

From: [Josey, Robert B](#)
To: [Reeder, Amanda J](#)
Subject: RE: MEC Rules
Date: Tuesday, January 06, 2015 3:09:07 PM
Attachments: [RRC Staff Responses 1-15.docx](#)
[15A NCAC 05H .1310.docx](#)
[15A NCAC 05H .1404.docx](#)
[15A NCAC 05H .1405.docx](#)
[15A NCAC 05H .1603.docx](#)
[15A NCAC 05H .1804.docx](#)
[15A NCAC 05H .1902.docx](#)
[15A NCAC 05H .1903.docx](#)
[15A NCAC 05H .2003.docx](#)

January 6, 2015 email from MEC staff withdrawing Rules 15A NCAC 05H .0804 and .1704.

Amanda,

The MEC has decided not to go forth with Rules .0804 and .1704 (if you need a separate email stating so, I can send you one). We will not be doing anything further to Rules .704, .1308, .1406, and .1613. As for the remaining 13, you had no comments on .1407. The remaining 8 rules are attached along with a document answering your questions.

Thanks,

Robert

From: Reeder, Amanda J
Sent: Monday, January 05, 2015 11:05 AM
To: Josey, Robert B
Cc: Reeder, Amanda J
Subject: MEC Rules

Robert,

Thank you for sending the rules on December 22. I want to make sure we are all on the same page on what is outstanding so that nothing is missed.

I note that the MEC has the following outstanding rules:

Commission Objected:

1. .0804
2. .1704

What is the MEC doing with these Rules? I am anticipating they will be withdrawn; if so, please let me know so I can plan accordingly.

Commission Extended Period of Review:

1. .0704
2. .1308
3. .1310
4. .1404
5. .1405
6. .1406



STATE OF NORTH CAROLINA
OFFICE OF ADMINISTRATIVE HEARINGS

Mailing address:
6714 Mail Service Center
Raleigh, NC 27699-6714

Street address:
1711 New Hope Church Rd
Raleigh, NC 27609-6285

December 17, 2014

Robert Josey
Mining and Energy Commission
Sent via email to: robert.josey@ncdenr.gov

Re: Objections to Rules 15A NCAC 05H .0804 and .1704

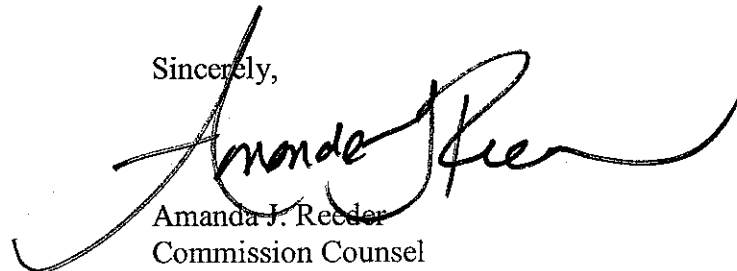
Dear Mr. Josey:

At its meeting this afternoon, the Rules Review Commission objected to the above-captioned rules in accordance with G.S. 150B-21.10.

The Commission objected both rules based upon G.S. 150B-21.9(a)(3), finding they are unnecessary to implement an enactment of the General Assembly, as both rules simply recite statutory provisions.

Please respond to this letter in accordance with the provisions of G.S. 150B-21.12. If you have any questions regarding the Commission's actions, please let me know.

Sincerely,



Amanda J. Reeder
Commission Counsel

Administration
919/431-3000
fax: 919/431-3100

Rules Division
919/431-3000
fax: 919/431-3104

Judges and
Assistants
919/431-3000
fax: 919/431-3100

Clerk's Office
919/431-3000
fax: 919/431-3100

Rules Review
Commission
919/431-3000
fax: 919/431-3104

Civil Rights
Division
919/431-3036
fax: 919/431-3103

1 15A NCAC 05H .0804 has been adopted as published in 29:02 NCR 121 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. Pending Legislative Review.*

Withdrawn by agency

1 15A NCAC 05H .1704 has been adopted with changes as published in 2902 NCR 150 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~~ G.S. 113-391.1.

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. Pending Legislative Review.*
14

1 15A NCAC 05H .0704 has been adopted with changes as published in 29:02 NCR 118 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. The Chair shall return ~~Incomplete~~incomplete requests ~~shall be returned~~ to the
6 requesting party.

7 (b) Before deciding the merits of the request, ~~if necessary~~ the Commission ~~may~~shall determine if additional
8 information or presentation(s) are needed and if so:

- 9 (1) request additional written submissions from the requesting party;
10 (2) request a written response from the Division staff or any other person; and
11 (3) hear oral arguments from the requesting ~~party~~party, intervenors, and Division staff or their legal
12 counsel.

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

15 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1308 has been adopted with changes as published in 29:02 NCR 128 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:~~ site. These conditions may require the permittee to:

- 6 (1) create or construct additional erosion control measures to be installed during oil and gas well
7 operations;
- 8 (2) create or construct a natural buffer to be left between any stream and the disturbed land;
- 9 (3) create or construct visual ~~screenings~~ screening, such as existing natural vegetation, vegetated
10 earthen berms, tree plantings at staggered spacing, to be installed and maintained between any
11 disturbed land and any adjoining property containing occupied buildings or public access within
12 view of the disturbed land;
- 13 (4) create or construct erosion control measures to be implemented during the construction and
14 operation of all roads to minimize off-site damage from sediment; or
- 15 (5) comply with other conditions as determined by the Department based on the well site geography,
16 geology, and the recommendations of other Divisions in order to safeguard public health, welfare,
17 and the environment.

18
19 *History Note:* *Authority G.S. 113-391(a)(5); ~~113-395(5)~~ e 1; 113-391(a6);*
20 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1310 has been adopted with changes as published in 29:02 NCR 129 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.~~ Rule .1304 of this Section.
6 The Department may review, approve, approve with conditions, or deny the application for modification in
7 accordance with the rules of this Section.

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

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

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

17 (e) If at any time it appears to the Department from its inspection of the disturbed land that the activities under the
18 Reclamation Plan and other terms and conditions of the permit are failing to achieve the purposes and requirements
19 of this Subchapter, the Department shall give the permittee written notice of that ~~fact,~~ fact and request the permittee
20 to modify the permit in accordance with Rule .1307 of this Section. ~~of its intention to modify the Reclamation Plan,~~
21 ~~and other terms and conditions of the permit in a stated manner.~~

22
23 *History Note: Authority G.S. 113-391(a)(5)a; 113-391(a6); 113-395; 113-410(a);*

24 *Eff. Pending Legislative Review.*

1 15A NCAC .1404 has been adopted with changes as published in 29:02 NCR 130 as follows:

2
3 **15A NCAC 05H .1404 DISTURBED LAND BOND**

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

7 (b) The Commission shall set the disturbed land bond amount ~~for disturbed land shall be based on by calculating~~
8 ~~the costs for corrective action(s) that the Department may require actions(s), using the Reclamation Cost Table and~~
9 ~~calculations specified in Paragraphs (c) and (d) of this Rule, to return the land to the conditions set out in the~~
10 ~~approved Reclamation Plan in accordance with Rule .2102 of this Subchapter and any reclamation conditions of the~~
11 ~~approved permit.~~

12 (c) The Commission shall use the Reclamation Cost Table to calculate the amount for the disturbed land bond. The
13 Reclamation Cost Table set by the Commission shall include the following:

- 14 (1) stone removal for access road and well pad in cubic yards;
15 (2) spreading stockpiles and berms to prepare for fine grading in cubic yards;
16 (3) filling of pits in cubic yards;
17 (4) fine grading per acre;
18 (5) seed and mulch, repair seeding, and fertilizing per acre;
19 (6) matting for soil cover per acre;
20 (7) matting permanent soil reinforcement per acre;
21 (8) drainage ditch excavation; and
22 (9) borrow excavation.

