## Minutes of April 22, 2013 meeting of the Marcellus Shale Safe Drilling Initiative Advisory Commission

Approved July 22, 2013

The Commission held its fifteenth meeting at the Lane University Center at Frostburg State University. In attendance were Chairman David Vanko and Commission members Senator George Edwards, Delegate Heather Mizeur, Commissioner James Raley, Commissioner William Valentine, Mayor Peggy Jamison, Shawn Bender, Steve Bunker, John Fritts, Jeffrey Kupfer, Paul Roberts, Nick Weber and Harry Weiss. Also in attendance were staff of state agencies and members of the public.

Chairman Vanko called the meeting to order.

Brigid Kenney and Christine Conn provided an overview of a draft strawman report on Best Practices, a copy of which has been posted on MDE's website with these minutes. They stressed that this draft was for discussion purposes only, did not necessarily reflect the positions of the Departments or any individual, was not complete or fully developed, and was subject to change. Whereas Dr. Eshleman's report was organized by the resources that were being protected, this report is structured the way regulations would be issued. The topics include Comprehensive Planning, location, setbacks, siting, engineering and environmental issues, monitoring, recordkeeping, and reporting, with a chapter for miscellaneous issues. For context for the following discussion points, refer to the draft document.

Dr. Conn presented the concept of the Comprehensive Gas Development Plan (CGDP). Commissioner Weber suggested that an environmental assessment be made, and it was noted that the current guidelines for the environmental assessment will be updated by MDE's Science Services Administration. When application is made for an individual permit (as opposed to the CGDP) additional assessment may be required.

Commissioner Kupfer questioned whether a mandatory CGDP is realistic. Other states don't require a CGDP. Companies generally drill an exploratory well, evaluate its productivity, and then make decisions about additional wells. Would the CGDP apply to exploratory wells? Small companies may not be able to comply. A planning horizon of 10 years is too long. The State needs to spell out clear criteria for deciding whether to approve a CGDP. The State should look at alternative approaches because this will discourage any company from drilling here.

Chairman Vanko asked when the plan will become public. The strawman draft is a public document, but it will be revised before it is presented for public comment. The State will hold a public meeting on the draft plan and receive public comment. After the comments are considered, the best practices report will be finalized.

Commissioner Valentine asked how this plan relates to local land use requirements. It was noted that an applicant for a well permit must comply with all local zoning and other land use regulations.

Commissioner Roberts asked whether a CGDP could be amended during the 10-year time frame. That is a possibility. If it is amended, there should be public input. Is 10 years the right time frame?

Permit conditions could be imposed in individual permits.

Commissioner Fritts said the best practices are an important step, but where will the money for enforcement come from? It was explained that MDE can impose a permit fee sufficient to cover inspection and enforcement.

Commissioner Weiss commented that the CGDP is good in theory, but would be difficult to carry out. We should consider whether we want two layers of protection (CGDP plus individual permit) or if everything could be managed through the individual permit. Perhaps setbacks can address the issues that are involved in the CGDP.

Commissioner Bender said that the planning concept is good, but that exploratory wells should be treated differently. He agreed with Commissioner Weiss that imposing a CGDP overlay on individual permits might be redundant.

It was noted that rural gathering lines are largely unregulated. Commissioner Roberts urged that the State assert more control over pipelines and compressor stations if this could be done without infringing on federal law. Also, could the State take more control over the leasing agreements for privately-owned land? Dr. Eshleman's report highlighted the comprehensive development planning process on state lands, where Pennsylvania includes many protections in the lease itself.

Commissioner Kupfer commented that we would need to clearly define the nature of a change that would require a revision to the CGDP. Would a change such as a longer lateral borehole require the full process? Chairman Vanko asked whether a company could submit multiple plans for different geographic areas or for exploration versus production.

Mayor Jamison noted that the State issues exploratory permits for strip coal mining; could there be an analogous process for gas wells? It was noted that Maryland allows exploratory permits for gas wells, but only where the reservoir has not been proven to be productive. A separate permit must be applied for and issued before the exploratory well can be put into production.

Commissioner Weber asked what the State's policy is on leasing the mineral rights to State lands. Dr. Conn noted that the current position is that the State will not lease those mineral rights, but that the policy could be reconsidered.

Senator Edwards noted the need to coordinate the CGDP with the county's comprehensive planning cycles. He noted that the wind turbines probably caused more forest fragmentation in Maryland than natural gas drilling ever would. He urged that there be no duplication of effort, and that hearings on multiple permits required for the same project be combined for the convenience of the public. He also suggested that the State act on applications within a definite time period. Chairman Vanko wondered whether the State could be overwhelmed with permit applications and unable to meet the schedule.

Commissioner Roberts said that a 2,000 foot setback may not be enough. He expressed concern over whether fractures in the target formation might communicate with other fractures. He stated that the companies had gathered a lot of geological data and that data should be shared.

Chairman Vanko commented that a 300 foot setback from parks may not be enough; it should be 600 feet. Some other Commissioners agreed.

Commissioner Kupfer said that we need to clarify the process, public disclosure, and opportunity to comment, for waivers as well as other parts of the permitting.

