

Ohio House Energy and Natural Resources Committee

January 30, 2018 Hearing on HB393

Citizen Testimony from Greg Pace, Columbus Resident

I would like to thank Chairman Landis and the members of the Energy and Natural Resources Committee for this opportunity to share my understanding about the subject of using oil/gas well brines as a road-spreading agent.

Local geologist and consultant Dr. Julie Weatherington-Rice has submitted written testimony regarding research she has been involved with in the 1980's and 1990's, focusing on the health risks of using oil/gas residual brines as an agent being spread on roads in the state of Ohio.

According to Dr. Rice, in 1986, the Ohio Governor's office commissioned a report to the Oil & Gas Regulatory Review Commission. This report was meant for the Department of Natural Resources to be able to determine whether public exposure to oil/gas production brines is safe to the health of people.

In Dr. Rice's words,

"The report was titled *"Toxicological Analysis of Ohio Brine, Constituents and their Potential Impact on Human Health:"* This review of then available toxicological data bases was an early version of a US EPA Risk Assessment, It reviewed each commonly noted hydrocarbon and heavy metal found in oil and gas brines, determined the various forms of toxicological impacts and the routes of exposures. It did not compare the synergistic impacts of the mixtures. Among other findings, the report noted that exposures to the oil and gas brines can trigger cancers over time." In her letter Dr. Rice has supplied the web address to access this report.

Her letter then explains the story of two people who died from lymphomas that doctors at James Cancer Hospital at OSU attributed to long exposures to heavy metals and hydrocarbons. One of these victims, Dr. Melvin Palmer, was a professor in the Department of Agricultural Engineering at OSU, with an OSU Extension appointment to the Ohio Department of Health, Private Water and Wastewater Section. After being diagnosed, Dr. Palmer went to work determining what the trigger was for his cancer. He determined that both victims, who were neighbors in Ohio, mowed their lawns similarly. Dust from the mowing was the most probable pathway for the carcinogens to enter their bodies through airway ingestion. The most important factor they had in common was that their roads had been using oil/gas brines for dust/ice control, and Dr. Palmer actually found a pool of dust laden with heavy metals and residual hydrocarbons in the gravel dust on the road in front of his home. The existence of residual materials, he determined like those that he found remaining on the road, was the culprit.

Since the 1986 report from the Ohio Governor's Commission, Dr. Palmer's research is the only known research done in Ohio to determine scientifically if oil/gas brines spread on roads is a dangerous practice.

Dr. Rice, who was involved with the 1986 study, explained to me that although the study was well done and indicated strongly that we now knew that oil/gas brines were dangerous materials, it was never used in a manner to influence the State of Ohio's decisions on how risky oil/gas brine spreading is to human health. Back in 1986, people were not worried about these things, and the report has collected dust since then.

The only recent study we have that looked with depth into the health risks of this practice was done by a dying scientist, determined to find the cause of his cancer. Ohio does not even track people who have been injured or died from exposures to these wastes. Other states do. How many other people have incurred cancers from these materials? Hundreds? Thousands? We just don't know!

The state of Ohio must refocus on the practice of brine spreading of these wastes seriously. The very least we must do is to review in depth these two bodies of research, to determine if the past practice of brine spreading should be ceased. Selling this material as a commodity must not be allowed at this point, because we need to exercise due diligence that has apparently not been properly exercised previously, after the reports I have mentioned were written. Why should we accept a practice and sell it, when we know it is lethal?

Thank you for your time.