Oil and Gas Incidents in Ohio 2015-2023

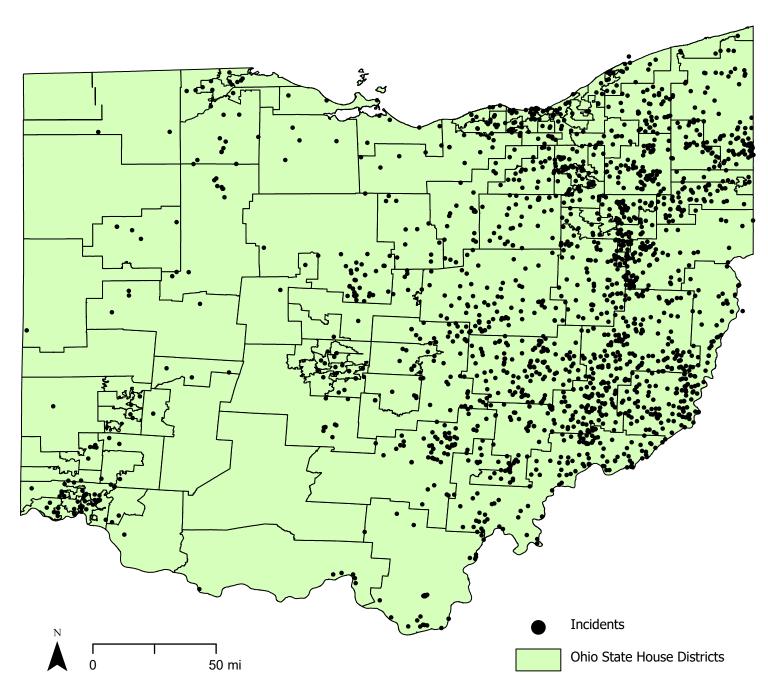








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Ohio Department of Natural Resources Unable to Manage Class VI Primacy

By: Buckeye Environmental Network

Executive Summary:

Buckeye Environmental Network hired Jenny Morgan to research and write the following report which utilizes Ohio Department of Natural Resources' (ODNR's) own data. This document demonstrates a pattern of the agency failing to manage its Class II Injection Well program with ten examples (there have been many more Class II injection well incidents since 2015). This failure poses a threat to health, safety, groundwater resources, and the environment. ODNR's own data shows us that its regulation of Class II Injection disposal well program are in need of an immediate and comprehensive review; ONDR would be unable to safely undertake primacy of Class VI injection wells.

BACKGROUND

Oil and gas production brings to the surface millions of gallons of toxic and radioactive liquid brine waste, and tons upon tons of solid/semi-solid waste. Liquid waste is then transported to Class II injection wells to be sequestered. Almost every day, ODNR is logging an oil and gas incident, many of which are contamination events.

FINDINGS

We found ODNR's shortcomings on the ability to safely regulate its Class II Injection well program as seen by: on-going and recurring violations, frequent and often, long-lasting contamination events, a lack of agency follow-up regarding possible subsurface and public water supply contamination.

CONCLUSION

Ohio Department of Natural Resources does not have the track record to take on Class VI well primacy from USEPA. Please consider how Ohio's statutes can better keep citizens of Ohio safe including:

- Statutes that would issue consequences to violators significant enough to result in action
- Statutes that elicit detailed documentation of contamination events start to finish
- Statutes that elicit constant monitoring and notification of the subsurface, public water supplies and residents near contamination events

Number of Oil and Gas Incidents by Type in Ohio

Reports from the Ohio Department of Natural Resources show there were at least 1,400 well-related incidents in the state of Ohio between 2015 and September 2023. This table shows the number of oil and gas incidents by type.

Incident Type	Count
Complaint	28
Explosion	20
Explosion/Fire	68
Fire	71
Gas Outage/Interruption	24
Gas Release	336
Injury	1
Loss of Well Control	13
Pipeline/Midstream	18
Property Damage	1
Release/Discharge	653
Stray Gas	37
Transportation Accident	11
Unintentional Gas Release	11
Other	119

Table 1. Incident Count by Type. ("Data Gaps: A Critical Examination of Oil and Gas Well Incidents in Ohio," 2025.)

Table: FracTracker Alliance - Source: Ohio Department of Natural Resources Created with Datawrapper

Appendix A – Frost Well





Appendix A - Frost Well Continued



The Frost Well is on State Route 144 only 500 feet from the Hocking River in Athens County, Rome Township. The injection well leaked into production wells. Eventually it was suspended and the owner walked away leaving this mess.

Read more on Page 78.

Appendix B – Production Wells in Noble County Contaminated by Deeprock Injection Wells



*Photo Credit – Ohio Department of Natural Resources

Ohio Department of Natural Resources' *Chief's Order for Suspension* admitted that Deeprock's injection wells had been migrating for 12 years before it was suspended. Four wells were contaminated within a 5-mile radius. Clean up cost taxpayers \$1.3 million. Read more on page 57.

Appendix C - Veto Lake



*Photo Credits to Roxanne Groff, 2021

The RedBird #4 well is an injection well that impacted many production wells in the Veto Lake area including Bob Lane and Bob Wilson's wells. Pictured is a blown production well in Veto Lake. Read more on page 110.

WASHINGTON COUNTY PRODUCED WATER INVESTIGATION EXECUTIVE SUMMARY

In late 2019, three owners of production wells in Washington County reported to the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management (Division) an increased flow of salt water, known as brine, during their extraction process in 28 production wells located in the Berea Sandstone formation. While some amount of brine is expected to be produced along with crude oil and natural gas, these owners reported seeing a higher volume than normal. The owners believed that the brine came from a nearby Class II Saltwater Injection Well, Redbird #4, in the Ohio Shale formation, which sits below the Berea Sandstone formation as shown in Figure A. The Division has received no reports of adverse effects to human health or safety associated with any of the wells at issue.

The Division began investigating the matter, and scientists in the Division's Underground Injection Control program requested and procured available data, including samples from the 15 production wells where brine samples could be obtained. The Division contracted with a third-party, Resource Services International, to analyze the data and determine if brine was travelling from Redbird #4 to the production wells.

The Division also discussed the allegations of brine travelling out of its injection zone with the owner of the Redbird #4 injection well in March of 2020. As of May 22, 2020, the owner voluntarily completed modifications to the Redbird #4 well to seal off the Ohio Shale formation. The Redbird #4 had not actively injected since November of 2019 because of an unrelated pump problem.

Key Report Conclusions

- Wastewater injected into the Ohio Shale Formation from the Redbird #4 well is the source of brine
 that has appeared in several production wells drilled into the adjacent Berea formation. The
 conclusion is based on data and water samples obtained from both the injection well and the
 production wells.
- Naturally occurring fissures exist between the Ohio Shale formation and the Berea Sandstone formation, allowing wastewater to migrate between the formations and into the production wells.
- Since Redbird #4 is no longer injecting brine into the Ohio Shale formation, brine volumes in the
 impacted production wells are expected to decrease and natural gas production will return to
 expected rates.
- It is unlikely that wastewater will migrate farther including into underground sources of drinking water due to the composition of the rock layers and other factors.

Actions by the Division of Oil and Gas Resources Management

Based on these conclusions and the unique geologic makeup of the area around the Redbird #4, there is currently no reason to believe that this issue is occurring in other wells outside of

this area. However, as a result of the initial complaint and in advance of the of the report's findings, the Division did the following:

- Collected samples from two other Class II Saltwater Injection operations injecting into the Ohio Shale within a ten-mile radius of the Redbird #4 well to allow for testing to determine if any wastewater is migrating out of the injection formation.
- Added conditions to all newly permitted Class II Saltwater Injection Wells after August 11, 2020.
 These conditions allow the Division to stop operations if fluids injected into the well do not remain in the zone in which they were injected and will require operators to perform additional testing.
- Contracted to plug an idle and orphan well located near Redbird #4 that contained wastewater, removing water from the Berea Formation.
- Compiled a list of 11 nearby wells that are being examined for determination if they qualify as idle and orphaned wells to be plugged by the Division's Orphan Well Program.

Moving forward, the Division will

- Engage an expert to provide further findings to determine if additional regulatory action is necessary.
- Prohibit the issuance of new Class II Saltwater Injection Well permits into the Ohio Shale formation within a ten-mile radius of the Redbird #4 until further studies of nearby injection wells are completed.
- Prepare a Scope of Work to contract a third-party consultant to conduct a groundwater study to corroborate the conclusions of the report.

The Division strives to protect human health, safety, and the environment and will take all necessary action to investigate any complaints it receives and will respond accordingly. While no surface environmental impacts have occurred, and the Division has not received any reports of contamination to groundwater in the geographical area, any residents who have questions should contact the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, at (614) 265-6608 or oilandgas@dnr.state.oh.us.

You can view the full report using this link: https://dam.assets.ohio.gov/image/upload/ohiodnr.gov/documents/geology/WashingtonProducedWaterInvestigation_ODNR_2020.pdf

Accident Entry #45

Today's date is July 31, 2024

SEVERE CONTAMINATION EVENT

TOXIC BRINE WASTE/CRUDE OIL

KLEESE INJECTION WELL FACILITY

TRUMBULL COUNTY, VIENNA

KLEESE DEVELOPMENT ASSOCIATES (KDA)

(Discovered 3/28/25, Reported on 4/2,15)

SOURCES FOR ACCIDENT ENTRY #45

- ODNR tracking sheet, incident #201500012
- ODNR Chief's ORDERS
- Media reports
- On-line mapping tools

NARRATIVE SUMMARY

Most Ohioans probably don't know how much toxic waste oil and gas production creates. Here's some math. It can take from 1.5 to 40 million gallons to hydro-fracture a well. An Olympic sized pool = 660,000 gallons. From this hydro-fracturing, nationwide, 3 billion gallons a day of oil/gas toxic waste is created. Where does all of this drilling waste come from?

To hydro-fracture a well, companies use water, a lot of water. Much of the fresh water that's used to fracture the rocks deep inside our earth, via oil/gas wells, is taken from our nearby Ohio lakes, rivers, creeks, groundwater, etc. that exist nearby. Companies say they are trying, more and more, to frack wells with waste water leftover from previous fracking, but this has its own issues, mainly the creation of a a super contaminated waste water product stream.

What happens to our fresh water after it's shot down a two mile well to fracture the fossils from the rocks deep beneath our feet? Well, since companies have to use countless chemicals when fracking, these dangerous chemicals now become part of the fresh water. And now, since various dangerous heavy metals exist in the rock/shale, rocks now blown apart from the fracking, these metals also become co-mingled with the fresh water.

What's one of the most dangerous metals fracking releases from Marcellus and Utica rocks/shale? Radium. Yes, that's right, the oil/gas waste is radioactive, sometimes VERY radioactive. So, millions upon millions of gallons of fresh water goes down our Ohio oil/gas wells, and millions upon millions of gallons of contaminated, toxic radioactive waste comes back up the well.

This waste must get trucked away, truck load by truck load. All of us have undoubtedly seen brine trucks on our Ohio roads. Each truck can carry from 42,000 to 126,000 gallons of this toxic brine waste away from the wells. Where are they taking the toxic waste?

Most Ohioans don't know, either, that this drilling brine waste is so contaminated, toxic and often radioactive, it must be re-injected deep into the ground via wells called Class II injection wells. There are other well classifications (class 1 - class 6). Class II is for oil/gas waste. In Ohio we have ~250 class II injection wells with more being drilled every day.

This brings us to our accident #45 entry.

In late March of 2015, a horrible spill occurred at an injection well site in Trumbull County, Ohio, in Vienna township. Kleese Development Associates operated 5 injection wells at their Kleese facility in Vienna, right near a neighborhood north of Youngstown, and very close to many domestic water wells and a public water supply (see the pink dots in the accompanying picture).

ODNR tracking records classify the March, 2015 Vienna contamination event as SEVERE, meaning there was a SIGNIFICANT public safety or environmental impact. 43 barrels (1806 gallons) of brine waste and crude oil released from the Kleese facility. The contaminants found their way to a nearby pond and wetlands.

Even though the spill was discovered on 3/28/15, ODNR was not notified until April 2, 2015. So, for at least 4 days these dangerous contaminants spilled onto the ground and into the water near the injection facility. What was the result? When finally notified, ONDR inspectors responded, and determined the land and water to be impacted. They traced the spill back to the Kleese Surface Facility where holding tanks were overflowing and there was a secondary containment failure.

ODNR"s investigation determined that the spill was likely related to operations at the Kleese Facility. Later investigations confirmed this. Reports of dead animals followed. The Ohio EPA, U.S EPA, Ohio Department of Health, the ODNR Division of Wildlife all responded as well.

The event was so serious, it elicited the ODNR Chief to issue an ORDER the very next day to close the Kleese wells. The Chief found that Kleese placed or caused to be placed crude oil or other fluids associated with the exploration, development, well stimulation production operations, or plugging of oil and gas resources on the land in a manner that could reasonably be anticipated to cause damage or injury to health or safety to the environment.

He found that by failing to construct the Kleese facility so as to prevent pollution to surrounding surface and subsurface and waters, Kleese violated the law by failing to conduct saltwater (brine) disposal operations in a manner which will not contaminate or pollute the surface of the land, or water on the surface or in the subsurface. The company was also directed by the Chief to remediate any contamination at and in the surrounding locations impacted.

Reports ensued of an EPA environmental crime investigation, an Ohio Bureau of Criminal investigation, of search warrants being issued to search the Kleese facility, etc. Reports say domestic water wells were tested for radiation at the time, but that subsequent testing was not done. DAR will have to follow up on this as it is common sense that a toxic plume might not reach wells for weeks, months, or, even years after such a spill.

Many media stories talk about this Trumbull County environmental disaster:

1."Spill at Injection well threatened water supply near Warren"

https://www.cantonrep.com/story/news/environment/2015/04/23/spill-at-injection-well-threatened/34710689007/?fbclid=lwY2xjawEXJF9leHRuA2FlbQlxMAABHTLoR-fSUlCx7g44slyk0yzMDSGbTfRZtG6-Kmn9t9Ww1-LoYn3GG7SUtg aem B4rrV-46Qt9dyyFgh-G iw

2. "EPA searches for evidence of environmental crime at Vienna injection well"

https://www.wfmj.com/story/28921727/epa-searches-for-evidence-of-environmental-crime-at-vienna-injection-well?fbclid=lwY2xjawEXJHhleHRuA2FlbQlxMAABHcYiJuHpXZTS0 Ma-oL7ZnHRZxag1ch65R-2abe-Oqzo9qpMFTBxgzuV1w aem E6XCiUa8bLsX62RojkZjrA

3. "Documents shed light on Trumbull County injection well search—We now have a better idea of what Federal agents were looking last April when they searched a company that operates injection wells in Vienna and Warren Township."

https://www.wfmj.com/story/29308542/documents-shed-light-on-trumbull-county-injection-well-

<u>search?fbclid=IwY2xjawEXJItleHRuA2FlbQIxMAABHTqH78bf2cJdShbLDPM2vnskWL0sMdf_LQC6_UGO4Tzz5iG_ApqtXhnXlYg_aem_NC7bCTx-FRcK57XQ-e1toQ_</u>

4. "State officials say Kleese Development failed to construct proper containment liner"

https://vindyarchives.com/news/2015/nov/15/probes-of-vienna-spill-focus-on-negligen/?print&fbclid=lwY2xjawEXJJ1leHRuA2FlbQlxMAABHQMB90-gQG6Ue5Msv62O6n3YDHgUjiV- wkMH-EmbZDCLMHZkkgZmm64xg aem v7Yvq lSdFh2Z1r7 BMB8w

5. "Officials test KDA site for radium"

https://www.tribtoday.com/news/local-news/2015/05/officials-test-kda-site-for-radium/?fbclid=IwY2xjawEXJK1leHRuA2FlbQIxMAABHW-2Rt0svKVKWD9y6QfmUr0sRwgWX9ukgDoE3i32fgkkYP1OK5Dv3YBbmw aem 4rf05xSRX51u61U iekFa w

There is more to learn about this Trumbull County spill, and to do so, DAR will be doing follow up public record requests.

As of Oct. 2022, as far as we at DAR can surmise, all of the injection wells at the old Kleese facility came back on-line and are open for oil/gas waste injection business. While at least one of the wells is still called the KDA well, the facility operates under a different company (Diamond Disposal/Dimond Energy). While some of the domestic water wells in the area appear to have been abandoned (we don't know why), many domestic wells are still nearby to this facility as is the public water supply and source water protection areas.