Commissioner Roberts and Delegate Mizeur said that the setback from private wells should be the same as for wells that supply public drinking water systems. Commissioner Weber urged greater protection for drinking water reservoirs.

Chairman Vanko questioned the meaning of "forest conservation" and suggested that it be recast as a conservation easement or forest conservation banking.

Commissioner Fritts said that stormwater and sediment were a big concern, as were roads. Who bears the cost?

Commissioner Kupfer asked whether a zero discharge pad is practical. Could the State even issue a permit for a zero discharge pad? It was noted that there were examples of permits for zero discharge operations. He further noted that in some cases open top tanks may be safer than closed tanks. Also, if the State is serious about using acid mine drainage (AMD) for hydraulic fracturing, it needs to address the issue of a company's liability for the AMD.

Commissioner Bunker recommended that we look at Penn State's guidelines for dirt and gravel roads.

Commissioner Weber expressed alarm that there were no regulations governing pipeline alignment and so few regulations for rural gathering lines. What would it take to have the PSC regulate these lines? They must be properly designed and constructed so they don't leak. He also suggested that the State should identify what roads will be used, document the conditions, and require industry to repair damage. Commissioner Valentine noted that some roads are federal, some State, and some local. It was noted that the State requires permits and bonding for oversize and overweight vehicles, and that trucks pay taxes that are used for road repair.

Delegate Mizeur wondered whether we were reviewing the draft report piece by piece or as a whole, and whether the Advisory Commission was supposed to come to a consensus. She expressed concern that Dr. Eshleman had recommended 100% recycling of flowback whereas the draft said "to the maximum extent practicable." She also questioned how trade secrets were to be defined, and it was noted that the draft proposed using federal law as the standard. Commissioner Weber noted that first responders need to know what chemicals are on site.

Commissioner Bunker questioned whether Maryland has the authority to prohibit the use of certain chemicals. Should the identity of chemicals be under recordkeeping rather than disclosure? It was noted that MDE had to approve all the additives under existing law.

It was noted that first responders would have access to information about even trade secret chemicals: the class of chemicals, hazards, how to clean up spills, etc., even if the specific chemical were not identified. Under the draft, MDE would know the identity of the trade secret chemical, would keep it confidential, and disclose it only under certain conditions.

The Toxic Release Inventory is under a federal act on Community Right to Know. There are quantity thresholds for reporting. Commissioner Kupfer noted that Material Safety Data Sheets are kept on site; what is the purpose of disclosure? It was noted that it would give the State an opportunity to review the information and it might encourage companies to use less toxic chemicals.

Commissioner Weber asked about the prohibition of chemicals and whether there is a standard for drinking water. It was noted that there are drinking water standards for some toxics, and that these apply uniformly.

Delegate Mizeur suggested that the State produce a side-by-side comparison of the Eshleman recommendations and the recommendations in the State's draft report. We shouldn't reject a recommendation just because it would require a study and funding. Staff reiterated that all the recommendations of the Eshleman report would be considered by the State, but that this report is on best practices, and not all Dr. Eshleman's recommendations were practices.

Commissioner Kupfer said that a pilot hole does not have to be drilled for each pad or drilled all the way to the target formation. Chairman Vanko agreed that this might be tightened up. It was agreed that more discussion was appropriate on the pilot hole.

Commissioner Weber noted that we need to spell out criteria for onsite disposal of cuttings.

The Eshleman report is not specific as to types of cement, but recommends using API guidelines. Could we be more specific? Commissioner Kupfer pointed out that the API recommendations might not be appropriate for all geological settings.

Commissioner Kupfer noted that the draft calls for a report on the extent of the fracturing be provided to MDE. Would this become public information? It might be proprietary. It was noted

that the public was concerned about fracture growth beyond the target formation, and that this information could address that concern.

Commissioner Kupfer also noted that it may not be feasible to recycle fracturing flowback and produced water if the company was not immediately developing other wells. Can water be taken to another pad? This should be spelled out.

The recommendation is that limited flaring is allowed, venting gas is not allowed. Commissioner Kupfer noted that a company would cap a gas well until pipelines were available rather than vent or flare the gas.

Commissioner Bender noted that access to the electric grid is limited and that electrical lines have to be buried, too. He suggested that bringing in liquefied natural gas or propane might be more environmentally sound.

It was noted that some of the air standards in the draft report were more stringent than those in the Eshleman report. These were recommended by MDE's Air and Radiation Management Administration. There was a brief discussion of the federal law that forbids the disposal of fracking flowback and produced water to surface water.

There were questions about noise. Staff noted that the noise levels must be met at the boundary of the receiving property. The State sets standards for industrial, commercial and residential properties, but local governments can set more stringent standards. Except for setting statewide standards, the entire noise program is administered by local government. Could more stringent standards be required for sensitive natural areas? Would camping areas be considered residential? Perhaps Savage River State Forest would be a good place to consider site-specific setbacks and standards.

The meeting adjourned at about 1:30, just before beginning any discussion of the recommendations on invasive species. The discussion would continue at the next meeting.