the end of each month and shall include the
21 following information:

22 (1) the permittee’s name, address, telephone number, fax number, and email address;

23 (2) the county and nearest city or town where the oil or gas well is located;

24 (3) the property street address or nearest address to the ingress or egress point leading from a public
25 road to the well pad;

26 (4) the API number, the lease name, and the oil or gas well name and number;

27 (5) the month and year of production;

28 (6) the number of days the oil or gas well was producing for the reporting period;

29 (7) the oil or gas well status;

30 (8) the quantities of oil and production fluids posted in barrels; and

31 (9) the quantities of gas posted in units of thousand cubic feet.

32 (e) All meters shall be calibrated at least annually and shall comply with Chapters 14, 21, and 22 of the API
33 “Manual of Petroleum Measurement Standards,” which is incorporated by reference, including subsequent
34 amendments and editions. These documents, published by API, may be purchased at a cost of one thousand four
35 hundred and sixty-eight dollars (\$1,468) for Chapter 14, four hundred and sixteen dollars (\$416) for Chapter 21, and
36 one hundred and sixty-three dollars (\$163) for Chapter 22 at <http://www.techstreet.com/api/products/21408> or by
37 mail at Techstreet, 3916 Ranchero Drive, Ann Arbor, MI 48108.

- 1 (f) All meters, valves, and gauges shall be maintained and remain accessible to the Department.
- 2 (g) The permittee shall notify the Department at least 72 hours via telephone or email prior to meter calibration.
- 3 The permittee shall submit Form 11 – Required Notifications to the Department, by mail, email or fax within five
- 4 calendar days and shall include the following information:
- 5 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 6 (2) the county and nearest city or town where the oil or gas well is located;
- 7 (3) the property street address or nearest address to the ingress or egress point leading from a public
- 8 road to the well pad;
- 9 (4) the API number, the lease name, and the oil or gas well name and number; and
- 10 (5) the scheduled date and approximate time for the meter testing.
- 11 (h) The permittee shall retain calibration records for five years in accordance with Rule .0202 of this Subchapter.
- 12 (i) The permittee shall replace any meter that fails an annual meter calibration test. Test results that exceed two
- 13 percent of the manufacturer’s specifications shall constitute a failure of the meter calibration test. The permittee
- 14 shall notify the Department within 24 hours of replacing a meter via mail or email and shall retain records related to
- 15 replacement for a period of five years.
- 16 (j) The permittee shall inspect daily each producing oil or gas well for the first 30 calendar days following
- 17 commencement of production and monthly thereafter. The permittee shall report on the daily inspections results
- 18 within 30 calendar days of the final daily inspection on Form 29 – Well Site Inspection Report.
- 19 (k) The permittee shall submit a monthly inspection report to the Department using Form 29 – Well Site Inspection
- 20 Report within 30 calendar days of the inspection.
- 21 (l) The Form 29 – Well Site Inspection Report shall include the following information:
- 22 (1) the permittee’s name, address, telephone number, fax number, and email address;
- 23 (2) the county and nearest city or town where the oil or gas well is located;
- 24 (3) the property street address or nearest address to the ingress or egress point leading from a public
- 25 road to the well pad;
- 26 (4) the API number, the lease name, and the oil or gas well name and number;
- 27 (5) the presence of corrosion or equipment deterioration on any production equipment;
- 28 (6) any indication or observation of a hydrocarbon release;
- 29 (7) the condition of the wellhead, tanks, separators, and all other production equipment;
- 30 (8) the condition of the secondary containment system for all tanks and separators;
- 31 (9) certification that activated charcoal filters, low pressure relief valves, hatch lids, and lightning
- 32 arrestors are present and functional for all tanks; and
- 33 (10) any pressure measurements taken at the wellhead.
- 34 (m) The Department may require the permittee to perform diagnostic testing on the oil or gas well or production
- 35 equipment to determine whether a potential mechanical deficiency exists and the best method of repair if
- 36 deficiencies or violations are noted by the permittee on the Form 29 – Well Site Inspection Report.

- 1 (n) The permittee shall notify the Department via telephone or email of any annular pressures in excess of 80
2 percent of the API rated minimum internal yield pressure rating within 24 hours after discovery.
- 3 (o) All shut-in oil or gas wells shall pass an annual mechanical integrity test. Oil or gas wells that had surface
4 equipment removed or have become incapable of production shall pass a mechanical integrity test within 30
5 calendar days. Oil or gas wells that fail a mechanical integrity test shall be repaired or plugged and abandoned
6 within six months of failing the test. Mechanical integrity testing shall be in accordance with the following
7 procedure:
- 8 (1) isolate the wellbore with a bridge plug, set at 100 feet or less above the highest perforations;
9 (2) pressure test the casing with inert or nonreactive liquid or gas at a minimum of 300 pounds per
10 square inch (psi) surface pressure; and
- 11 (3) maintain a minimum of 300 psi surface pressure for at least 15 minutes without a pressure
12 differential of more than 10 percent.
- 13 (p) The permittee shall notify the Department using Form 11 – Required Notifications to the Department, not less
14 than 10 calendar days prior to initiating a mechanical integrity test by mail, email, or fax. The notification shall
15 include the following information:
- 16 (1) the permittee’s name, address, telephone number, fax number, and email address;
17 (2) the county and nearest city or town where the oil or gas well is located;
18 (3) the property street address or nearest address to the ingress or egress point leading from a public
19 road to the well pad;
20 (4) the API number, the lease name, and the oil or gas well name and number; and
21 (5) the scheduled date and approximate time for which the test will be performed.
- 22 (q) Mechanical integrity test results shall be submitted to the Department using Form 16 – Mechanical Integrity
23 Test Results, within 30 calendar days after completing the test and shall include the following information:
- 24 (1) the permittee’s name, address, telephone number, fax number, and email address;
25 (2) the county and nearest city or town where the oil or gas well is located;
26 (3) the property street address or nearest address to the ingress or egress point leading from a public
27 road to the well pad;
28 (4) the API number, the lease name, and the oil or gas well name and number;
29 (5) the purpose or reason for testing and identify if tubing or casing is being tested;
30 (6) identify depth of producing zone and perforated intervals;
31 (7) the tubing and casing diameter and depth;
32 (8) description of the pressure test data including pressure charts showing pressure prior to, during,
33 and at the commencement of testing; and
34 (9) be signed by the service company or contractor conducting the pressure test to attest that all tests
35 and results comply with the standards set in this Rule.
- 36 (r) The permittee shall submit Form 2 – Oil or Gas Well Permit Application, to the Department for the recompletion
37 work required for the oil or gas well to be placed back into production.

1

2 History Note: Authority G.S. 113-391(a)(5)c, i, and k;

3 Eff.