Note: This is not the only time Ohio has had trouble with class II injection wells. See Daily Accident Report entries #33, 27, 25, 23, 17, 12, and 7. Also, most recently, the state has shut down leaking injection wells in Athens County Ohio. The Chief of ODNR determined they were impacting nearby production wells and that such impacts endangered or were likely to endanger public health, safety and the environment.

https://ohiocapitaljournal.com/2024/07/31/after-more-than-a-decade-of-advocacy-a-majority-of-injection-wells-in-athens-county-are-

<u>suspended/?fbclid=lwY2xjawEXJSlleHRuA2FlbQIxMAABHYZXdGFc4lKn1 B sdpG5y44TcU1gOwp</u>g-2mV3IL70TL5VfxvSXwtc9mEA aem s4mesaUKeRusSpwogL-0OA

ODNR TRACKING SHEET FOR THIS INCIDENT IN BULLETED FORM

- incident #201500012
- Severe
- Release, discharge
- Discovered on 3/28/15....reported on 4/2/15
- "prior to tracking"
- Kleese Development Associates (KDA)
- API 34-155-24078
- Trumbull
- Class II, production
- Brine
- 43 barrels
- Water, land affected
- "overflowing holding tanks. Secondary containment failure"

- OEPA, Wildlife, FR, ODH
- -No items pending
- Status = closed on 1/2/19 (1354 days) closed per UIC emeritus manager Andrew Adgate

DAR END NOTES:

Following are quotes taken from media interviews of Rob Brundrett (President of Ohio Oil & Gas Association):

"Both vertical and horizontal drilling are not really a risk at all for the water or really the environment. Horizontal drilling proven to be safe and environ friendly quite honestly as far as the water protection goes."

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on."

"The MWCD (Muskingum Watershed Conservation District) is just one example of how Ohio continues to benefit from the shale revolution..."

DAR (Daily Accident Report): We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities of oil and gas drilling in Ohio vs. industry spin.

Accident Entry #87

Today's Date: January 22, 2025

Title: Where Are the ODNR Inspection Reports?

DENNISON DISPOSAL LLC
BRINE-WASTE CONTAMINATION
CLASS II INJECTION DISPOSAL WELL (SWIW#11)
LAND AFFECTED
TUSCARAWAS COUNTY
(Release discovered on 11/9/23)
(ODNR incident #2023249)
(American Petroleum Institute well #34157255070000)

SOURCES

- Ohio Department of Natural Resources documents
- On-line mapping tools

NARRATIVE SUMMARY

Intro

Dennison Disposal calls itself "a state-of-the-art Class II injection facility." What is a Class II injection facility? It is a drop off site/disposal facility for trucks carrying contaminated oil/gas liquid waste, otherwise known as brine-waste. Most of the liquid that comes up an oil/gas well, 90% or more, in fact, will not be oil and gas, it will be contaminated liquid brine-waste. Brine-waste can spew from a well for the whole life of that well, or, for decades.

Across our nation, the oil/gas industry creates ~3 billion, with a b, gallons PER DAY of this brine-waste. And so, there are a LOT of trucks, carrying a LOT of contaminated brine, from a LOT of Ohio oil/gas wells. These trucks are carrying this contaminated brine along our highways, and into our communities, on their way to the more than 250+ class II injection disposal wells operating in Ohio. Dennison Disposal is in eastern-central Tuscarawas County, Ohio.

Most don't know it, but this oil/gas waste is so contaminated, and more often than not, very radioactive (a fact confirmed by ODNR's own testing of these wastes), it must be carried away from wells truck load by truck load, to these Class II wells, where it will be re-injected back into the earth's underworld. With this said, there are a couple caveats to this.

Caveat (1) is that all of this dangerous brine-waste must be trucked away, save for the liquid waste the companies choose to keep on-site to utilize in future stimulation/fracking of the well(s). It should be noted that when the brine-waste takes this "recycling route," it will become more and more contaminated with each trip it takes down the oil/gas well (ie: becoming a supercontaminated concoction that has to be trucked away from the site later down the road).

The second caveat is that, in 1985, our Ohio legislators decided to make a "beneficial use" out of this oil/gas brine-waste. They passed a law that would allow oil/gas brine-waste to be used on our Ohio roads for de-icing and dust suppression. We can hear the gasp as you read this! It's true. Lawmakers stipulated only brine-waste from vertical wells could go down on our roads, BUT even vertical wells' brine-waste, when tested by ODNR, tested high, sometimes very high for radioactive radium levels, levels that surpassed safe drinking water and discharge to the environment limits.

Citizens have been working for years to, at long last, get what is arguably a dangerous practice, banned.

Where Is Dennison Disposal?

The Dennison Disposal Class II Injection Facility operates along route 250 in Dennison, Ohio, just five miles upgrade/upstream from the Tappan Lake Reservoir and the Cadiz public water supply. Three waterways surround the facility: The Little Stillwater Creek flows a mere ~1000 feet south of the oil/gas waste disposal facility. Wolf Run is even closer. Its waters flow just ~800 feet west of the facility. Irish Run is to the facility's east by ~1500 feet. The facility is immediately adjacent to the 100-year floodplain. Wolf Run and Irish Run flow into Little Stillwater Creek, and Stillwater Creek flows into Tappan Lake Reservoir.

The facility is a HUGE brine-waste disposal operation. The Co. boasts, on their website, that 98% of all Ohio permitted Utica/Marcellus Ohio wells are located within a 60-mile radius of its facility. It's open 24/7, seven days a week, 365 days a year, with a capacity to handle almost 900,000 gallons of brine-waste. The facility houses not one, but two class II injection disposal wells, along with:

- a 300-barrel horizontal steel cylindrical tank (contents unknown) (12,600 gallons of unknown)
- 4-2000 barrel above ground storage tanks (336,000 gallons of brine-waste)
- a 300-barrel vertical oil tank complete with center drain and sump (12,600 gallons of oil)
- 4-3000-barrel steel above ground storage tanks (504,000 gallons of brine-waste)
- 2 transfer pumps, 2 filter pods
- Injection equipment = 3 quintaplex pumps, 2 charge pumps and 4 filter pods

The first injection disposal well here was permitted in March, 2014, the second in Jan 2018.

Where can one find information on Ohio oil/gas incidents/accidents?

When it comes to oil and gas incidents, ie: well pad explosions, fires, spills, etc., there are 3 levels of public records. There are the ODNR tracking sheets which include the basic incident information. This is information collected when an incident is called into the One Call emergency 24/7 hotline. This hotline that was specifically set up in 2016 to respond to oil/gas incidents. The ODNR tracking sheets will include basic information such as date of incident discovery, authorized owner, well/facility info., what was released info., estimated quantity released, media effected, etc. These tracking records also include a brief description of the incident.

The next level of information can be found in the ODNR inspection reports. ODNR regularly inspects the more than 65,000 oil/gas wells in Ohio, the 250+ Class II injection wells, etc. With each inspection, a report is logged. When an oil/gas contamination event happens, ODNR might go out once, twice, or, multiple times to investigate it. These incident inspections will be in these ODNR incident inspection logs, and will be, in many cases, more detailed than the brief incident description on the ODNR tracking sheets.

The third level of oil/gas incident information can be found:

- a) in 30-day post incident reports that are required by Ohio law (under certain circumstances) to be submitted to ODNR by the responsible party (ie: Co. that owns the well), and/or
- b) in reports done by whatever agency(ies) are involved in the incident response. When it comes to oil and gas incidents, this can involve ODNR, the over-all regulator of oil and gas in Ohio, the OEPA (if surface water, drinking water, etc. is contaminated by an incident), the PUCO (if it's a pipeline involved), the Ohio Department of Commerce (ODC) State Fire Marshal (SFM), etc.

For our Daily Accident Report, we utilize information from 1 and 2, which is information we have already secured. Accessing information from the third level requires follow up public records requests, which we can, and will do, but the availability is unpredictable for the writing of our D.A.R. entries.

The Dennison Disposal Contamination Event(s)

*1. Brine-waste spill discovered on November 9, 2023 (Featured spill in today's entry):

The spill was discovered at Dennison Disposal on Nov. 9, 2023. Another brine spill, with unknown amounts, had just happened here 5 months prior, and impacted 2500 to 3000 square feet of land at the facility. On Nov. 9th, the spill amount was estimated to be 1050 gallons of brine-waste. It too impacted the land, but it is not noted how much land.

ODNR Emergency response staff would make 11 site visits to Dennison in regards to the spill. However, the only notes DAR can find on this spill are on the ODNR tracking spreadsheet, again, a document with limited information. Here is ODNR's brief description of the spill as it is written in the tracking sheet:

"Drain is not flowing this date. Remaining water in sump measured 4.23 ms/cm. Slope is partially vegetated. Will get with operator in July to finalize remediation."

STOP! First, is our regulatory agency really saying that remediation for a Nov 9, 2023 brinewaste spill would not be finalized until JULY? We had to re-read ODNR's brief description three times. Why the delay?

Also, in the brief description, a sump drain pump in mentioned. If one visits the Dennison Disposal website, it is clear that the injection pad includes drains. Is a sump pump there also? That would make sense with a drainage system. Are there auto-shut off valves on all of these drains and sump(s) when there is a spill at the facility, or, not?

To answer important questions like these, one can turn to ODNR inspection reports. Again, ODNR has files and files of these inspection reports. With the help of the Buckeye Environmental Network, D.A.R. has secured 22 pages of ODNR inspections for this particular facility. And yet, there appear to be no ODNR inspection reports of this contamination event. Why?

ODNR records show ODNR staff visited the site on 10/13/2023 (almost a month before the Nov 9th spill, and then not again until 1/30/2024 (almost 3 months after the Nov 9th spill). Where are the ODNR notes from the 11 visits ODNR made to this facility in relation to this Nov 9th, 2023 brine-waste spill? Also, there is no closure date listed on the ODNR tracking sheet for this spill. It simply notes this spill to be in the "remediation/recovery" stage. Perhaps just a documentation mistake?

As mentioned, there have been at least 3 other contamination events at the Dennison Disposal facility. Do these contamination events have more informative inspection reports that go beyond the limited tracking sheets? Let's look.

2. Brine-waste spill discovered on June 29, 2023:

First, let's look at the spill that happened on June 29, 2023, 5 months before today's featured spill. The ODNR brief tracking description says this:

"(ODNR staff) was on the Dennison Disposal LLC property looking at a previously remediated area when discoloration was noticed on gravel in the swale between the facility and the well. A soil conductivity probe was utilized to determine whether the discoloration was due to fresh water or brine impacted water. Conductivity readings were "Over Range" on soil and fluid in the area of discoloration. (D.A.R. note: This is an indication of brine-waste contamination). Visibly impacted area was 2500-3000 square feet. The facility is very clean and no obvious source was identified. Three northern most drainage basins on facility driveway were field screened and were cleaned at this time. (ODNR) contacted (the Co's General Manager) to inform him of findings. (The Co.) will have a crew out Monday 7-3 (4 days later) to install a cut off trench (a collection ditch) to collect water, and they will further investigate the source. (ODNR) notified the UIC (underground injection control) inspector of the situation."

First, ODNR was out at the facility on June 29, 2023, and yet, there are no June 29, 2023 ODNR inspection reports in the inspection log. Why? Also, there were 14 site visits related to this spill? Where are these 14 reports? What we do see in the inspection logs are that ODNR staff went out to the facility on 5/1/23 (~2 months before the 6/29/23 spill) and then, not until 8/7/23 (~ month after the spill).

Interestingly, it does appear to us that the June 29, 2023 contamination event might be referenced in the 8/7/23 ODNR inspection notes. It says this: "The collection ditch between the facility and the well was approximately 5 inches from ground level. Dennison Disposal personnel turned on the 2-inch trash pump to empty the collection ditch"

Remember how, on the ODNR tracking spreadsheet, the Co. said they were going to install a cut off trench (a collection ditch) to collect the 6/29/23 contaminated water? Could this mean that the 6/29/23 spill that impacted 2500-3000 square feet wasn't being remediated ("collected") until a month later? Or, were there other contaminants that had to be collected from the ditch? Was the ditch pervious or impervious? These are important questions. Also, D.A.R. notes there is no closure date for this spill either. The tracking sheet simply says it is in the remediation/recovery stage.

Let's look at the two other spills the facility has had to see if ODNR has inspection reports for these.

3. Brine-waste spill discovered on December 29, 2021--(not reported until January 18, 2022):

The release was discovered at the Dennison Disposal facility on 12/29/21, and yet, it cannot be found on the ODNR 2021 tracking sheet. Why? Because it was not reported until almost three weeks later, on 1/18/22. Here's how the 2022 ODNR tracking sheet, with its limited information, describes the spill:

"(The Co's General Manager) of Operations at Denison Disposal reported a brine release to the One Call. The release was reported on 1/18/2022 due to being found to have occurred on 12/29/2021. A review of the video recordings was under review by (Dennison Disposal) due to a release that was thought to be within containment. After reviewing video of the operation, it is now believed that a release of (210-420 gallons) of production brine was released into the environment. The Co. investigated drains and found no impacts remain on 1/18/2022. A field investigation on 1/19/2022 found water impacted by de-icing salt to be present in the catch basin, valve was closed and fluid was captured using on site vacuum truck." The report says the land was affected.

Are there ODNR inspection reports for this spill? No. Why? Records show ODNR visited the facility on 12/7/21, three plus weeks before the 12/29/2021 spill, and then again on 1/14/22, two weeks after the actual spill, BUT 4 days before the spill was reported).

ODNR didn't visit the facility again until 3/29/22 (three months after the spill). Yet, again, in the above tracking brief description, it clearly says that, upon being notified on 1/18/22 of the spill, the ODNR Emergency Response Staff were deployed. Records show this spill case took 79 days to close. Where are ODNR spill inspection report(s) for this spill? If the Co. was checking drains, nearly 3 weeks after this 12/29/2021 spill, did the spilled contaminated brine get into the drains? If so, where did the brine discharge?

4. Brine-waste spill discovered on November 8, 2021:

Finally, let's look at yet another brine spill at the facility. All the above spills were in relation to Dennison Disposal's #1 well (SWIW #11 well). This fourth spill was in relation to their second injection well (SWIW #15)--API #34157255210000.

The fourth spill happened on 11/8/21. Brine-waste was, once again, released at the facility. This time 840 gallons of it. Here's how the ODNR tracking sheet reads for this 11/8/21 spill:

"Trench has been backfilled. Revegetation will not occur until spring time after the backfill has settled and area regraded."

Are there inspection reports for this spill so we can read more details about it? No. There is an ODNR inspection report on 10/27/2021, a little more than a week before the 11/8/21 release, and then not again until 12/7/2021, a month after the release. Why no inspection reports? The spill took 60 days to close and land was impacted.

Conclusion

When it comes to oil and gas contamination events, like these at Dennison Disposal, it is critical to get the contaminated areas identified and remediated asap. This is because oil and gas products and wastes are very dangerous, and can contain harmful drilling chemicals, heavy metals, including radioactive radium.

When spilled, these materials can contaminate soil, surface water, they can harm humans and wildlife, AND, these contaminants can seep into the ground, and contaminate underground drinking water sources that are nearby, or, downgrade from the contamination event. Contaminants can travel underground for miles.

Oil/gas brine-wastes have tested very high for radium in Ohio. Radium can dissolve into surface water and groundwater, and our bodies will mistake it for calcium. This is why radium is known to accumulate in the bones of humans and wildlife. It is known as a bone-seeker.

These inherent oil/gas dangers are one reason why, in 2016, Governor Kasich declared that an emergency existed. He would sign Executive Order 2016-04K, and direct the state of Ohio to create an oil/gas incident 24/7 hotline, and new and amended oil/gas incident reporting rules. One of these new rules was that an oil/gas incident must be reported within 30 minutes of discovery. One section of the Executive Order reads:

"Whereas, the release of natural gas, crude oil, brine, drill cuttings, hydrogen sulfide gas, hazardous substances, extremely hazardous substances, and other wastes can have a deleterious impact on the environment if the release is not quickly discovered and remediated..."

It's VERY concerning that, on 11/9/23, 1050 gallons of contaminated brine-waste was discovered on the ground at the Dennison Disposal facility, and yet, ODNR, the regulatory agency, wasn't going to finalize remediation of this spill until JULY.

It's VERY concerning that, on 6/29/23, a spill was discovered at the facility that would impact 2500-3000 square feet of land, and YET the Co. would not be coming out until 4 days later to install a cut off trench (a collection ditch) to collect the contaminated brine-water, AND that ODNR allowed this four-day delay.

It is VERY concerning that. on 12/29/21, a spill was discovered at the facility, BUT this spill was not reported by the Co. until ~18 days later.

It is VERY concerning that, on 11/8/21, 840 gallons of contaminated brine-waste was discovered on the ground at the facility, and yet the only thing ODNR would write in the tracking sheet is the "(t)rench has been backfilled. Revegetation will not occur until spring time after the backfill has settled and area regraded."

It is VERY concerning that there are no ODNR inspection reports in the 22 pages of ODNR inspections for this facility. Thus, without doing more record requests, there's no information about remediation, ie: how deep the contamination went, how much contaminated soil had to be excavated, where the contaminated soil was taken for disposal, etc.

