

**MEETING MINUTES OF THE  
NORTH CAROLINA MINING AND ENERGY COMMISSISON  
September 6, 2013  
GROUND FLOOR HEARING ROOM, ARCHDALE BUILDING, RALEIGH, NC**

The North Carolina Mining and Energy Commission (MEC) met in regular session on Friday, September 6, 2013 beginning at 9:04 am in the Ground Floor Hearing Room of the Archdale Building, Raleigh, North Carolina. Commission Chairman James Womack presided over the meeting.

**1. Preliminary Matters**

Chairman Womack called for a moment of silence, followed by the Pledge of Allegiance. He welcomed Commission members and others attending the meeting. Chairman Womack read the excerpt of the State Government Ethics Act, and asked Commission members to consider whether or not they had conflicts of interest with respect to any action items on the agenda. No conflicts were raised.

Chairman Womack called the roll for Commission members as follows:

Commission Members Present

Mr. James Womack (Chairman)  
Dr. Ray Covington (Vice Chairman)  
Mr. George Howard  
Dr. Robert Mensah-Biney  
Mr. Charles Holbrook  
Dr. Kenneth Taylor  
Dr. Marva Price  
Ms. Rosalind Harris  
Ms. Jane Lewis-Raymond  
Ms. Amy Pickle  
Ms. Charlotte Mitchell  
Mr. Charles Taylor  
Dr. Vikram Rao  
Mr. Ivan "Tex" Gilmore

Commission Members Absent

DENR Members Present

Mr. Toby Vinson  
Ms. Trina Matta  
Mr. Walt Haven  
Ms. Katherine Marciniak  
Mr. Ryan Channell  
Ms. Layla Cummings  
Mr. Tracy Davis

Attorney General's Office

Ms. Mary Lucasse (substituting for Ms. Jennie Hauser)

Others in Attendance

See attached sign in sheets.

**2. Approval of Minutes from July 26, 2013 Meeting**

Dr. Kenneth Taylor made a motion, seconded by Ms. Amy Pickle, to approve the minutes as presented. The motion passed.

### **3. Committee Reports**

#### Water and Waste Management Committee

Dr. Vikram Rao, Committee Chairman, reviewed the following items related to the Water and Waste Management Committee:

- a. The Committee has resolved not to allow the underground injection of fluid wastes from oil and gas operations;
- b. The Committee desires that water either be reused or treated and properly disposed;
- c. The Committee received presentations regarding wastewater management on September 5, 2013 from representatives of Southwestern Energy and Environmental Defense Fund;
- d. Dr. Rao's white paper on wastewater disposal will be updated based on information discussed in the last Committee meeting and will be posted to the MEC website; and
- e. Dr. Rao expects the Committee to complete deliberation of the draft waste management rule set during its next meeting.

The Commission noted that Southwestern Energy maintained an intricate and effective system for wastewater treatment and recognized that this company's method fostered environmental responsibility and cost savings.

#### Administration of Oil & Gas Committee

Mr. Charles Holbrook, Committee Chairman, reviewed the items addressed within the Administration of Oil and Gas Committee as follows:

- a. A well permit application form is under development;
- b. The Committee received a presentation regarding diabase dikes, indicating that these intrusive bodies should not serve as conduits of contamination of fracturing fluids into potable water wells;
- c. The Committee deliberated the well closure rules; and
- d. The Committee discussed current rule development with respect to Session Law 2012-143.

Mr. Womack asked Dr. Kenneth Taylor to provide a one-page set of talking points and an overview of diabase dikes for future MEC use. The Commission noted that the Fayetteville Shale region is similar to North Carolina's Triassic Basins and could serve as a proxy for North Carolina rule development. Mr. Holbrook and Dr. Rao explained that recent U.S. Geological Survey and EPA studies within the Fayetteville Shale indicated that water well contamination did not occur from hydraulic fracturing activities.

#### Environmental Standards Committee

Mr. George Howard, Committee Chairman, reviewed the items addressed by the Environmental Standards Committee as follows:

- a. The Committee is currently deliberating a draft setback rule;
- b. The Committee determined that establishing specific setbacks based on scientific reasoning and public safety would be challenging;
- c. Mr. Howard stated that the Committee would allot appropriate time for drafting proper setback rules;
- d. Mr. Howard noted the difficulty in determining the objective rationale behind established setbacks in other states; and
- e. A diabase dike presentation by Dr. Taylor is pending for the Environmental Standards Committee.

Mr. Womack noted the wide variability in setbacks from other states, which have little objective justification. He also agreed with the Environmental Standards Committee's and staff's intent to develop their own objective reasoning for setback development. The Commission recognized that setbacks should be based on environmental, health and safety concerns.

Mr. Womack asked that the current draft setback rule be circulated among the membership of the Local Government Regulation Study Group to allow for input to assist with rule development.

