AELR Hearing on COMAR 26.19.01

December 20, 2016
2015 Legislation

• “The Department shall adopt regulations to provide for the hydraulic fracturing (HF) of a well for the exploration and production of natural gas in the State.”

• The regulations may not be effective, nor may the Department issue a permit for HF, until October 1, 2017.

(Env. Art. § 14-107.1; Ch. 480 of 2015)
Purpose of Proposal

- Fulfill statutory obligation to adopt HF regulations
- Update regulations adopted before techniques like HF and horizontal drilling were widely used in this region
- Ensure any future oil and gas exploration and production occurs in a manner protective of public health, safety, the environment, natural resources, and surrounding communities
History

• Three years of meetings of the Marcellus Shale Advisory Commission (2011-2014)

• Three-part study published by the Department and DNR (2011-2014)

• Initial regulatory proposal with public comments (January 2015)

• Three public meetings on a series of issue papers (June 2016)

• Public comments received through July 2016
Overview of Proposal

• Striving for reasonable and balanced regulations with protective and achievable requirements

• Would be the most protective and comprehensive shale gas development regulations in the U.S.

• Many provisions of the January 2015 proposal remain unchanged

• Some changes and additions in response to comments
Protection of Drinking Water and Aquatic Habitat

• Well location
  – 2,000 ft from private drinking water well
  – 1,000 ft from wellhead protection area (public well)
  – 2,000 ft from surface water intake
  – 300 ft from streams and wetlands of special state concern
  – 100 ft from other wetlands
  – Prohibited within watersheds of Broadford Lake, Piney Reservoir, Savage Reservoir, and Deep Creek Lake

• Baseline data and environmental assessment
  – 1 year of baseline water monitoring, including private water wells within 2,500 feet
Protection of Drinking Water and Aquatic Habitat

• Drilling and well construction
  – Protect potential drinking water zones with four concentric layers of steel casing and cement
  – Integrity and pressure testing during and after well construction, with certification of well integrity before conducting any hydraulic fracturing

• Operation
  – Lined well pad with secondary containment for tanks to capture any surface spills or leaks
  – Ongoing monitoring of water quality and replacement of contaminated water supplies, with presumption of causation within 2,500 ft of well
Protection of Air Quality

- Best available technology (BAT) for control of air emissions
- Leak detection and repair
- Reporting and offset of methane emissions from the well pad
- Baseline and ongoing air monitoring will involve regional and targeted local monitoring, rather than a pad-specific approach
Public Participation and Access to Information

• Mandatory comprehensive development plan with opportunity for public comment

• Public participation in the permitting process: public meeting and written comment

• Disclosure of chemical information
  – Trade secret information must be disclosed to the Department and (where necessary) to medical and public health professionals
Proper Management of Wastes

• Maximize recycling of flowback and produced water, with a requirement for at least 90% recycling unless demonstrated to not be practicable

• No disposal of flowback or produced water via underground injection or land application

• Wastewater treatment facility must have specific approval in its discharge permit to accept flowback or produced water

• Waste must be tested for radioactivity and disposed in accordance with federal, state, and local law

• Only fresh water may be stored in a surface impoundment
Regulatory Oversight

• Department approval of proposed start date for drilling a new well.

• Each operator may drill and fracture only one well at a time

• Detailed requirements for plugging and reclaiming wells (including bonding of at least $50,000 per well), and identifying and locating historical abandoned wells

• Insurance requirements for personal injury, property damage, and environmental pollution liability

• Department authority to revoke permits or issue administrative orders, including to stop work and conduct corrective actions
Other Requirements Applicable to Natural Gas Development

- Sediment control and stormwater management at State and federal levels
- Non-tidal wetlands requirements
- Water appropriation and use
- New federal requirements related to methane emissions and pipeline safety
Additional information:
www.mde.maryland.gov/marcellus