It begs the question: Did this contaminated brine-waste, often times left on the ground for days, get into the subsurface? Did it get into the ground water? Did it contaminate domestic wells, or, public water supplies? More importantly, did any agency check? Were citizens, and public water supply officials, living and working nearby alerted of these spills, and directed to keep watch over their water?

All of this is extra concerning because:

- 1. The facility is surrounded by waterways, including, but not limited to, a 100-year old floodplain
- 2. There are several drain basins at the injection facility
- 3. The waterways that surround the facility flow into Tappan Reservoir and the Cadiz public water supply which is a mere ~5 miles downstream.
- 4. Domestic drinking water wells are located just hundreds of feet from this large disposal facility

END NOTES:

Following are quotes taken from media interviews of Rob Brundrett (President of Ohio Oil & Gas Association):

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio..."

"... We have a really good class II injection well program in state of Ohio."

DAR (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

ODNR TRACKING SPREADSHEET IN BULLETED FORM

- incident: #2023249
- status = remediation/recovery
- incident classification = minor
- type of incident = release/discharge
- discovered on Nov 9, 2023
- closure date = blank
- owner = Dennison Disposal LLC
- well name: Dennison Disposal (SWIW #11) 1
- -API 34-157-2-5507-0000
- County = Tuscarawas (D.A.R. Note: the county has 10 injection wells)
- Where? 7514 US 250 in Dennison
- Authorized Activity = Class II Injection during injection phase
- What was released: Brine
- Est amount: 25 barrels or 1050 gallons
- Media impacted: Land
- Personnel Deployed = Emergency response staff only (11 site visits)
- Brief description: "Drain is not flowing this date. Remaining water in sump measured 4.23 ms/cm. Slope is partially vegetated. Will get with operator in July to finalize remediation"

Accident Entry #88

Today's Date: Jan 29, 2025

Title: The Ongoing Disregard at Stark County Injection Wells and Beyond—And our toothless Ohio regulatory system

OWS ACQUISITION CO. LLC
BRINE RELEASE/CONTAMINATION
THE BARBER UNIT (SWIW #17) 1 CLASS II INJECTION DISPOSAL WELL
LAND AFFECTED
STARK COUNTY
(Release discovered on 6/30/22)
(ODNR incident #2022152)
(API = 34-151-2-3877-00-00)
(ODNR Chief's Orders 2024-83, 2024-99, 2024-259, 2024-298, 2024-299, 2024-330 and 2024-410)

SOURCES

- ODNR docs
- On-line mapping tools
- 2016 EDF Comments in Response to the Ohio Division of Oil and Gas Resource Management's Proposed Rules 1501:9-8-01 and 1501:9-8-02, Pertaining to Incident Notifications.
- ShaleXP.com
- Mineral Answers.com

NARRATIVE SUMMARY OF OIL/GAS CONTAMINATION EVENT

Intro—Oil and Gas Class II Injection Disposal Wells

When oil and gas companies drill for oil and gas in Ohio, they can utilize dangerous chemicals, and will create millions of gallons, and tons upon tons of contaminated, radioactive liquid and solid wastes. Most Ohioans don't realize it, but drilling deep down into the earth comes with a cost—It disturbs a lot of dangerous heavy metals, including, but not limited to, the radioactive metal known as radium.

The liquid waste created from drilling for oil and gas is known as brine-waste. This brine-waste is so contaminated with heavy metals, and drilling chemicals, it must be trucked away from drilling sites truck load by truck load. Where is it taken? If it's not kept on-site for use in subsequent fracking operations, it will be taken to Class II Injection Disposal Wells that are specifically designated for oil/gas brine-waste disposal. Class II Injection wells, are, essentially, just deep holes in the ground, lined part way down with a steel casing. Sometimes old production wells, for instance, that have stopped producing, are converted into Class II disposal wells.

A brine hauler will simply pull up to a Class II well, often "innocently" operating off the side of an Ohio road, hook up some hoses, and empty thousands of gallons of contaminated, radioactive brine-waste from his or her brine truck. The contaminated waste travels thousands of feet down the well, where it will, hopefully, settle into its designated geological formation.

After the brine haulers inject their load, they will go back to a well pad to collect more brine, and so on, and so on. Three billion (that's with a B), gallons of this contaminated brine-waste are created at oil/gas wells across the U.S. each DAY.

It is concerning that this contaminated, radioactive waste, has been known to migrate from its "assigned" disposal zone, which, as one can imagine, is not good at all. Presently, there is a real mess down in Athens Ohio due to disposal well waste migration. The brine-waste that has been injected into Class II wells has migrated into oil/gas production wells. Production well owners are livid, of course, and seeking legal action.

There are also instances where contaminated brine waste has spontaneously shot up and out of abandoned oil/gas wells, and contaminated the surface and surface waters. Luckily, thus far, as far as we know, this waste hasn't migrated into drinking water wells, but time will tell. Cross your fingers for our fellow Ohioans in Athens.

Governor Kasich Declares a State of Emergency

In 2016, Governor Kasich declared a State of Emergency in Ohio related to oil and gas accidents, and signed Executive ORDER 2016-04K. With this ORDER, the Governor sought to create a 24/7 One Call system for oil/gas incident reporting, and instituted new incident notification rules/laws, and new amendments to present rules/laws. These incident reporting rules/laws are outlined in OAC 1501:9-8-01, 02.

At the time, the Governor, and ODNR, considered the advice of experts before finalizing the new rules/laws. The Environmental Defense Fund, for instance, wrote to Rick Simmers, the then Chief of the Division of Oil and Gas Resource Management at ODNR. EDF applauded and supported the efforts of Kasich and the agency, but they also offered a few suggestions for improvement. They suggested, among other things, the following:

- 1. To expand the definition of a "mandatory reporter" who witnesses, or, comes upon an oil/gas related accident so to make the system speedier, and more efficient. ie: EDF suggested a "reporter" should include more than just the owner of a well. (*Kasich and ODNR did not heed this suggestion*).
- 2. To simplify reporting thresholds from 10 categories to 2, similar to what other state regulators use, so to make the reporting process less confusing. (*Kasich and ODNR did not heed this suggestion*).
- 3. To lower all reporting thresholds, down from 5 barrels (210 gallons) to 1 barrel (42 gallons). The EDF wrote that a 5, 4, 3, 2-barrel spill "can have extremely damaging impacts to soil,

surface and groundwater, animals, plants and insects." (Kasich and ODNR did not heed EDF's suggestion. How many oil spills of 0 to 209 gallons go unreported in Ohio?).

- 4. To require incident notification NOT just for releases that *leave* the well containment areas, BUT for spills that happen *within* the well pad containment areas. EDF suggested this because Ohio's oil/gas well pad construction rules did not require new well sites to be lined (ie: to prevent subsurface entry of contaminants), and because it was unlikely that previously existing well sites were constructed with liners under tank batteries and other equipment. EDF made the point that even releases within containment areas would absorb into the soil. (*Kasich and ODNR did not heed this suggestion*).
- 5. EDF suggested ODNR modify the proposed rules to require responsible parties to conduct more thorough follow up reporting. Specifically, EDF suggested:
- a. Follow up reporting should be across the board, not just for specific incidents. (Kasich and ODNR did not heed this suggestion. Ohio rules only require companies to submit post 30-day incident reports in certain instances).
- b. A follow up report should be submitted to ODNR within 15 days vs. 30 days (*Kasich and ODNR did not heed this suggestion*).
- c. Regarding follow up reporting, it should also include a follow up report EVERY 30 days until the mitigation is completed. (Kasich and ODNR did not heed this suggestion. Ohio only requires one post 30-day report unless the Chief asks for more).

As you read through D.A.R Entry #88, please keep all of these EDF recommendations in mind, as well as Ohio's rejection of these recommendations.

Featured Spill: The June 30, 2022 Barber Unit (SWIW #17) 1 Class II Injection Well Brine Spill

The Barber Unit (SWIW #17) 1 Class II Injection Well operates in the NE corner of Stark County, along 13901 Union Street in Alliance, Ohio, a half mile east of Berlin Lake, and near to several Source Water Area Watersheds/Public Water Supplies and domestic drinking water wells. Nearby PWS's include Newton Falls, Alliance City, Sebring Village, etc.

The Barber well's sister injection well, The Barber Unit (SWIW #19) 2 well, operates nearby too, and even closer to Berlin Lake (a mere ~118 feet from the water's edge). The Barber airport is also near to the injection wells, as is the Berlin Lake Wildlife Area, Deer Creek Reservoir, Deer Creek Park and much more.

As one can imagine, when brine haulers are collecting, transporting, and emptying a lot of this contaminated oil/gas liquid waste, and hooking and unhooking injection lines, spills happen. Lines can also just break from old age.

The spill was discovered, and called into the One Call oil/gas hotline on June 30, 2022. During the injection phase, there was a break in the injection line at the Barber 1 injection well, and an estimated 84 barrels, or, 3528 gallons of brine spilled onto the ground. Land beyond the limits of the facility were impacted. The facility was shut down, and a trench was hand dug from the offloading pad to a buried vault.

Interestingly, the ODNR incident tracking document doesn't say anything about ODNR testing the contaminated soils, or, instructing the Co. to do so, nor does it say anything about the Co. needing to excavate contaminated soils for off-site, approved landfill disposal, a common brine remediation directive. Instead, the Co. was simply advised to till the contaminated soils, and apply lime/gypsum.

Lead Up to the June 30, 2022 Spill at the Barber 1 well

We find the lead up to this brine release interesting in that no ODRN violation notices were seemingly issued to OWS. As said, the OWS Acquisition Co. LLC took ownership of the injection well in Nov. 2020, two years before this spill.

- On 4/4/22, the agency would find evidence of an oil spill in the containment area with peat sorb (a hydro-carbon absorbent) over it. No violation was issued. Why? (D.A.R. Q: What is done with the peat sorb after it absorbs the hydro carbons? Does it absorb heavy metals/radium too? Did the Co. take the contaminated peat sorb to an approved landfill? If not, why?).
- On 5/27/22, a month before our featured spill, the agency would inspect the well again, and would find another leak. The injection pump that had a small leak in the pump house. Again, no violation was issued. Why?
- A month later, on June 30, 2022, the 3528-gallon spill would happen. No violation is noted in the inspection reports. Why?

Our Initial Questions Regarding the June 30, 2022 Spill:

- 1. After this >3000-gallon spill, did ODNR test the contaminated soils, gravel, etc., or, direct the Co. to do so? If not, why? IF ODNR and the Co. did not test the level of contamination in the soils, what data supported the agency directing the Co. to simply till the contaminated soil, and apply lime/gypsum versus having the Co. excavate and remove the soil to a licensed landfill?
- 2. Why didn't ODNR issue violation notices leading up to this spill, OR, for this featured spill?
- 3. Was the trench lined to prevent contamination from reaching subsurface groundwater?
- 4. Was the spill going into the "vault" via the trench? Was the vault steel, a lined pit, ie: impervious?

5. Did contaminated brine enter the subsurface? Did it enter groundwater? Did contaminants from the spill enter any domestic water wells nearby, or, any nearby public water supplies, because, as noted, there are several. Did ODNR and/or the Ohio EPA check? If not, why? Did any Ohio agency warn residents, and public water supply workers in the area about this spill? If not, why?

Later in this post, one will read how ODNR requires the excavation and removal of brine contaminated soils to licensed landfills. We are confused and concerned with the tilling, lime/gypsum, peat sorb "remediation" process. We will be working to better understand this particular process.

After the 6/30/2022 Spill at OWS's Barber 1 well:

ODNR continued to find issues at the Barber #1 well after the June 30, 2022 spill:

On 7/29/2022, ODNR found fittings on the annulus were operational, but highly corroded. An annulus of an oil well is the open space between two concentric pipes or between a pipe and the wellbore. It allows fluids to flow through the well and can be used for pressure control and fluid injection. Failing annulus fittings don't sound like a good thing. No violation was issued.

On 3/11/2024, an ODNR violation was issued to OWS because three horizontal storage tanks had overflowed. Each tank had vent pipes coated with oil. An area between the fencing and the secondary containment was impacted by the overflow of tanks. There was leaf litter and vegetation impacted. The Co. was directed to:

- rake up the oil impacted leaf litter and vegetation and properly dispose of it
- clean up the oil residue on the storage tanks
- stop overflowing the storage tanks

Again, we ask, did ODNR test the contaminated soils, gravel, etc.? If not, why?

On 12/18/2024, ODNR, once again, visited the site and observed oil throughout the secondary containment. The Co. relayed that brine truck haulers overflowed the primary containment for the storage tanks. ODNR instructed the Co. to clean it up asap. Did the company do so? Was the containment area lined, or, did some of the spill seep into the subsurface?

OWS Acquisition Co. LLC, and Their Concerning Track Record in Ohio

Stark County is approximately 575 square miles, and it houses some 20 Class II injections wells. Sixteen of these wells are brine-waste Class II <u>disposal</u> injection wells, and four are what is called <u>ERP</u> Class II injection wells. Like disposal wells, ERP wells can be injected with brine-waste, but ERP wells are injected with this waste in order influence the pressure in the underworld to help nearby production wells become more productive. We are not yet sure how exactly this process works.

OWS owns 9 of the 20 Class II wells in Stark. The Co. also owns many other wells across Ohio. ODNR records show that in 2022 OWS Acquisition Co. LLC owned 5617 producing, or capable of producing, wells. We don't know the present number of wells owned by OWS, but our guess is the Co. presently owns even more oil/gas wells.

What is the company's track record? Here's a quick look at some highlights from 9 OWS Ohio wells:

- 1. As mentioned above, on 4/4/22, ODNR would find evidence of an oil spill at the Barber 1 Stark county injection well. It was "remediated" with peat sorb.
- 2. As also mentioned above, on 5/27/22, ODNR would inspect the Barber 1 well and find another brine leak. We cannot locate any remediation information of this spill in ODNR files.
- 3. On 6/6/22, OWS's Flintkote No. 36 ERP Class II well in Stark County (API #34151249860000) had a 200-barrel (8400 gallons) leak of brine-waste. ODNR issued a violation for the broken flow line at the well. Land and a private lake were impacted, as was the grass, shrubs, and trees. An earthen dam was created in the ditch near the pond to prevent further impact. Two temporary trenches collected the contaminated brine-waste. Were these trenches lined to prevent contaminants from going into the subsurface? We don't know.

For remediation, ODNR directed OWS to call in a water truck to remove all the fluid from the trench and along the ditch. ODNR also directed the Co. to till the soil, apply lime, till-in topsoil and to re-seed, a far cry from testing the contaminated soils, excavating it, and transporting it to an approved landfill.

- 4. On 6/30/22, today's D.A.R. featured spill occurred. ODNR would be notified of a 3528-gallon brine spill at the Barber 1 well in Stark county. ODNR directed the contamination to be remediated with lime/gypsum.
- 5. On 6/30/22, ODNR would find concerning issues at a different OWS well. At OWS's Ohio Power 86 well, in Morgan County (API: 34-115-2-3768-00-00), ODNR would hear the sound of gas coming from outside the well's casing. It was also bubbling from the ground. There was a marker that read "Danger H2S gas." The well is located in a low area by a creek and is subject to high water.

On 7/6/22, ODNR issued OWS a Compliance Notice requiring the Co. to stop and repair the gas leak at their Morgan County well, and to plug the well by October 4, 2022. ODNR observed that the well had been under the water. ODNR contacted and discussed the issue with OWS several times over the next two years, and directed the Co. to correct this issue. The well was still leaking hydrogen sulfide gas (H2S), which smelled at distances between 20 feet to 120 feet away from the well.

It was not until August 7, 2024, that the ODNR Chief, at long last, issued ORDER #2024-410, finding that the well was defective, and directing OWS to properly plug, abandon and restore the well site. Has the Co. complied? We do not know.

6. On 4/26/23, almost a year after the 8400-gallon spill at well No. 36 (#3 above), ODNR was on site of OWS's **No. 37** ERP Stark county injection well (API #34151249870000)—The agency was assessing remediation of No. 37's soil that had been impacted by the 6/6/22 injection line break at nearby well No. 36. Yes, you are reading this right, it was nearly a year after the spill, meaning the contamination, seemingly, remained on the ground for almost a year.

Soils at No. 37 tested high in contamination, and ODNR determined the soils had to be removed. Pine trees next to the impacted area were dead. There was no vegetation growth in the impacted area. The dammed ditch along the access road, and west of the facility, was full of contaminated brine-water. A Compliance Notice was issued to OWS to do the additional remediation by 5/19/23.

DAR Q: So, let's get this straight: There was a spill on 6/6/22 of 8400 gallons that contaminated the soil at OWS's well No. 36 and No. 37. It remained on the ground for ~year. Then, ODNR determined that the contaminated soil at No. 37 was so contaminated it must be removed, BUT the contaminated soil at well No 36 (from the same spill) only had required the tilling in of some lime (#3 above)?

Did the Co. follow ODNR's directive and remove the soil from well No. 37? Records show, in late June, 2023, upon returning to OWS's No. 37 well, ODNR found manure had been tilled in with the soil, and the entire impacted area had been hydroseeded. Was contaminated soil removed, as ODNR directed? We don't know.

