



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

SENATE APPROPRIATIONS SUBCOMMITTEE ON NATURAL AND ECONOMIC
RESOURCES
The Honorable Andrew C. Brock, Co-Chairman
The Honorable Brent Jackson, Co-Chairman

HOUSE APPROPRIATIONS SUBCOMMITTEE ON NATURAL AND ECONOMIC
RESOURCES
The Honorable Tom Murry, Chairman
The Honorable Roger West, Chairman
The Honorable Jimmy Dixon, Vice-Chairman
The Honorable Garland E. Pierce, Vice-Chairman
The Honorable Michele D. Presnell, Vice-Chairwoman

FISCAL RESEARCH DIVISION
Mark Trogdon, Director

FROM: Jim Womack
Chairman of the North Carolina Mining and Energy Commission

Ray Covington VICE-CHAIR MEC FOR

SUBJECT: Coordinated Permitting Study Group Report

DATE: February 28, 2014

Pursuant to Session Law 2013-365 Section 2(a), the North Carolina Mining and Energy Commission, with the assistance of the Department of Environment and Natural Resources, shall study development of a coordinated permitting program for oil and gas exploration and development activities using horizontal drilling and hydraulic fracturing treatments in order that a single comprehensive environmental permit may be issued to a permit applicant to govern the applicant's exploration and development activities at a site, including, but not limited to,

regulation of the following matters: well construction, siting, and closure requirements; hydraulic fracturing treatments, including subsurface injection of fluids for that purpose; water quality, including stormwater control, and management of water resources; management of waste; and regulation of air emissions. Please consider submission of the attached report as the Commission's fulfillment of requirements under respective session law.

If you have any questions or need additional information, please contact me by phone at (919) 770-4783 or via e-mail at commissioner.womack@gmail.com.

cc: Mitch Gillespie, Assistant Secretary for Environment
Neal Robbins Director of Legislative Affairs
Carr McLamb, Deputy Director of Legislative Affairs
Fred F. Steen, Office of the Governor
Jennifer Hoffman, Fiscal Research Division
Tracy Davis, Director, Division of Energy, Mineral, and Land Resources

North Carolina Mining and Energy Commission

Coordinated Permitting Study Group Report

February 28, 2014

In April 2013, Mining and Energy Commission (MEC) Chairman James Womack established the "Coordinated Permitting Study Group" (Study Group) and identified MEC Commissioner Kenneth Taylor as the Study Group Director. This action was in anticipation of the N.C. General Assembly mandate to the MEC for a study of the development of a coordinated permitting program for oil and gas exploration and development activities using horizontal drilling and hydraulic fracturing treatments in order that a single comprehensive environmental permit may be issued.

From May to December of 2013, the Study Group met a total of nine times [dates: May 2nd, June 6th, June 27th, July 26th, September 6th, September 27th, October 25th, November 22nd, and December 6th] to identify a path to a coordinated permitting process. This report documents the principal conclusion of the Study Group: **the path to implement a coordinated permitting process for oil and gas has been identified with the N.C. Department of Environment and Natural Resources' (NC DENR) Division of Energy, Mineral, and Land Resources as the coordinating agency.**

At the first Study Group meeting (May 2nd), the group examined the permitting process used in the North Carolina Mining Act as a model for how coordinated permitting of oil and gas could be accomplished. Division of Energy, Mineral, and Land Resources (DEMLR) Director Tracy Davis gave an invited presentation on how a coordinated permitting process is already working in the state. As examples, he showed the application checklist, and permit application routing to other entities (i.e. DWR, DWM, U.S. Fish and Wildlife, Cultural Resources, etc.) for approval (where needed) and for requesting recommendations from the reviewing agencies to the mining program which would become incorporated into permit conditions in the approved application.

The Minutes for the May 2, 2013 meeting of the Study Group summarizes Director Davis' presentation. Meeting agendas, minutes, and presentations for the Study Group can be found on the NCDENR web portal at:

<http://portal.ncdenr.org/web/mining-and-energy-commission/permittingstudygroup11-22-13>

During later discussions, the Study Group noted that the Mining Act has several statutory provisions which are not found in the existing Oil and Gas Conservation Act. The Study Group discussed several proposed statutory changes to the Oil and Gas Conservation Act which would strengthen the rulemaking associated with a coordinated permitting process. These suggested changes include:

- (a) Statutory language listing the agencies that would review an oil and gas permit application;
- (b) Oil and gas permit denial criteria;
- (c) The required permit application content;
- (d) Timeline for permit review;
- (e) Public notification prior to the issuance of a permit.