Mr. Womack asked that a setback variance provision be established, but noted that such a provision may not be appropriate for inclusion in the setback rule. The Commission recognized that industry practices typically involve avoiding sensitive areas and that respective rule development may not be needed.

Mr. Howard asked for formal input regarding setbacks from the Stakeholder Group on Oil and Gas Management.

#### Rules Committee

Ms. Amy Pickle, Committee Chairwoman, reviewed the items addressed by the Rules Committee as follows:

- a. The Committee deliberated and passed the baseline testing rule;
- b. The Committee began deliberation of the wellhead standards rule; and
- c. The Rules Committee has generated a list of common actions and definitions that will be further discussed during their next meeting.

Mr. Womack stated that a set of terms needed to be defined which would be applicable throughout the entire oil and gas rule set. Dr. Taylor noted that the U.S. Department of Labor has petroleum industry terms, but that API does not maintain a glossary. Ms. Pickle noted that defined terms need to be understandable by the reader of the rules.

Dr. Rao suggested that two glossaries be developed:

- a. Defined terms to be used within a rule;
- b. Glossary of terms used by the industry which could be obtained by the public.

#### **4. Study Group Reports**

##### Local Government Regulation Study Group

Mr. Charles Taylor, Study Group Director, explained that his Study Group had completed its report. He also provided these details:

- a. The Study Group addressed the topic of setbacks, as well as other matters assigned from Session Law 2013-143;
- b. Input was provided by the North Carolina League of Municipalities and the North Carolina Association of County Commissioners, along with other interest groups;
- c. Mr. Taylor expressed his appreciation of DEMLR staff efforts;
- d. The Study Group analyzed information from other states' rules regarding noise, light, and odor nuisances;
- e. The Study Group suggested that operators should be allowed to request a time-limited variance to noise and light ordinances;
- f. Local governments should maintain their overall authority regarding nuisance regulation; and
- g. The Study Group recommends that industry provide a liaison to local government officials.

Chairman Womack expressed his support for having a local liaison from industry and opined that establishing such an industry representative could be part of the permitting process. He explained that oil and gas companies in Pennsylvania routinely provide these liaisons to the township level with great public relations success.

Chairman Womack noted that the Local Government Regulation Study Group report is supposed to be passed from the Commission to the General Assembly, whereas the Compulsory Pooling Study Group report will proceed from the Commission to DENR, and then be presented by DENR to the General Assembly.

#### Compulsory Pooling Study Group

Dr. Ray Covington, Study Group Director, reviewed the following items being addressed by the Compulsory Pooling Study Group:

- a. The final report should be completed within the next two weeks;
- b. North Carolina already has a compulsory pooling law, which dates to 1945;
- c. Current Study Group recommendations will be protective of landowners. Recommendations include:
  1. Requirement for a surface use agreement with landowners;
  2. Indemnification for landowners who are compulsory pooled against liability related to oil or gas operations within the respective pool;
  3. Requirement that a surface area intended for drilling be defined before a pooling order is issued;
  4. A recommendation requiring that 90 percent of acreage of voluntary pooling participants be established before any property can be compulsory pooled;
  5. Compulsory pooling options:
    - i. A compulsory pooled owner of mineral rights, regardless of acreage, would receive one-eighth of his royalty payments until well costs are recovered. After cost recovery, the owner would receive full royalty payments;
    - ii. The MEC could apply an options approach to cost sharing to a mineral rights owner possessing over 10 acres, which may include making a compulsory pooled owner wait until well costs of 200 percent are recovered before sharing in full royalty profits;
    - iii. Other options for a compulsory pooled owner would be for the owner share in all costs as a "participating owner" or to have the owner surrender his or her working interest in the pool.
- d. The report includes a flowchart of the mineral leasing process, as developed by Rural Advancement Foundation International;
- e. The current set of recommendations encourages industry to negotiate voluntary agreements with owners for pooling; and
- f. The Study Group also studied property rights, mineral rights, and extinguishment of mineral rights.

Dr. Rao noted that without compulsory pooling, a given owner could install a well on his or her property and could drain conventional hydrocarbon fluids from beneath an adjacent owner.

Chairman Womack explained that MEC voting and approval of study group reports would not be necessary. Instead, all study group reports are to be routed according to applicable session laws.

#### Funding Levels and Potential Funding Sources Study Group

Ms. Jane Lewis-Raymond, Study Group Director, reviewed the following items being addressed by the Funding Levels and Potential Funding Sources Study Group:

- a. The report is nearing completion;
- b. The Study Group was awaiting information from Dr. Taylor and Dr. Covington regarding production estimates;
- c. Impact costs to DENR and DOT have been estimated;
- d. Bonding needs have been addressed; and
- e. Severance taxes are being addressed.

