

Minutes, May 18, 2012, meeting of the Marcellus Shale Safe Drilling Initiative Advisory Commission

Approved June 15, 2012

The Commission held its eighth meeting at the hall of the Eastern Garrett Volunteer Fire Department, 401 Finzel Road, Frostburg Maryland 21532. In attendance were Chairman David Vanko and Commission members James Raley, William Valentine, Peggy Jamison, Nick Weber, John Fritts, Paul Roberts, Delegate Heather Mizeur, Jeff Kupfer, Dominick Murray, Steven Bunker, Senator George Edwards, and Harry Weiss. Also in attendance were Secretary Robert Summers, staff of state agencies and members of the public.

The meeting began with a vote on the April meeting minutes. Commissioner Weber asked for a correction on page two, going on to page three. The point of his comment had been that monitoring should be done of both deep and shallow wells at the wellpad, upgradient of the wellpad and downgradient of the wellpad, and that any contamination be reported. With that change, the minutes were approved unanimously.

Chairman Vanko introduced Dave Bolton from the Maryland Geological Survey (MGS), who gave a presentation on work that the MGS will be doing this year in Garrett County to begin a study of methane in groundwater. MGS has been documenting groundwater quality in Maryland for many years, focusing on changes in groundwater quality. More recently they have focused on specific issues such as arsenic and radium in certain locales. The new work will begin to evaluate the distribution of methane and the range of methane concentrations in drinking water wells, and could inform a plan to determine how to identify the sources of methane. This is the beginning of a baseline dataset. The details of the planned sampling were summarized. Questions were taken on the presentation.

Commissioner Valentine noted that some wells tap groundwater from different aquifers and from different depths, and that some aquifers draw from a wide area and others from a more confined area. He asked whether the sampling plan would target specific aquifers. Mr. Bolton answered that it is hard to tell where in the borehole water enters a well. It is rarely documented in the well log, and it would be necessary to isolate portions of the well with a packer to sample water entering from fissures at different depths.

Commissioner Roberts asked whether the lack of a committed funding source for a baseline study affected the scope of work for the methane sampling. Mr. Bolton answered that this was a preliminary scoping study -- a necessary step before planning a more complete study. A complete study would require additional funding. Commissioner Roberts said that he was hearing that there is no good handle on the issue of finding a funding source, especially for the large scale project which will be needed. Chairman Vanko asked if it is fair to say that this preliminary study is just a tiny part of what the regional groundwater study would be if funding were available. Mr. Bolton answered, yes, this is a small study but necessary to start. Chairman Vanko added that MGS is able to do this piece with funding they already have.

Commissioner Roberts asked if the wells selected would be valley or hilltop wells. Since most people live in between, what will the mix be? Mr. Bolton answered that it is easier to find wells in the valleys to sample, but that MGS will also sample hillside wells and possibly hilltop wells. Commissioner Roberts also asked whether pressurized liquids can move upward. Mr. Bolton answered that groundwater flows in response to pressure gradients.

Commissioner Weber asked if radium had been tested for in previous studies. Mr. Bolton answered no, and there were no plans to include radium in this study due to cost restrictions. Commissioner Weber added that you may find radium compounds in shale. He thought it would be important to get a baseline before drilling started. Mr. Bolton agreed, and said that over the years, MGS has done field scans for radioactivity and found some low levels. He speculated that areas where radiation was detected might be good locations to sample in the future. Commissioner Weber asked if the depth of the well is significant in terms of capturing the data across areas? Mr. Bolton said yes, and that MGS would like to sample wells of varying depths, but that they could only sample wells of landowners who volunteered. Commissioner Weber asked if public supply wells are routinely screened for methane and Mr. Bolton answered no.

Commissioner Weiss asked, if we find methane in this preliminary study, would it be important to find a funding source for a baseline study before moving on? Mr. Bolton said that MGS is interested in finding out how the groundwater system works, the distribution of wells with methane, and the range of methane concentrations. If areas of methane contamination are found, wells in those areas may be tested in the future to determine whether the methane is coming from shallow or deep sources.