23 (d) The disturbed land bond shall be calculated by multiplying the affected area for each item listed in Paragraph (c)
24 of this Rule and the unit cost for each item as determined by the Commission based on market value of each item.
25 The Reclamation Cost Table is available on the Division's Oil and Gas Program webpage at the following address:
26 <http://portal.ncdenr.org/web/lr/oilgas>.

27 ~~include costs to reclaim well site features, such as the haul road, drainage and roadway ditches and berms, pits,~~
28 ~~stockpiles, and production facilities at the well pad as set out in the Reclamation Cost Table approved by the~~
29 ~~Commission~~

30 (e) If the applicant, permittee, or surface owner disagrees with the disturbed land bond amount determined by the
31 Commission, the applicant, permittee, or surface owner may appeal the bond amount pursuant to G.S. 113-
32 421(a3)(1).

33
34 *History Note:* Authority G. S. 113-391(a)(5)l; 113-391(a)(13a); ~~113-421(a2); 113-421(a3)(1); 150B-43;~~
35 Eff. Pending Legislative Review.

1 15A NCAC .1405 has been adopted with changes as published in 29:02 NCR 131-132 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 of one million dollars
5 (\$1,000,000), unless the Commission sets a higher amount pursuant to G.S. 113-421(a)(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) In identifying environmentally sensitive areas, the Commission shall consider the following:

9 (1) renewable resources, which may include:

10 (A) watersheds or aquifers that are present sources of public water supply, as identified by the
11 Department or the Environmental Management Commission at
12 <http://swap.ncwater.org/website/swap/viewer.htm>; and

13 (B) prime forestry land (sites capable of producing 85 cubic feet per acre-year, or more, of
14 marketable timber).

15 (2) environmental or natural resources, which may include:

16 (A) existing national or State parks or forests, wilderness areas, the State Nature and Historic
17 Preserve, or public recreation areas;

18 (B) present sections of the natural and scenic rivers system;

19 (C) stream segments that have been classified for scientific or research uses by the
20 Environmental Management Commission at <http://portal.ncdenr.org/web/wq/ps/csu>, or
21 that are proposed to be so classified in a rulemaking proceeding that is pending before the
22 Environmental Management Commission pursuant to G.S.143-214.1 at the time of the
23 designation of the area of environmental concern;

24 (D) existing wildlife refuges, preserves or management areas found at
25 <http://www.fws.gov/refuges/refugelocatomaps/NorthCarolina.html> and game lands
26 identified by the Wildlife Resources Commission found at
27 <http://ncpaws.org/wrcmapbook/>;

28 (E) areas that sustain rare and endangered botanical or animal species; and

29 (F) areas containing unique geological formations, as identified by the State Geologist.

30 (3) natural-hazard areas, which may include:

31 (A) the shoreline of estuarine and public trust waters;

32 (B) floodways and floodplains; and

33 (C) areas where geologic and soil conditions are such that there is a substantial possibility of
34 landslides or seismic activity, as identified by the State Geologist, at
35 <http://portal.ncdenr.org/web/lr/geologic-hazards>.

36 (4) Outstanding Resource Waters as designated by the Division of Water Resources at
37 <http://nc.maps.arcgis.com/apps/webappviewer/index.html?id=5f5cce7640a1499b83a7b7efaf5524a>

1 4 and such contiguous land for the purpose of maintaining the exceptional water quality and
2 outstanding resource values identified in the designation; and

3 (5) Primary Nursery Areas as designated by the Marine Fisheries Commission at
4 <http://portal.ncdenr.org/web/mf/primary-nursery-areas>.

5 ~~(e)(d)~~ ~~If the Commission determines~~After the Commission determines that an operation would be sited in an
6 environmentally sensitive area, the Commission may increase the bond amount pursuant to G.S. 113-421(a3)(2). In
7 making the ~~determination~~determination, the Commission shall consider ~~the following factors~~factors such as the
8 following:

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

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

11 (3) the topography of the environmentally sensitive area; and

12 (4) special soil or geologic conditions in the environmentally sensitive ~~area~~; and area.

13 ~~(5) — any other factors the Commission determines to be relevant in determining an environmentally~~
14 sensitive area.

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

17 Eff. Pending Legislative Review.

1 15A NCAC .1406 has been adopted with changes as published in 29:02 NCR 132 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~~After receipt of the notice as required by Paragraph (b) of this Rule, ~~and at any other time the Department~~
10 ~~may elect, Rule,~~ the Department shall conduct an inspection ~~in accordance with Rule .0203 of this Subchapter to~~
11 determine whether the permittee has complied with the Reclamation Plan, ~~the rules of this Subchapter, the statute,~~
12 ~~and the terms~~Plan in accordance with Rule .2102 of this Subchapter and the reclamation conditions of the Oil or Gas
13 Well Permit.

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

16 (2) ~~If~~if the Department determines from its inspection of the area that reclamation is deficient based
17 on Rule .2102 of this Subchapter, then the Department shall notify the permittee in writing of all
18 such deficiencies. The permittee shall ~~thereupon~~commence action within 30 days to rectify these
19 deficiencies and shall take corrective actions until the deficiencies have been corrected. The
20 Department shall conduct follow-up site inspections in accordance with this Subparagraph and
21 Rule .0203 to ensure the permittee has taken the corrective actions.

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

- 24 (1) the reclamation of the disturbed land within the permitted area is not proceeding in accordance
25 with the Rule .2103 of this Subchapter or the Reclamation Plan;
26 (2) the permittee has failed within 30 days after notice to commence corrective action; or
27 (3) the final reclamation has not been properly completed in conformance with the Reclamation Plan
28 and G.S. 113-421(a3).

29
30 *History Note: Authority G. S. 113-391(a)(5); 113-391(b); 113-410; 113-421(a3);*
31 *Eff. Pending Legislative Review.*

1 15A NCAC .1407 has been adopted with changes as published in 29:02 NCR 132 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~~notice of violation. Upon receipt of the written notice of
6 violation, the permittee shall have 60 calendar days to ~~take~~complete corrective action. If the permittee does not
7 correct the violation within the 60 day period, the Department ~~may~~shall request the Attorney General to initiate
8 forfeiture proceedings against the bond or other security filed by the permittee in accordance with Rule .0901 of this
9 Subchapter.

