



PA House of Representatives
Republican Policy Committee

414, Main Capitol Building
Harrisburg, PA 17120
(717) 260-6144

Rep. Joshua D. Kail
Chairman

PA House Republican Policy Committee Hearing

“Brine Spreading”

July 25, 2024, at 10 a.m.

**Drake Well Museum & Park
202 Museum Lane
Titusville, PA 16354**

10:00 a.m.	Welcome and Pledge of Allegiance
10:10 a.m.	Burt Waite <i>Geologist</i>
10:15 a.m.	Hon. Jim Trussell <i>Chairman, Hamlin Township Board of Supervisors</i>
10:20 a.m.	Hon. David McClain <i>Chairman, Keating Township Board of Supervisors</i>
10:25 a.m.	Hon. Steve Goodwill <i>Chairman, Columbus Township Council</i>
10:30 a.m.	Questions for the Testifiers
11:00 a.m.	Closing Comments



Testifier Biographies

PA House of Representatives Policy Committee Hearing *"Brine Spreading"*



Burt Waite **Geologist**

Burt Waite, renowned for his leadership and athletic prowess at the Chambersburg Area Senior High School (CASHS), earned a football scholarship to The College of William and Mary. There, he starred as a defensive lineman and linebacker, co-captaining the team and earning All-Southern Conference honors in his senior year. He graduated with a degree in geology.

Burt advanced his education with an MS in hydrogeology from the University of Vermont in 1971. He then taught Earth Science and Environmental Science at CASHS and

coached football before joining a geologic consulting firm in Harrisburg, PA. Burt's career in hydrogeology spanned several decades, where he progressed from Staff Geologist to Senior Geologist and Principal of the firm. His work supported the coal mining, oil, and gas industries, and he served on advisory committees for the Pennsylvania Department of Environmental Protection.

In addition to his career responsibilities, Burt found time to coach local soccer, football, track and field, and ice hockey teams and he served as mayor of Cochranton, PA for 12 years. During his tenure as mayor, he discovered that the state of Pennsylvania empowers its mayors to perform wedding ceremonies. Burt was honored to marry more than 30 couples during his mayoral term.

In retirement, Burt continues to support his community and stays engaged with local sports, reflecting his lifelong commitment to education, geology, and mentorship.

Hon. Jim Trussell **Chairman, Hamlin Township Board of Supervisors**

A former employee of the Knox and Kane Railroad, Jim Trussell currently serves as chairman of the Hamlin Township Supervisors. Recently, Jim served as the 2023-2024 President of the Mt. Jewett Rotary Club.



Hon. David McClain

Chairman, Keating Township Board of Supervisors

David McClain currently serves as a supervisor for Keating Township. Located in McKean County, Keating Township covers over 98 square miles and has a population of approximately 2,700 individuals.

Hon. Steve Goodwill

Chairman, Columbus Township Council

Steve Goodwill currently serves as the chairman of the Columbus Township Council. Columbus Township, located in Warren County, covers over 41 miles and is home to approximately 1,600 individuals.



Burt Waite
Testimony on Road Spreading
Oil and Gas Field Brine as a Road Treatment
July 25, 2024 – Drakes Well Museum

Do we need to be concerned about what we put on our roads to control ice and snow or to control dust?

- YES! Of course we do.
- Everything we introduce into the environment has a consequence. It has an impact. It leaves the proverbial footprint.

Then why do we spread anything on our roads?

- We do it to control a risk.
- A risk of driving on snow covered roads.
- A risk of road deterioration if dust is not controlled.
- A risk to our quality of life by living in a cloud of dust every time a car or truck passes by.

It really all comes down to a risk assessment.

- Are the impacts to the environment outweighed by the benefit created?
- If your tolerance for environmental impact is zero – then nothing can be added to a road surface. Nothing at all – not rock salt, not commercially manufactured products not commercial mined products from the earth, not oil and gas field brine.
- However, most of us would argue that some environmental impact is acceptable to have safe roads.

So, the debate begins.

- Is oil and gas field brine a greater risk to the environment than other products that are routinely used when applied in a controlled and well considered manner?
- To my mind and based on many studies that have been conducted through the last several decades the answer is no – it is not.

