



MDE Maryland Department of the Environment

Maryland's Draft Marcellus Shale Risk Assessment – Status of Public Comments

Presentation to the Marcellus Shale Advisory Commission

11/25/14





Maryland's RA Consequences

Consequence	Definition
Minor	Slight adverse impact on people or the environment; causes no injury or illness
Moderate	Considerable adverse impact on people or the environment; could affect the health of persons in the immediate vicinity; localized or temporary environmental damage
Serious	Major adverse impact on people or the environment; could affect the health of persons in a large area; extensive or permanent environmental damage
Insufficient Data to Determine	Lack of available data to confidently assign consequence

Ricardo RA Consequences

From *Shale Gas Risk Assessment for Maryland*, Mark Broomfield, Ricardo-AEA, prepared for Chesapeake Climate Action Network and Citizen Shale, 19 August 2014.

- **Slight:** Slight environmental effect— e.g. a planned or unplanned discharge which does not result in exceedances of an environmental quality standard
- **Minor:** Minor environmental effect – e.g. a planned or unplanned discharge which could result in exceedances of an environmental quality guideline in the **immediate vicinity** of the release point, but which would not be expected to have significant environmental or health effects
- **Moderate: Localized environmental effect** – e.g. a discharge or incident resulting in potential effects on natural ecosystems **in the vicinity** of the release point or incident; ongoing effects on people **in the vicinity** of a site due to impacts such as noise, odor or traffic
- **Major:** Major environmental effect – e.g. an ongoing discharge resulting in **persistent exceedances** of an environmental quality standard; **permanent degradation** of a protected habitat
- **Catastrophic:** Massive environmental effect – e.g. a pollution incident resulting in harm to the health of members of the public over a **wide area** due to contamination of drinking water supplies; accident resulting in death or serious injury to workers and/or members of the public.



Comments Received From

Peer Reviewers

Mark Boling – Southwestern Energy

Kate Konschnik – Policy Director Harvard Env.
Law

Kate Sinding - Natural Resources Defense Council

Michael McCawley – WVU School of Env. Health

Hannah wiseman – FSU Law



Comments Received From, cont.

Commissioners

Commissioners Vanko, Bristow, and
Weber



Comments Received From, cont.

Agencies/Organizations

1. State Highway Admin.
2. The Nature Conservancy
3. Halliburton
4. Ches. Climate Action Network
5. MD. Env. Health Network
6. Physicians for Social Responsibility
7. Alliance of Nurses for Healthy Environments
8. Food and Water Watch
9. Chesapeake Water Keepers
10. American Petroleum Institute
11. The Greater Cumberland Committee
12. Energy and Property Rights Coalition
13. Maryland Conservation Council
14. State Water Quality Advisory Commission

General Public

1. 18 members of the public with specific RA comments
2. Thousands of comments voicing opposition to fracking but with no specific comments on the RA

Comment Themes

- 1. Failure to address climate change**
- 2. Potential to decrease property values/economic downsides**
- 3. Surface and groundwater impacts from spills, releases or well failure**
- 4. Critical to have adequate compliance/enforcement.**
- 5. Impacts from Explosions/emergency response capability**
- 6. Need for more risk categories, more use of insufficient info., or too much use of N/A**
- 7. Failure to address on-site worker risks**
- 8. Failure to consistently address cumulative risks**

Comment Themes, cont.

- 10. Traffic severity underestimated**
- 11. Need to clarify uncertainty in assessments**
- 12. Overall underestimation of Risks.**
- 13. Best practices not in regulation, so can't assume**
- 14. Recommendations for additional specific best practices**
- 15. Certain risks and UGWD phases (i.e., well plugging and abandonment, refracturing) not fully explored or not explored at all.**
- 16. Potential for valley air stagnations**
- 17. Inconsistency in document formatting, presentation, and consistency both across RA and between the Exec Summary and RA.**

Comment Themes, cont.

18. No differences in risk ranking between scenarios

19. More clarity needed around how risk conclusions were made

20. Insufficient data risks not appropriately highlighted or reflected in the risk ranking

Next Steps

- Reviewing all comments and prioritizing those with change potential.
- Will ensure consistency between final report and RA findings
- Tentative date of Mid-January for final response to comments and final revised RA

Q&A



Matthew C. Rowe

Deputy Director

Science Services Administration

Maryland Department of the Environment

matthew.rowe@maryland.gov

410-537-3578

