

CHESAPEAKE BAY COMMISSION
Williamsport, PA
November 6-7, 2014

The Chesapeake Bay Commission held its fourth quarterly meeting of 2014 on Thursday, and Friday, November 6-7, 2014, in Williamsport, PA.

The following Commission members and staff were in attendance:

Senator Richard Alloway (arrived dinner on Thurs., & Friday)
Deputy Secretary Russ Baxter
Senator Mike Brubaker (Thursday only)
Deputy Secretary Frank Dawson
Representative Garth Everett
Maryland Citizen Member Bernie Fowler
Senator Emmett Hanger
Deputy Secretary Kelly Heffner (arrived dinner on Thurs., & Friday)
Delegate Scott Lingamfelter
Senator Thomas "Mac" Middleton
Representative Ron Miller
Virginia Citizen Member John Reynolds
Senator Frank Wagner
Rear Admiral Ricky Williamson

Staff: Ann Swanson
Jen Donnelly
Jack Frye
Bevin Buchheister
Marel King

Members not in attendance:
Delegate David Bulova
Pennsylvania Citizen Member Warren Elliott
Senator Brian Frosh
Delegate James Hubbard
Delegate Maggie McIntosh
Delegate Margaret Ransone
Representative Michael Sturla
Delegate John Wood

Thursday, November 6, 2014

Chairman Ron Miller called the meeting to order at 8:35 a.m. Delegate Lingamfelter moved to approve the minutes of the previous meeting. Senator Middleton seconded the motion which was approved unanimously. Delegate Lingamfelter then motioned to approve the agenda for the meeting. Senator Middleton also seconded that motion which was approved unanimously.

Pennsylvania Senator Gene Yaw, representing the 23rd Senatorial District which includes Williamsport, provided some welcoming remarks and asked us while on our tour to “look for what you don’t see.” He was followed by Commission member Representative Garth Everett, who represents the 84th Legislative District which also includes Williamsport. Chairman Miller then introduced the new Department of Defense Liaison to the Commission, Rear Admiral Ricky Williamson, Commander, Navy Region Mid-Atlantic.

The agenda for the day focused on shale gas development, which is occurring in Pennsylvania’s portion of the Chesapeake Bay watershed and may occur in other parts of the watershed in the near future.

The first speaker was David Yoxtheimer, P.G., Extension Associate with the Penn State Marcellus Center for Outreach and Research, who provided a “Shale Gas 101” presentation. He described the evolution of the oil and gas industry in Pennsylvania from the nation’s first commercial oil well at Titusville in 1859 to the current shale gas development. The amount of shale gas that could be available in Pennsylvania is globally significant and Pennsylvania is now a net exporter of methane and propane. Marcellus Shale is the largest gas reservoir in the world and can provide the entire U.S. with a 20 year supply of gas. They are now producing 20% of the gas used in the U.S.

There have been over 8,000 shale gas wells drilled in Pennsylvania, with almost 5,000 of them producing gas. The number of producing wells has been increasing due to new pipelines becoming available to transport the gas. Eight to twenty wells can be located on each well pad, and approximately five acres are disturbed for each well pad plus two to three additional acres of disturbance per well for roads, pipelines and other associated activities.

The second speaker, Dr. Kurt Gottschalk of the USDA Forest Service, summarized a report he authored on behalf of the Chesapeake Bay Program’s Scientific & Technical Advisory Committee, on the environmental impacts of shale gas activity in the watershed. The Marcellus Shale deposit underlies 43% of the Chesapeake Bay watershed and 85% of the Susquehanna River watershed. Potential impacts are both water-based and land-based. Mr. Gottschalk gave us a history lesson – fracking has been taking place since the late 1800s and originated in Torpedo, PA, where they used artillery shells or dynamite to crack the shale. Hydraulic fracking started in the 1960s and the industry has now added horizontal drilling. He went on to explain the report identified a few topics for future research, including quantification of the sediment loads from well pads in development and restoration cycle, and from pipelines, access roads and other associated activities, and identification of the trends in current BMP use, effectiveness and enforcement. The report also provided some recommendations to the Bay Program partners, including incorporation into the Chesapeake Bay Watershed Model of land use trends associated with shale gas activity; coordination of monitoring networks across agencies and regions, and viewing permits on a project basis rather than a site by site basis.