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

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

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

22
23 *History Note: Authority G.S. 113-391(a)(5)l; ~~113-421(a2); 113-421(a3);~~*

24 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1603 has been adopted with changes as published in 29:02 NCR 136-137 as follows:

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. The variance, if
6 granted, shall provide equal or greater protection of public health, safety, and the environment. Variances from
7 setbacks established for high occupancy buildings are prohibited. The Commission ~~shall consider the following~~
8 ~~factors in granting or denying variances;~~ variances shall:

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

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

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

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

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

18 ~~(3)(2)~~ (2) freshwater storage pits, reserve pits to drill surface casing, and emergency ~~pits;~~ pits shall be a
19 minimum of 400 feet from an occupied dwelling.

20 The Commission shall not grant a variance for any E & P waste pit setback from an occupied dwelling.

21 (c) An applicant or permittee may request a variance to reduce the setback distances for an oil or gas wellhead,
22 a ~~tank;~~ tank, or tank battery from an intermittent stream, ~~or a pond,~~ or other natural or artificial water body, ~~that~~ which
23 is not a water of the State, wholly contained within the drilling ~~unit required by Rule .1601 of this Section;~~ unit. The
24 Commission shall determine that the measures proposed to eliminate, minimize or mitigate potential adverse
25 impacts to public health, welfare and the environment are adequate to address all the risks at the well site and justify
26 the reduction of setback distances as requested in the variance and that the variance, if granted, shall provide equal
27 or greater protection of public health, safety, and the environment. ~~The Commission shall consider the following~~
28 ~~factors in granting or denying variances;~~ variance shall include the following conditions:

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

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

35 ~~(3)(2)~~ (2) the oil or gas wellhead, freshwater storage pit, tank, tank battery, or production facility shall be a
36 minimum of 50 feet from any intermittent stream, pond, or other natural or artificial water body,
37 that is not a water of the State, and that is wholly contained within the drilling unit; unit; and

38 ~~(4)(3) no variance is allowed for any E & P waste pit setback from an intermittent stream; and~~

1 ~~(5)(3)~~ oil or gas wellheads, ~~tanks or a tank~~, a tank battery, or pits less than 650 feet from, and up-gradient
2 of, a surface water body shall use tertiary containment, such as an earthen berm.

3 The Commission shall not grant a variance for any E & P waste pit setback from an intermittent stream.

4 (d) The Commission shall require green completions in any approved ~~variance; variance, which include:~~

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

6 (2) prevention of uncontrolled venting shall be prohibited; venting; and

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

8 (A) ~~adequately sized~~ sized to handle one and one half times the largest flowback

9 volume of gas experienced within a 10-mile radius;

10 (B) valves and porting available to divert gas to temporary equipment or to permanent flaring

11 and oxidizing equipment; and

12 (C) auxiliary fuel ~~with sufficient supply~~ and heat to sustain combustion or oxidation of the

13 gas mixture when the mixture includes noncombustible gases.

14 (e) An applicant or permittee may submit a surface use agreement from a surface landowner as justification to

15 request a variance to setback distances for the wellheads, tank or tank battery, and pits from occupied dwellings.

16 The surface use agreement may include additional site-specific mitigation measures. The surface use agreement

17 shall include written consent of the landowner, which may be provided by any of the following:

18 (1) a copy of an original lease agreement text filed with the county Registrar of Deeds that ~~provides~~

19 ~~for~~ shows the reduction of the distance of the location of an oil or gas wellhead, well pad, tank

20 battery, or pit, as applicable, from an occupied dwelling;

21 (2) a copy of a deed severing the oil and gas mineral rights, as applicable, from the owner's parcel of

22 land as filed with the county Registrar of Deeds that expressly provides for the reduction of the

23 distance of the location of an oil or gas wellhead, well pad, tank battery, or pit, as applicable, from

24 an occupied dwelling; or

25 (3) a copy of a written surface use agreement signed by the property owner that consents to the

26 proposed location of an oil or gas wellhead, well pad, tank, tank battery, or pit(s), as applicable.

27 An applicant or permittee may submit a copy of a written statement filed with the county Register

28 of Deeds that expressly provides for the reduction of the distance of the location of an oil or gas

29 wellhead, well pad, tank battery, or pit, as applicable, from an occupied dwelling in lieu of a copy

30 of a written surface use agreement.

31 (f) Variance requests shall be submitted in accordance with Rule .0301 of this Subchapter. In addition to the

32 information required by Rule .0301 of this Subchapter, any permittee seeking to use surface use agreement as a basis

33 for a variance shall submit a copy of the surface use agreement containing the information in Paragraph ~~(e)~~(e) of this

34 Rule.

36 *History Note:* *Authority G.S. 113-391(a)(5)d;*
37 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1613 has been adopted with changes as published in 29:02 NCR 141-142 as follows:

2
3 **15A NCAC 05H .1613 WELL STIMULATION REQUIREMENTS**

4 (a) The applicant or permittee shall indicate on the Form 2 – Oil or Gas Well Permit Application the intent to
5 perform well stimulation operations. If well stimulation was not approved as part of the initial application, the
6 permittee desiring to perform such operations shall submit for approval the information required by this Rule via
7 email, fax or mail to the Department for review ~~and approval~~ at least 30 calendar days prior to commencement
8 of planned well stimulation 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 contact information is set forth in Rule
19 .0201 of this Subchapter. The permittee shall submit Form 11 – Required Notifications to the Department, by mail,
20 email, or fax within five calendar days of the telephone or email notice and shall include the 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~~address, or nearest address to the ingress ~~or~~and egress point leading
24 from a public 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~~Rule and the Department shall be notified within 24 hours of the occurrence of an
3 ~~exceeded pressure~~. Pressures on any casing string other than the surface casing shall not be allowed to exceed 80
4 percent of the API rated minimum internal yield pressure for such casing string throughout the stimulation
5 treatment. The permittee shall notify the Department within 24 hours via telephone or email if treatment pressure
6 exceeds 80 percent of the API rated minimum internal yield pressure on any casing string other than 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~~fluid injection 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
18 groundwater ~~zones~~zones, if the permittee is unable to assess the wellbore integrity. If either the permittee or the
19 Department determines fresh groundwater zones are endangered, the Department shall require the permittee to
20 perform remedial operations to correct any oil or gas well failure.

21 (i) The Department shall notify the Commission at its next regularly scheduled meeting of any remedial operations
22 conducted pursuant to Paragraph (h) of this Rule.