- 7. On 6/28/23, ODNR was notified about another brine release at well No. 37. Land was affected and the Co. dug a trench and scraped the soil. ODNR issued a Compliance Notice directing the Co. to get things remediated by 7/14/23, ie: to remove and properly dispose contaminated soil and vegetation from the location, and to repair the injection line, etc. Almost a full year later, and after many visits to the well, and additional leaks, ODNR found the required remediation had not yet been fully completed.
- 8. Issues regarding OWS's No. 38 ERP class II injection well in Stark County: Since 2016, the Flintkote No. 38 ERP well (API 34151249880000), had issues. OWS took ownership of this well in 2020. Way back in 2016, ODNR had observed a failed mechanical integrity test (MIT) at this well. Failure of a MIT essentially means the well, if used, could leak dangerous things into the environment. ODNR suspended this well back in 2016. After OWS took ownership of the well, the well continued to be suspended, and OWS took no actions to properly plug and abandon it. The ODNR Chief would cite this No. 38 well in his 4/23/24 ORDER (more on this Chief's ORDER below).

- 9. On 8/4/23, ODNR was called out to another spill at OWS's No. 36 well. It was another injection line break, this time depositing unknown amounts of brine. The land was affected. The well was shut in (temporarily shut down), and ODNR directed the Co. to remove all contaminated soil, repair the flow line, dispose of soil into an approved landfill, and to replace impacted soil with clean topsoil. It was not until four months later, on 11/14/23, that OWS finally made repairs to the injection line, but it could not maintain pressure. Seven months after this particular spill, OWS still had not completed full remediation at the well No. 36.
- 10. On 11//3/23, OWS had a flowline break at their Carroll county Lee Unit 1-D injection disposal well (SWIW #19) (API #34-019-2-2045-0000). It deposited 1050 to 2100 gallons of contaminated brine into a nearby farm field. This would elicit lots ODRN soil testing, a 20-page Co. remediation plan, a visit to the site by ODNR radiation experts (remember oil/gas brine can be dangerously radioactive), and much more.

DAR Q: Why do ODNR docs related to all of the other spills being mentioned in our DAR #88 entry NOT include this kind of ODNR diligence?

Let it be noted that the farmer was allowed to harvest his field after the spill, but before any soils were tested, and before any conclusions were made about contamination levels, details, etc. Luckily, after the farmer harvested, soil testing showed radiation levels were not dangerously high. What were the levels of the other contaminants?

The spill remained on the ground for ~4 months as ODNR assessed and planned remediation. In the end, because the farmer did not want his contaminated farm land soil removed, ODNR applied 16 tons of gypsum and 9.6 gons of Humex to the contamination zone. The "remediation" would take 3-4 years to complete.

Five months after the farm field contamination event, the Chief would issue ORDER 2024-99 to OWS. The Chief found:

- the company had caused brine contamination of the land surface at the Lee Unit 1-D Well, and was in violation of ORC 1509.22(A)-no person shall place or cause to be placed in ground water or in or on the land or discharge or cause to be discharged in surface water brine, crude oil, natural gas, or other fluids associated with the exploration of....
- and, in violation of OAC 1501:9-1-07(A)—All persons engaged in any phase of operation of any well or wells shall conduct such operation or operations in a manner which will not contaminate or pollute the surface of the land, or water on the surface or in the subsurface.

The Chief wrote in his ORDER that the Co's remedial plan should be accepted.

11. On 11/17/23, ODNR inspected the Flintkote well No. 39 because of a steady flow line leak of unknown amounts. Land was being impacted and OWS was directed, by December 1, 2023, to remove soil/material and replace with clean soil and materials and to reseed. Three months later, ODNR found the remediation was not fully completed.

- 12. On 3/11/2024 ODNR issued a violation notice to OWS because three horizontal storage tanks had overflowed at the Barber 1 well injection well in Stark. Vent pipes were coated with oil along with the western ends of the tanks. An area between the fencing and the secondary containment was impacted by the overflow of the tanks. ODNR directed the Co.:
- rake up the oil impacted leaf-litter and vegetation and properly dispose of it
- clean up the oil residue on the tanks
- stop overflowing the storage tanks
- 13. On 4/3/24 the ODNR Chief, at long last, issued ORDER #2024-83 to OWS to Suspend Operations of their 4 ERP Flintkote Wells in Stark citing the following:
- a. OWS's operation of No. 36, 37 and 39 caused brine, crude oil, natural gas, or other fluids...to be placed on land which caused and could reasonably be anticipated to cause damage or injury to public health or safety or the environment.
- b. OWS has failed to conduct No 36, 37 and 39 in a manner that will not contaminate the surface of the land, or water on the surface or in the subsurface.
- c. No. 36, 38 and 39 are input wells that are not capable of injecting fluids.
- d. OWS is in violation of permit conditions for No. 36, 38 and 39 by failing to plug and abandon them within 60 days of discontinuance of operations.
- e. OWS must suspend its operations at No. 36, 38 and 39.
- f. OWS must either plug No. 36 and 39 or seek written permission from ODNR not to plug them.
- g. OWS must plug the Flintkote No. 38.

The Chief ORDERED OWS to ACT:

- a. OWS shall immediately suspend all operations at the Flintkote No. 36, 38 and 39.
- b. Within 14 days, OWS shall submit to ODNR for review and acceptance a detailed plan for remediation of contamination at the Flintkote No. 36, 37 and 39. All contamination must be remediated pursuant to an accepted plan within 90 days.
- c. Within 90 days, OWS shall either plug No. 36 and 39 or obtain permission from ODNR not to plug them.
- d. Within 60 days, OWS shall plug No. 38.

- e. OWS shall not resume operation at No. 36 and 39 until the Chief or his authorized representative determines that all violations at these wells have been corrected and terminates this order.
- 14. Two months later, on 6/20/24, the ODNR Chief also issued ORDER #2024-330 to OWS. The subject of the ORDER was a "Material and Substantial Violation Failure to File Annual Statement of Production."

Companies are required, by law, to file statements of production of oil, gas and brine-waste for the previous year. OWS had failed to do so for 30 wells in 2022. The Co. was ordered to submit their 2022 information by July 4, 2024. Did the Co. comply? We do not yet know.

15. Two months later, as mentioned above in #6, on 8/7/24, the ODNR Chief issued, at long last, ORDER 2024-410 regarding the need for proper plugging of OWS's Ohio Power 86 Well in Morgan County (API 34-115-2-3768-00-00). Two years had passed since ODNR had witnessed gas leaking and bubbling from the well, and issued the agency's July 6, 2022 Compliance Notice requiring OWS to repair the gas leak at this well, and to plug it.

Again, in his ORDER, the ODNR Chief cited Ohio law that states "(n)o person shall construct or operate a well, that causes damager to other permeable strata, underground sources of drinking water, or, the surface of the land, or, that threatens the public health and safety or the environment.

ODNR also cited, in the ORDER that upon discovery that the casing in a well is defective or that a well was not adequately constructed, the person that owns the well or that is responsible for the well *** shall immediately repair the casing, correct the construction inadequacies, or plug and abandon the well."

16. Four months later, on 12/30/24, the ODNR Chief issued several more ORDERs to OWS.

The ODNR Chief issued ORDER 2024-259 regarding the Bennett C-2 well in Athens County (API #34-009-2-3594-00-00), directing OWS to properly plug and abandon the well, as is required by law. Essentially, for years, OWS ignored ODNR's directives to plug this well. An inspection back on April of 2024 found evidence of an old release, scalding of land, deer tracks, etc. Has OWS complied and plugged the well? We do not know.

And ORDER 2024-298 regarding OWS's Wogan J1 Well (API 34-009-3545-00-00) in Athens County, directing OWS to properly plug and abandon this well. With this well too, OWS was contacted by ODNR many times over several years, and directed to plug the well. OWS did not comply. So, on 12/30/24, ODNR finally issued an ORDER for OWS to properly plug and abandon and restore the well within 30 days. Has OWS complied? We do not know.

And ORDER 2024-299 regarding OWS's the Bennett C 1 Well (API #34-009-2-3593-00-00) in Athens. The Co. ignored ODNR's directive to plug this well, and the ODNR Chief issued the Co. to do so.

Just Some of Our D.A.R. Questions:

- 1. It is a well-known fact that oil and gas brine-waste can be very dangerous, and can contain dangerous drilling chemicals, and dangerous heavy metals, including, but not limited to, radioactive radium. Some of these brine spills are staying on the ground for months, even for years at a time. Why is ONDR, our regulator, our protector, allowing these spills to remain on the ground?
- 2. Did ODNR and/or the Ohio EPA check to see if any of these spills reached the subsurface, groundwater, and nearby domestic wells and/or public water supplies? If not, why? It is hard to imagine contaminants didn't seep into the subsurface and form a plume.
- 3. Why is ODNR, our protector, allowing these repeat offenses to go on and on and on? Hydrogen Sulfide gas can be deadly, and it was leaking from OWS's Power 86 Morgan County well for two years!
- 4. Are there legal guidelines for brine remediation here in Ohio? We have not yet been able to locate this information. We hope we are missing finding it. For the 6 months we have been researching oil/gas accidents in Ohio, we have always read in the files that ODNR requires testing of soils, excavation and off-site disposal at approved landfills. We just assumed this was the legal remediation method. How, exactly, is lime, or, gypsum ridding the contaminated soils of the many dangerous contaminants contained in a brine spill?
- 5. Does ODNR and/or the Ohio EPA notify residents near spills like this, and public water supply workers? If not, why?

Conclusion:

As mentioned at the start of our entry D.A.R Entry #88, in 2016, Governor Kasich determined that an emergency existed related to oil and gas accidents/incidents that required immediate adoption of, and amendments of rules. One of the reasons he declared this emergency was because the "release of natural gas, crude oil, brine, drill cuttings, hydrogen sulfide gas...can have a deleterious impact on the environment if the release is not quickly discovered and remediated." As they say: WORD.

Finally, it's sobering that our D.A.R entry #88 today is an expose on just a few of OWS's wells. How many spills are happening at their other 5000 or more wells? How many spills are happening in Ohio at the more than 65,000 production wells, 250+ injection wells, and 19,000 oil/gas orphaned wells?

And here's a question that might really blow your mind: How many of these oil/gas contamination events have happened here in Ohio since the mid 1800s, when oil/gas extraction began? It's mind boggling to even consider. Are these oil/gas on-going contamination events maybe one reason why so many of us our sick with cancer? It's something to consider.

END NOTES

Following is a quote taken from a media interview of Rob Brundrett (President of Ohio Oil & Gas Association):

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio..."

DAR (Daily Accident Report): We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

ONDR TRACKING SPREADSHEET (in bulleted form) USED FOR THIS D.A.R. POST

- incident #2022152
- incident classification = minor
- type of incident = release/discharge
- discovered on: 6/30/22
- status: closed on 7/6/22 (7 days)
- owner: OWS Acquisition Co LLC
- well name: Barber Unit (SWIW #17)
- -API: 34-151-2-3877-0000
- County = Stark
- Where? 13901 Union St in Canton, Ohio
- authorized activity = Class II injection well during injection phase
- What was released: brine
- Est amount: 84 barrels, 3528 gallons
- Media impacted: land
- deployment status = emergency response staff only
- Brief description: "Cause of leak determined to be break in injection line. The line was repaired. There are impacted soils beyond the limits of the facility with stressed grasses. Owner/operator advised to till soils, with application of lime/gypsum. The operator has not performed this work to date. Will refer to UIC for follow-up.

The Daily Accident Report-Ohio Oil & Gas Accident Entry #89

Today's Date: Feb 5, 2025

Title: Wishin' and Hopin' and Thinkin' and Prayin' -- The Lore City Oil & Gas Facility

THE SHIELDS ONE SWIW #17 & CALLAWAY SWIW #24
CLASS II INJECTION DISPOSAL WELLS
THE MUD MASTERS & GPB E&P OH, LLC
"PROCESSING" FACILITIES
GUERNSEY COUNTY
CLEAR WATER FIVE LLC, SELECT AGUA LIBRE MIDSTREAM LLC, SELECT WATER
SOLUTIONS LLC
(API #34-059-24445-0000 and API #34-059-24527-0000)

SOURCES

- ODNR oil/gas incident tracking sheets
- ODNR Chief's Orders
- ODNR inspection reports and permits
- On-line mapping tools
- Belmont Solids' facility application

NARRATIVE SUMMARY

If you go to Lore City, Ohio, just off Wintergreen Road, a half mile south of Old Washington Village, you will find, among the fields and farmland, the large Lore City Oil & Gas Facility. The facility is open 24 hours a day, seven days a week, and is "treating," "processing" and disposing of hundreds of thousands of gallons, and tons upon tons of contaminated, radioactive oil and gas waste.

This facility includes two Class II injection disposal wells (permitted to inject over 500,000 gallons of contaminated liquid oil/gas brine-waste a-day)-- Class II wells are specifically for contaminated oil/gas brine-waste--AND 2 oil/gas waste "processing" facilities, one of which is permitted to store up to 3000 tons of solid/semi solid contaminated oil/gas waste. We cannot determine how much solid/semi-solid waste the other "processing" facility can store and process here, but our best guess is it can also store/process up to 3000 tons.

Lore City is ~3 miles to the south of this facility. Waterways nearby include the:

- Hawkins Run creek ~.28 miles to the facility's S/SE
- Mud Run Creek ~1.3 miles to the SW
- Salt Fork creek, ~2.7 miles to the north

Drinking water supplies nearby include:

- domestic drinking water wells
- Byesville water supply ~4 miles to the S
- and the Source Water Area Watershed for the city of Cambridge ~4 miles to the S, SE and SW

Landmarks include Salt Fork State Park, which is ~4 miles to the north, and Senecaville Lake, ~6 miles to the SE.

Because so many companies, related to this facility, have merged, taken ownership, surrendered ownership, etc., it is hard to make sense of who owns what. This is not uncommon in the oil/gas industry. To the best of our ability, we believe the two injection wells at this facility are now owned by Select Water Solutions. In the past, these injection wells have been owned by Clearwater Five LLC, and Select Agua Libre Midstream LLC. The waste "processing" facilities at the site are owned by Mud Masters and GPB E&P OH, LLC, or, maybe these two entities have now become one, we cannot determine.

HOW DOES OIL/GAS WASTE DISPOSAL & "PROCESSING" WORK?

1. CONTAMINATED OIL/GAS LIQUID BRINE-WASTE AT THE LORE CITY FACILITY

It has been reported that oil and gas extraction and production, in the U.S., creates 3 billion, that's billion with a B, gallons of oil and gas liquid brine-waste PER DAY. Because Ohio, Pennsylvania and West Virginia are home to two of the most productive geologic formations related to oil/gas extraction and production (Utica and Marcellus shale), these three states create a lot of the 3 billion gallons a day of this brine-waste.

It is a well-known fact that this brine-waste is very contaminated, and more often than not, especially in the Utica and Marcellus formations, dangerously radioactive.

Imagine it! On a regular basis in Ohio, trucks are transporting this contaminated, radioactive brine-waste away from well sites, along our Ohio roads, to places like the Lore City Oil/Gas Facility. Not only that, but PA and WV oil/gas truckers are also bringing their brine-waste to our Ohio injection wells. Why? We've heard this cross-state transport is because the geology in Ohio is better for injection disposal, and/or because Ohio's disposal costs are cheaper. We have not yet confirmed these explanations.

Once a brine-waste hauler arrives at the Lore facility, he, or, she will connect a hose/pump between the truck and an above ground storage tank, and unload all of the truck's contaminated waste. From the drone footage we've seen (link below), we believe there are some 25, or, more, 500-barrel (21,000-gallons) storage tanks housed at this facility. That's $25 \times 21,000 = 525,000$ gallons of liquid waste.

Drone footage link: https://www.youtube.com/watch?v=Nhu2ItpgvLM

During the transfer of the brine, spills, of course, will happen. So, ideally, any and all unloading areas, called "pads," will be comprised of concrete drives (or some other impervious material), impervious knee walls (to keep any spills from running off the pad and onto the ground), and

drain(s). Any such drain(s) should be connected to a sealed, underground concrete vault complete with a pump. When the vault(s) get full, the contents will be pumped back up, and out, into something that can safely contain it.

Of course, one can only hope that companies keep any and all of their concrete/impervious features, tanks, vaults, hoses, pumps, drains, etc, in good working order, and crack and tear free, etc. One can also only hope that companies will immediately seal any cracks/tears. Otherwise, contaminated and radioactive waste will be seeping into the ground via these cracks, tears in plastic liners, etc., and possibly into the groundwater in the area. Groundwater, obviously, feeds drinking water supplies.

