



News for Immediate Release

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DEP Study Shows There is Little Potential for Radiation Exposure from Oil and Gas Development

Harrisburg – The Department of Environmental Protection (DEP) today announced the results of its TENORM Study, which analyzed the naturally occurring levels of radioactivity associated with oil and natural gas development in Pennsylvania. While the study outlines recommendations for further study, it concluded there is little potential for harm to workers or the public from radiation exposure due to oil and gas development.

“The study report is the culmination of a multi-year effort and represents what we believe to be the most comprehensive radiological study of the oil and gas industry ever conducted,” Vince Brisini, DEP Deputy Secretary for Waste, Air, Radiation and Remediation said. “While the recommendations for future actions contained in the report call for additional studies and efforts, we now have data to inform the management of natural gas resources and resultant wastes for environmental and health protection.”

In January 2013, at the direction of Gov. Tom Corbett, DEP began studying radioactivity levels in flowback waters, treatment solids and drill cuttings, as well as transportation, storage and disposal of drilling wastes. This included a study of radon levels in natural gas to ensure that public health and the environment continue to be protected.

In summary, the peer-reviewed study concluded that:

- There is little potential for additional radon exposure to the public due to the use of natural gas extracted from geologic formations located in Pennsylvania.
- There is little or limited potential for radiation exposure to the public and workers from the development, completion, production, transmission, processing, storage, and end use of natural gas. There are, however, potential radiological environmental impacts from fluids if spilled. Radium should be added to the Pennsylvania spill protocol to ensure cleanups are adequately characterized. There are also site-specific circumstances and situations where the use of personal protective equipment by workers or other controls should be evaluated.
- There is little potential for radiation exposure to workers and the public at facilities that treat oil and gas wastes. However, there are potential

radiological environmental impacts that should be studied at all facilities in Pennsylvania that treat wastes to determine if any areas require remediation. If elevated radiological impacts are found, the development of radiological discharge limitations and spill policies should be considered.

- There is little potential for radiation exposure to the public and workers from landfills receiving waste from the oil and gas industry. However, filter cake from facilities treating wastes could have a radiological environmental impact if spilled, and there is also a potential long-term disposal issue. TENORM disposal protocols should be reviewed to ensure the safety of long-term disposal of waste containing TENORM.
- While limited potential was found for radiation exposure to recreationists using roads treated with brine from conventional natural gas wells, further study of radiological environmental impacts from the use of brine from the oil and gas industry for dust suppression and road stabilization should be conducted.

To read the entire report and a complete list of its observations and recommendations, visit www.dep.state.pa.us, keyword: TENORM.

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