23
24 *History Note: Authority G.S. 113-391(a)(5)k; 113-391(a)(10); 113-391(a)(11); 113-391(b); 113-391(b1);*
25 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1804 has been adopted with changes as published in 29:02 NCR 152 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,
5 or 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 Form 21 – Water Supply Investigation Report can be found in
7 Rule .0201(a) in this Subchapter and shall be sent to the Department in accordance with Rule .0201(c) in this
8 Subchapter. The completed form shall include the following information:

- 9 (1) the name of surface owner or owner of the water supply, address, telephone number, and email
10 address;
11 (2) the name of the oil or gas well ~~permittee;~~ permittee, if known;
12 (3) the API number, the lease name, and the oil or gas well name and ~~number;~~ number, if known;
13 (4) an indication if the individual contacted the permittee, ~~permittee was contacted~~ and if ~~so,~~ the
14 name of the person contacted; ~~provide contact name;~~
15 (5) the date of ~~incident~~ incident, if known; and
16 (6) a description of the incident or problem.

17 (b) Upon the receipt of a Form 21 – Water Supply Investigation Report, ~~At the request~~
18 ~~of the Department,~~ Department shall require the permittee shall ~~to pay for a test to be conducted~~ conduct a test of
19 the water supply and submit the analytical results to the Department ~~within 30 calendar days of receipt in~~
20 accordance with Rules .1803(f) and .1805 of this Section.

21 (c) ~~The Department shall require the permittee to~~ The permittee shall replace a water supply pursuant to G.S. ~~113-~~
22 ~~421(a4)~~ 113-421(a5) if the investigation and analytical results indicate that the water supply is contaminated due to
23 the activities of the permittee.

24
25 *History Note: Authority G.S. 113-391(a)(3); 113-391(a)(4); 113-391(a)(5)b; 113-391(a)(14); 113-423(f);*
26 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1902 has been adopted with changes as published in 29:02 NCR 153-154 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~~reach, the following information shall
13 be ~~provided~~provided by the permittee to the Department:

- 14 (1) the river basin ~~designation~~designation, as defined by G.S. 143-215.22G, at the point of
15 withdrawal and the river basin designation where the water will be ~~used as defined by G.S. 143-~~
16 ~~215.22G, which is incorporated by reference including subsequent amendments; used;~~
17 (2) the classification of the water source at the withdrawal point in accordance with 15A NCAC 02B
18 .0301, which is incorporated by reference including subsequent amendments;
19 (3) for free-flowing water sources:
20 (A) a list of other existing and proposed withdrawals within the affected ~~reach~~reach,
21 including the maximum withdrawal capacity of each; and
22 (B) ~~provide~~ an estimate of the 7Q10 flow at the proposed intake location and explain the
23 methodology used to derive the estimate. The cumulative maximum instantaneous
24 withdrawal from the affected reach shall be limited to 20 percent of the 7Q10 flow.
25 ~~(4) when flows in the affected reach are at 7Q10 levels, withdrawals conducted under this permit shall~~
26 ~~cease until flows reach 120 percent of the 7Q10 flow level; and~~
27 ~~(5)~~(4) the owner, facility name, National Pollution Discharge Elimination System (NPDES) permit
28 number, and permitted volume of any point source discharges within the affected reach
29 or ~~that~~ discharge to a water impoundment that is listed as a water source.

30 (c) When flows in the affected reach are at 7Q10 levels, withdrawals conducted under the permit shall cease until
31 flows reach 120 percent of the 7Q10 flow level.

32 ~~(e)~~(d) The results of a survey to determine the presence of any state or federally threatened or endangered species or
33 any invasive species that may be affected by the proposed withdrawal shall include:

- 34 (1) the identification of any state or federally threatened or endangered species present;
35 (2) a description of how any detrimental impacts to those species and their critical habitats will be
36 avoided;
37 (3) a description of how the spread of any identified invasive species will be prevented; and

(4) the identification of the sources of information used for the determination and contact information for the federal and state agencies consulted.

~~(d)~~(e) The permittee shall indicate the presence of any known noxious aquatic weeds listed in 15A NCAC 02G .0602, which is incorporated by reference including any subsequent amendments, or other exotic or invasive species in the source water(s).

~~(e)~~(f) If the surface water source is classified as an Outstanding Resource Water under 15A NCAC 02B .0225, ~~which is incorporated by reference including subsequent amendments, .0225, the permittee shall document how that~~ the outstanding resource value will not be adversely ~~affected~~ affected, taking into account the value assigned to it, the site-specific location, and the proposed quantity of water to withdrawn under this plan.

History Note: Authority G.S. 113-391(a)(4); 113-391(a)(5)e; 113-391(a)(5)k;
Eff. Pending Legislative Review.

1 15A NCAC 05H .1903 has been adopted with changes as published in 29:02 NCR 154 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, the~~
10 Water Management Plan, a copy of the Well Construction Permit issued by the Department
11 pursuant to 15A NCAC 02C ~~.0105~~.0105, which is incorporated by reference including subsequent
12 amendments, and the associated groundwater well construction record form submitted to the
13 Department pursuant to 15A NCAC 02C .0114(b);
- 14 (3) the results of an aquifer pump test for each well included in ~~this application, the~~ Water
15 Management Plan. The aquifer pump test shall be conducted in accordance with 15A NCAC 02C
16 .0110(b), which is incorporated by reference including subsequent amendments;
- 17 (4) a map showing the extent of the measureable area of influence determined ~~from~~by the aquifer
18 pump test at the proposed rate of withdrawal indicating the locations of all surface waters and
19 water supply wells within the area of influence;
- 20 (5) a map showing the extrapolated cone of depression based on six months usage; and
- 21 (6) information required by 15A NCAC 02C .0107(j)(2)(E) and (j)(3)(D), which is incorporated by
22 reference including subsequent amendments, for the construction of water supply and other wells.

23 ~~(b) When the drought indicator well closest to the groundwater source(s) included in this application is designated~~
24 ~~as D3, indicating that water levels are at or below the 5th percentile of historic water level measurements as reported~~
25 ~~by the Division of Water Resources, withdrawals from these sources shall cease until the designation is upgraded to~~
26 ~~D4 or above, indicating water levels above the 10th percentile of historic water level measurements.~~

27 ~~(b) The applicant or permittee shall use~~In consultation with and with the approval of the Department, an applicant
28 ~~or permittee may identify~~ a drought indicator well within the measureable area of influence identified by the
29 Division of Water Resources and the United States Geological Survey found at <http://www.ncwater.org/?page=345>,
30 to be used to monitor the impacts to groundwater and to determine appropriate thresholds on which to base the
31 cessation of groundwater pumping. If there is no such well, the applicant or permittee shall, in consultation with
32 and the approval of the Department, identify a well for this purpose.

33 ~~(c) When the drought indicator well closest to the groundwater source(s) included in this application is designated as~~
34 ~~D3, indicating that water levels are at or below the 5th percentile of historic water level measurements~~
35 ~~as reported~~determined by the Drought Management Advisory Council and reported by the Division of
36 Water Resources, Resources at <http://www.ncwater.org/?page=345>, the withdrawals from these sources shall cease

1 until the designation is upgraded to D1 or above, indicating water levels above the 10th percentile of historic water
2 level measurements.