When this oil/gas brine-waste gets transferred to the storage tanks, it will be given time to settle so that non-liquids will travel to the bottom of the tank. This becomes contaminated tank sludge that will have to be dealt with down the road. Then facility workers filter the liquid tank brine-waste with something called "filter socks." The filter socks, will, of course, become very contaminated and radioactive, and will have to be handled and disposed of very carefully.

Of course, one can only hope companies and workers have the good sense and integrity to be careful with these contaminated filter socks, and to properly dispose of them. Otherwise, contaminants from these "socks" could seep into the ground, and possibly into the groundwater. We do not know yet what "proper" disposal of these "socks" is.

At this point, the oil/gas liquid waste is, hopefully, particle free (so as to prevent clogging of well), is ready for injection into the earth, via the Class II wells. The workers will then blast this contaminated liquid-waste, with high pressure, down into one of the (2) Class II injection wells at this site.

The brine-waste will then go down, down, down the well, and into a geological formation, which at this facility, is some 9000 feet under the ground. On the way down, the waste will, of course, be traveling (via a steel well bore surrounded by cement) through groundwater/aquifer(s), etc., and so, the integrity of the well is critical to keeping drinking water in the area safe.

Therefore, one hopes the well, and the cement around the well, are not cracked or compromised in any way. One can only hope the Co. monitors all the things they are supposed to, by law, when it comes to the integrity of their two injection wells, and that workers will not exceed injection pressure that might over-stress the well. Otherwise, an injection well could fail and cause contamination of drinking water, ie: domestic wells, AND, public water supplies near to this injection well. Such contamination, since radium is involved, would be hard or impossible to undue.

Theoretically, once the waste has reached its assigned geological formation, it is supposed to stay there, but, there are cases in Ohio when it has not. This, of course, is VERY concerning.

In Athens, Ohio, for instance, brine-waste, in Class II wells, has travelled to nearby production wells and contaminated these wells. In other cases in Ohio, the brine-waste has found unplugged oil/gas wells, and travelled up the hole, only to blast out the hole with sustained vengeance,

contaminating ground, waterways, fish and more, in the unplugged well's vicinity.

As one can imagine, with such a collection of several potentially dangerous operations at this Lore City Facility, there are a lot of Ohio laws and rules the companies have to follow. There are Class II injection construction, injection, storage, etc. laws and rules to be followed. One can only hope the companies follow these laws and rules, and that ODNR, the regulatory agency, enforces these rules and laws, if and when, the companies don't comply.

2. CONTAMINATED OIL/GAS SOLID/SEMI-SOLID WASTES AT THE LORE CITY FACILITY

In the section above, we have been discussing LIQUID oil/gas brine-waste. Now we would like to discuss the solid/semi solid wastes of oil/gas extraction. We would like to offer a very simplified explanation of the complex process of solid/semi solid oil and gas waste "processing" at facilities like the Lore facility. We are in the beginning stages of learning about this process ourselves.

Here's what we know, and this information comes from a permit we have secured from a similar Ohio oil/gas facility by the name of Belmont Solids in Lisbon, Ohio.

When it comes to companies like Mud Masters and GPB, companies that are "processing" a LOT of oil/gas solid/semi solid wastes, the first thing on the to do list is for companies to submit their Radiation Protection Program (RPP) to ODNR. More importantly, of course, is to ensure that these companies follow their RPP program. Doing so is for the protection of facility workers, and to ensure that radiation exposures received by members of the general public and the environment are negligible. One can only hope the companies do so.

Beyond these RPP plans, what, exactly, do Mud Masters and GPB do with the contaminated solid/semi solid wastes they have received from drilling sites? Let's start at the beginning:

Imagine how much mud, rock, etc. you would create if you dug a hole a mile and a half deep with a circumference of 7-inches. The math tells us this would be ~1716 cubic feet of solids/semi solids, or, a 12 ft x 12 ft room filled with this waste. Now imagine all of this mud and rocks, (called drill cuttings) are contaminated with drilling chemicals, and dangerous heavy earth metals including, but not limited to radioactive radium.

What do you do with it? It's too contaminated to leave on the ground at the drilling site. It's too contaminated to put into landfills. There's only one thing to do with it: Load it up onto a truck, hopefully a sealed truck called a "water box", and transport it to one of the thirteen Ohio oil/gas "processing" facilities, like Mud Masters and GPB in Lore, Ohio.

When you start loading the solid waste into your truck at the drilling site, you realize the drilling has created other solid/semi-solid wastes. There's a different kind of drilling mud, which isn't mud at all, it's a drilling mixture that can contain oil-based products, clays, polymers, etc. Additionally, there might be used proppant, which can be contaminated sand and/or ceramic

beads, etc. that the drillers have used. And, there will be filtering media, and more. All of this will be going to Mud Masters/GPB too.

Like the liquid brine-waste, all of the contaminated solid/semi solid drilling wastes will be transported, truck load, by truck load, along our Ohio roads, throughout communities, hopefully, again, in water tight "water boxes." Otherwise, the contaminated waste will blow out into the air, and could spill onto the highway, and into storm drains, creeks, etc.

Once you arrive at Mud Masters/GPB, the waste from your water box will be "processed" inside a building, hopefully. We are not yet sure how all of this "processing" works. We know that somehow the wastes will be emptied out, and then liquids will be separated from the solids.

This liquid will then be pumped out of the building into one of the storage tanks on-site. Then the remaining waste, the radioactive and otherwise contaminated solids, will start being downblended. Workers will start adding quick-lime, or, portland cement, or, something else to this radioactive waste so as to dilute its radioactive levels. Some say dilution is the solution?

Hopefully, there is a lot of testing, and retesting of the wastes involved--We hope there is. The question is: What will they be testing in these solids/semi-solids. Radium? Yes. Will they be testing for the myriad of other dangerous heavy metals in the wastes? We hope so. Will they be testing for the myriad of drilling chemicals? Since oil/gas companies don't have to disclose their potentially dangerous drilling chemicals, Mud Masters won't know what chemicals they need to test for.

After being "downgraded," these oil/gas wastes will be reloaded onto trucks and taken to Ohio landfills if they test at "acceptable" radioactive levels, or out of state, if levels of radioactivity cannot be sufficiently lowered. NOTE: Some believe all of this radioactive oil/gas waste should go to hazardous wastes out west vs. going through any "downgrading" process.

Of course, one hopes all of the workers at Mud Masters, and at similar oil/gas facilities across Ohio and beyond, are dressed in their hazmat suits and respirators. Our guess is the workers are not. This is based on the video we've watched of the site, where workers are walking around the facility in regular clothes.

One also hopes the building, where this downgrading takes place, is sealed with a top-notch filtering system, ie: radioactive particulates blowing out and into the community. We hope it has an impervious concrete surface, with no cracks. We hope there are closed loop drains on the building's floor, and that these drains are tied into sealed vaults complete with sump pumps.

What are the anticipated waste volumes to be "processed? at this facility" Belmont Solids, which we think is a much bigger facility, processes 400 tons of oil/gas waste day, 2800 tons a week, 12,000 tons a month and 144,000 tons a year.

PUTTING ALL HOPE ASIDE. SOME REALITIES AT THE LORE CITY FACILITY

Oil and gas extraction and production involves countless stages. In Ohio, at the more than

65,000, production wells, more than 250 class II injection wells, 13 or more solid/semi solid waste facilities, ~19,000 orphaned wells, hundreds of miles of oil/gas pipelines, 4 Ohio refineries and countless transportation routes carrying oil/gas, there are endless opportunities for mistakes and accidents to happen.

An average of 250 oil/gas incidents are logged each year at ODNR, Ohio's oil/gas regulator. AND, this includes only the reported oil/gas incidents. With an industry that utilizes large amounts of dangerous chemicals, and, that creates large amounts of contaminated, radioactive waste, this is concerning.

What kind of accidents happen? Oil and gas waste is a very corrosive waste, and hard on machines and other equipment. Consequently, it makes machinery, valves, tanks, pumps, etc. very vulnerable to failure. Also, lightning can strike and ignite fuel tanks, and static electricity can do the same. Cement on drilling wells can fail. Human errors happen every day that cause spills, explosions, fires, truck accidents, and so much more. Also, there are companies, unfortunately, that do not follow the laws and the rules that they are supposed to follow. These are the realities of oil/gas extraction and production.

Putting all hope aside, what are the realities at the Lore City Oil and Gas Facility?

From what we can garner, Clearwater Five LLC purchased the property in the 2000s. Their Shields One Injection Well was permitted in 2013, but injection didn't start until 2017. In the meantime, the Co. leased some of the property to a Co. known as Mud Masters. In Feb. 2016, Mud Masters got their first permit to start "processing" solid/semi solid oil and gas wastes. Six months later, Mud Masters filed a second permit to increase storage capacity, and to expand services to include truck and vessel washing.

The facility was getting under way. Soon, it would include:

- the Shields One Class II injection disposal well
- the Callaway Class II injection disposal well
- the Mud Masters waste "processing" facility
- and the GPB E&P OH, LLC waste "processing" facility

It wouldn't take long for ODNR inspectors to find big concerns at the Mud Masters facility. On December 1, 2016, ODNR found that the company's storage tanks, and secondary containment area were not in alignment with the Co's site plan designs. Also, process tanks were full, waste substances were spilled onto the secondary containment, and contaminated filter socks were being stored in an unsecured manner, open to the atmosphere.

ODNR went back a week and a half later, and found the secondary containment area, where the Co. was storing, treating and processing brine and other waste, had failed and contaminated brine had discharged onto the ground. Filter socks were still being stored in an unsecured manner.

On December 15, 2016, ODNR would document a brine leak of unknown amounts impacting the

land at the facility.

On December 21, 2016, Mud Masters was issued ODNR ORDER 2016-438 and the Chief of ODNR directed the suspension of operations, and ordered the Co. to:

- secure filter socks within 24 hours in compliance with the radiation plan and to dispose of them at an authorized facility
- to provide all docs related to transport
- to test the brine waste and other waste, including the socks
- to submit to the Chief approval of a plan to determine the horizontal and vertical extents of the discharge brine and other waste substances
- to remediate any contamination
- AND to stop accepting any waste until the Chief had determined the facility had been properly remediated.

By January 13, 2017, the Chief gave Mud Masters the ok to reinstitute operations.

Three days before this, on January 10, 2017, ODNR was notified that Clearwater Five was prepared to commence injection operations in the Shields injection well they had long been drilling and constructing on-site. Soon, Clearwater received authorization to inject brine-wastes and to store it on-site.

A mere week later, the injection well was having trouble, and ODNR told the Co. to shut it down. By March 23, 2017, the Co. was trying to pinpoint the hole in the well casing and to come with a plan to repair it. The hole would be found in the casing at 3980 feet down in the ground. By April, the Co. would pass their well integrity test.

On April 10, 2017, an ODNR inspection at the site found more improperly handled filter socks, but this time, for some unknown reason ODNR simply "suggested" to properly handle the socks, and to place them in a roll off box.

On July 27, 2018, ODNR simply told the Co. that "housekeeping" was needed in the containment area.

On June 7, 2017, ODNR received a call from the Ohio EPA regarding a complaint that "water" (a euphemism we think for contaminated liquid waste) was being released from a tank at the facility. A containment sump pump line had failed, but the facility representative told ODNR nothing was released outside the containment area.

In September, 2018, ODNR received an application from the Co., GPD, to store and process oil/gas waste on the other side of the large facility, similar to Mud Masters. By granting GPD a

permit, ODNR would, essentially, be almost doubling the contaminated waste coming to this facility.

In October, 2018, the Shields One Injection well would, once again, face troubles. The Co.'s well's integrity test failed, and ODNR directed the Co. to cease injection operations until repairs to the well could be made. After Halliburton pumped over a 1000-gallons of gel, 723 sacks of cement, and did a lot more work on the well, the well was ready in mid-November, 2018 to start injecting waste again.

In August of 2019, ODNR told a new owner of an injection well at the site (Select Agua Libre Midstream LLC) that cleanup was needed in the storage tank area next to the Mud Masters section of the site, because, the ODNR representative said, Mud Masters was being sloppy with their filters (yes, their radioactive filters).

In October, 2019, a fire happened at the site. There is not much info. in the ODNR files save for that the Fire Department was called out to the site.

On January 21, 2021, ODNR issued ORDER 2021-24 that would suspend all of Clearwater Five's operations in Ohio. ODNR found the Co. had committed a substantial violation for failure to maintain sufficient insurance coverage. The Co. was given 30 days to get things in order.

On April 18, 2024, ODNR got word that the owner of the Shields injection well would be proposing to expand the facility by adding an additional containment area near the well that will house four additional 500-barrel storage tanks (105,000 gallons of waste storage), along with an additional concrete lane and unloading area.

CONCLUSION

A picture speaks a thousand words. So, here is a video that the wonderful organization, Fractracker, took of the Lore City Oil/Gas Facility: https://www.youtube.com/watch?v=Nhu2ItpgvLM

You can see what appears to be various spills on the ground, unsealed truck boxes containing what appear to be solid wastes, a large old pit, and much more.

Here is a video of the Austin Master facility in Martins Ferry. It was an oil/gas "processing" facility that recently got shut down by the state of Ohio: https://www.youtube.com/watch?v=J4tXtSFM5NE&t=14s

And, here's a good Dispatch article on oil/gas "processing" facilities: https://www.dispatch.com/story/business/2021/06/23/ohio-no-rules-radioactive-fracking-waste-oil-gas-industry-environment/7683746002/

It's important to note that oil/gas facilities in Ohio, similar to the Lore facility, have had failures. As mentioned above, in Athens, for instance, Class II injection wells, similar to Lore's, have

experienced waste migration, and have contaminated nearby production wells. Such waste migration has also spontaneously shot out of unplugged abandoned wells, and contaminated nearby land, water, fish and more.

In Martins Ferry, Ohio, the Austin Master oil/gas "processing" facility was recently shut down by the state, and the community is presently struggling with some 10,000 tons of contaminated, radioactive waste the Co. left in the warehouse when they skipped town.

It's overwhelming to think of all of the dangerous materials and waste the Ohio oil and gas industry is utilizing and creating every single day across our state. To protect Ohioans from this complex, accident-prone industry, that is operating at every turn and corner of our lives, we can only hope:

- our legislators have written, and will continue to write the most protective oil/gas laws they can
- that ODNR, the oil and gas regulator, will always enforce these protective laws to the very best of their ability
- that companies will follow the laws, since ODNR cannot be watching them 24 hours a day, seven days a week
- when companies don't follow the laws, that ODNR will fine them, prosecute them, and, when warranted, shut them down

If you have read the 89 Daily Accident Report entries we've posted thus far, we think you will agree that hope only goes so far.

END NOTES

Presently, Guernsey County houses 9 oil/gas Class II injection disposal wells.

Following is a quote taken from a media interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is an Ohio oil/gas incident/accident map, and a quote from Governor John Kasich:

Brundrett:

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on."

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report: https://arcg.is/1GHnr4

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..."

In 2016, the Governor signed Executive ORDER 2016-04K: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

DAR (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

The Daily Accident Report-Ohio Oil & Gas

Accident Entry #90

Today's Date: Feb 7 2025

TITLE: When Class II Injection Wells Go Awry

Did you know oil and gas extraction creates billions and billions AND billions of gallons of

dangerous, contaminated and radioactive liquid brine-waste? Many don't know this.

Do you know where this waste goes? Much of it gets trucked away, truck load by truck load,

along our Ohio roads, through our communities to something called Class II injection wells. The

waste then gets shot down these wells and into geological formations deep beneath our feet.

QUESTION: WHAT CAN HAPPEN WHEN THIS DANGEROUS OIL/GAS CONTAMINATED AND

RADIOACTIVE BRINE-WASTE IS INJECTED INTO A GEOLOGICAL FORMATION VIA CLASS II

INJECTION WELL?

ANSWER:

It can migrate to nearby production wells and contaminate those production wells--

https://insideclimatenews.org/news/14052023/ohio-pennsylvania-fracking-wastewater/

AND....AND...AND....

It can also migrate to the surface via unplugged wells, and contaminate the ground, water,

plants, animals, and more.