Next was a panel of experts representing government, environmental advocacy and industry, describing their respective view of the regulation of shale gas development. First was Scott Perry, Deputy Secretary for Oil and Gas at the Pennsylvania Department of Environmental Protection. Pennsylvania

currently oversees over 8,000 “unconventional” (e.g. Marcellus) gas wells and over 127,000 conventional gas wells and has handled about 100 gas migration incidents. There are 227 inspectors in the oil & gas program. In 2010 there were 1,281 violations found for an 80% violation rate on Marcellus wells. In 2013, there were twice the number of inspections but half the number of violations. Act 13 of 2012 updated the Commonwealth’s standards for well drilling, and additional updates have been proposed to further address surface activities. Mr. Perry said the most important environmental issue with fracking is managing the chemically laden wastewater that cannot be treated by conventional wastewater plants. He said the recycle rate for fracking fluid is 82% because of limited disposal options. Water discharges must now meet drinking water standards.

The second panelist was Cindy Dunn, President & CEO of PennFuture, who highlighted the habitat and physical impacts of forest fragmentation and right-of-way development, especially with the increase in pipelines being installed. She also recommended an evaluation of the cumulative impacts of drilling and pipeline activity, with a focus on erosion and sediment control right-of-way use and re-vegetation, and tracking of water withdrawal and wastewater disposal. Additionally, since methane is a greenhouse gas that is 84 times more potent than CO₂, a federal program to comprehensively address methane emissions and leaks from wells, pipelines and transfer stations was recommended.

The final panelist was Stephanie Catarino Wissman, Executive Director of the Associated Petroleum Industries of PA. She emphasized the industry’s need for regulations to be clear and interpreted consistently across a jurisdiction. For example, there is no numerical definition of “fresh groundwater” for purposes of well casing standards. Different companies then use their own different interpretations. Similarly, “waters of the U.S.” is interpreted differently across different federal agencies and between states and federal agencies. She also addressed the issue of re-vegetation of well sites, the manner of which is determined by the landowner and is part of the lease negotiation.

Chairman Miller then recessed the meeting so that members could embark on a tour of shale gas drilling sites in the greater Williamsport area. DCNR and Anadarko Petroleum Corp. both presented to us during this tour.

Friday, November 7, 2014

Chairman Miller reconvened the meeting at 9:40 a.m.

Virginia Director, Jack Frye provided an update on the Commission’s work with Penn State to look at livestock stream exclusion policies across the member states. A draft report is expected to be ready for member review in January.

Executive Director, Ann Swanson reported on the Commission’s work with its member states to secure Land & Water Conservation Fund dollars for the Chesapeake region’s Large Landscape Collaborative project. Senator Middleton requested a list of likely areas in the watershed that could receive this funding.

Maryland Director, Bevin Buchheister then reported on work within the Chesapeake Bay Program to develop management strategies for each of the outcomes in the new Bay Agreement. The Commission has signed on to each outcome, and staff will be prioritizing participation in the development of individual management strategies.

Bruce Michael, Director of the Resource Assessment Service of the Maryland Department of Natural Resources, provided an update on the relicensing process for Conowingo Dam and the potential impacts of the dam on water quality in the Bay. A report is expected later in November on the impacts of the dam, which has reached “dynamic equilibrium.” Preliminarily, it appears that it is not really the sediments that are causing negative effects, but the nitrogen and phosphorus that is associated with the sediment. However, it is unknown how much of those nutrients are bioavailable when they reach the Bay. Regardless, sources upstream of the dam deliver more sediment and nutrients, and therefore have more impact on the Bay, than the scoured sediment and associated nutrients from behind the dam. It is recommended that Phase III WIPs under the Chesapeake Bay TMDL should take this into account.

The findings on Conowingo are among many that will be addressed during the Bay Program’s “Mid-Point Assessment” related to the TMDL. The assessment will feature updates to the inputs, assumptions and calibration that inform the Chesapeake Bay Watershed Model. Pennsylvania Director Marel King provided a brief update of this work which is already underway to meet a 2017 deadline.

The final segment of the meeting focused on another component of the Mid-Point Assessment, which is evaluation of our progress toward the goal to have 60% of the necessary practices to meet the TMDL in place by 2017. Rich Batiuk, Associate Director for Science, Analysis and Interpretation at the Chesapeake Bay Program Office, explained that state commitments and progress reporting indicate that we are on track for phosphorus and sediment, but water quality monitoring is showing a different result. Both modeled progress and monitoring data show us behind on nitrogen. States are falling short on certain milestone commitments meaning that we will need to make-up additional ground by 2017.

Kim Coble, Vice President for Environmental Protection and Restoration at the Chesapeake Bay Foundation, provided state-specific information on progress by sector, along with the practices that states are relying on. Due to a significant amount of member discussion on this topic, the Commission will revisit this information at its January meeting and focus on source sectors and recommendations for action.

Chairman Miller adjourned the meeting at 12:05 p.m.