3

4 *History Note:* *Authority G.S. 113-391(a)(5)e; 113-391(a)(5)k; 113-391(b);*
5 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .2003 has been adopted with changes as published in 29:02 NCR 156-157 as follows:

2
3 **15A NCAC 05H .2003 EXPLORATION AND PRODUCTION WASTE DISPOSAL**

4 (a) The permittee shall test produced water and flowback ~~fluids~~fluids. The permittee shall test for the following
5 parameters on a frequency and schedule determined by the ~~Department~~Department, based on factors such as new
6 sciences, the shale resource, and operator technology for the protection of public health, welfare, and the
7 environment. At a minimum, testing shall be conducted on the produced water and flowback fluids from the first
8 completed well on each well pad and on all fluids prior to management in accordance with Subparagraphs (c)(2),
9 (c)(3), and (c)(4) of this Rule:

carbonaceous biochemical oxygen demand (CBOD)	ammonia-nitrogen (NH3-N)
dissolved oxygen (DO)	specific conductance
pH	total suspended solids (TSS)
Barium barium	bromide
Chlorides chlorides	sulfates
Sodium sodium	divalent cations
total dissolved solids (TDS)	oil and grease
arsenic, total recoverable	cadmium, total recoverable
cobalt, total recoverable	copper, total recoverable
cyanide, total recoverable	lead, total recoverable
mercury, total recoverable	nickel, total recoverable
tin, total recoverable	zinc, total recoverable
Benzene benzene	bis(2-ethylhexyl)phthalate
butylbenzyl phthalate	carbazole
n-Decane	fluoranthene
n-Octadecane	radium-226 (Dissolved)
strontium-90 (Dissolved)	beta radiation (gross)
chronic wet testing whole effluent toxicity	<u>total organic carbon</u>
	<u>volatile organic compounds</u>
	<u>semi-volatile organic compounds</u>

- 11
- 12 (1) the water samples shall be collected and analyzed in accordance with Rule .1803 of this
- 13 Subchapter; and
- 14 (2) the analytical results shall be submitted to Division within 30 calendar days of receiving the
- 15 analytical results, unless a different schedule is prescribed by the ~~Department~~Department, based
- 16 on the results of the initial test.

(b) The Director, in consultation with the Director of the Division of Water ~~Resources~~, ~~Resources~~ and the Director of the Division of Public Health within the Department of Health and Human Services, may require additional analysis and scheduling as necessary for the protection of public health, welfare, and the environment.

(c) E & P waste shall be managed as:

- (1) reuse in well stimulation operations;
- (2) ~~on-site~~ onsite pretreatment for reuse or disposal;
- (3) disposal at a plant installed for the purpose of disposing of waste within the ~~state~~ State, permitted in accordance with G.S. 143-215.1; or
- (4) disposal facility located within another state that is duly permitted to accept flowback fluid and produced water from oil or gas operations.

(d) If E & P waste is to be disposed of in accordance with Subparagraphs (c)(2), (c)(3), or (c)(4) of this Rule, the permittee shall also comply with the following requirements:

- (1) prior to transporting the waste to a publically owned treatment works pursuant to Subparagraph (c)(3) of this Rule, the permittee shall submit a copy of the approved Industrial User Permit required by 15A NCAC 02H .0916, which is incorporated by reference, including subsequent amendments, to the Division.
- (2) the permittee shall notify the Division if any facility identified in the plan refuses to accept E & P waste. Upon such refusal, the permittee shall submit a revised E & P Waste Management Plan in accordance with Rule .2002 of this Section that identifies a new disposal facility to the Division.

~~(d)(e)~~ Any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule or from any ~~on-site~~ onsite pretreatment that may be used in conjunction with ~~Subparagraph~~ Subparagraphs (c)(2) and ~~(c)(3)(3)~~ of this Rule shall be managed and disposed of pursuant to ~~Subparagraph~~ Subparagraphs (c)(3) and ~~(c)(4)(4)~~ of this Rule or with the Resource Conservation and Recovery Act and regulations promulgated pursuant thereto, 42 USC 6901 *et seq.* and 40 CFR Parts ~~239-282~~, ~~239-282~~, which is incorporated by reference, including subsequent amendments, which can be accessed for no charge at http://www.ecfr.gov/cgi-bin/text-idx?SID=13be85c0df8971509a2531a778d1c87f&tpl=/ecfrbrowse/Title40/40tab_02.tpl. In addition, prior to disposal of any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule, or from any ~~on-site~~ onsite pretreatment that may be used in conjunction with ~~Subparagraph~~ Subparagraphs (c)(2) and ~~(c)(3)(3)~~ of this Rule, the permittee shall demonstrate that the sludge or residual meets all applicable radioactivity standards for the disposal facility.

~~(e)(f)~~ Residuals from onsite pretreatment shall be disposed of in accordance with ~~G.S. 143-215.1~~, ~~G.S. 143-215.1~~ and G.S. 130A-294, or transported to another state and disposed of in accordance with the receiving state's rules.

~~(f)(g)~~ Solid E & P waste, including drill cuttings and solidified muds, shall be characterized in accordance with ~~EPA Method 1311~~, Toxicity Characteristic Leaching ~~Procedure~~, Procedure, which is incorporated by reference, including subsequent amendments and found at <http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/1311.pdf>. The solid E & P waste shall be characterized on a frequency and schedule determined by the ~~Department~~ Department, based on the permittee's

drilling, completion, and stimulation practices. In addition, the Director, in consultation with the Director of the Division of Waste Management, may require additional analysis as necessary for the protection of public health, welfare, and the environment.

~~(g)(h)~~ Solid E & P waste shall be disposed of by transfer to ~~an~~the appropriate permitted solid waste management facility in accordance with 15A NCAC 13A or 15A NCAC 13B, which ~~is~~are incorporated by reference including subsequent amendments.

~~(h)(i)~~ E & P waste fluids may be transported to other drilling sites for reuse provided that such fluids are transported and stored in a manner that does not constitute a hazard to water resources, public health, ~~safety~~safety, or the environment in accordance with 15A NCAC 13B .0105.

~~(i)(j)~~ E & P waste, when transported off-site for treatment or disposal, shall be transported to treatment facilities ~~authorized by the Department~~, or to waste disposal facilities permitted to receive E & P waste by the Department in accordance with 15A NCAC 13B. When transported to facilities outside of North Carolina for treatment or disposal, E & P waste shall be transported to facilities ~~authorized and~~ permitted by the appropriate regulatory agency in the receiving state.

~~(j)(k)~~ When E & P waste is transported off-site, the permittee shall maintain for five years copies of each invoice, bill, or ticket and such other records ~~necessary~~ to document the following requirements:

- (1) the permittee's name, address, and business telephone number;
- (2) the county, city, or town where the oil or gas well is located;
- (3) the property street ~~address~~address, or nearest address to the ingress ~~or~~and egress point leading from a public road to the well pad;
- (4) the API number, the lease name, and the oil or gas well name and number;
- (5) the date and time of the transport;
- (6) the company name and contact information of the E & P waste transporter;
- (7) the location of the E & P waste pickup site if different then a pit or tank located onsite;
- (8) the type and volume of E & P waste;
- (9) the name and location of the treatment or disposal site; and
- (10) a chronological record showing the date and time of waste collection and the transfer of waste from one person to another during the course of final delivery to a disposal facility. These documents shall be signed and dated by all appropriate parties, and shall include the generator, transporter, and receiving facility representative.