Brine is not dumped

- For over 40 years now road spreading of oil and gas field brine has been conducted in Pennsylvania in a controlled and well managed manner.
- this all stopped three years ago when DEP put a stop to the practice.
- The volume of brine spread compared to the total amount of brine generated is small - only a percent or so. REPEAT
- Based on a review of DEP files, in all of that time not one violation has been issued for environmental harm as a result of spreading oil and gas field brine. That is a big statement and hard to believe. Intuitively, some environmental impacts of note would have been expected. It would have just been a factor in the environmental risk associated with the activity if that was so.
- In 1996 DEP conducted a field study on the impacts of road spreading and concluded that by following guidelines impacts can be minimized while meeting road spreading objectives. i.e. establish guidelines and the activity is justified.
- In 1997 another field study was conducted that quantified the impacts of long-term point source discharge of brine to the ground on groundwater. The study concluded that “unacceptable” impacts are possible if the application of brine is uncontrolled over decades of discharge directly to the ground surface.
- In 2020 a PSU laboratory study concluded that brine was no more effective to stabilized roads than water. This finding was been seriously challenged and is at odds with many township supervisors and road masters that use brine and attest to their effectiveness. It appears a laboratory study does not support what has been seen in the real world for a long period of time.
- In 2022 another PSU study concluded that brine was just as effective and no more harmful to the environment than commercial products.

Conclusion

- Oil and gas field brine is effective in controlling dust on dirt roads.
- Oil and gas field brine is no more threatening to the environment than commercial products now on the market.
- Oil and gas field brine is often donated to townships on a no cost basis making it a win/win for the producer and the township.

Burt A. Waite

Geologist and Hydrologists with 50 years of consulting experience in PA
Certified Professional Geologist in PA.

Much of my work involved the development of groundwater supplies for
municipal and industrial users and evaluations of impacts of oil and gas
development and mining operations on ground and surface water.

I am now retired from day-to-day consulting work.

Hamlin Township

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James L. Trussell, Chairman
Dale Wally Howard, Supervisor/Road Master
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July 19, 2024

To Whom it May Concern,

James Trussell has been a Supervisor/Chairman with Hamlin Township since 2014, over 10 years of service. Up until 2017, our township utilized conventional well brine on 2.85 miles on our dirt roads for dust suppression, following the regulations set forth by the DEP. Not only did this benefit the residents and users of the township, but our local oil companies. It was, at the time, a win-win situation.

However, since the moratorium on brine spreading came into effect in 2017, the dust issue has been difficult to deal with. We have tried calcium chloride which had a high cost and very little effect. Many complaints come in each year, primarily from those residents that live on these roads. One farm in particular has had issues with the dust getting into cracks in their barn where they store hay for their horses, rendering it unusable. Each year the township applies for DCED and multimodal grants for paving the roads, but so far, they have been denied.

If the ban on conventional well brine spreading was to be lifted, it would be of great benefit to ours and other townships across the state.

Thank you for your time, and for allowing us to come before you today. God Bless America

David McClain

Chairman

Keating Township, McKean County

Supervisor since 2014

Conventional Gas Well Brine Application

Keating Township has over 44 miles of roads to maintain with a shrinking tax base. The brine has a track record of being a low cost, highly effective treatment for paved roadways.

During the on-set of winter storms, pretreatment with brine stops the formation of ice on the road surface. Studies have shown that brine treated roads are more effective than normal antiskid, in the early stages of a storm. Ice storms are more frequent than heavy snow falls, and the brine application builds in the needed time to get the plow routes completed safely.

Applying brine also helps with dispatching plows with the limited number of employees and trucks that most townships have available.

Having brine back as an option for the townships would not only take some needed financial burden away but would also make the roadways safer for our residents and our employees.

Hello my name is Steven Goodwill I am the Roadmaster at Columbus Township in Warren County. I have been at Columbus Since 1983.

When I first Started we Could get dust Control for about .3 Cents a gallon so it would cost the township roughly 10-15 thousand, now at todays cost it would be 45 thousand plus.

Back in the well drilling in the 80's we had the opportunity to get free Brine out of the wells, it worked really well except most of the trucks at the time would have to open the Valve on the Back & run to the cab to start Spreading. Problem being to much brine on the Start & Finish of the Roads. We decided that we needed to make our own truck.

We built our first truck in 87 using a banjo System in the cab, had to build new truck in early 90's using most of same system only using hyd motor to run Pump, we are still using today to Spread water.

we used free brine until the trouble in Farmington Twp that set the govt to put a stop to using free Brine. So then we all had to purchase all types of Dust Control, it was costing the Townships alot of money & no help from the State.

Columbus finally settled on using Flak Calcium which only cost us around \$15,000.00

alot less than our neighboring Township. we apply with a small Guger type V-Box Spreader then we spread with water. Works very well much better with some rain.

The biggest problem with this system is it is very time consuming. We would be very much behind supporting the use of using well out of the wells in our area. Our govt in Harrisburg do not understand we dont have alot of paved roads like they have down state, we also dont have huge budgets to accomidate alot of dust control. You dont get any help from the State.