Commissioner Kupfer asked if there are well construction standards in Maryland and whether they are different in different parts of the state. Mr. Bolton said that the Maryland regulations (COMAR) identify regions and that the construction standards are specific to the region. Requirements for wells in the region that includes Garrett and Allegany Counties include drilling at least 2 feet into bedrock, setting the casing, and grouting from the bottom of the casing to the surface. For the methane study, MGS will include only wells for which the casing and grouting have been documented. In addition, the wells will be visually inspected before sampling.

Delegate Mizeur asked if there is any relationship between study sites chosen and where drilling may occur. Mr. Bolton explained that the study is designed to get regional information rather than information about specific sites. However, the study results might be useful if drilling occurs in the area later. Delegate Mizeur said that it seems to make sense to sample sites that could be impacted by the drilling. Mr. Bolton commented that Pennsylvania required pre-drilling sampling at the drill site, and he assumed that Maryland would require the same. This study is looking for regional information. Delegate Mizeur asked if any air sampling is being planned. Mr. Bolton replied that the MGS study will not consider air quality, which is not within MGS's technical expertise.

Senator Edwards commented that there may be data from existing wells, and that we should use that information as much as possible, including deciding where to test. Mr. Bolton agreed that past data can be useful and that MGS has used health department data in other studies. However, he noted that the health department has not analyzed well samples for methane. Also, data

cannot be combined unless they were generated using consistent sampling and testing procedures.

Commissioner Bunker asked how long methane persists in the water. Mr. Bolton said it does not last very long because it degases. For this reason, special sampling procedures will be followed.

Commissioner Valentine asked if they will be sampling in the historical dry time or wet time, as it might be wise to come back during more wet times. Mr. Bolton agreed that there could be significant variability throughout the year and said they would be taking repeated samples to see if there is any fluctuation.

Commissioner Weber asked what the regulatory permitted level of methane is and if there have been levels that approach that. Mr. Bolton answered that there is no regulatory level for methane in water. Commissioner Murray asked if this study should be limited to methane, or if we should be concerned about other contaminants. Ms. Kenney noted that normally drinking water is not tested for methane, but that it is tested for some other parameters. She reiterated that the MGS study is a regional study of methane, not a background study that would be much more extensive.

Delegate Mizeur asked Ms. Kenney how much money would be needed for a comprehensive baseline study, noting that the Departments previously looked at numbers in the \$1.8 million range. Clearly, she said, the methane study is not the baseline study the Commission had recommended. Ms. Kenney agreed that this study and the baseline study are not comparable. This study will give us information we don't have, provide insight into the groundwater system, and possible guide later sampling; it is not meant as a substitute for the baseline study. The scope of work and estimated cost of the baseline study are contained in the December 2011 report. This methane study is part of a different effort funded under the Safe Drinking Water Act.

The next item on the agenda was the revised schedule for the Marcellus Shale Safe Drilling Initiative. Ms. Kenney reminded the Commissioners that at the April meeting, they had suggested that the August 1, 2012 deadline for the Phase II Report on best practices be changed to December 31, 2012. She explained that the Departments had considered the amount of time that would be needed for the Commissioners to fully consider Dr. Eshleman's work, and the time to issue a draft and obtain public comment as required by the Executive Order. The Secretaries requested, and the Governor accepted a postponement of the dates. The new schedule calls for a draft Phase II Report no later than December 31, 2012, to be followed by a public comment period and a final Phase II Report no later than August 1, 2013.

Dr. Eshleman noted that his contract with MDE calls for him to deliver a summary of research and a literature search on best practices by June 15 and a recommended suite of best practices for Maryland by July 2, 2012. He suggested that these dates be changed to August 31 and September 30, 2012, respectively. Ms. Kenney noted that each of these deliverables will be made available to the Commissioners and discussed at Commission meetings. It might be possible to bring in subject matter experts to answer specific questions.

Commissioner Fritts asked if there is an opportunity for Commissioners to discuss the best practices research as it proceeds, as this is a critical piece. He felt that the Commission was not fully involved. Ms. Kenney reminded him that a draft scope of work for Dr. Eshleman was discussed at a Commission meeting and that in response to comments, the scope was amended. She also noted that the Commissioners have heard speakers on best practices.