~~(k)(l)~~ All records shall be maintained in accordance with the Rule .0202 of this Subchapter.

*History Note: Authority G.S. ~~113-391(a)(3) and (4)~~; 113-391(a)(3); 113-391(a)(4); 113-391(a)(5)f;
Eff. Pending Legislative Review.*



STATE OF NORTH CAROLINA
OFFICE OF ADMINISTRATIVE HEARINGS

Mailing address:
6714 Mail Service Center
Raleigh, NC 27699-6714

Street address:
1711 New Hope Church Rd
Raleigh, NC 27609-6285

December 17, 2014

Robert Josey
Mining and Energy Commission
Sent via email to: robert.josey@ncdenr.gov

Re: Extension of the Period of Review for Rules 15A NCAC 05H

Dear Mr. Josey

At its meeting this afternoon, the Rules Review Commission extended the period of review for the following rules in 15A NCAC 05H in accordance with G.S. 150B-21.10:

1. .0704, Completeness and Request for Additional Information
2. .1308, Permit Conditions
3. .1310, Permit Modifications
4. .1404, Disturbed Land Bond
5. .1405, Environmental Damage Bond
6. .1406, Inspection and Approval for Reclamation for Bond Release or Forfeiture
7. .1407, Bond Forfeiture Proceeding
8. .1603, Variance for Setbacks
9. .1613, Well Stimulation Requirements
10. .1804, Request for Investigation of Water Supply
11. .1902, Surface Water Source Documentation
12. .1903, Groundwater Source Documentations
13. .2003, Exploration and Production Waste Disposal

They did so in order to allow the agency to make technical changes and submit the rewritten rules at a later meeting.

Administration
919/431-3000
fax: 919/431-3100

Rules Division
919/431-3000
fax: 919/431-3104

Judges and
Assistants
919/431-3000
fax: 919/431-3100

Clerk's Office
919/431-3000
fax: 919/431-3100

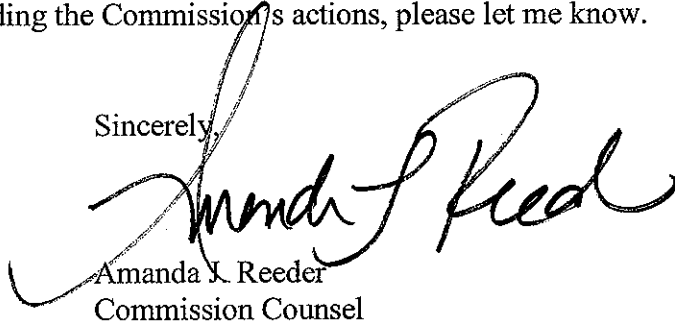
Rules Review
Commission
919/431-3000
fax: 919/431-3104

Civil Rights
Division
919/431-3036
fax: 919/431-3103

Pursuant to G.S. 150B-21.13, when the Commission extends the period of review, it is required to approve or object to rules or call a public hearing on the same within 70 days. The agency indicated it will submit the rewritten rules for Commission review at its January 15, 2015 meeting.

Should you have any questions regarding the Commission's actions, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Amanda J. Reeder". The signature is fluid and cursive, with a large initial "A" and "R".

Amanda J. Reeder
Commission Counsel

1 15A NCAC 05H .0704 has been adopted as published in 29:02 NCR 118 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. Pending Legislative Review.*

1 15A NCAC 05H .1308 has been adopted as published in 29:02 NCR 128 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-l;*
17 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1310 has been adopted with changes as published in 29:02 NCR 129 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. The Department may
6 review, approve, approve with conditions, or deny the application for modification in accordance with the rules of
7 this Section.

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

11 (c) If a proposed modification of the permit affects the land area covered by the permit or the approved reclamation
12 plan then the permittee shall propose a modification to the Reclamation Plan that meets the requirements of Rule
13 .2102 of this Subchapter.

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

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

21
22 *History Note: Authority G.S. 113-391(a)(5)a; 113-395; 113-410(a);*
23 *Eff. Pending Legislative Review.*

1 15A NCAC .1404 has been adopted as published in 29:02 NCR 130 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)l; 113-391(a)(13a); 113-421(a2);*

13 *Eff. Pending Legislative Review.*

1 15A NCAC .1405 has been adopted with changes as published in 29:02 NCR 131-132 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) In identifying environmentally sensitive areas the Commission may consider such area as the following:

9 (1) Renewable resource, which may include:

10 (A) watersheds or aquifers that are present sources of public water supply, as identified by the
11 Department or the Environmental Management Commission, or that are classified for
12 water-supply use pursuant to G.S. 143-214.1; and

13 (B) prime forestry land (sites capable of producing 85 cubic feet per acre-year, or more, of
14 marketable timber), as identified by the Department of Agriculture.

15 (2) Areas containing environmental or natural resources of more than local significance, which may
16 include:

17 (A) existing national or State parks or forests, wilderness areas, the State Nature and Historic
18 Preserve, or public recreation areas; existing sites that have been acquired for any of the
19 same, as identified by the Secretary; and proposed sites for any of the same, as identified
20 by the Secretary, provided that the proposed site has been formally designated for
21 acquisition by the governmental agency having jurisdiction;

22 (B) present sections of the natural and scenic rivers system;

23 (C) stream segments that have been classified for scientific or research uses by the
24 Environmental Management Commission, or that are proposed to be so classified in a
25 proceeding that is pending before said Environmental Management Commission pursuant
26 to G.S.143-214.1 at the time of the designation of the area of environmental concern;

27 (D) existing wildlife refuges, preserves or management areas, and proposed sites for the
28 same, as identified by the Wildlife Resources Commission, provided that the proposed
29 site has been formally designated for acquisition or for inclusion in a cooperative
30 agreement by the governmental agency having jurisdiction;

31 (E) areas that sustain rare and endangered botanical or animal species; and

32 (F) areas containing unique geological formations, as identified by the State Geologist.

33 (3) Natural-hazard areas, which may include:

34 (A) the shoreline of estuarine and public trust waters;

35 (B) floodways and floodplains; and

36 (C) areas where geologic and soil conditions are such that there is a substantial possibility of
37 landslides or seismic activity, as identified by the State Geologist.

1 (4) Outstanding Resource Waters as designated by the Environmental Management Commission and
2 such contiguous land for the purpose of maintaining the exceptional water quality and outstanding
3 resource values identified in the designation; and

4 (5) Primary Nursery Areas as designated by the Marine Fisheries Commission.

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

- 8 (1) the proximity of the oil or gas well or well site to the environmentally sensitive area;
9 (2) the character of the environmentally sensitive area;
10 (3) the topography of the environmentally sensitive area;
11 (4) special soil or geologic conditions in the environmentally sensitive area; and
12 (5) any other factors the Commission determines to be relevant in determining an environmentally
13 sensitive area.