Here is an ODNR Chief's ORDER 2023-02 outlining several instances when this dangerous

oil/gas waste migrated from its assigned geological formation:

ORDER BY THE CHIEF

January 9, 2023

ORDER NO. 2023-02

TO: Deeprock Disposal Solutions LLC

637 State Street Route 821

Marietta, OH 45750

056

RE: Warren Drilling No. 1 Well
API # 34-121-2-3995-00-00
SWIW No. 6
Jackson Township, Noble County
and
Travis Unit No. 200405
API # 34-121-2-4086-00-00
SWIW No. 7
Jackson Township, Noble County

SUBJECT: Suspension of Injection Operations

Pursuant to Ohio Revised Code 1509.03 and Ohio Admin. Code 1501:9-3-07(N), the Chief of the Division of Oil and Gas Resources Management ("Chief" or "Division") makes the following Findings and issues the following Order:

BACKGROUND:

- (1) Deeprock Disposal Solutions LLC ("Deeprock") is the "Class II disposal well owner," as that term is defined in Ohio Adm.Code 1501:9-3-01(J), of the Warren Drilling No. 1 Well, API# 34-121-2-3995-00-00, SWIW No. 6, and Travis Unit Well No. 200405, API 34-121-2-4086-00-00, SWIW No. 7 ("Travis Well"), located in Jackson Township, Noble County, Ohio (collectively referred to as "the Wells").
- (2) Pursuant to R.C. 1509.05, R.C. 1509.06, and R.C. 1509.22(D), on May 27, 2004 and August 11, 2008, the Division issued permits to Triad Resources Inc., authorizing Triad Resources Inc. to drill the Travis Well as a saltwater injection well and convert the Warren Drilling No. 1 Well to a saltwater injection well.
- (3) On January 5, 2021, Division records were updated to reflect that the Wells were transferred to Deeprock. Deeprock is the successor-in-interest to the permits for the Travis and Warren Drilling No. 1 Wells.
- (4) The Warren Drilling No. 1 Well is constructed to inject into the Clinton and Medina formations at a depth interval of 5764 feet to 5892 feet.
- (5) The Travis Well is constructed to inject into the Clinton and Medina formations at a depth

interval of 5868 feet to 5981 feet.

- (6) On November 15, 2010, a flow of brine was encountered at the surface while removing downhole equipment at the Patrick F/MM-OVOC No. 3 Well, API# 34-121-2-4101-00-00, located approximately 1.5 miles northeast of the Warren Drilling No. 1 Well. The Patrick F/MM-OVOC No. 3 Well was drilled to produce from the Clinton formation at a depth interval of 6052 feet to 6134 feet.
- (7) On August 27, 2013, a flow of brine was encountered at the surface while beginning to plug an oil and gas production well knowns as the Raney H No. 81 Well, API# 34-121-2-3122-00-00, located approximately 3.5 miles southwest of the Warren Drilling No. 1 Well. The Raney H No. 81 Well was drilled to produce from the Clinton and Medina formations at a depth interval of 5895 feet to 5985 feet.
- (8) On April 23, 2019, an uncontrolled flow of brine occurred at the surface of the oil and gas production well known as the Schott No. 1 Well, API# 34-121-2-2117-00-00, located approximately 5 miles southwest of the Warren Drilling No. 1 Well. The Schott No. 1 Well was drilled to produce from the Clinton and Medina formations at a depth interval of 5564 feet to 5688 feet. The flow of brine ceased after setting of a bottom plug across the Clinton and Medina formations.
- (9) On January 24, 2021, an uncontrolled flow of brine began at the surface of the oil and gas production well known as the Ohio Power/Gant No. 17-69 Well, API# 34-121-2-3216-00-00, located approximately 2 miles southwest of the Warren Drilling No. 1 Well. The Ohio Power/Gant No. 17-69 Well was drilled to produce from the Clinton and Medina formations at a depth interval of 5889 feet to 6019 feet. The uncontrolled brine release continued for days until a plug could be set in the well. The land surface and adjacent stream were impacted by the release. This release caused environmental impacts. The Division incurred costs of \$1,279,608.03 to take corrective actions. The Division notified Deeprock of the impact of the Ohio Power/Gant No. 17-169 Well.
- (10) On January 7, 2023, a Division inspector received a report that brine was spraying from a hole in the production casing of the oil and gas production well known as the Virgil Porter #1 C Well, API # 34-121-2-3092-00-00. The Virgil Porter No. 1 C is located approximately 5.43 miles of the Travis and Warren Drilling No. 1 Wells and is drilled to produce from the Clinton and Medina formations at a depth interval of 5626 feet to 5778 feet. This spraying brine caused imminent health, safety, and environmental risk.

- (11) Also on January 7, 2023, the Division notified Deeprock of the Virgil Porter No. 1 Well impact and informed Deeprock that the Division would be issuing an order suspending Deeprock operations at the Wells. The Division also requested and Deeprock agreed to voluntarily suspend injection at the Wells pending the issuance of the suspension order.
- (12) The above-referenced brine flows occurred at oil and gas production wells along a linear trend from the Wells as depicted in the attached Exhibit A.
- (13) The volumes and pressures of the brine flows described above do not occur naturally in Clinton wells drilled decades ago and can only be originating from a nearby injection well or wells.
- (14) The only nearby injection wells that inject brine at volumes large enough to migrate to the above-referenced impacted production wells are the Travis and Warren Drilling No. 1 Wells. The Wells are also the only injection wells on the linear trend where documented instances of brine flow to surface through production wells have occurred. Any other nearby injection wells have also not been in operation long enough to be the cause of these brine flows.
- (15) The impacts to production wells on this linear trend extend outside the area of review for the Travis and Warren Drilling No. 1 Wells.
- (16) Ohio Revised Code 1509.22(A) provides, in pertinent part, that "[n]o person shall . . . cause to be placed . . . on the land or discharge or cause to be discharged in surface water brine . . . or other fluids associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources that causes or could reasonably be anticipated to cause damage or injury to public health or safety or the environment."
- (17) Ohio Administrative Code 1501:9-1-07(A) provides that "[a]II persons engaged in any phase of operation of any well or wells shall conduct such operation or operations in a manner which will not contaminate or pollute the surface of the land, or water on the surface[.]"
- (18) Ohio Administrative Code 1501:9-3-07(N)(1) states, in pertinent part, that "[t]he chief may immediately suspend, by order, operations of a class II disposal well or surface facility under any of the following circumstances:
- (a) A class II disposal well is causing or likely to cause contamination of the land, surface waters, or subsurface waters; * * *

- (f) The chief determines that operation or continued operation of the well . . . is likely to endanger public health or safety;
- (g) The chief determines that brine or other waste substances from class II disposal well injection operations may be outside of the permitted injection zone or area of review; [and] * *
- (k) Any violation of Chapter 1509. of the Revised Code or division 1501:9 of the Administrative Code."

FINDINGS:

- (1) The Chief finds that Deeprock's operations of the Wells violates R.C. 1509.22(A), and Ohio Admin. Code 1501:9-1-07(A).
- (2) The Chief finds that the operation of the Wells has and is impacting nearby production wells and that such impacts endanger and are likely to endanger public health, safety, or the environment.
- (3) The Chief finds that if the Wells continue to operate, additional impacts may occur in the future and are likely to contaminate the land, surface waters, or subsurface waters. Thus, the continued operation of the Wells presents an imminent danger to the health and safety of the public and is likely to result in immediate substantial damage to the natural resources of the state.
- (4) The Chief finds that brine or other waste substances from operation of the Wells are outside of the area of review.
- (5) The Chief finds that the Wells should be immediately suspended under Ohio Admin. Code 1501:9-3-07(N).

ORDERS:

IT IS HEREBY ORDERED:

- (1) Deeprock shall immediately suspend all operations at the Wells.
- (2) Deeprock shall submit a plan in accordance with Ohio Admin. Code 1501:9-3-07(O)(1).

(3) Injection operations at the Wells shall not resume until the Chief or his authorized representative determines that the conditions that caused the suspensions have been corrected and this Order is terminated.

Daily Accident Report END NOTES

Following is a quote taken from a media interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is an Ohio oil/gas incident/accident map, and a quote from Governor John Kasich:

Brundrett:

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on."

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report: https://arcg.is/1GHnr4

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..." In 2016, the Governor signed Executive ORDER 2016-04K: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

DAR (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

The Daily Accident Report-Ohio Oil & Gas

Accident Entry: #92

Today's Date: Feb 12, 2025

Title: What Do You Call an Oil & Gas Regulatory Message with No Consequences?

Ongoing Brine-Waste Contamination!

THE NORTHSTAR COLLINS (SWIW #13) 6 CLASS II INJECTION DISPOSAL WELL SELECT WATER SOLUTIONS LLC; D & L ENERGY INC; BOBCAT COITSVILLE, LLC MAHONING COUNTY LOSS OF WELL CONTROL and more

BRINE CONTAMINATION

LAND IMPACTED

(Discovered on 8//6/20)

(ODNR incident #2020141)

(Well API #34-099-23I71-0000)

SOURCES

- 1. Preliminary Report on the Northstar1 Class II Injection well and The Seismic Events in the Youngstown Area, ODNR, March 2012
- 2. ODNR Chief's ORDERs
- 3. ODNR inspection reports
- 4. The Coitsville Reader (Trustees)

NARRATIVE SUMMARY

INTRO

The Northstar Collins (SWIW #13) Class II injection well operates right off Rt. 422/McCartney Road just east of Youngstown, Ohio in Mahoning County. It's one of six Class II injection wells (specifically for oil & gas contaminated waste) presently operating in Mahoning.

The Collins well is locally famous for several reasons. It, along with four other injection wells, were <u>shut down</u> in 2011 by Governor Kasich, after a 4.0 earthquake occurred in the area. Yes, injection wells, and the fracking of production wells, in Ohio, and beyond, have been known to cause the earth to shake. In December of 2011, the Youngstown earth shook a little too much for comfort. Although it was determined, after an investigation, that a different, nearby Northstar well was the earthquake culprit, the Northstar Collins well, along with other wells, stayed closed, at least for a while.

Another interesting factoid about the Northstar Collins injection well is that it's associated with the infamous Ben Lupo. If you don't know it already, Mr. Lupo went away to prison back in 2013, when he was found guilty of ordering workers from his company to illegally dump tens of thousands of gallons of toxic oil/gas sludge and brine-waste down a storm sewer(s) some 33 times from Oct 2012 to Jan 2013. The fluids reached a Mahoning River tributary.

Ohio Revised Code <u>1509:22</u> outlines the proper storage or disposal of brine, crude oil, natural gas, or fluids, and it does NOT include pouring contaminated brine-waste down a drain. ODNR revoked Mr. Lupo's well permit(s) after this, one of which was for the Northstar Collins well.

The other reason the Northstar Collins injection well is famous is because it operates right next to a <u>camp</u> for differently abled adults and children. Gabba Camp is a 55-acre camp complete with cabins, a 7-acre lake, farm animals and more. It looks like quite a dream, and service to the community, save for the fact that it operates right next to an oil and gas injection well.

OVER THE YEARS, THE NORTHSTAR COLLINS WELL'S CONCERNING ISSUES

As mentioned above, after Mr. Lupo illegally dumped and went to prison, the Northstar Collins well had its permit revoked. On February 6, 2013, the ODNR Chief of the Division of Oil and Gas Resources Management (DOGRM), issued ORDER 2013-03 to D & L Energy in relation to this revocation. Consequently, the Northstar Collins well wouldn't be permitted to do business until several years later.

In March of 2015, records show that D & L Energy Inc's bankruptcy trustee transferred the Northstar No. 6 well to North Star Disposal Services VI, LLC. In June of 2018, North Star Disposal Services changed the Co. name to Bobcat Coitsville, LLC. According to ODNR records, the well is presently owned by Select Water Solutions, LLC. We do not know when Select Water Solutions, LLC took ownership of the well, or, if Select Water Solutions, LLC is affiliated with Bobcat Coitsville, LLC.

In May of 2018, Bobcat Energy made plans to begin construction at the facility, and they cut down all of trees at the site.

By December, 2019, with Chief's ORDER 2019-379, Bobcat Energy was given the go ahead to start injecting contaminated brine-waste into the Northstar Collins well. The Chief of ODNR found:

- the well was in compliance with the requirements of R.C. 1509.22 and OAC 1501:9-3
- was not in violation of law
- did not jeopardize public health or safety
- was in accordance with good conservation practices

Not too long after ODNR gave Bobcat Energy the green light, issues would plague the Northstar Collins well. In February 2020, a citizen would capture a release at the well happening in real time. The citizen recorded it, and sent the video to the media. Years after the news coverage of the earthquake, the Northstar Collins well was in the news again...this time with contaminated waste spilling out over the storage tanks, and onto the ground.

On March 10, 2020, more than three weeks after the February 16th incident, ODNR inspections found ground contamination at the site within the field west of the facility. ODNR determined it had resulted from this February 16, 2020 overflow of waste, indicating, of course, that this waste had stayed on the ground for weeks.

The question is, of course, how much of the contaminated brine-waste seeped into the subsurface from this lingering spill? Did ODNR, or, any other Ohio agency, check on the possible contamination of the subsurface? Did any agency check on possible contamination of drinking water wells, and public water supplies in the area?

According to ODNR inspection reports, it would be just a month later, in June of 2020, that the operator at the well announced to ODNR that the Co. would be upping its injecting volume, nearly doubling injection amounts. The amount injected increased from 33,600 gallons/day to 58,800.

On August 6, 2020, according to a 2020 ODNR oil/gas incident tracking, the well would have another incident. This time there would be a loss of well control. The Co. had brought 1,470,000 gallons of brine to the well to perform what is called "well stimulation." The Co. would be injecting 2100 gallons of brine-waste a minute into the well. It wouldn't be long until control was lost. The nipple on the wellhead failed. The well blew out, and the brine-waste started over-flowing. An unknown amount of contaminated brine-waste spilled out and impacted the land at the site. ODNR, of course, got involved. It took the agency 100 days to close the file on the incident.

For the next few years, ODNR inspection reports of this well show issue after issue. Six days after the well lost control, ODNR noticed the Co., Bobcat Energy, had placed a pump next to the storm water runoff sump pit with hoses leading back to the storage tanks. It tested high for contamination. ODNR directed the Co. to keep the storm water outfall valve CLOSED until further notice.

On August 24, 2020, ODNR sampled a pool of water at the drainage pipe outlet in the gravel lined ditch OUTSIDE the fenced facility and it tested high in contamination levels.

When sampling again on Sept 14, 2020, ODNR found high levels of contamination, and directed the Co. to KEEP THE STORMWATER VALVE CLOSED.

On September 30, ODNR sampled liquid on the ground again at the site OUTSIDE the fenced facility. Once again, it tested high in contamination levels. ODNR gave another directive to keep the storm water outflow valve closed.

This contamination, and constant reminders from ODNR to keep the storm water valve closed, would go on and on—On 9/3/20, on 11/10/20, on 12/11/20, on 4/14/21, on 10/20/21, and yet again on 6/29/22, ODNR found the same issues, and gave the same reminder: Keep the storm water valve closed.

ODNR also found other issues with other valves at the site: on 3/3/21, ODNR found the needle valve on the annulus of the well in the open position with no plug or pressure gauge. The pressure on the annulus was zero. According to inspection reports, the operator admitted that the Co. told him to leave the valve open, and to check on it as the weather improves. ODNR instructed him to CLOSE the valve and NOT to leave it open so to prevent any possible spills and leaks.

If all the above isn't enough, ODNR found other issues with the well and well owner: The legally required paperwork has often not been submitted in a timely manner to ODNR:

On May 17, 2021, the Co. had not turned in their legally required 2020 Annual Report, form 204. When ODNR received it more than once month later, the report showed the Co. exceeded their maximum allowable injection pressure.

On 8/1/22, the Co. was in violation of OAC 1501:9-3-01(G) for failing to submit important paperwork, and again on 8/29/22, and again on 6/13/24.

CONCLUSION

Over the years of the on again, off again operation at this well, ODNR inspection reports show this well racked up a total of 9 violations. These violations range from a driver at the well overflowing a frac tank that contained drilling mud in 2011, to the Co. not conducting required reclamation and removal of frac tanks in 2012, to, on several occasions, the Co. not submitting legally required records.

As discussed, the well also experienced spill, after spill, after spill, along with a well blow out. Inspection reports show that ODNR never issued violations for these spills and blow out incidents. We do not know why. Instead, the agency simply gave the same, tired message: Clean up the contamination and keep the valve closed so to prevent spillage.

As we have written countless times in the Daily Accident Report, oil and gas liquid brine-waste can be contaminated with drilling chemicals, and heavy metals, including <u>radium</u>, a radioactive metal. The fact that the Northstar Collins well has been allowed to remain operational, when all of this oil/gas waste is being deposited onto the ground there, is hard to understand.

Presently, many who live near this well, are concerned that activity is increasing around the well site. Citizens don't know what this increase of activity means, but, again, they are concerned.

We, at the D.A.R., are also concerned that the Northstar Collins well, and all of its many incidents, are happening so close to a camp, a lake, children, farm animals, and near to the Dry Run Creek. The creek is just .76 miles to the south of the Collins well. Where does the camp get its water? Do they draw water from the nearby lake, and/or from a domestic water well?

After contamination events happen at the Northstar Collins well, do state agencies check the Gabba Camp water supplies? Do the agencies check other domestic and public water supplies in the area? AND, since it may take months or longer for subsurface contamination to travel underground, are these water supplies presently being monitored? Finally, are residents and public water supply workers being told about these spills, and being told to keep an eye on their water supplies? If not, why?

END NOTES

Following is a quote taken from a radio interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is the Fractracker Ohio oil and gas incident/accident map, and a quote from Governor John Kasich:

Brundrett: (radio interview at 27:00)

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on."