Chairman Vanko asked if Commissioner Fritts is concern something may fall through the cracks. He answered that he wants to see the best possible final product. Chairman Vanko commented that one safeguard is the draft report will be available to both the Commission and the public, giving an opportunity for all interested parties to weigh in.

Dr. Eshleman added that as his team went through the list of best practices included in the scope of work, they identified another 10 important issues that they added. He reassured the Commissioners that the scope of work is appropriate and that he will do a thorough job.

Commissioner Weiss asked Commissioner Fritts if there is concern that the Advisory Commission will not have enough oversight of the study. He answered yes. Commissioner Weber said that he hoped there would opportunity for the Advisory Commission to be working closely with Dr. Eshleman and his team.

Commissioner Roberts asked Dr. Eshleman to describe where the Commissioners fit into the study. Dr. Eshleman stated that this is still to be worked out. Ms. Kenney pointed out that the Commission will have time to look at each deliverable. Commissioner Bunker noted there are three meetings between receipt of Dr. Eshleman's recommended suite of best practices and the date the draft report is due, giving time for review and comment.

Commissioner Kupfer stated that it strikes him as a pretty lengthy time to digest the information if public comment begins in January and the final report is not due until August. He asked whether this will further delay the decision about permitting gas wells. Secretary Summers said that we have all put a lot of time and effort into this process, and we will wait for the report before making decisions.

Commissioner Bunker asked that if the Best Management Practice document will inform the regulations, why is there such a gap between the draft and the August 2013 date. Secretary Summers clarified that the Department already has the authority to include whatever conditions it feels are necessary in a permit. Technically a permit could be drafted whenever we are ready, however we want to have the final report to guide us.

Commissioner Weber commented it would be helpful to have time to read and digest each report before discussing it at a meeting. He also questioned whether there should be a public meeting. Dr. Eshleman mentioned that a public hearing during the comment period could be useful.

Secretary Summers commented that when we have this report the Department can begin to develop specific requirements for a permit. Any permit will be subject to public review before a final decision is made whether to issue it. Everything we are doing is leading up to that very structured process.

Commissioner Roberts stated that it was his impression that, once the Department has presented a proposed regulation or permit, it is very hard to “stop the battleship.” He said it would be important to appoint a group to help and work with Dr. Eshleman’s team, and that a work plan is needed. Secretary Summers responded that the Department takes public comment very seriously and many permits have been pulled back as a result of public comment, as have regulations. However, he agreed it is a good idea to agree to a process ahead of time.

Chairman Vanko said that he thought it would be fine to have a small work group if Commissioners want to interface regularly with Dr. Eshleman. Commissioner Weber commented that the issue is transparency, coupled with fact the Commissioners are all volunteers. Commissioner Fritts agreed that a small group would help with transparency, and that if he became more engaged then he could more easily be an advocate for the final report. Senator Edwards agreed, asked that there be a summary of each section in plain English, not legalese; to make it easier for the Commissioners and for the public to understand. Commissioner Murray commented that the idea seems to be consistent with the goal of keeping everyone informed.

Lisa Nissley presented an overview of the Maryland legislative process. She described the General Assembly, the leadership, the players and the roles they play, and the schedule and milestones for the process. Commissioner Fritts asked whether one could find out which lobbyists represent which companies. Ms. Nissley indicated that that information is available on line on the website of the State Ethics Commission (<http://ethics.gov.state.md.us>).

After a short break, Brigid Kenney led a discussion on what the Commissioners would like to see in the 2013 session. A list was developed as part of the discussion and is attached. The following comments were made during the discussion.

Senator Edwards commented that people want to know who they are actually dealing with during the leasing process and certification of landmen is one way to do that.

Delegate Mizeur explained that the House Environmental Matters Committee was very interested in Marcellus Shale issues, but given the workload of the Committee, it could not devote sufficient time to all the bills. Therefore, the Committee concentrated on one bill: the fee bill.

Ms. Kenney noted that some of the bills introduced were inconsistent with other bills or left gaps. Chairman McIntosh said that she would like to see a more coordinated approach in 2013. A comprehensive package of bills is much more likely to pass.