14
15 *History Note: Authority G. S. 113-391(a)(5); 113-421(a3)(2);*
16 *Eff. Pending Legislative Review.*

1 15A NCAC .1406 has been adopted as published in 29:02 NCR 132 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. Pending Legislative Review.*

1 15A NCAC .1407 has been adopted as published in 29:02 NCR 132 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)l; 113-421(a2);*

23 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1603 has been adopted with changes as published in 29:02 NCR 136-137 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. The variance, if
6 granted, shall provide equal or greater protection of public health, safety, and the environment. Variances from
7 setbacks established for high occupancy buildings are prohibited. The Commission shall ~~consider the following~~
8 ~~factors~~ determine that the applicant or permittee has met the following two factors in granting or denying variances:

- 9 (1) the variances shall include additional measures that eliminate, minimize, or mitigate potential
10 adverse impacts to public health, welfare, and the environment, such as the use of non-diesel fuels
11 with lower emissions; and
12 (2) the Commission shall require site-specific mitigation measures to address location specific
13 considerations.

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

- 15 (1) the wellhead, tank or tank battery, or production facility shall be a minimum of 400 feet from an
16 occupied dwelling;
17 (2) no variance is allowed for any E & P waste pit setback from an occupied dwelling; and
18 (3) freshwater storage pits, reserve pits to drill surface casing, and emergency pits, shall be a
19 minimum of 400 feet from an occupied dwelling.

20 (c) An applicant or permittee may request a variance to reduce the setback distances for an oil or gas wellhead, a
21 tank or tank battery from an intermittent stream, or a pond, or other natural or artificial water body, that is not a
22 water of the State, wholly contained within the drilling unit required by Rule .1601 of this Section. The
23 Commission shall determine that the measures proposed to eliminate, minimize or mitigate potential adverse
24 impacts to public health, welfare and the environment are adequate to address all the risks at the well site and justify
25 the reduction of setback distances as requested in the variance and that the variance, if granted, provides equal or
26 greater protection of public health, safety, and the environment. ~~The Commission shall consider the following~~
27 ~~factors in granting or denying variances:~~ variance shall include the following conditions:

- 28 (1) ~~the variances shall include~~ additional measures that eliminate, minimize, or mitigate potential
29 adverse impacts to public health, welfare, and the environment, such as the use of secondary or
30 backup containment measures;
31 (2) ~~the measures proposed to eliminate, minimize or mitigate potential adverse impacts to public~~
32 ~~health, welfare and the environment are adequate to address all the risks at the well site and justify~~
33 ~~the reduction of setback distances as requested in the variance;~~
34 (3) the oil or gas wellhead, freshwater storage pit, tank, tank battery, or production facility shall be a
35 minimum of 50 feet from any intermittent stream, pond, or other natural or artificial water body,
36 that is not a water of the State, wholly contained within the drilling unit;
37 (4) no variance is allowed for any E & P waste pit setback from an intermittent stream; and

- 1 ~~(5)~~(4) oil or gas wellheads, tanks or a tank battery, or pits less than 650 feet from, and up-gradient of, a
2 surface water body shall use tertiary containment, such as an earthen berm.
- 3 (d) The Commission shall require green completions in any approved variance:
- 4 (1) flow lines, separators, and sand traps capable of supporting green completions shall be installed;
- 5 (2) uncontrolled venting shall be prohibited; and
- 6 (3) temporary flowback flaring and oxidizing equipment shall include the following:
- 7 (A) adequately sized equipment to handle one and one half times the largest flowback volume
8 of gas experienced within a 10-mile radius;
- 9 (B) valves and porting available to divert gas to temporary equipment or to permanent flaring
10 and oxidizing equipment; and
- 11 (C) auxiliary fuel with sufficient supply and heat to sustain combustion or oxidation of the
12 gas mixture when the mixture includes noncombustible gases.
- 13 (e) An applicant or permittee may submit a surface use agreement from a surface landowner as justification to
14 request a variance to setback distances for the wellheads, tank or tank battery, and pits from occupied dwellings.
15 The surface use agreement may include additional site-specific mitigation measures. The surface use agreement
16 shall include written consent of the landowner, which may be provided by any of the following:
- 17 (1) a copy of an original lease agreement text that provides for the reduction of the distance of the
18 location of an oil or gas wellhead, well pad, tank battery, or pit, as applicable, from an occupied
19 dwelling;
- 20 (2) a copy of a deed severing the oil and gas mineral rights, as applicable, from the owner's parcel of
21 land as filed with the county Registrar of Deeds that expressly provides for the reduction of the
22 distance of the location of an oil or gas wellhead, well pad, tank battery, or pit, as applicable, from
23 an occupied dwelling; or
- 24 (3) a copy of a written surface use agreement signed by the property owner that consents to the
25 proposed location of an oil or gas wellhead, well pad, tank, tank battery, or pit(s), as applicable.
26 An applicant or permittee may submit a copy of a written statement filed with the county Register
27 of Deeds that expressly provides for the reduction of the distance of the location of an oil or gas
28 wellhead, well pad, tank battery, or pit, as applicable, from an occupied dwelling in lieu of a copy
29 of a written surface use agreement.
- 30 (f) Variance requests shall be submitted in accordance with Rule .0301 of this Subchapter. In addition to the
31 information required by Rule .0301 of this Subchapter, any permittee seeking to use surface use agreement as a basis
32 for a variance shall submit a copy of the surface use agreement containing the information in Paragraph (c) of this
33 Rule.

34
35 *History Note: Authority G.S. 113-391(a)(5)d;*
36 *Eff. Pending Legislative Review.*
37

1 15A NCAC 05H .1613 has been adopted with changes as published in 29:02 NCR 141-142 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 immediately if the pressures exceed the limits set in
2 Subparagraphs (f)(1) through (f)(3) of this ~~Rule~~-Rule and the Departments shall be notified within 24 hours of the
3 occurrence of an exceeded pressure. Pressures on any casing string other than the surface casing shall not be
4 allowed to exceed 80 percent of the API rated minimum internal yield pressure for such casing string throughout the
5 stimulation treatment. The permittee shall notify the Department within 24 hours via telephone or email if treatment
6 pressure exceeds 80 percent of the API rated minimum internal yield pressure on any casing string other than
7 surface casing.

8 (g) The permittee shall monitor and record, at all times, the following parameters during well stimulation
9 operations:

- 10 (1) surface injection pressure, in pounds per square inch (psi);
- 11 (2) ~~slurry pumping~~fluid injection rate in barrels per minute (BPM);
- 12 (3) proppant concentration in pounds per thousand gallons;
- 13 (4) fluid pumping rate in BPM;
- 14 (5) identities, rates, and concentrations of additives used in accordance with Rule .1702 of this
15 Subchapter; and
- 16 (6) all annuli pressures.