All of these proposed changes have already been forwarded to the Department for consideration in their legislative requests for the short session of the General Assembly.

In order for the Study Group to better understand how the permitting process is conducted in other states, two summer interns, both unpaid – Ms. Colleen Brophy and Mr. Franklin Wolfe went to the official websites of eight states to obtain the raw data for a comparison. The oil and gas permit application, instructions, bonding paperwork, and additional permits for eight states – Wyoming (WY), Arkansas (AR), Colorado (CO), North Dakota (ND), Ohio (OH), Pennsylvania (PA), Texas (TX), and West Virginia (WV) were compiled. Mr. Ryan Channell from the DEMLR Energy Program also provided two complete application packages from Ohio.

At the June 27th Study Group meeting, the Study Group Director presented a state-by-state comparison and showed the Study Group the single paper copy (double-sided when possible) of over 2,000 pages of information which was collected. Each member of the Study Group and every member of the MEC were provided with a compact disc (CD) of this material.

That CD contained 231 megabytes (231 MB) of material in eight directories (one for each state). For each state, the following material was compiled: WY (35 files), AR (64 files), CO (56 files), ND (48 files), OH (41 files), PA (71 files), TX (162 files), and WV (41 files). Included in the Ohio material were two complete application packages for two wells. These documents also included the completion reports and simulation (hydraulic fracturing) reports. The Minutes for the June 27, 2013 Study Group meeting includes the discussion of the state-by-state comparison.

Both the MEC Administration of Oil and Gas Committee and the Local Government Regulations Study Group were also briefed on this material. In addition, all MEC staff members received CDs of this information to use in draft rule writing.

On August 26, 2013, NC DENR Assistant Secretary Mitch Gillespie chaired a Coordinated Permitting Meeting with the Directors of Water Resources (DWR), Air Quality (DAQ), Waste Management (DWM), Energy, Mineral, and Land Resources (DEMLR), and the Study Group Director. In that meeting, eight caveats to a coordinated permitting process were identified by the division directors:

- (a) Coordinated permitting would be implemented to address well construction and completion only;
- (b) Once a well is put into production, separate environmental permits from other Divisions may be required;
- (c) Waste management is part of the permitting process and would encourage water reuse;
- (d) The N.C. Department of Transportation (NCDOT) expects that the oil and gas industry will inform NCDOT of plans for high-volume truck traffic;
- (e) The coordinated permitting process would be applied to comprehensive environmental permitting, not to road use or other types of permitting;
- (f) Air quality permitting should not be required, but DAQ maintains an interest in the permitting process;
- (g) If an operator is not doing on-site disposal, the operator is considered as being a waste generator. Burial of drill cuttings on site would require characterization of the material before burial occurs. Industry typically uses off-site disposal options (i.e. landfill);
- (h) Additional permitting may be needed for off-site waste disposal that would be separate from a DEMLR oil and gas drilling permit.

At their September 6th meeting, the Study Group was briefed on the outcome from this meeting.

A "White Board" exercise was also conducted at the same Study Group meeting. Each study group member was provided a pad of adhesive "Post-it" notes and asked to post their issues, ideas, and information concerning coordinated permitting on the "white board". This exercise captured 72 items which would need to be considered as part of the coordinated permitting process. At the next study group meeting, September 27th, each study group member was asked to further explain and expand those issues they brought to the table. The minutes from those two meetings captured the study group discussion on those issues. Most of these Study Group comments have already been or plan to be incorporated in the draft rule sets.

Three times the Coordinated Permitting Study Group Director was tasked to assist one or more of the MEC Committees or Study Groups with analysis from the compiled oil and gas information. The Local Government Regulation Study Group asked for an explanation of the drilling unit layout used in other states. Downloading from the official websites for those states, the study group director was able to show how multiple wells can efficiently drain a large area from a single well pad.

The Funding Levels & Potential Funding Sources Study Group asked for an estimate of the volume water and sand as well as the number of trucks which would be needed to complete the hydraulic fracturing of a well. Actual examples from both Ohio and Arkansas were used to calculate the impact and these figures were included in the proposal for an impact fee by that study group. Later, the same study group needed to document the potential level of revenue through severance taxes to support the oil and gas regulatory program. For this request, the actual number of wells drilled in the Arkansas Fayetteville Shale per year and the production from those wells was compared to an equal sized area in North Carolina. Three scenarios (high, medium and low) production were modeled. These analyses demonstrated the proposed severance tax rate would be adequate for the program's support and were attached to the Funding Levels & Potential Funding Sources Study Group Report.