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DAR (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

The Daily Accident Report-Ohio Oil & Gas

Entry #93

Today's Date: Feb 19, 2025

Title: Trumbull County PAC Injection Wells--Broken Laws/Rules, State Impotence, & the Reported Suffering of Nearby Residents

- "The PAC Facility" (The Natale SWIW #28 (1) & Natale SWIW #29 (2) Class II Disposal Oil/Gas Injection Wells & Waste "Processing")
- API # 34155231960000 & API# 34155232230000
- PAC Development LLC
- Trumbull County, Warren Twp.
- (Trumbull County is home to a total of 19 Class II injection wells)

OIL/GAS FACTOIDS TO HELP BETTER UNDERSTAND D.A.R ENTRY #93

- Ohio oil and gas extraction creates millions of gallons of <u>LIQUID brine-waste</u>, and tons upon tons of <u>SOLID/SEMI-SOLID wastes</u> otherwise known as sludges, drill cuttings, etc.
- This waste can be contaminated with drilling chemicals, radioactive radio-tracers, and dangerous heavy metals including, but not limited to, radium 226 and 228
- The primary disposal for <u>liquid</u> brine-waste is at Class II injection disposal wells into geological formations. The <u>solid/semi solid</u> wastes are taken to "processing" facilities and then taken to landfills.
- Applicable laws include ORC 1509.22 (Storage or disposal of brine, crude oil, natural gas, or other fluids) AND OAC 1501:9 (Division of Mineral Resources Management-Oil and Gas).
- Companies must secure permits for both Class II injection well disposal, and for "processing" facilities, and or "processing" activities

NARRATIVE SUMMARY

WHO, WHAT & WHERE

The PAC Facility operates right off route 422 and Templeton Road, in Warren, Ohio, some 5 miles N/NW of Youngstown, Ohio. Nearby to this PAC oil and gas operation, one can find the Glenn Christian Foundation Church, Quiggley Bar & Grill, LaBrae High School, the Pleasant Park Mobile Court, and more.

The wells are surrounded by water, a lot of water. There are several domestic drinking water wells nearby, as well as Chocolate Run Creek, Eagle Creek, the Mahoning River, and a 100-year floodplain. The Source Water Protection Area for the Pleasant Mobile Court is a mere 1400 feet

SE of the well. This becomes important, of course, related to any oil/gas contamination that might happen at this injection facility.

According to ODNR inspection reports, the facility has been injecting oil and gas brine-waste into two Class II injection wells at this site since 2014. Since 2016, the facility has been owned by the PAC Development LLC. Formerly, these two wells were owned by the infamous Kleese Development Associates (KDA).

KDA might sound familiar to many in the Trumbull County area, as this is the company that had a <u>severe 2015 contamination</u> event at nearby Trumbull County injection wells in Vienna, Ohio-1806 gallons of contaminated brine waste, and crude oil, released from the facility, and into a nearby pond and wetlands, killing wildlife. Holding tanks had overflowed. An EPA and <u>Ohio Bureau of Criminal investigation</u> ensued, as well as testing for radium (radioactive) contamination levels.

ODNR classified this event as an event that posed significant public safety or environmental impact, and ODNR shut the facility down. As of October, 2022, the Vienna wells have been reopened for brine-waste disposal.

CONCERNING ISSUES AT NATALE WELLS

FIRST, THE LAW & RULES OF OIL & GAS WASTE

As mentioned above, Class II injection disposal wells are specifically used for injecting oil/gas LIQUID brine-waste into geological formations for disposal. Ohio law requires a company to secure a permit to run such wells, and wells must be constructed and operated according to very specific laws and rules.

As also mentioned, if a Co. is not only injecting LIQUID brine-waste, but also "processing" oil gas solids/semi solid wastes, they must secure a permit for this activity, AND follow the rules and laws for this activity as well.

These important laws are in place to try and prevent contamination events of ground, ground water, drinking water, etc., AND to prevent particulate air pollution, odors and more.

THE ODOR COMPLAINTS

For years, residents have complained about the <u>horrible chemical odors</u> coming from the PAC Facility. The NAACP of Trumbull County has filed complaints with ODNR, the regulator, and met with both legislators, and Governor DeWine. The Trumbull county Commissioners have become involved as well.

One might ask, what odors could residents be smelling from this oil and gas injection site? While we cannot say for sure what residents might be smelling, what we can say is this: When one reads the 113 pages of the PAC facility's ODNR inspection reports, along with the ODNR

Chief's ORDERS issued to the wells' owner, PAC Development LLC, one will get a very good idea of what residents *could* be smelling.

ILLEGAL "PROCESSING" OF SOLID/SEMI-SOLID WASTE

The first glaring thing one learns, upon reading documents on the PAC Facility, is this: When the Co. received 2013 ODNR permits for their two Natale injection wells, these permits would allow the facility to:

- 1. Inject a maximum of 168,000 gallons a day of liquid brine-waste into its 2 disposal injection wells, and
- 2. Temporarily store liquid brine-waste inside approved tanks at the surface facility

The facility did not, however, receive a permit, or, Chief's ORDER to otherwise store, recycle, treat, process, or dispose of brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources in any other manner, ie: oil/gas solid and semi-solid wastes (drill cuttings, sludge, etc.).

Consequently, on 2/28/22, the ODNR Chief of Oil and Gas Management Resources (DOGRM), issued **ORDER 2022-49** to PAC Development, to CEASE the unauthorized storage, recycling, treatment and process operation they were running at the Natale wells that was in violation of ORC 1509.22(B)(2)(a).

In his ORDER, the Chief lays out a picture of a dirty, rule-breaking PAC Facility:

- On 7/22/21, 8/5/21, 8/18/21 9/15/21, 10/6/21, 11/15/21, 11/22/21 and 12/1/21, the agency found oilfield waste stored in vacuum boxes, vacuum tanks, steel boxes, and other containers.
- On 8/18/21 the agency found a pile of frac sand from a brine truck that had been washed out on site. In November and December of 2021, the agency found more evidence that trucks were being washed out at the site.
- On 12/20/21 the agency witnessed drilling muds, an oilfield waste substance, spilled at the site

The Co. was ORDERED to cease all storage, processing and truck washing operations at the facility not authorized by its permits. And, the Co. was ordered to remove all oilfield waste substance from the facility within 14 days. They were also ordered to provide documents related to the transport and disposition of the oilfield waste substances from the facility within 21 days.

MORE RULE BREAKING AT THE SITE

If one digs deeper, one will find ODNR inspection reports showing the rule breaking at the site dates back even further in time:

- Between 8/1/18 and 8/6/18, ODNR found the Co. was in the process of cleaning sludge from the inside of the off-loading pit, AND from 400-barrel storage tanks.
- Dating back to 2/8/18 and 2/12/18, ODNR met with the Co. to discuss proper removal and disposal of some 34 roll off--tarp covered containers, and waste materials "impacting the ground surface."
- Inspection reports show it took the Co. nearly all of 2018 to get things removed, all the while, the Co. was cleaning up oil/gas contaminated waste at the site.
- On 8/24/18 ODNR found more cleaning of the sludge from the off-loading pit. ONDR writes: "operator was removing brine fluid from off load pit and pumping into the storage tanks leaving sludge exposed."
- Dating back to 11/22/19, ODNR inspection reports show the agency had determined PAC was in violation of -Ohio Administrative Code 1501:9-3-08(A) stating that "saltwater (brine) and oil field wastes shall be drained or removed and properly disposed of periodically, at intervals not to exceed 180 days." The agency required the Co. to submit a plan for the removal of brine-waste and oilfield waste from an excavated containment.
- The agency didn't receive the Co's plan, and had to ask, some 8 months later, on 7/30/20, for this waste to be removed.

BRINE TRUCK WASHING VIOLATION(S)

As mentioned in the above Chief's ORDER, the Co. power washed the waste trucks at the site in violation of ORC 1509.22 (B)(2)(a):

On 12/13/21 the inspection reports read like this:

"I noticed 15 vac tanks (boxes) on location. I observed the facility operator pumping fluid from a yellow vac box... into the off-loading pit. There were 4 vac boxes out of the 15 NOT on the concrete pads or on secondary containment. I questioned the facility operator why there were so many vac boxes on location. The facility operator stated the vac boxes were needed for cleaning out the water trucks. I asked the facility operator which water trucks. The facility operator replied Smith Tranport. I told the facility operator, the PAC Development UIC facility (Natale 1 and 2 injection wells) was not supposed to clean out water trucks from brine hauling companies. The facility operator restated water trucks have been getting cleaned out ever since the concrete pads were installed..."

On 12/20/21, the ODNR representative witnessed a mist in the air as he was driving by the facility. He stopped to find a Co. representative inside a brine truck, power washing it. The ODNR, once again, *informed the Co.* that they were not allowed to clean out water trucks on location. ODNR *also informed the truck driver* that the brine hauling Co. was not allowed to get their water trucks cleaned out at the PAC Development UIC facility- a violation of the ORC.

OVER FLOWING STORAGE TANKS

And then there is the over-flowing storage tank problem that ODNR found to be frequent at this oil/gas facility:

On 7/31/19, ODNR found a brine-waste storage tank had over flowed. Inspections found over flow again on 10/28/19, 3/3/20, 8/18/20, and 12/9/20. At this point, according to the ODNR inspection reports, the inspector told the facility operator to stop the overflows. But more overflowing waste was found on 4/23/21. At this point ODNR told the facility operator, again, that the overflowing of the storage tanks needs to stop, and to clean up the oil residue on the gravel at the wellhead. Then, more overflow was found on 12/21,21, 11/3/22, 12/22/22, and 2/17/23. This time ODNR "requested to Mr. Z to stop overflowing the storage tank." Then, on 1/26/24, ODNR noticed, once again, at least 3 storage tanks had overflowed...and the vault under the concrete pad was full of oilfield fluid. Once again ODNR told the Co. rep that "overflowing the storage tanks needs to stop."

OVER PRESSURIZING OF INJECTION WELLS

Injecting large amounts of waste deep down into our Ohio sub-surface is quite an involved process. One of the aspects to this waste injection involves ensuring the pressurization of certain parts of the well are kept below, or, at the permitted psi (pound per square inch). The OAC 1501:9-3-07 outlines the rules about this pressurization.

This OAC also outlines other important aspects to injection wells, such as monitoring equipment that must be installed onto a well (ie: Murphy Switch), so that this switch can shut the well down, IF, and when, the well ever exceeds its maximum allowed pressure.

Why is it important NOT to over-pressurize an <u>injection well</u>? One reason is because if an injection well is over pressurized, it can lead to several issues including: geologic formation fracturing, fluid migration into unintended formations (like aquifers), well casing damage, leaks at the wellhead, etc.

Considering, in 2011, that this part of Ohio had four Class II injection <u>wells shut down</u>, after one of the injection wells was found to be causing earthquakes (one of which reached a 4.0 level), following the pressurization rules would seem to be rather critical.

At the PAC facility, over-pressurization is noted in ODNR inspection reports on:

7/12/13, 7/25/14, 4/23/15, 4/24/15, 1/12/18, 1/3/19, 2/6/19, 2/22/19, 3/13/19, 3/14/19, 3/15/19, 10//28/19, 11/4/19, 11//5/19, 11/13/19, 11/14/19, 3/2/20, 3/3/20, 3/4/20, 4/27/20, 5/11/20, 5/18/20, 5/19/20, 8/18/20, 8/21/20 8/24/20, 8/26/20, 7/19/21, 8/5/21, 8/11/21, 8/21/21, 11/15/21, and 11/22/22.

There were also countless times when ODNR conducted inspections at the site when the wells' auto shut off equipment was not working:

On the following inspection dates, ODNR writes this:

- 10/28/19, the ODNR inspector writes "I noticed the Murphy Switch (auto shut off) line...was disconnected..."
- On 10/29/19, "...the Murphy Switch has not been replaced..."
- On 3/3/20, "I noticed the hose to the auto shut off switch has been disconnected..."
- On 8/5/21, the "Auto Shut Off Device has not been repaired or replaced."
- On 8/24/20: "The auto shut off switch has not been repaired for the main injection pump, and the auto shut off switch for the back-up injection pump has not been installed."
- On 1/6/21: "The auto shut off switch on backup pump has not been completely installed."
- On 6/11/21: "The facility operator did not know if the auto shut off device would be repaired or replaced."
- On 7/19/21: "I found the auto shut off devices at the injection pump for both injection wells have not been replaced."
- On 8/11/21: "The wiring for the auto shut off device the back up pump still was not connected...I found the auto shut off device for the main injection pump has not been replaced/repaired."
- Etc.

FORMAL ODNR VIOLATIONS ISSUED

In total, at the PAC site, ODNR issued violations for the following:

The Natale #28 well received the following violations:

- 11 violation notices for exceeding maximum allowable pressure at the well
- 10 violations for not submitting required disposal fees and/or annual reports
- 1 violation on 1/31/17 for well mechanical integrity failure, contamination and well shut down
- 10/28/19 violation for oil spill throughout diked tank battery, 3/3/20 violation for storage tank overflow, 7/30/20 brine and oil field waste within excavated containment area, 8/18/20 oil on concrete pad inside secondary containment, overflowed buried vault under concrete pad, overflow in secondary containment

The Natale #29 well received the following violations:

- 13 violations for over pressurization at the well
- 9 violations for not submitting required well paperwork
- violations on 10/28/19 for oil spill throughout tank battery, 3/3/20 storage tank overflow, 4/27/20 for oil on water, straw and soil under and around the old injection tubing removed from well, for pads lying on ground, bags of trash lying on old injection tubing, etc., on 7/30/20 for brine and oilfield waste within an excavated containment area

CONCLUSION

For years, people have been complaining about this PAC oil and gas waste facility. Residents say the <u>odors from the site are horrible</u>. "It smells like a toxic brew…there's no way it could be healthy, no way," one resident says in one media interview. Concerns, however, go far beyond odor nuisances. Residents and community leaders are also concerned about the air particulates blowing off-site, and what contaminants these particulates might contain. They are also

concerned that the oil and gas contaminated waste at this site could be causing sub-surface and drinking water contamination in the area.

One could argue that people have a right to be concerned. Oil and gas wastes are known to contain potentially dangerous things, such as drilling chemicals, volatile organic compounds, and heavy metals, including, but not limited to, <u>radium 226 and 228</u>. When these wastes spill onto the ground, or, sit in large containers at the site, and are only covered with tarps, or, not covered at all, one can surmise, they could become airborne. And, particulate matter can be <u>carried in the</u> air for miles.

Also, from all of the overflowing tanks, truck washing and more, one could surmise there is certainly the possibility that contaminants have reached the sub surface at the site. Once contaminants reach the sub surface, they can become plumes that reach groundwater, and can travel miles downgrade. The Trumbull County Commissioner(s) are concerned about this, and want the state to pay for testing of township wells to rule out contamination. No testing, to our knowledge, has been done of the air, subsurface, drinking water wells, public water supplies, or, waterways near to the site.

The Ohio Department of Natural Resources' own documents show, what appears to be, serial rule/law breaking at this Trumbull County oil and gas facility. And yet, when the media asked the Trumbull County Fire Department about the horrible odors, the Chief simply responded that "(t)here is a smell that comes from the brine out there...and, there not much we can do..." In an ODNR statement, for this same media interview, the regulatory agency simply assured the public that there is no leak occurring at the injection well, that certain wastes will simply emit a strong odor, and that the odor will subside when the waste is transferred to enclosed tanks.

What ODNR neglected to say in this media interview, is that a lot of the oil/gas waste at the facility has, over the years, been placed there illegally, and that illegal brine truck washing has occurred at the site. The agency also neglected to explain that sometimes the waste has been stored in an open pit that is NOT enclosed. Additionally, the agency neglected to tell the concerned residents that even when the oil/gas waste has been successfully transferred to enclosed tanks, the facility has had a history of frequently overflowing these storage tanks.

END NOTES

Following is a quote taken from a radio interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is the Fractracker Ohio oil and gas incident/accident map, and a quote from Governor John Kasich:

Brundrett: (radio interview at 27:00)

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on.

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report.

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..." The Governor then signed Executive ORDER 2016-04K: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

DAR (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

SOURCES

- ODNR inspection reports, permits, etc.
- ODNR Chief's ORDERs 2022-49, 2024-405, 2025-01
- NAACP of Trumbull County
- Media coverage
- On-line mapping tools
- <u>Pro-Publica</u> "Injection Wells: The Poison Beneath Us—Lax oversight, uncertain science plague program under which industries dump trillions of gallons of waste underground"
- Food & Water Watch's "Drilled Too Far: The Perils of Injection Wells"

The Daily Accident Report-Ohio Oil & Gas

Entry #94

Today's Date: March 13, 2025

Title:

Imminent Danger to the Health and Safety of the Public--

How a broken Ohio oil & gas regulatory system allowed fraudsters to improperly operate an Athens County Class II injection disposal well

- Reliable Enterprises Ohio, Inc (Reliable Enterprises/Reliable One Resources)
- M. Frost No. 1 SWIW No. 9
- 34009237610000
- Rome Twp. in Athens County
- Athens County is home to 7 Class II injection disposal wells (6 suspended by ODNR), with 17 additional Class II wells operating close to the Athens County border
- The Frost No. 1 SWIW No. 9 was originally drilled to be a production well in 2007. It was converted into a Class II injection disposal well in 2013. Reliable Enterprises Ohio Inc. took ownership in November, 2018.

