**What is in the salt used to melt snow on our roads?**

Large quantities of salt water brine are produced in the process of fracking oil and gas wells and recovering the oil or gas. The produced brine has been around for a long time, but the quantity of brine produced has risen dramatically in recent years as fracking has increased. The regulation of the radioactive brine is somewhat clouded by the fact that the material is considered a "naturally occurring radioactive material". A recent article in Rolling Stone magazine detailed many of the issues associated with the unethical disposal of some of the brine, including using it on winter roads.

 <https://www.rollingstone.com/politics/politics-features/oil-gas-fracking-radioactive-investigation-937389/>

In response to a recent inquiry to Friends of the Middle River concerning the Rolling Stone article about radioactive salt brine, I have inquired around to several local and state agencies and have the following to report:

The City of Staunton currently buys their brine from Houff Trucking in Weyers Cave who makes it with salt bought from Cargill. Waynesboro currently makes their own brine from salt obtained from Mid-Atlantic Salt Company. Suppliers for localities and VDOT change over time since the procurement is competitively bid.

In this area the Virginia Department of Transportation (VDOT) currently buys brine from Houff Trucking although other districts have other sources. VDOT has made brine from salt in the past and may still do that in some areas that are not close to Houff Trucking. VDOT's Staunton District Hazardous Materials Manager was aware of the brine from gas wells in the past but had not thought about it recently in light of the greater volume of brine available now. He indicated that he was going to remind the VDOT state hazardous materials manager of the issue so other districts such as Bristol that are closer to oil and gas well production can be on the lookout for potential issues.

To summarize, the personnel I contacted at Staunton and Waynesboro were not aware of the radioactivity issue and no one is currently testing the brine for anything but salt content. Here are two links to additional information.

<https://www.world-nuclear.org/information-library/safety-and-security/radiation-and-health/naturally-occurring-radioactive-materials-norm.aspx>

<https://pubs.usgs.gov/fs/fs-0142-99/>

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