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1. In section 6.7 of the SGEIS, there is a description of NORM, or Naturally Occurring Radioactive materials. This section mentions that there are high levels of NORM in the Marcellus shale and that "activities that have the potential to concentrate these constituents through surface handling and disposal may need regulatory oversight to ensure adequate protection of workers, the general public and the environment". This section goes on to say that hydro-fracturing of gas wells can bring high levels of NORM to the surface suspended in production brine and that Radium-226 is the primary radionuclide of concern from the Marcellus.

Table 6.30 in this section shows that the half-life of Radium 226 is 1600 years. That means that wherever it is deposited, it will be present for a very, very long time.
The section goes on to note that disposal of NORM-contaminated exploration and production wastes is a major component of the oil and gas NORM issue.
At the end of this section, the SGEIS notes that the disposal of processed and concentrated NORM in the form of water treatment waste is subject to regulation under part 380, which states that this waste is prohibited in part 360 regulated solid waste landfills and can only be stored in low-level radioactive waste disposal sites.

This section of the SGEIS highlights the problem of disposing of radioactive produced brine. Hydrofracturing a single well could result in thousands of gallons of produced brine, which would presumably contain NORM. However, there is no method described in the SGEIS which could be used for disposal of this considerable volume of radioactive, salty liquid. If the produced brine contains low-level radioactive waste, then there would need to be a facility; possibly many facilities built to contain the millions of gallons of produced brine expected to be generated from the drilling of thousands of wells in New York State. It seems that the DEC needs to determine a method for disposal of this radioactive NORM.