



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

MEMORANDUM

TO: ENVIRONMENTAL REVIEW COMMISSION
The Honorable Brent Jackson, Chairman
The Honorable Ruth Samuelson, Co-Chairman
The Honorable Mike Hager, Co-Chairman

JOINT LEGISLATIVE COMMISSION ON ENERGY POLICY
The Honorable Bob Rucho, Co-Chairman
The Honorable Mike Hager, Co-Chairman

FROM: Jim Womack *Brad Atkinson for Jim Womack*
Chairman of the North Carolina Mining and Energy Commission

Tracy Davis *Brad Atkinson for Tracy Davis*
Director of the Division of Energy, Mineral and Land Resources

SUBJECT: Quarterly Report on Activities Conducted Pursuant to S.L. 2012-143

DATE: April 1, 2014

Pursuant to Session Law 2012-143, the North Carolina Mining and Energy Commission and the Division of Energy, Mineral and Land Resources shall submit to the Environmental Review Commission and the Joint Legislative Commission on Energy Policy a report on activities conducted and progress made pursuant to Session Law 2012-143 on a quarterly basis. Please consider the Quarterly Report on Activities Conducted Pursuant to S.L. 2012-143 attached as the formal submission of this report.

If you have any questions or need additional information, please contact me by phone at (919) 707-9201 or via e-mail at Tracy.Davis@ncdenr.gov.

cc: Mitch Gillespie, Assistant Secretary for the Environment
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Tracy Davis, Director, Division of Energy, Mineral, and Land Resources
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N.C. Mining and Energy Commission
And Department of Environment and Natural Resources
Quarterly Report on Activities Conducted Pursuant to S.L. 2012-143
To the Joint Legislative Commission on Energy Policy
And the Environmental Review Commission
April 1, 2014

Session Law 2012-143, the Clean Energy and Economic Security Act, was ratified on July 2, 2012 and reconstituted the North Carolina Mining Commission as the North Carolina Mining and Energy Commission. The Act directs the Mining and Energy Commission (MEC) to establish a modern regulatory program for the management of oil and gas exploration and development in the State and the use of horizontal drilling and hydraulic fracturing treatments involved in that purpose. The Act also directs the Commission to submit quarterly written reports on the Commission's operation, activities, programs, and progress to the Joint Legislative Commission on Energy Policy and the Environmental Review Commission (Section 1.(h)). The Department is also required to report on the progress in developing and adopting the rules required to be adopted by S.L. 2012-143. The quarterly reports shall include recommendations on changes required to existing rules and statutes and any other findings or recommendations necessary for the implementation of this Act (Section 2.(m)). This report satisfies both of these reporting requirements for the January through March 2014 timeframe.

Activities for each of the MEC Committees for this quarter are summarized below:

The **Administration of Oil and Gas Committee** convened on January 13, 2014 and reconsidered the draft Well Spacing and Drilling Unit Requirements rules, which define drilling unit characteristics, drilling unit sizes, and horizontal separation distances related to well spacing and unit boundaries. The Committee extracted all rule language related to unitization for development as a separate rule set and forwarded the draft "Well Spacing" rules to the Rules Committee. The Administration of Oil and Gas Committee also deliberated the draft Site Infrastructure and Construction Standards rules, which address overall well site construction requirements, including standards for access roads, sediment and erosion control measures, and well pads. Finally, the Committee deliberated the draft Well Stimulation rules, which require industry notifications for hydraulic fracturing and other hydrocarbon recovery procedures.

The Administration of Oil and Gas Committee met again on January 30, 2014 and continued deliberation of the draft Well Stimulation rules and considered respective comments from the Stakeholder Group on Oil and Gas Management, which had met on January 16, 2014. The Committee developed rule edits, which staff incorporated into the subsequent draft. Additionally, the Committee continued working on the draft Site Infrastructure and Construction Standards rules, considered related Stakeholder comments, and developed rule edits for staff.

The Administration of Oil and Gas Committee reconvened on February 17, 2014 and approved the draft Site Infrastructure and Construction Standards rules and formally passed the rule set to the Rules Committee. The Administration of Oil and Gas Committee also received and deliberated the draft Operation and Production rules, which establish requirements for production reporting, production meter calibrations, and well site inspections. This rule set was approved and formally passed to the Rules Committee. Finally, the Administration of Oil and Gas Committee approved the draft Well Stimulation rules and passed this rule set to the Rules Committee.