Chairman Womack mentioned that Dr. Taylor and Dr. Covington were working to develop a scenario of potential hydrocarbon production in the Triassic basins over the first seven years. He explained that Dr. Rao would also be reviewing the study and that scenario results would be used to develop recommendations for a severance tax rate.

Dr. Taylor expressed concern that, if improperly used, his report might result in financial speculation about North Carolina hydrocarbon resources. Ms. Lewis-Raymond mentioned the need for us to quantify potential resource extractions so we can objectively identify the level of severance tax needed to recover \$3,000,000 per year for funding and oil and gas permitting programs. Dr. Rao noted that the price of gas projections should be provided by the U.S. Energy Information Administration and explained that it would be difficult for Dr. Taylor and Dr. Covington to develop accurate production estimates. Chairman Womack asked that the report include sources of error and caveats. Dr. Covington noted that despite caveats, misquoting of report information was likely to occur in the media. He also noted that actual volumetric information regarding North Carolina hydrocarbon resources was unknown. Dr. Rao suggested that scenarios of gas production volumes could be estimated for which severance tax rates could be determined. Ms. Lewis-Raymond agreed.

Chairman Womack noted that the Funding Levels and Potential Funding Sources Study Group report should be passed from the Commission to the General Assembly.

#### **5. The Commission recessed from 10:56 am until 11:10 am.**

#### **6. Public Comment**

Sharon Garbutt (Chatham County resident): Ms. Garbutt expressed her desire for schools to be protected as much as golf courses.

John Wagner (Chatham County): Mr. Wagner expressed concern about diabase dikes in the Triassic Basins, but noted that he was not a geologist. Nevertheless, he stated that too little information was known about Triassic Basin faults and groundwater flow. Mr. Wagner stated that he understood from previous information provided in the Administration of Oil and Gas Committee that groundwater resources were typically in shallow areas of dikes. He expressed concern regarding dike fracturing and vibrations originating from hydraulic fracturing activities, as well as unexpected and extensive “rogue” fractures. He also stated that fracture distances would be difficult to predict and that a “baked” zone around a dike would hold water. Finally, Mr. Wagner explained that undisclosed fracturing chemicals

would be used, under high pressure and would likely affect dikes and impact water supply wells. He provided a handout to commissioners.

### **7. MEC Discussion and Action on the Well Construction Rule Set**

Mr. Holbrook and Mr. Ryan Channell led the rule discussion concerning the well construction rule set. The Commission addressed the following matters with respect to these draft rules:

- a. The rule text in .XX8 (k)(2) was reworded to address cementing requirements for intermediate casing. Other portions of this section were removed, due to being redundant in other parts of the draft rule;
- b. The Commission discussed annular spacing and cementing requirements;
- c. Blowout prevention equipment requirements were reviewed; and
- d. Language regarding the testing of a shear ram as delineated in .XX13 (a)(4) was modified with language to allow for ram testing under open hole conditions.

The Commission discussed whether or not the MEC had variance authority. Ms. Pickle noted that other regulatory bodies which exercised variance authority had such authority specifically granted by statute. She further explained that variance authority with respect to Session Law 2012-143 was uncertain.

Dr. Kenneth Taylor made a motion to approve the draft wellhead rules and to return them to staff for administrative processing. Additionally, he noted that other subsections within the rules had yet to be written, but would be incorporated into the rule set as they became drafted and approved. The motion was seconded by Mr. Tex Gilmore. The motion passed on a unanimous vote.

### **8. MEC Discussion Regarding the Baseline Testing Rule Set**

According to MEC meeting bylaws, any draft rule which is approved by the Rules Committee must be held for at least 30 days before being heard by the Commission. However, Commission members may choose to waive this rule as long as two-thirds of the MEC vote to do so. The baseline testing rule set had been approved by the Rules Committee less than 30 days prior to the September 6<sup>th</sup> MEC meeting. As a result, Mr. Charles Taylor offered a motion to waive this 30 day rule, which was seconded by Dr. Robert Mensah-Biney. The motion passed.

Mr. Howard and Mr. Channell led the discussion concerning the rule set. Mr. Howard stated that the draft baseline testing rule, as currently drafted, is the most comprehensive baseline testing rule in the nation. The Commission addressed the following matters with respect to these draft rules:

- a. Testing requirements of water supplies prior to oil or gas drilling;
- b. Changing the term “permittee” to “applicant or permittee” in section .0XX2(a);
- c. The Commission noted that sample collection was required for baseline testing and that analytical results were not required before a permit would be issued; and
- d. The word “well operator” was changed to “permittee” in section .0XX4(a)(7).

The Commission discussed the terms “permittee” and “applicant” and noted that an “applicant” would become a “permittee” only after a permit is issued to the respective individual or company.

The Commission discussed whether or not an applicant would be willing to assume the cost of baseline testing without the guarantee of a permit being issued. Commissioners noted that current draft rule language requires that the permit be issued only after the sampling has been completed. Dr. Taylor explained that baseline testing would be a permit condition.

