Dear Representative Stephens,

I am writing to you as a concerned citizen of Vinton County, a mother and a physician (family physician, retired). I implore you to NOT ALLOW the spread of oil and gas well "brine" on any of our roads.

Radium 226 and 228 are known carcinogens and have a myriad of other health effects. Radium is chemically similar to calcium and is a "bone seeker". These elements are linked to cancer of the bone, the sinuses, and to leukemia. They are long lasting in the body (up to thirty years) and their toxic effect continues during that time. (US National Center for Biotechnology Information)

Once brought up from the relative safety of their natural home deep underground, these elements remain radioactive for centuries and will accumulate in the environment, continuing to expose people and wildlife for generations. To allow municipalities to apply them to roads, or any surfaces is reckless. To allow the product (Aqua Salina, or any other) to be sold on the open market to homeowners is pure insanity.

Geologists have known for a long time that the formations that hold oil and gas also hold radium and radon. The flowback fluids from both conventional and hydrofracking wells are contaminated with these radioactive elements. The amount will vary depending on the well, but if this fluid were to be used or sold, every single batch of fluid needs to be tested for radioactivity and meet stringent water safety requirements in order to be used as any surface treatment. These types of products should be safe for human and wildlife consumption, as drinking water wells and surface waters could easily become contaminated.

I ask you to vote AGAINST HB 282.