

## **CONTINUING EDUCATION WEBINAR SERIES**

Date: Wednesday, July 9, 2014

**Time: 12-1pm** 

Location: <a href="http://connect.ag.vt.edu/vmn\_at7/">http://connect.ag.vt.edu/vmn\_at7/</a>

## Hydraulic Fracturing for Natural Gas in Virginia

## Presented by: David Spears, Virginia Department of Mines, Minerals, and Energy

Hydraulic fracturing (also known as "hydrofracking," "fracking," and "fracing") is an industrial process used to expand the capacity of oil and natural gas wells to produce from unconventional tight reservoirs such as shale. The process involves pumping a mixture of water, sand, and chemicals into a well under high pressure to fracture the rock near the wellbore and release the hydrocarbons contained in microscopic pores. Hydraulic fracturing has been used in the oil and gas industry for over 50 years, but in the past decade it has been combined with the relatively new technique of horizontal drilling to gain access to previously inaccessible energy resources. This presentation will focus on hydraulic fracturing in Virginia and the laws, regulations, and agencies governing its use.

David Spears is the State Geologist of Virginia, a position residing in the Department of Mines, Minerals, and Energy. He is responsible for coordinating the work of a small group of geoscientists focused on mapping Virginia's geology, mineral resources, energy resources, and geologic hazards such as earthquakes, landslides, and sinkholes. In recent years, the State Geologist has played an increasing role in responding to public policy issues such as offshore drilling, natural hazards, and hydraulic fracturing. David received a BS in Geology from Lafayette College and a MS in Geology from Virginia Tech. He began his professional career in the petroleum industry before coming to Virginia state government in 1993.