The last meeting of the Administration of Oil and Gas Committee occurred on March 6, 2014. The Committee deliberated, approved and formally passed the following draft rules to the Rules Committee:

- Draft Bonding rules, which establish requirements for financial assurance related to well plugging and abandonment and site reclamation;
- Draft Reclamation rules, which address requirements for interim and final well site land surface restoration;
- Draft Drilling Unit rules, which establish standards for combining contiguous properties into oil or gas drilling units; and
- Draft Permitting rules, which set requirements for an oil or gas operator to apply for and obtain a permit to drill an oil or gas well.

The Committee also considered comments from the Stakeholder Group on Oil and Gas Management, which had met on February 20, 2014.

The **Environmental Standards Committee** did not meet during this quarter, due to its completion of initial rule assignments.

The **Water and Waste Management Committee** did not meet during this quarter, due to its completion of initial rule assignments.

The **Rules Committee** convened on January 10, 2014 and extended its discussions into January 13, 2014. During the January 10 portion of the meeting, Committee members deliberated the draft Well Spacing and Drilling Unit requirements rules and returned this rule set to the Administration of Oil and Gas Committee to decouple well spacing requirements from drilling unit requirements. Subsequently, the Rules Committee received the draft Well Spacing rules from the Administration of Oil and Gas Committee on January 13. This rule set was approved by the Rules Committee and referred to the Mining and Energy Commission. The Rules Committee also deliberated the draft Waste Management rules. This rule set addresses the management, storage, and disposal of oil and gas waste products. These rules also establish standards for storage ponds and pits, and will address response actions for unintentional releases of waste material to the environment. Staff used Committee feedback to modify the draft rule set in preparation for the next Rules Committee meeting.

The Rules Committee met again on February 17, 2014 and extended its discussions into February 18, 2014. The Committee continued deliberating the draft Waste Management rules and provided feedback which staff used to edit the rule set for further Committee consideration during the March meetings. Additionally, the Rules Committee approved the draft Site Infrastructure and Construction Standards rules as well as the draft Operation and Production requirements for oil and gas wells rules and formally passed these rule sets to the Mining and Energy Commission.

The final meeting of the Rules Committee occurred on March 17, 2014, wherein Committee members approved the draft Waste Management rules and the draft Well Stimulation rules and formally passed these rule sets to the Mining and Energy Commission. The Rules Committee also deliberated the draft Drilling Unit rules and the draft Reclamation rules, but voted to return these rule sets to the Administration of Oil and Gas Committee for further clarification of proposed regulatory requirements.

The **Mining Committee** convened on March 14, 2014 and received a presentation from Dr. Kenneth Taylor, P.G., State Geologist, on the emerging minerals industry. The Committee also received an information update from DEMLR staff regarding mining statistics and regulatory enforcement activities.

Study Groups of the Mining and Energy Commission

Activities for each of the MEC Study Groups for this quarter are summarized below:

The **Funding Levels and Potential Funding Sources Study Group** met on January 30, 2014 in response to Session Law 2013-365, which required the Mining and Energy Commission to "...formulate recommendations for appropriate levels of funding that should be maintained to address emergency events associated with oil and gas exploration, including sufficient funding for emergency preparation, emergency response, emergency environmental protection, or mitigation associated with a release of liquid hydrocarbons or associated fluids directly related to onshore energy exploration, development, production, or transmission." As a result of this charge, the Study Group considered and developed recommendations for the following matters:

- Funding for emergency response operations, specifically to address well blowouts; and
- Funding for long-term contaminant release mitigation.

The Funding Levels and Potential Funding Sources Study Group researched legal agreements between oil and gas operators and well blowout mitigation companies, financial assurance strategies, and the environmental response and contaminant mitigation programs currently operating within the NC Division of Waste Management. The Study Group submitted its findings to the Legislature as an addendum to its October 01, 2013 report. Recommendations include requirements for oil and gas operators to maintain contracts with well blowout and mitigation contractors, as well as providing funding via severance taxes to the Division of Waste Management.

The **Protection of Trade Secrets and Proprietary Information Study Group** convened on January 30, 2014. This Study Group continues to research trade secret and proprietary information laws from other states and from the Code of Federal Regulations. Additionally, members are continuing to analyze current North Carolina statutes, case law, pending state legislation and industry practices relevant to trade secrets and proprietary information.