Commissioner Roberts asked whether the goal is to develop bills that the Administration or agencies would introduce. Ms. Kenney commented that the discussion was a first step for the Commission to develop and refine its recommendations. The Departments would take that into account. At hearings on bills, the Departments are always asked about the position of the Advisory Commission.

Commissioner Kupfer asked whether last year's report was sufficient to communicate the Commission's recommendations to the legislature. Ms. Kenney responded that the recommendations in the December report were rather general; for example, we recommended that the General Assembly enact a comprehensive surface owner's protection act (SOPA), but we gave no specifics about what it should include. We recommended an appropriate State-level severance tax, but did not suggest a tax rate. This did not give the legislature sufficient guidance. Commissioner Kupfer asked if the Commission would sketch out what a SOPA would look like. Ms. Kenney responded yes.

Commissioner Valentine suggested that MDE and the industry could develop a mandatory form lease that would protect the landowner, stating for instance that all property will be returned to its original or better condition, and that minimum setbacks would be observed. Chairman Vanko asked Commissioner Kupfer to comment on this issue. He responded that he is not aware of any state that mandates a lease in this way.

Commissioner Weiss noted that some jurisdictions have enacted minimum protections, such as a 3-5 day waiting period where owners can back out. He commented that experience has shown that the people most in need of protection are those who don't have leverage to negotiate, but he questioned whether the form should be mandatory. It is good to provide some minimum protection, but you don't want to take away the parties' ability to negotiate for more. He thought such a provision might not be enforceable. He also said that in some cases groups of land owners have banded together to get more favorable leases.

Delegate Mizeur stated that the State is not collecting transfer taxes when leases are sold. We need a mechanism to track the transfer of leases and we need to tax the transfer.

Senator Edwards noted that a bill did pass to require that an intake sheet contain certain information when a gas lease is recorded. Most leases with a term less than seven years don't have to be recorded, and you may not want to require the recordation of all commercial and residential leases. Recordation is a time when taxes can be assessed, but recording the lease also protects the lessee's interest in the property.

Senator Edwards commented that many gas leases have a five year term with a right to renew. As for the value of the lease, he questioned how one would assess the value, which is likely to change constantly.

Commissioner Roberts said that if people knew the tax implication of a lease, they may know it is worth more than \$5/acre. Commissioner Weiss commented that you may be better off putting money into public outreach and education.

Commissioner Weber commented that this is complicated; we are thinking about proposed legislation that might address air, water, drilling, etc. How many different laws would we be affecting? Do we or the agencies know enough about these matters? The Commission has not heard much about air pollution regulations. Ms. Kenney responded that we can schedule a presentation on air pollution or other topics if necessary.

Commissioner Weber believes there should be a public lands protection act. Chairman Vanko commented that there public lands where the state owns the mineral rights and other public lands where the state does not own the mineral rights. Commissioner Fritts suggested creating an incentive to buy out interest in those leases to protect those public lands.

Commissioner Roberts mentioned that an ombudsman program could be helpful, especially to landowners. Also, he thinks that on the fee issue, the state agencies should take a lead role in engaging industry. Delegate Mizeur expressed her frustration with the industry for not offering to pay the fee on leases, and asked Commissioner Kupfer to take a lead on fees. Commissioner Kupfer responded that he knows of no other example where an industry has been asked to fund a study before there is any assurance that the activity will be allowed. He noted that at an earlier meeting, he asked if the Commission would go on record as supporting gas drilling if the results of the study showed that it could be done safely. Not all the Commissioners were willing to take that position. It seems unfair to extract money from an industry that may not even be allowed to operate in the state. There was an inconclusive discussion about how much money the industry is spending or making by selling and buying leases compared to the amount that would be necessary to fund the study.

Senator Edwards expressed his doubt about the validity of the cost estimate for the study, which he said has changed. Shouldn't the cost be reduced by the funds the Department has accessed for the best practices study? He mentioned that he asked Deputy Secretary Murray if any other industry has been asked to spend money to do a study for the state and Mr. Murray said he did not know of any. Senator Edwards believes Maryland should have done the study, not ask industry to do it. Industry might agree if they could recoup the cost, but they should be reimbursed if they end up not drilling. Deputy Secretary Murray responded that he thought some industries have put up funds up front, but perhaps that has been through permit fees. He pointed out that this industry alone presents the potential to impact the region's water, and asked whether water studies could be undertaken with general funds. Secretary Summers responded that this might have been possible in the past, but not today.

