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Subject: : Conservation

Topic: : Fracking Issues 101

Re: Fracking Issues 101

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URL:

Here's more actual science from the US Geologic Service involving radioactive radium related to data available re: hydrofracking (in addition to the uranium problem):

"As a radioactive element, radium may represent a potential health hazard if released into the environment. The half-lives of the two principal isotopes of radium, Ra-226 and Ra-228, are 1,600 and 5.75 years, respectively (Akovali, 1996; Artna-Cohen, 1997), and approximately 10 half-lives are required for a radioactive element to decay to negligible quantities. Chemically, radium behaves in a manner similar to calcium and is capable of bioaccumulation in plants and animals. There is a significant body of research aimed at quantification of radium uptake in crops and livestock that make up the human food chain."

Radium is released by the process of hydrofracking.

"The term "produced water" in this report represents water produced from an oil or gas well at any point during its life cycle. The term, therefore, includes waters produced immediately after hydraulic fracturing, with compositions close to those of the injected fluid, as well as waters produced after months or years of production, whose compositions resemble formation water."

<http://pubs.usgs.gov/sir/2011/5135/pdf/sir2011-5135.pdf>

AND

"Radioactive waste expert Dr. Marvin Resnikoff", argues "that Marcellus Shale drill cuttings are unusually radioactive, owing to a high concentration of Radium-226, a decay product of Uranium-238 which is known to occur in high concentrations in shale formations that originate in briny conditions of ancient evaporative sea water; that Ra-226 (unlike U-238) is soluble in water; and that, as a result, brine and cuttings returned to the surface during well development concentrate Ra-226 by separating the radium from the uranium remaining in the formation. Ra-226 in the formation is about 25 times more radioactive than background radioactivity in the surface environment and the water surrounding wet drill cuttings as they come up from a wellbore can be as high 1,000 times background. Dr. Resnikoff had been working for over ten years in the Barnett Shale gas fields in Texas, which is a similarly briny shale formation."

<http://www.garyabraham.com/ChemungLF.html>

Info on Dr. Marvin Resnikoff: <http://www.rwma.com/mr.htm>