Minutes of November 20, 2013, meeting of the Marcellus Shale Safe Drilling Initiative Advisory Commission

Approved January 6, 2014.

The Commission held its 23st meeting at Allegany College on November 20, 2013 at 1:00 pm. In attendance were Chairman David Vanko and Commission members Senator George Edwards, Commissioner James Raley, Commissioner William Valentine, Mayor Peggy Jamison, Shawn Bender, Steve Bunker, Jeff Kupfer, Cliff Mitchell, Paul Roberts, Nicholas Weber and Harry Weiss. Also in attendance were staff of state agencies and members of the public.

Minutes of the October 23, 2013 minutes were approved without change.

Chairman Vanko called the meeting to order and the Commissioners introduced themselves. Chairman Vanko announced that Secretaries Summers and Gill have appointed Ann R. Bristow, Ph.D., to the Advisory Commission.

Brigid Kenney gave an update on the status of the ongoing studies. The Regional Economic Studies Institute finalized the gas development scenarios it intends to use for the economic study. They are gathering data on tourism in areas where Marcellus Shale drilling has occurred and are preparing to analyze the results of the in-person and online survey. Information about the Economic Study will soon be posted on MDE's website.

Regarding the risk assessment, Ms. Kenney said that she had received three emails in response to her request for suggestions of additional risks or risk pathways. She could not recall what they were, but they will be considered for addition to the existing list. No other suggestions had been received. Work teams will be assembled in January and a report will be prepared this spring.

Regarding the Best Practices report, Ms. Kenney said that the Departments were reviewing the comments on the draft report, combining and paraphrasing similar comments and placing them in categories. She said she would provide them to the Commissioners to review so that they could identify specific issues about which they feel they need additional information before they can formulate their own opinions.

Ms. Kenney announced that the Piney Run air monitor had been equipped with additional instrumentation so that it could detect methane and other gases associated with gas development. No data were available yet. In addition, ground level background monitoring is planned using a mobile lab from the National Environmental Testing Laboratory.

The results of the Commissioners' responses to Survey Monkey questionnaire were discussed. Commissioners Kupfer and Roberts did not fill out the questionnaire, but had submitted written comments. They agreed that their comments could be posted with the survey results. In response to a question, Ms. Kenney said that the purpose of the survey had been to allow each Commissioner to focus on the individual issues and make preliminary judgments about them. In this way, the more controversial issues could be identified and more time could be spent discussing them. The survey was not intended to capture the opinions of the Advisory Commission; that will be developed and reviewed by the Commission and included in the final Best Practices report as an Appendix.

Christine Conn reported on the mapping workshop that had been held on November 15. The purpose of the exercise was to identify recreational areas that are intensively used in the Marcellus Shale areas of

Maryland. The locations of these areas will be mapped and included in the toolbox to guide the preparation of a CGDP that will avoid conflicts with public use. In response to questions, Dr. Conn explained that this mapping workshop was independent of the risk assessment and the economic study, and could potentially be used to adjust setback requirements. The workshop was by invitation only, and persons with knowledge of high use areas were invited, rather than members of the general public. The survey would include private lands if they were intensively used. Commissioner Weber noted that small brook trout streams are worthy of protection even if only a few people fish there. Commissioners Valentine and Bender noted that some gas utility rights of way offer access to good hunting and are heavily used, not only by hunters, but also by bikers and cross-country skiers. Dr. Conn agreed to find out whether a completed mapping study of the coastal area could be made available to the Commissioners so they would have an idea of the nature of the final product. She also agreed to provide the slide presentation and handouts from the November 15 workshop and the rough data, once it is available. Chairman Vanko pointed out that the Marcellus Shale Safe Drilling Initiative was producing great data that would be useful whether or not hydraulic fracturing is ultimately allowed in Maryland.

Following a break, there was a brief discussion of the surface water quality monitoring that is occurring in Maryland downstream from some West Virginia gas wells. Of the two monitoring sites, one began monitoring before the well was fracked and the other after. No pollution events have yet been detected at these monitoring sites. Senator Edwards noted that this is not the only place in Maryland where water originating out of state is monitored as it enters Maryland. Commissioner Vanko requested that the document sent to Commissioner Valentine, detailing the observations of the two monitoring sites discussed, be distributed to the Commission.

Dr. Clifford Mitchell noted that he had attended a meeting on November 15 of the consultants preparing the public health report and the economic report and staff from MDE and DNR. The purpose of the meeting was to facilitate data sharing and to discuss the gas development scenarios so that common reasonable assumptions could be made. In response to a question from Commissioner Weber, Commissioner Mitchell said that the topic of the economic impact of Marcellus Shale drilling on the health care infrastructure had come up at the meeting. The University of Maryland Institute for Applied Environmental Health is interested in the topic, and plan to discuss it in their report, although it may not be fully explored. He opined that the Affordable Care Act would likely have a much greater impact on the health care infrastructure than drilling.