17 (h) Following the notification in Paragraph (f) of this Rule, the Department may require additional documentation
18 or oil or gas well tests to determine if the well stimulation operations potentially endanger any fresh groundwater
19 zones. If either the permittee or the Department determines fresh groundwater zones are endangered, the
20 Department shall require the permittee to perform remedial operations to correct any oil or gas well failure.

21 (i) The Department shall notify the Commission at its next regularly scheduled meeting of any remedial operations
22 conducted pursuant to Paragraph (h) of this Rule.

23
24 *History Note: Authority G.S. 113-391(a)(5)k; 113-391(a)(10); 113-391(a)(11); 113-391(b); 113-391(b1);*
25 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1804 has been adopted as published in 29:02 NCR 152 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,
5 or 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
18 permittee.

19
20 *History Note: Authority G.S. 113-391(a)(3); 113-391(a)(5)b; 113-423(f);*

21 *Eff. Pending Legislative Review.*

1 15A NCAC 05H .1902 has been adopted as published in 29:02 NCR 153-154 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. Pending Legislative Review.*

1 15A NCAC 05H .1903 has been adopted as published in 29:02 NCR 154 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. Pending Legislative Review.*

1 15A NCAC 05H .2003 has been adopted with changes as published in 29:02 NCR 156-157 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~~ Department, but at a minimum testing shall be conducted on the produced
6 water and flowback fluids from the first completed well on each well pad and shall on all fluids prior to management
7 in accordance with Subparagraphs (c)(2), (c)(3), and (c)(4) of this Rule:

carbonaceous biochemical oxygen demand (CBOD)	ammonia-nitrogen (NH ₃ -N)
dissolved oxygen (DO)	specific conductance
pH	total suspended solids (TSS)
Barium	bromide
Chlorides	sulfates
Sodium	divalent cations
total dissolved solids (TDS)	oil and grease
arsenic, total recoverable	cadmium, total recoverable
cobalt, total recoverable	copper, total recoverable
cyanide, total recoverable	lead, total recoverable
mercury, total recoverable	nickel, total recoverable
tin, total recoverable	zinc, total recoverable
Benzene	bis(2-ethylhexyl)phthalate
butylbenzyl phthalate	carbazole
n-Decane	fluoranthene
n-Octadecane	radium-226 (Dissolved)
strontium-90 (Dissolved)	beta radiation (gross)
chronic wet testing whole effluent toxicity	<u>Total organic carbon</u>
	<u>Volatile organic compounds</u>
	<u>Semi-volatile organic compounds</u>

9
10 (1) the water samples shall be collected and analyzed in accordance with Rule .1803 of this
11 Subchapter; and

12 (2) the analytical results shall be submitted to Division within 30 calendar days of receiving the
13 analytical results, unless a different schedule is prescribed by the Department.

14 (b) The Director, in consultation with the Director of the Division of Water Resources, Director of the Division of
15 Public Health within the Department of Health and Human Services, may require additional analysis and scheduling
16 as necessary for the protection of public health, welfare, and the environment.

17 (c) E & P waste shall be managed as:

- (1) reuse in well stimulation operations;
- (2) on-site pretreatment for reuse or disposal;
- (3) disposal at a plant installed for the purpose of disposing of waste within the state permitted in accordance with G.S. 143-215.1; or
- (4) disposal facility located within another state that is duly permitted to accept flowback fluid and produced water from oil or gas operations.

(d) If E & P waste is to be disposed of in accordance with Subparagraph (c)(2), (c)(3), or (c)(4) of this Rule, the permittee shall also comply with the following requirements:

- (1) prior to transporting the waste to a POTW pursuant to Subparagraph (c)(3) of this Rule, the permittee shall submit a copy of the approved Industrial User Permit required by 15A NCAC 02H .0916 to the Division.
- (2) the permittee shall notify the Division if any facility identified in the plan refuses to accept E & P waste. Upon such refusal, the permittee shall submit a revised E & P Waste Management Plan in accordance with Rule .2002 of this Section that identifies a new disposal facility to the Division.

~~(d)(e)~~ Any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule or from any on-site pretreatment that may be used in conjunction with Subparagraph (c)(2) and (3) of this Rule shall be managed and disposed of pursuant to Subparagraph (c)(3) and (4) of this Rule or with the Resource Conservation and Recovery Act and regulations promulgated pursuant thereto, 42 USC 6901 *et seq.* and 40 CFR Parts 239-282. In addition, prior to disposal of any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule, or from any on-site pretreatment that may be used in conjunction with Subparagraph (c)(2) and (3) of this Rule, the permittee shall demonstrate that the sludge or residual meets all applicable radioactivity standards for the disposal facility.

~~(e)(f)~~ Residuals from onsite pretreatment shall be disposed of in accordance with G.S. 143-215.1, G.S. 130A-294, or transported to another state and disposed of in accordance with the receiving state's rules.

~~(f)(g)~~ Solid E & P waste, including drill cuttings and solidified muds, shall be characterized in accordance with Toxicity Characteristic Leaching Procedure, on a frequency and schedule determined by the Department. In addition, the Director, in consultation with the Director of the Division of Waste Management, may require additional analysis as necessary for the protection of public health, welfare, and the environment.

~~(g)(h)~~ Solid E & P waste shall be disposed of by transfer to an appropriate permitted solid waste management facility in accordance with 15A NCAC 13A or 15A NCAC 13B, which is incorporated by reference including subsequent amendments.

~~(h)(i)~~ E & P waste fluids may be transported to other drilling sites for reuse provided that such fluids are transported and stored in a manner that does not constitute a hazard to water resources, public health, safety or the environment in accordance with 15A NCAC 13B .0105.

~~(i)(j)~~ E & P waste, when transported off-site for treatment or disposal, shall be transported to treatment facilities authorized by the Department, or to waste disposal facilities permitted to receive E & P waste by the Department in accordance with 15A NCAC 13B. When transported to facilities outside of North Carolina for treatment or disposal,

1 E & P waste shall be transported to facilities authorized and permitted by the appropriate regulatory agency in the
2 receiving state.

3 ~~(j)(k)~~ When E & P waste is transported off-site, the permittee shall maintain for five years copies of each invoice,
4 bill, or ticket and such other records necessary to document the following requirements:

- 5 (1) the permittee's name, address, and business telephone number;
- 6 (2) the county, 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;
- 10 (5) the date and time of the transport;
- 11 (6) the company name and contact information of the E & P waste transporter;
- 12 (7) the location of the E & P waste pickup site if different than a pit or tank located onsite;
- 13 (8) the type and volume of E & P waste;
- 14 (9) the name and location of the treatment or disposal site; and
- 15 (10) a chronological record showing the date and time of waste collection and the transfer of waste
16 from one person to another during the course of final delivery to a disposal facility. These
17 documents shall be signed and dated by all appropriate parties, and shall include the generator,
18 transporter, and receiving facility representative.

19 ~~(k)(l)~~ All records shall be maintained in accordance with the Rule .0202 of this Subchapter.

20
21 *History Note: Authority G.S. 113-391(a)(3) and (4); 113-391(a)(5)f;*
22 *Eff. Pending Legislative Review.*