The **Coordinated Permitting Study Group** has not met during this quarter. However, the Study Group submitted its final report to the legislature in March 2014. Group members received presentations from other permitting agencies within DENR and had researched processes in other states to analyze how those programs might apply to North Carolina.

The following list summarizes Study Group recommendations:

- 1) Coordinated permitting should be implemented to address all environmental activities associated with site development, well construction and well completion up to the point the well is put into production;
- 2) The coordinated permitting process should involve a coordinated environmental review by various DENR agencies and DOT, with one comprehensive environmental permit being issued; and
- 3) Applications and permitting information should be received by DEMLR, routed for agency and public review, and maintained via electronic data methods.

Research provided by the Coordinated Permitting Study Group has been used by staff and the Administration of Oil and Gas Committee to develop the draft permitting rules.

The **Mining and Energy Commission** held three meetings during this quarter and received Committee and Study Group updates during each. During the January 14, 2014 meeting, the Commission deliberated and passed the draft Chemical Disclosure rule set and assigned it for internal completion of edits by staff.

The next meeting of the Mining and Energy Commission occurred on January 31, 2014, wherein the MEC accepted, deliberated, and passed the draft Well Spacing rules and the draft Setback rules and assigned them for internal completion of edits by staff.

During its February 18, 2014 meeting, the Commission accepted, deliberated, and passed the draft Site Infrastructure and Construction Standards rules and the draft Operation and Production rules and assigned them for internal completion of edits by staff.

DENR is continuing to manage the **Stakeholder Group on Oil and Gas Management**, which is composed of representatives from industry, non-profit organizations, individuals, and local and state governments. The first meeting of this quarter occurred on January 16, 2014, during which staff presented the draft Well Stimulation rule and the draft Site Infrastructure and Construction Standards rule. The Stakeholders convened again on February 20, 2014 to discuss the draft Well Permitting rules. The group generated suggested changes to all presented rule sets, which were provided to the Administration of Oil and Gas Committee.

MEC Commissioners continue to participate in local and regional education and outreach programs, in addition to providing information briefings to the Legislature. Specific activities for this quarter included:

- January 15 2014: Commissioner and State Geologist Dr. Kenneth Taylor provided an overview of North Carolina Geological Survey activities related to oil and gas research to the Lt Governor's Energy Policy Council;
- January 20, 2014: Commissioner and State Geologist Dr. Kenneth Taylor briefed the Lt Governor's Chief of Staff and General Council on hydrocarbon resources, exploration, and potential development;
- January 21, 2014: Commissioner and State Geologist Dr. Kenneth Taylor provided a presentation on hydrocarbon resources, exploration, and potential development to the Soil Science Society of North Carolina;
- January 23, 2014: Vice Chairman Dr. Ray Covington provided a presentation on "North Carolina's Natural Gas Opportunities and Compulsory Pooling" to the North Carolina Board of Realtors;
- January 23, 2014: Chairman James Womack provided a presentation on MEC rules development and oil and gas exploration activity to the Troy Rotary Club;
- February 4, 2014: MEC Chairman James Womack, Vice Chairman Dr. Ray Covington, and Commissioners Dr. Vik Rao, Dr. Kenneth Taylor, Ms. Amy Pickle, and Mr. Charles Holbrook briefed the Joint Legislative Commission on Energy Policy on rule development and study group progress;
- February 7, 2014: Chairman James Womack provided a presentation on MEC rules development and oil and gas exploration activity to the West Raleigh Rotary Club;

- March 8, 2014: Commissioner and State Geologist Dr. Kenneth Taylor provided a presentation on North Carolina hydrocarbon resources, exploration, and potential development to the Daughters of the American Revolution; and
- March 21, 2014: Commissioner and State Geologist Dr. Kenneth Taylor provided a presentation on water use and natural gas exploration during the World Water Day event, hosted at the Archdale Building in Raleigh, NC;
- March 31, 2014: Commissioners James Womack, Amy Pickle, and Jane Lewis-Raymond participated in the Duke University Shale Energy public finance workshop in collaboration with experts from TX, ND, PA, CO, NM and other shale energy states.