The next agenda item was a discussion of public comments on the draft Best Practices Report. Ms. Kenney introduced the topic by saying that there were three topics raised by the comments that she thought the Commissioners were familiar with and could productively discuss: whether exploratory wells should be permitted without going through the CGDP process; the overall structure of a CGDP to look at landscape level effects followed by a site-specific permitting of individual wells; and whether there should be a system for compensating persons who were impacted by Marcellus drilling but whose damages would not support a legal claim. This last topic was taken up first and prompted a considerable amount of discussion.

There was agreement that such a system should not offer compensation for trivial impacts. The "presumptive impact area law" is helpful, but it applies only to drinking water and the presumption lasts only for one year. The enhanced financial assurances requirement guarantees that a permittee will have

the financial ability to pay for damages it causes, but it was acknowledged that individuals may face a long and expensive legal process if they need to sue a gas company for damages. The state level severance tax has not been established, and the bills introduced in the past have earmarked that money for emergency relief when the liable company failed to act promptly and for remediation when the responsible company could not be identified.

The BP Oil Spill fund was mentioned; the money in that fund was contributed from BP and it was distributed through an administrative process when credible claims were made for economic or medical losses. Those receiving compensation had to waive their right to sue for damages. Commissioner Valentine said that small claims court might be able to handle some claims.

Commissioner Bunker suggested that there might be a reason to differentiate between people who leased their mineral rights and those who were "innocent bystanders." Commissioner Weiss said that a Surface Owners Protection Act could address this issue, although generally those laws protect persons on whose land surface activity actually occurs, not "innocent bystanders."

Commissioner Raley noted that some wind development companies had voluntarily offered monthly compensation to persons in Pennsylvania who had not leased their land for wind development, but who lived within a certain distance of the turbines.

Some members of the community are concerned that their property will lose value merely because there is drilling on nearby properties. Ms. Kenney noted that there are many examples of communities opposing a legally permissible use of property (for example, a crematorium) in their neighborhoods because they fear a loss of property values. The law does not generally recognize this as a compensable harm. Commissioner Roberts said there was no comparison between a crematorium and gas development.

Commissioner Bender said that he thought the issue was that people were afraid that there would be "sacrifice zones" where people would be disproportionately impacted without compensation.

Reassuring people on this point would be very helpful. Commissioner Weiss said that he thought the basic idea was to provide compensation to those who lived in an area of lawful but intense development where the impacts are disproportionately high.

It was decided that the Commission wanted more clarity on the purpose of such a compensation system. Senator Edwards asked Commissioner Roberts to develop the concept and provide a few scenarios where an impact to an individual could occur but would not be addressed by financial assurance requirements or through a severance tax fund. This concept document will be provided to the Commission for further consideration and discussion.

The next issue discussed was whether exploratory wells should be permitted without going through the CGDP process. Ms. Kenney noted that MDE and DNR felt strongly that no well pads should be established without a comprehensive plan, but that the industry made a strong argument that such a plan could not be developed in advance of exploratory wells that would determine whether the formation was productive. It was noted that the Delaware River Basin Commission staff had drafted regulations that would have allowed any company to drill up to ten exploratory wells before developing a comprehensive plan. Those regulations have been stalled for a long time and will probably never be adopted. Commissioner Kupfer noted that both exploratory wells and production wells are generally

drilled and fracked. They are defined differently for purposes of financial reporting, however, and so there should be no confusion between them.

Various ideas were suggested for allowing a limited number of exploratory wells to be drilled without the preparation of a CGDP:

- Allow "x" number of exploratory wells per company
- Allow "x" number of exploratory wells per square mile
- o Limit exploratory wells so that there is not more than one within a five mile radius
- Allow a different number of exploratory wells, depending on the size (acreage) of company's holdings
- Allow the drilling and fracking of an exploratory well, but require a CGDP before it can go into production
- o Require a scaled down CGDP process for exploratory wells
- Allow exploration along transects (north/south and east/west) and look for trends to determine likely productivity

Commissioner Bender noted that wells and pipelines are both very expensive, and that the first wells would likely be drilled near pipelines. He noted, however, that the location of a planned pipeline could change depending on the results of exploration. Commissioner Bunker suggested that exploratory wells might be permitted if they were in a location that could easily be connected to an existing pipeline without the risk of forest fragmentation or damage to sensitive resources. Commissioner Weber said that either the CGDP is important, in which case it should be required for even one well, or it is not important, we should abandon it. Senator Edwards noted that it should be taken into account that a company may have scattered holdings. Commissioner Bunker noted that the real benefit of a CGDP is in the context of multi-well development.

