

**Meeting Minutes of the Environmental Standards Committee of the
North Carolina Mining and Energy Commission
July 25, 2013**

1. Preliminary Matters

Committee Chairman Mr. George Howard called the meeting to order at 1:02 p.m. He read the ethics statement and asked Committee members whether or not they had conflicts of interest with respect to any action items on the agenda. Chairman Howard informed the Committee his company purchased a firm in Oklahoma that performs biological surveys as a service for the oil and gas industry, which could result in future business arrangements with industry representatives. Mr. Howard is coordinating consultative efforts with Ms. Jennie Hauser and the State Ethics Commission.

Chairman Howard invited members of the public who wished to formally address the Committee to sign their names to the “public speakers” sign-in sheet.

The following persons were in attendance for all or part of the meeting:

Committee Members Present

Mr. George Howard, Chairman
Dr. Ray Covington, Vice Chair
Dr. Kenneth Taylor
Ms. Amy Pickle
Ms. Charlotte Mitchell
Dr. Vikram Rao

Other Committee Members Present

Mr. Jim Womack

Attorney General’s Office

Jennie Wilhelm Hauser

DENR Staff Members

Trina Ozer, Office of the Secretary
Layla Cummings, Office of the Secretary
Toby Vinson, Division of Energy, Mineral and Land Resources (DEMLR)
Walt Haven, DEMLR
Katherine Marciniak, DEMLR
Ryan Channell, DEMLR
Rosalind Harris, DEMLR

Others in Attendance

Refer to the meeting sign in sheets (attached to these minutes).

2. Background and Introduction - George Howard, Chairman

Chairman Howard discussed the plan for the Environmental Standards Committee to manage setbacks while the Administration of Oil and Gas Committee will address well spacing. Mr. Howard and Mr. Holbrook will meet to outline the rules each Committee will address.

3. Approval of Minutes from Last Meeting

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Dr. Taylor made a motion to approve the minutes, Dr. Covington seconded the motion. The motion passed.

4. Presentation and Discussion of Setbacks – Katherine Marciniak (See attached presentation)

Ms. Marciniak presented setback (horizontal separation distance) information from 10 different states and how the various states implement the setbacks. The Committee discussed the difference between setbacks and well spacing and how the differences are applied to surface features and well laterals drilled within a drilling unit. It was noted, that setbacks are bidirectional and may need to be applied in both horizontal and vertical directions. The North Carolina water well construction rules, 15A NCAC 02C .0107 outline the horizontal separation distances required for installation of new water supply wells and section 02C .0301 requires all potential sources of groundwater contamination installed after the well to meet the same distances listed in section 02C .0107.

The Committee discussed two possible sections as part of the setback rule; horizontal setbacks and vertical setbacks. Some states do not have setback requirements and yield to local governments for setting and enforcing setback distances. Ms. Marciniak displayed a map, produced by Don Kovaschitz – Lee County Strategic Services, showing an example of an 11 acre site from West Virginia and how the site could be placed in Lee County, North Carolina utilizing various setbacks. The Committee identified several topics for staff to research in preparation for the next meeting scheduled for September 5, 2013:

- The process used by other states to set the optimal setback distance and if the distance is quantifiable to health and safety;
- The date when setback rules were implemented in other states, the date could be linked to the applicability or effectiveness of the setback;
- Identify other industries in North Carolina similar to oil and gas development and associated setbacks;
- Identify the setbacks associated with fertilizer plants;
- Setback standards for the Bureau of Land Management;
- Identify examples of vertical separation distances as applied to setback standards; and
- Begin to draft rule language related to surface setbacks.

5. Presentation and Discussion of Noise, Odor, Dust: Sources, Abatement, and Rule Examples
– Colleen Brophy and Franklin Wolfe (See attached presentation)

Ms. Colleen Brophy and Mr. Franklin Wolfe, DEMLR interns, presented information regarding noise, odor, and dust from six different states. The Committee recognized that Colorado had the most detailed standards followed by Arkansas.

6. Discussion of Information Needs and Possible Rule Development Related to Diabase Intrusions - George Howard, Chairman

Chairman Howard asked Committee members if they should formally investigate environmental concerns related to diabase dikes, as explained in § 113-391(a)(5)(2). Dr. Taylor reviewed previous geological

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work related to Triassic Basin geology and hydrogeology, specifically dealing with work around Jordan Lake and the Sharon Harris nuclear power plant. The Committee considered these issues:

- Requiring an operator to submit geologic maps showing the locations of diabase dikes;
- Dr. Taylor plans to produce a two-page document related to the potential of diabase dikes to transmit fluid contaminants;
- Dikes were addressed in DENR's shale gas report.

Ms. Pickle has asked for a formal presentation regarding diabase dikes. However, Chairman Howard notes that scheduling of such a presentation has yet to be determined.

7. Public Comment –

Therese Vick (Blue Ridge Environmental Defense League) talked about noise impacts on hearing and how prolonged exposure can induce hypertension, sleep deprivation, and mood disruptions. Ms. Vick also mentioned that a West Virginia University study indicated that greater setback distances were needed from oil and gas operations due to the presence of benzene; she stated that she will forward the study to the Committee.

8. Discussion

Mike Abraczinskas (Division of Air Quality - DAQ) stated that his Division already has standards for dust and odors, which will apply to oil and gas operations. Ms. Pickle would like a presentation from DAQ regarding the rules that they have and how those rules might apply to oil and gas operations.

The Committee wants to receive recommendations from the Local Government Regulation Study Group before developing rules related to noise.

9. Adjournment

The Environmental Standards Committee adjourned the meeting at 3:10 pm.

DENR Staff Contact for this Committee: Mr. Walt Haven, DEMLR