At this point public comment was taken.

Eric Robison, a local contractor, spoke in favor of mandatory lease provisions, which Maryland requires for contracts for services to protect the homeowner. He favors the licensing of landmen and making the information available on the internet. Lastly, he said the County should levy an impact fee and let the State use the severance tax money.

Ann Bristow Braitman of the Savage River Watershed Association spoke about the importance of water quality issues. She noted that other states didn't study the issues before allowing drilling and that they are now paying the price. She said that it is legitimate to ask the industry to pay upfront for the study that should have been done in these other states.

Dana Shimrock told the Commissioner that she is the person who signed the \$5/acre lease that is often mentioned. She thinks the issue of property values and tax base need to be explored. She mentioned an area in Washington County, PA, where a person was unable to get a mortgage, not because the property he wanted was burdened with a gas lease, but because of a gas lease on a

neighbor's property. She also asked Commissioner Kupfer about leases Chevron acquired that she alleges were entered into in reliance on false statements made by landmen or with persons not authorized to do business in Maryland. Commissioner Kupfer said he was willing to talk with her offline.

James "Smokey" Stanton expressed his appreciation that this meeting was held in Garrett County. He noted that setbacks might be necessary not only for residences, but also for barns and other agricultural features. He urged the Commissioners to consider the needs of agriculture, livestock and recreation. All interests need to be balanced.

Barbara Pritts, a realtor from Garrett County, discussed homeowner issues. She said that local banks in Washington County, PA, have a policy not to lend if the land has been leased. She stressed the importance of preserving the value of land. She said that Maryland should ban fracking like France did.

Don Carnes, a caver from Pennsylvania, noted that West Virginia had banned drilling in Greenbriar formation and other areas where there are caves or mines. He urged Maryland to consider the risks of drilling in similar areas.

Chris Pritts commented that he thought the federal government or industry should fund an all out effort to devise a way to hydrofrack without using chemicals. Even if the government had to do it, it would be money well spent.

The meeting was adjourned at 1:40 pm. The next Commission meeting will be on June 15 at a time and place to be determined.

Attachment to Minutes of May 18, 2012, meeting of the Marcellus Shale Advisory Commission

What should be addressed through legislation

1. Landmen
 - a. Professional license/Certification?
 - b. Mandatory notice of landowner rights
2. Leases
 - a. Model lease?
 - b. Mandatory provisions?
 - c. Minimal protections
 - i. Time to rescind
 - ii. Provisions deemed unconscionable and unenforceable
 - d. Disclosure
 - e. Recordation and Registry
 - f. Term of lease and right of renewal
3. Taxes
 - a. Transfer
 - b. Recordation
 - c. Real estate taxes on value of lease?
 - i. Difficulty of appraisal
 - ii. Alternative is to tax the resource as it is produced
 - d. Severance
 - i. Consider local tax already levied
 - ii. What will the severance tax be used for; how much is needed; when will it be needed
 - iii. Should the fund be capped
 - iv. What do other states impose as severance tax
4. Location of wells relative to property boundary (and other land uses/buildings, etc.)
 - a. Different for different target formations
 - b. Extent of fracing as well as location of well
 - c. How to protect other landowners
 - d. What do other states do

- e. Determined by State or by counties and municipalities
- 5. Bond
 - a. Cap on performance bond
- 6. Special protection for public lands
- 7. Incentive program for buying back the mineral rights to public land or land that is especially valuable
- 8. Surface Owner's Protection Act
 - a. Retroactive?
 - b. Adopt common law or change it
 - c. Negotiation over extent, nature, locations of surface activities
 - d. If no agreement, who decides
 - e. Compensation
 - f. Arbitration/mediation/ombudsman
- 9. Study Fee Bill
 - a. What would industry agree to?
 - b. Provision for industry to recoup costs?
 - c. Clarify exactly what will be studied and how much it will cost
- 10. Transportation, treatment, recycling and disposal of wastes