As noted above, there was some support among the Commissioners for allowing a limited number of exploratory wells before requiring a CGDP. There was general agreement, however, that a CGDP would be useful after the exploratory stage. The Commission was not unanimous, however, that the CGDP should be mandatory rather than voluntary, even after the exploratory stage.

Ms. Kenney said that there were other issues that garnered significant comment, including

- o setbacks from drinking water wells
- o zero methane emissions
- fracture growth
- stormwater management
- water appropriation
- wastewater treatment and recycling
- trade secrets

She suggested that it would be useful to have subject matter experts attend a future Advisory Commission meeting to explain the issue and answer questions. Commissioners were invited to identify additional issues they wanted to explore in this way.

There was a brief discussion regarding a project being undertaken by the Maryland Geological Survey (MGS) to drill paired wells, one shallow and one deep, at three sites in Garrett County. The goal of the project is to obtain data about the relationships among shallow and deep groundwater and the nearby streams.

The public was then invited to comment.

Eric Robison made several statements:

- He asked Commissioner Mitchell if DHMH could prepare a scope of work for a health cost study.
 Commissioner Mitchell said he would take it under consideration.
- O He announced that Citizen Shale and the Chesapeake Climate Action Network (CCAN) had engaged a consultant, Ricardo AEA, to perform a risk assessment for hydrocarbons operations involving hydraulic fracturing because they couldn't get a risk assessment done through the Marcellus Shale Safe Drilling Initiative process. He said that the assessment would be Maryland-specific, would investigate whether the best practices were adequate and where there were data gaps, and look at risks associated with downstream gas activities, such as pipelines, compressor stations, and the proposed liquefied natural gas facility at Cove Point in Maryland.
- He said that the DNR monitoring of surface water downstream of West Virginia gas wells had not been started in time to catch the drilling and fracking stages. Commissioner Vanko agreed that that was true of one monitoring station but not the other.
- O He said that there should be an ombudsman to review compensation claims of people in "sacrifice zones." He gave an example of a woman whose property was surrounded by other parcels that had been leased for drilling. The access road to the proposed well pad would have been directly across from her home and the proposed well pad would have been 1.000 feet from her home. She believed that the value of her home would be reduced to zero and that she would not be able to sell it. Commissioner Roberts said that this was an example of an innocent bystander for whom a compensation program would be appropriate.
- He said that if exploratory wells were allowed without a CGDP, two years work of baseline data should be required before drilling could begin.

Megan Jenny of Chesapeake Climate Action Network said that fracking is the time when contamination, in particular contamination of surface water, was most likely to occur. She referred to nine recent studies of surface water contamination related to fracking.

James "Smokey" Stanton asked whether the three sets of MGS monitoring wells were all in the Savage watershed, ignoring the Youghiogheny watershed. In response it was noted that one of the three is on Buffalo Run, which is a tributary to the Youghiogheny River.

Commissioner Raley announced that the Garrett County Marcellus Shale Committee had been reconstituted. It meets the first Tuesday of each month at 4 pm at the Garrett County Health Department.

Woody Getz made two comments:

 He said that the Commission and the public had not been prepared to discuss the idea of compensation, and suggested that Commissioner Roberts' explanation of it should go out to the Advisory Commission in advance of the next meeting. O He questioned why those invited to the DNR workshop were mainly those who make money from outdoor recreation. Commissioner Raley said that it was not limited to such companies, and that the park system was well represented. Mr. Getz clarified that what he meant is that this information has economic impact and that RESI should be made aware of it. Commissioner Weiss said that the information should be included in the toolbox.

Ruth Yoder said she is a landowner surrounded by farms and that she if frightened that her view will be ruined and that her water will be polluted.

Nadine Grabania raised two topics:

- O She asked what the State's response would be if the monitoring downstream of the West Virginia gas wells showed evidence of pollution. Dr. Conn said the State would probably contact its sister state to find out if there had been an incident. [Dr. Conn also stated that the continuous data loggers offered real-time data observations. She subsequently learned that the data are not available in real time but are collected every 6 weeks from the monitoring sites and asked that the minutes reflect this correction.]
- She suggested that the State should be monitoring the corners of the State now, in advance of drilling, to establish a baseline. It was pointed out that the best practice recommendation that the applicant for a well permit conduct two years of baseline monitoring data before beginning operations would establish the baseline.

The meeting adjourned at 4:30.