Early in the Coordinated Permitting Study Group's discussions, two outliers to the concept of a single coordinated permitting were identified. Both of these were within DEMLR and both were issues which needed to be addressed in coordination with the Environmental Management Commission (EMC) and the Sediment Control Commission (SCC).

The General Assembly tasked the EMC to write rules to coordinate their authority with that of the MEC. The existing state stormwater program does not have rules exclusively for oil and gas operations. In order to establish new rules for the industry, the DEMLR Stormwater Management Program has developed a stormwater rule exclusively for oil and gas for consideration by the EMC. The new rule would allow personnel in the same lead division (DEMLR) to establish stormwater permit conditions for oil and gas. The MEC was briefed at their January 14, 2014 meeting on the progress in rule development for all new and revised EMC rules associated with oil and gas by Mr. Evan Kane, staff member to the EMC.

The other outlier was the review and approval of erosion and sedimentation control plans for land-disturbing activities related to oil and gas exploration and development. During the Special Teleconference Business Meeting on January 28, 2014, the North Carolina Sedimentation Control Commission (SCC) conducted a discussion and approval of the concept for the SCC to request the NC DENR Secretary to assign administration of the Sedimentation Pollution Control Act (SPCA) to DEMLR's Energy Section with regard to oil and gas exploration and development land-disturbing activities.

DEMLR proposed a two-part process for the Sediment Control Commission (SCC) to undertake: (1) amend the Memorandums of Agreement (MOAs) with existing local programs in areas with oil and gas potential to return jurisdiction to the SCC over land-disturbing activities related to oil and gas exploration and development; and (2) request that the Secretary of the Department of Environment and Natural Resources (Secretary) assign to DEMLR's Energy Section the administration and enforcement of the Sedimentation Pollution Control Act (SPCA) for land-disturbing activities related to oil and gas exploration and development and present to the Secretary any desired conditions or requirements that the SCC would ask of the Energy Section related to implementation of the SCC's regulatory program.

The SCC voted in favor of the DEMLR concept.

Membership of the Coordinated Permitting Study Group

MEC Commissioners

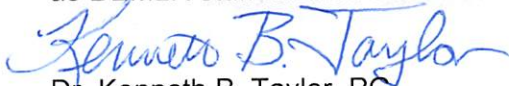
MEC Chairman James Womack;
Chairs of the three substantive MEC rule development committees;
Administration of Oil and Gas -- Mr. Charles Holbrook,
Environmental Standards -- Mr. George Howard,
Water and Waste Management -- Dr. Vikram Rao;
Compulsory Pooling Study Group Director -- Dr. Ray Covington;
Coordinated Permitting Study Group Director -- Dr. Kenneth Taylor

Representatives from NC DENR and NC DOT

Mr. Tracy Davis, PE, CPM, Director, Division of Energy, Mineral, and Land Resources (DEMLR)
Mr. Toby Vinson, PE, Chief Engineer, Land Quality Section, DEMLR
Mr. Ken Pickle, Stormwater Management Program, Division of Water Quality (DWQ), later DEMLR
Mr. Don Rayno, Division of Water Resources (DWR)
Ms. Ellen Lorscheider, Division of Waste Management (DWM)
Mr. Evan Kane, PG, Groundwater Planning, DWQ, later DWR
Mr. Mike Abraczinskas, EIT, CPM, Deputy Director, Division of Air Quality (DAQ)
Mr. William Willets, PE, Engineering Supervisor, Permitting Section, DAQ
Mr. Brandon Jones, NC Department of Transportation (NCDOT)
Ms. Emily McGraw, NCDOT

Mr. E.O. Ferrell, MEC Commissioner joined the Study Group for the last two meetings to assist in his orientation to the MEC as the representative from the Environmental Management Commission (EMC).

The Study Group Director appreciates and thanks all the members of the Study Group as well as DEMLR staff for their assistance in this Study Group Report.



Dr. Kenneth B. Taylor, PG
State Geologist of North Carolina
N. C. Mining and Energy Commission Member

February 28, 2014