

**Testimony Of  
Siri Lawson  
Farmington Township, Warren County  
Before The  
Senate Democratic Policy Committee  
Hearing On  
Spreading Oil & Gas Wastewater On Roads  
April 17, 2024**



*(March 2024 photos of road spreading)*

Thank you for allowing my voice to be heard at this hearing.

My heartfelt thanks to everyone who has shown the interest, the will and perseverance in stopping the environmentally catastrophic oil and gas industrial waste disposal practice known as brine road spreading.

Pennsylvania produces a prodigious amount of natural gas and oil each month. Estimates from the [industry website Shale XP](#) say 668 million cubic feet of natural gas (MCF) and 5,300 barrels of oil were produced in the single month of December 2023 alone.

To produce one barrel of usable oil [42 gallons] or 1 million cubic feet of natural gas, staggering amounts of unusable wastewater are produced.

Industry standards state one barrel of oil co-produces 5-10 barrels [210 to 420 gallons] of unusable wastewater.

The business magazine-Reuters- states 1 million cubic feet of natural gas produces 260 barrels [10,920 gallons] of the same unusable wastewater.

The quantities of wastewater, or brine, are self-reported by the producers, so are methods

or location of disposal in Pennsylvania.

Oil and gas wastewater is an enormous liability for the fossil fuel industry. Time and again, the industry has proved the less regulators or the public know about this toxic by-product of fossil fuel production, the better off the industry is.

By the early 2000's, Pennsylvania had entered a phase of fossil fuel production known as the "Shale Era".

By 2011, so much unusable wastewater was being produced, then Gov. Corbett had to request producers stop using the waterways of Pennsylvania as dump sites for their unusable brine.

To continue to churn out massive quantities of oil and gas, fossil fuel producers needed to find an alternate brine disposal solution.

The Penn State Centre For Dirt and Gravel Road Studies estimates our state has 25,000 miles of dirt and gravel roads. Need was about to meet opportunity.

Forbidden in 2011, from easy disposal of wastes into waterways and with few other convenient disposal choices, all eyes turned to dirt roads.

The number of vac trucks disgorging loads of oil and gas wastewater on rural dirt roads literally skyrocketed.

Soon to follow, in 2012, Senator Joseph Scarnati became associated with a bill known as the "medical gag order" (Act 13 of 2012).

Officially this bill was designated as a way to protect proprietary chemicals used in fracking.

But, in real time, thousands of vac trucks were now descending on Pennsylvania's rural countryside and using dirt roads to dispose of trillions of gallons of toxic wastewater, year after year.

This bill succeeded in gagging medical doctors, making them afraid to communicate with their patients about potential toxic brine wastewater exposures that could be injuring them.

Doctors were afraid and said so.

My husband and I were victims of this.

Oil and gas wastewater chemically and physically destabilizes dirt roads. Brined roads become discolored, lose their integrity and solid riding surfaces and once brined, produce exponentially more dust than a road that is not brined.

Rural townships maintain their dirt roads in a particular fashion. Road and ditch dirt is graded to the center of the road, then several passes are made with a "York rake" to smooth out the loose dirt.

Left behind in spots there may be as much as six inches of loose dirt ready to be disturbed by the lightest breeze.

When this mechanical destabilization is combined with the chemical destabilization caused by massive and repetitive wastewater dumping, the perfect platform for continued road dumping occurs.

A) Residents plead for dust control

B) Townships state they cannot afford to pave these dirt roads

C) The fossil fuel industry steps up and say they have both the answer and the solution--

MORE BRINE.

We discovered there has been so much wastewater dumping in our township the DEP referred to Farmington Township as a "Waste Facility," That was shocking.

As the brine dumping escalated astronomically in our township, we began hearing from fellow residents. They were reporting 3-4 brine vac trucks dumping on their roads per day, multiple times per week, month after month, year after year.

Spring, summer, fall. And they wanted it stopped.

Farmington Township roads became dotted with "No Brine" signs. Petitions asking for brine spreading to stop were signed, given to officials and rejected.

Importantly, residents agreed, oil and gas wastewater did not suppress dust or stabilize roads.

There were reports of children experiencing anaphylactic-like respiratory reactions in connection to fresh brine exposure.

There were complaints about the smell of brine and how fresh brine could make you dizzy and nauseous, if you had to cross your road to the mailbox.

People complained about the brine mud generated on a clear, dry day after a fresh spread. If the brine mud was allowed to dry on vehicles, it would have to be chipped off.

Amish recounted not only did horses legs and feet get coated, but often it was the young Amish daughter told to clean the dried brine mud coated buggy.

Residents told us that in rainy spells, even in summer, they would often have to use all wheel, or 4-wheel drive to navigate Farmington's brined roads.

There were reports of brand new vehicles significantly rusting in their first year and catastrophic rust induced failures of older ones.

We got reports of farm ponds, dead and no longer able to sustain aquatic life.

Brine coated dust is insidious.

It would choke people outdoors and it coated houses, gardens, lawns, crops, cars, animals, people.

Brine laden dust particles also covered the interiors of buildings. Surfaces, food, furniture, pets, clothes, I have startling pictures.

At the height of the road spreading years, there were reports of springs and wells being affected, people having to deal with orange brown water.

And with the brine came a distinctive bright green algae found in nooks, crannies, sidings and roofs.

So invasive, those that had pools reported they could no longer use them because of the green slime.

We tried to work through all the standard channels to stop the road spreading. We and our fellow residents were dissed and threatened or ignored every step of the way.

Twice charges were filed against us by one of the vac truck drivers for taking pictures, once against a neighbor for stopping to watch him spread.

The repeated and unrelenting wastewater dumping caused me and my husband to experience life-threatening injuries.

Heart, lung, sinus, ear damage. Massive infections. Metabolic damage.

It badly damaged many of our horses and dogs, they suffered the same injuries.

All the environmental advocacy in the world was not having an impact on either DEP, our township or those using Farmington's dirt roads to dump brine.

We had to turn to the courts and Fair Shake Legal Services was the only firm brave enough to take our case.

Fair Shake gave us the choice of a personal injury action or a different action which

would benefit our dirt road neighbors and all those that lived on dirt roads in Pennsylvania.

There was no choice, we would try to help everyone.

The outcome of the 2017-18 Environmental Hearing Board lawsuit is hard to bear. Its immediate success was rapidly clouded by its shortcomings.

Outsiders dubbed our victory merely a moratorium on road spreading and as it turns out, not even that.

Some operators did not wait even a month to resume spreading and manipulating the law.

By 2021, the brine dumping business had nearly returned to normal. Once again, dirt roads were getting hammered. Wastewater was being spread on paved roads..

When the good people of Pennsylvania speak of the drilling wastes, drill cuttings and wastewaters that have made our landfills radioactive and irradiated our waterways, this is what is being dumped on Pennsylvania's roadways.

Only some of what is dumped on the roads stays on the roads. Some wastewater washes into the waterways, some sinks into ditch sediments.

While the bulk of the VOC's [volatile organic compounds] evaporate, the majority of the brine attaches to tiny dust particles as it dries and it blows into surrounding houses, barns, woods.

Residents are literally inhaling oil and gas wastewater 24-hours per day.

Pennsylvania needs to pass a total and complete ban on road spreading of oil and gas wastes.

The oil and gas industry is continuing to use the public's paved and dirt roads to dispose of their wastewater.

Over the past month, in dry weather and well above freezing, I have photographed numerous roads coated with fresh, distinctive, well head wastewater.

The government, environmentalists, science and the oil and gas industry rapidly need to become leaders in solving the oil and gas wastewater problem. The solution will require public involvement also.