The MEC recognized that the draft rule, as well as Session Law 2012-143, requires baseline testing requirements out to a radius of 5,000 feet from a given wellhead. The MEC discussed a scenario where the sampling radius of a latter company might overlap the radius of a previous company. Members discussed whether or not rules or statute would allow the latter company to use testing data from the previous company in the area of overlap. Chairman Womack noted that legislative clarification may be needed for baseline sampling.

Mr. Womack asked staff to update draft rule language to allow testing information to be used by a latter operator, from an earlier operator where required testing areas overlap. Mr. Howard suggested alternative rule language to address this matter.

Ms. Pickle stated that the current wording of the draft rule requires every permittee to perform testing within the 5,000 foot radius and allows for no sharing of data previously collected by another permittee. She also noted that Session Law 2012-143 (General Statute 113-423(f)) explains that each individual developer or operator must conduct his or her own testing. The Commission noted that this statutory requirement needed modification to allow for better understanding and practical implementation. Mr. Womack noted that this statute had implicit requirements for each operator to perform testing.

Dr. Taylor noted that the draft rule set (Section .0XX2(d)(3)) would allow for one round of baseline testing for all wells on a given well pad and asked if this rule language was in compliance with General Statute 113-423(f).

Ms. Pickle asked for the Attorney General's Office to research General Statute 113-423(f) and to provide an informal opinion as to whether or not baseline testing rules could allow sharing of data collected by different operators, within the same land area, to satisfy the requirements of initial baseline testing. Ms. Mary Lucasse accepted this inquiry and stated her intent for her office to research the matter.

Mr. Holbrook noted his concern about the current draft rule being excessive and burdensome to industry, without scientific evidence that fracturing operations cause well water contamination.

Mr. Womack agreed that a statutory requirement for a 5,000 foot-radius testing area from a wellhead could be excessive. However, he stated his desire to have baseline testing requirements which were both environmentally protective and could be reasonably performed by industry. Mr. Holbrook expressed his agreement with the need for baseline testing, but was concerned about the scope of current statutory and draft rule requirements.

Ms. Pickle stated that the current baseline sampling rule is most likely to be unwieldy, due to overlapping sampling areas and the installation of multiple wells on a single pad. She noted that General Statute 113-423(f) did not consider typical, on-site field conditions.

Commissioners discussed possible statutory changes that would allow for sampling distances to be measured from the well pad, allowing operators to use existing testing data, and reducing the 5,000 foot sampling radius as defined by General Statute 113-423(f). Mr. Womack noted that the General Assembly had already requested MEC input for statutory changes during the next legislative session.

Ms. Pickle stated that the Commission may not legally grant final approval to rule sets which are contrary to statutes.

Commission members discussed the appropriateness of a 5,000 foot sampling radius and whether or not industry had adequate opportunity to participate in the legislative and rule writing process. Additionally, the MEC recognized that the Environmental Standards Committee had invited industry input during the development of the baseline testing rules. Finally, the MEC Chairman noted that draft rules are available on the MEC website for public review.

Ms. Lewis-Raymond asked if the MEC had a process to determine which rules would be reviewed by the Stakeholder Group on Oil and Gas Management and which rules would not. Ms. Trina Matta stated that presentation of rules to stakeholders are based on committee chair desires and scheduling opportunities.

Mr. Womack asked Mr. Holbrook and Dr. Rao to develop a white paper with recommendations and justification for the appropriate distance for presumptive liability with respect to baseline testing that could be shared with the General Assembly.

Chairman Womack asked for Commissioners to send suggested draft rule edits to staff electronically.

## **12. Administrative Remarks**

### MEC Rule Development Update

Mr. Walt Haven introduced Ms. Ashley Barham, an intern with the Energy Program. He explained that Ms. Barham recently completed a double major in Geology and Biology from UNC-Chapel Hill.

Mr. Haven presented the latest version of the MEC rule development list, which displayed a color-coded listing of rule progress. Chairman Womack asked staff to update the table after Mining and Energy Commission meeting cycles.

Chairman Womack reminded commissioners to submit travel claims within 30 days of incurring expenses. He explained that each commissioner was responsible for completing his or her own claims and that Ms. Rosalind Harris was willing to provide respective training.

## **13. Concluding Remarks**

Commissioners expressed their appreciation to DENR staff and welcomed Ms. Pickle back to the Commission. Dr. Marva Price also thanked members of the public who regularly attend committee and commission meetings.

**Chairman Womack adjourned the meeting at 1:47 pm.**

Respectfully Submitted,

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Walter Haven, PG  
Division of Energy, Mineral, and Land Resources

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Tracy E. Davis, PE, CPM  
Director, Division of Energy, Mineral, and Land Resources