DEMLR staff also participated in local and regional education and outreach programs. On January 21, 2014, staff provided presentations on North Carolina geology, hydrocarbon resources, and the current progress of rule development to the Soil Science Society of North Carolina. Similar presentations were also provided to the North Carolina Manufacturers Alliance (February 19, 2014), Athens Drive High School in Raleigh (March 19, 2014), and to the Groundwater Professionals of North Carolina (March 27, 2014). Additionally, staff provided an overview of DEMLR's Oil and Gas Program to the Lt Governor's Energy Policy Council during its inaugural meeting on January 15, 2014.

Oil and Gas Program personnel have been assisting the North Carolina Geological Survey (NCGS) to assess hydrocarbon potential. Staff collected nearly 70 structural geological measurements and numerous rock samples on January 22, 2014 from exposures of Dan River Triassic Basin formations. Additionally, Oil and Gas staff teamed with NCGS and set up a booth to advertise North Carolina resources and to network with industry professionals during the North American Prospect Expo in Houston, TX from February 4-7, 2014.

Finally, DEMLR hired a new Energy Section Chief, Mr. Brad Atkinson, a geologist with prior oil and gas industry experience who will oversee the following Programs: Oil and Gas, Renewable Energy, Transportation, Weatherization, and State Energy. In addition, DEMLR hired a Rules Coordinator, Mr. Robert Josey, a licensed attorney who will be working closely with the Rules Committee and staff to compile the approved rule sets into a comprehensive framework and process the rules through the public hearing and rulemaking process.

Additional information about the MEC, including agendas, meeting minutes and audio recordings of meetings, can be found at the Commission's website:

<http://portal.ncdenr.org/web/mining-and-energy-commission/>. The Department continues to manage this website and to share information about the activities of the MEC with the public. The website lists meeting agendas, meeting minutes, PowerPoint presentations from meetings, contact information for MEC members, and other information. A listserv is also available for individuals who would like to receive updates on the MEC and changes to the website. To sign up for the listserv, visit <http://lists.ncmail.net/mailman/listinfo/denr.shale.gas>.

Figure 1 reflects current committee and study group members, as well as primary staff contacts for each committee and study group.

Committee	Chair/Vice Chair	Other Members	Primary DENR Staff
Mining	Tex Gilmore	George Howard Amy Pickle Dr. Marva Price Dr. Robert Mensah-Biney E.O. Ferrell Dr. Ray Covington	Janet Boyer
Civil Penalty Remissions	Charlotte Mitchell	Jane Lewis-Raymond Jim Womack Dr. Robert Mensah-Biney Charles Taylor	Walt Haven
Environmental Standards	George Howard Dr. Ray Covington	Dr. Kenneth Taylor Charlotte Mitchell Amy Pickle Dr. Marva Price Dr. Vikram Rao	Walt Haven (Ryan Channell)
Water & Waste Management	Dr. Vikram Rao Charlotte Mitchell	Dr. Kenneth Taylor Charles Holbrook Ivan "Tex" Gilmore Amy Pickle	Katherine Marciniak
Administration of Oil & Gas	Charles Holbrook Jane Lewis-Raymond	Dr. Vikram Rao Dr. Ray Covington E.O. Ferrell Ivan "Tex" Gilmore Dr. Kenneth Taylor	Ryan Channell (Walt Haven)
Rules	Amy Pickle	Charlotte Mitchell George Howard Charles Holbrook Jane Lewis-Raymond Dr. Vikram Rao	Robert Josey (Walt Haven)
Study Group	Director	Other Members	Primary DENR Staff
Funding Levels and Potential Funding Sources	Jane Lewis-Raymond	Jim Womack Dr. Vikram Rao George Howard	Walt Haven (Katherine Marciniak)
Local Government Regulation	Charles Taylor Dr. Marva Price	Jim Womack Charles Holbrook	Walt Haven
Compulsory Pooling	Dr. Ray Covington	Jim Womack Charles Holbrook Charlotte Mitchell	Walt Haven
Coordinated Permitting Study Group	Dr. Kenneth Taylor	Jim Womack Dr. Ray Covington Dr. Vikram Rao Charles Holbrook George Howard	Walt Haven
Protection of Trade Secrets and Proprietary Information Study Group	Jim Womack	Amy Pickle Jane Lewis-Raymond	Ryan Channell

Figure 1. Commissioner responsibility and primary staff assignments.