OIL/GAS FACTOIDS, INFO. & APPLICABLE LAWS to HELP BETTER UNDERSTAND D.A.R. ENTRY #94

- 1. In Ohio, there are, presently, some 65,000 oil/gas production wells, A production well is where oil and/or gas is produced.
- 2. In Ohio, there are, presently, over 250 <u>Class II injection wells</u>. A Class II injection well is where contaminated oil/gas brine-waste (an ongoing by-product of extraction), is injected into geological formations below the earth for "storage."

Each year, Ohio oil and gas extraction creates tens of <u>millions of gallons</u> of LIQUID brine-waste. This waste can be <u>contaminated</u> with drilling chemicals, radioactive tracers put down the well, and dangerous heavy metals, including, but not limited to, radium 226 and 228.

3. In Ohio, some 19,000 <u>orphaned wells</u> have been identified in Ohio. An orphaned well is an abandoned well where the owner is unknown, deceased, or cannot be located, and the well has not been properly plugged or its land surface restored. For various reasons, it is <u>unsafe</u> for an unproducing well to remain unplugged.

4. Applicable laws include:

ORC 1509.22 (Storage or disposal of brine, crude oil, natural gas, or other fluids).
OAC 1501:9 (Division of Mineral Resources Management-Oil and Gas).
AND 1501:9-3-07 (Design and Operational Requirements of a Class II Disposal Well or a surface Facility

5. Important Background Info on Class II injection wells & possible contamination pathways: When contaminated oil and gas brine-waste is injected into a Class II disposal well,

it goes down the well, deep into the earth, and settles into its "assigned" geological formation. Our drinking water aquifers range in depth from 90 to 600 feet below the surface, so, these geologic formations, holding this contaminated, radioactive brine-waste, are below aquifer level.

Loss of well integrity: Of course, all steel lined oil/gas wells are drilled through our aquifers. To avoid contaminated brine-waste from leaking from a Class II well, it is critical for these disposal wells to be kept in the best of shape, continually monitored via an electronic monitoring system, and for all operating these injection wells, to follow any and all additional laws that are in place: OAC 1501:9-3-07(D)(1) Design and Operational Requirements of a Class II Disposal Well or a Surface Facility.

Surface spills: With this said, while these geological "storage" formations are far below aquifers, the surface of the well is not. If contaminated brine-waste is spilled onto any soils at the well, subsurface migration to water supplies would be a real concern. This is why it is critical for any and all oil/gas related spills to be cleaned up as soon as they happen. By Ohio law, OAC 1501:9-8-02 (Incident notifications), spills must be reported within 30 minutes of discovery. It is equally important to ensure all well pad concrete lined containment areas have no cracks, that plastic lined containment areas are not compromised, etc. Otherwise, contamination could seep into the soil.

Waste Migration: Unfortunately, even if a well is in perfect working order, and is perfectly operated, and a well owner cleans up surface waste spills asap, there are two other ways brine waste can cause a major contamination event. If a nearby production well, or, orphaned well happens to be "connected" to the same geologic formation as a Class II disposal well is depositing into, the brine-waste could find its way to these wells. This is very bad, as the brine-waste will contaminate production of the well it enters, and/or shoot up these wells to the surface. This has happened in Ohio related to several injection wells, including the Frost Well.

NARRATIVE SUMMARY OF FROST WELL INCIDENT(S)

WHO, WHAT, WHERE:

The Frost Well is located in Rome Township in SE Ohio's Athens County. It operates along route 144, near Lightner and Frost Roads, and a mere 600 feet from the Hocking River, an Ohio River Source Area Watershed. Nearby, there are domestic drinking water wells, and the town of Coolville is ~5 miles downstream.

The Frost Well was originally permitted in 2007 to Mid-Con Petroleum Co Inc. It was drilled to operate as an oil/gas production well. Two years later, in 2009, ownership changed to D.T. Atha Inc., and in 2013, D.T. Atha CONVERTED the Frost production well to a Class II injection disposal well. In 2016, ownership changed again to Scarlet Energy LLC. It was in 2018, that a company, known as Reliable Enterprises Ohio Inc. (affiliate to Reliable Enterprises/Reliable One Resources, or, "Reliable"), took ownership of the well.

LET US BEGIN WITH THE END OF THE STORY:
ALLEGED FRAUD & IMMINENT DANGER TO HEALTH AND SAFETY

After writing this *Daily Accident Report entry 94*, and before publishing it on-line, we found an important ODNR document: Just recently, on February 19, 2025, an ODNR lawyer wrote a document, regarding the Frost Well, for entry into the agency's case file. Below are highlights of this document:

- Reliable Enterprises Ohio, Inc. ("Reliable") is the owner of the Frost No. 1 Class II disposal well.
- Per Chief's ORDERS 2023-93, 2023-95 (both issued May 1, 2023), and ORDER 2023-188 (issued September 8, 2023), the Chief determined the Well presents an imminent danger to the health and safety of the public, and is likely to result in immediate substantial damage to the natural resources of the state.
- Liability insurance IS legally required for the Well.
- Reliable has failed to comply with the Chief's Orders, and the Well needs to be plugged.
- At this time the Well should be referred to the Orphan Well Program because ODNR 's enforcement options, as to this owner, have been exhausted.
- The well is abandoned and there is no money available to plug it, making it an orphaned well.
- On Jan 6, 2023, the U.S. Securities and Exchange Commission filed an emergency action against Reliable...The purpose of the action was to investigate alleged fraud carried out by the defendants.
- On February 8, 2023, the court appointed a "Receiver", ordered the defendants' assets, including the well, to become part of the receivership, and ordered all the assets of the receivership frozen.
- The court appointed "Receiver" in the case signed an affidavit stating:
 - It is likely that Reliable Enterprises was used solely to perpetuate a fraud.
 - Reliable is not an operating company, does not hold substantially any other assets besides the Well, and is completely insolvent.
 - The well is abandoned and has not operated since 2022 at the latest.
 - Reliable cannot pay any amount towards plugging the Well, or, to reimburse the DNR for plugging the Well.
 - The amount of money left in the receivership's operating account is \$100,593.10.
 - The outstanding admin expenses against the receivership exceed \$890,000.00.
 - Defrauded investors have submitted claims exceeding \$17 million.
 - The estate's admin expenses will take priority over other claims.
 - These expenses will exhaust the receivership's assets.
 - Therefore, Reliable has no available funds to plug the Well.

The ODNR lawyer goes on to say in this case document that:

- (ODNR) has paid for emergency work to the Well, but that (ODNR) did not submit a reimbursement order, due to the Division's knowledge of the lack of funds as explained above.
- The only funds available to the ODNR is the "Co's" bond (equaling \$15,000,) which the agency received form Peoples Bank.

- At this point, the division has concluded that all enforcement avenues have been exhausted, and that enforcement should cease.
- AND, that a referral to the Ohio Attorney General's office in this matter would be futile.
- Therefore, the Well should be referred to the Division's Orphan Well Program.

CONCERNING ISSUES AT THE FROST WELL

VIOLATIONS AT THE WELL—JUST THE TIP OF THE ICEBERG

The Frost Well had racked up 6 ODNR violations before Reliable Enterprises Ohio, Inc. took it over in November of 2018. ODNR issued violations for:

- cracks in the unloading pad
- contaminated brine filters being improperly stored on-site
- unapproved tanks being brought to the property
- leaks getting through the plastic containment liner
- no continuous monitoring of the well pressures
- not turning in proper paper work, and more.

"Reliable" took ownership of the Well in November 2018. Between November 2018 and May 1, 2023, when the Chief of Oil & Gas had finally suspended the well, the Co. would receive 13 violation notices from ODNR. Nine of these violations had to do with the Co. not turning in their legally required paper work, and/or disposal fees. Well paper work is very important as it tells ODNR things such as the source and amount of injection waste being brought to the well, important pressure levels kept at the well, etc.

Other violations were issued when part of the well froze from the cold winter, and when there was fluid accumulating in the "cellar" around the wellhead. These violations, however, would be just the tip of the iceberg of the Frost Well nightmare.

CONTAMINATED BRINE-WASTE MIGRATES FROM THE FROST WELL-Sept, 2020

ODNR records show that the first evidence of migration from the Frost well came in September of 2020. ODNR received information indicating a production well (D&R Humphry well), a mile away from the Frost Well, had found brine-waste at its surface. Three months later, ODRN got word about three other nearby production wells that were possibly being impacted by brine-waste (Silliman Humphrey, Cunningham, D. Bailey Wells). A month later, there was, yet another nearby production well being impacted by brine-waste (S. Hutchinson Well). ODNR could undoubtedly see that the Frost Well was the closest injection well to these production wells. The next closest Class II well was ~5 miles away. ODNR would soon determine the Frost Well was the culprit of brine-contamination at the production wells. SERIOUS VIOLATIONS AT THE FROST WELL-- June, 2022 and Dec, 2022 THAT LED ODNR to SUSPEND the WELL

The June 22, 2022 ODNR Frost Well inspection

Almost two years after ODNR was first alerted of nearby production wells being impacted by brine-waste, the agency conducted its quarterly inspection of the Frost injection well. What the agency found was a long list of violations related to Ohio Revised Code 1509.22 and OAC 1501:9-3:

- The injection tubing at the well, and the well's annulus were NOT connected for continuous monitoring in violation of <u>1501:9-3-07(F)(2)</u> (failure to continuously monitor the inject tubing) and <u>1501:9-3-07(D)(1)</u> (failure to continuously monitor annular pressure)
- The well's annulus had zero pressure in violation of (1501:9-3-07(D)(1)) (failure to maintain positive pressure sufficient to detect leaks)
- There was a used 100-barrel steel tank at the well pad that was outside of containment and on a gravel pad, AND used brine filters were stockpiled on the well's concrete pad in violation of 1501:9-3-01(1)(1) (failure to lawfully dispose of wastes and equipment)
- AND, the well's containment dike had 2 inches of it, and the well's unloading pad sump fluid has overflowed onto the unloading pad

ODNR issued a compliance notice to Reliable Enterprises, and the Co. was given one week, until JUNE 27, 2022, to resolve the issues. For the next 6 months, ODNR would conduct follow up inspections of the Frost Well only to find all had not been fixed.

The ODNR Dec 2, 2022 Frost Well inspection

On December 2, 2022, ODNR visited the Frost Well, and found additional violations of ORC <u>1509.22(A)</u> and OAC <u>1501:9-3</u>:

- a leak was found that was allowing contaminated brine to drip from 2-inch valve on injection line in violation of 1509.22(A) (pollution and contamination)
- valves were open on the well, the pad's containment dike had 6 inches of fluid in it, and the well's unloading pad sump fluid had overflowed onto the unloading pad
- the annular pressure was measured at 55 psi, and was still NOT being continuously monitored in violation of 1501:9-3-07(F)(2) (failure to continuously monitor the injection tubing) and 1501:9-3-07(D)(1) (failure to continuously monitor annular pressure)
- the electric service to the facility had been disconnected at the transformer pole

ODNR issued another compliance notice to Reliable Enterprises, and gave the Co., a week, until December 7, 2022, to get things resolved at the well.

Not only did the Co. NOT resolve things, ODNR inspection reports reveal things just kept getting worse at the well:

- December 7, 2022: ODNR found ALL tanks, except one, had valves open. The contaminated fluid just kept spilling out at the well.
- December 22, 2022: The secondary containment at the site had 10 inches of fluid in it.
- January 11, 2023: The injection tubing valve body had separated and was leaking brine down the wellhead and into the cellar. The fluid in the "cellar" was 17 inches from the

- surface. The secondary containment now had 12 inches of fluid with an oil sheen, and the unloading pad was completely full of water. No well monitoring was being done at the site.
- January 13, 2023: The well's cellar fluid was only 13 inches from the surface, the secondary containment was now filled with 16 inches of contaminated fluid, and the unloading pad was completely full of water and was overflowing onto the gravel pad.
- Feb 8, 2023: the electric service to facility was still disconnected, the annular pressure was still not being continuously monitored, both annulus valves were separated at the valve seams, the annulus had zero pressure, cellar fluid was now 8.5 inches from the surface, the secondary containment now had 18.5 inches of contaminated fluid with a sheen, the fluid was in contact with the bottom portion of the injection pump electric motor house, and the unloading pad was completely full of fluid.

THE SECURITIES & EXCHANGE COMMISSION (SEC), FRAUD & FROZEN ASSETS—January, 2023

IF all of the above is not enough, on January 6, 2023, a mere month after the December 2, 2022 ODNR violation notice was issued, the Securities and Exchange Commission filed a complaint and emergency action against Reliable One, alleging Reliable One violated various securities laws (Securities and Exchange Commission vs. Reliable One). The purpose of the action was to investigate alleged fraud carried out by the defendants. The court would appoint a "Receiver" in the case, who would soon take control of the Co's assets, including the Frost Well. Upon investigation, the Receiver would find the Frost Well had been owned by a mother company that was a non-operating company, that the company had likely been used solely to perpetuate a fraud, AND that the Frost Well had been abandoned and not operated since 2022 at the latest.

ODNR SUSPENDS THE FROST WELL BY ISSUING NOT ONE, BUT TWO SUSPENSION ORDERS to the CO.—May, 2023

Fast forward five months, to May 1, 2023. It had been twelve months since ODNR had issued its important June 22, 2022 compliance notice, which the Co. ignored. It had been six months since the agency had issued the December 2, 2022 compliance notice, which the Co. also ignored. And, it had been two and a half years since ODNR first got word of the rogue brinewaste contaminating four production wells near the Frost Well. At long last, ODNR issued an ORDER, in fact, two ORDERS to Reliable Enterprises to suspend the Frost Well.

ORDER 2023-93 (issued May 1, 2023) Chief's FINDINGS were as follows:

- (1) The operation of the Frost No. 1 Well has, and is, impacting nearby production wells. Such impacts endanger, and are likely to endanger, public health, safety, or the environment.
- (2) If the Frost No. 1. Well continues to operate, additional impacts may occur in the future, and are likely to contaminate the land, surface waters, or subsurface waters. Thus, the continued operation of the Frost No. 1 Well presents an imminent danger to the health

and safety of the public and is likely to result in immediate substantial damage to the natural resources of the state.

- (3) Brine or other waste substances from operation of the Frost No. 1 Well is outside of the area of review.
- (4) "Reliable's" operation of the Frost No. 1 Well violates OAC <u>1501:9-1-07(A)</u>, and should be immediately suspended under Ohio Admin. Code <u>1501:9-3-07(N)</u>.

The Co. was then ORDERED by the Chief to:

- (1) Immediately suspend all operations at the Frost No. 1 Well and associated surface facility
- (2) Submit a plan in accordance with OAC 1501:9-3-07(O)(1)
- (3) Injection at the well shall not resume until the Chief or his authorized reps determines that the conditions that caused the suspension have been corrected

ORDER 2023-95 (issued May 1, 2023) Chief's FINDINGS were as follows:

- (1) "Reliable" has failed to maintain positive pressure on the annular space between the casing and the injection tubing sufficient to detect leaks.
- (2) "Reliable" has failed to continuously monitor annular pressure between the production casing and the injection tubing.
- (3) "Reliable" has failed to test the injection line after repair of the pipe and the connections.
- (4) The Frost No. 1 Well should be immediately suspended under OAC 1501:9-3-07(N)

The Co. was ORDERED by the Chief of ODNR Oil & Gas to:

- (1) Immediately suspend all operations at the Frost No. 1 Well and associated surface Facility
- (2) Submit a plan in accordance with OAC 1501:9-3-07(O)(1)
- (3) Operations at the Frost Well shall not resume until the Chief or his authorized Rep. determines that the conditions that caused the suspensions have been corrected.

THE CO. DOESN'T HAVE THE MONEY to CLEAN UP THE FROST WELL but FILES ARTICLES OF ORGANIZATON TO START A NEW AFFILIATE IN CHILLICOTHE OHIO (July, 2023 and August, 2023)

For the next two months, following the May 1, 2023 ODNR suspension ORDERS, the Co. did not comply, and it did not fix the problems at the Frost Well. Instead, the Co. engaged in the same behavior, ignoring the rules/laws, and ignoring the Chief's ORDERS. The result? Contaminated brine waste just kept building up on the surface of the well pad, and well cellar, (just ~600 feet from the Hocking River and nearby domestic drinking water wells), AND the brine-waste sub-surface migration was reaching its third year, a situation the ODNR Chief said himself:

"presents an imminent danger to the health and safety of the public and is likely to result in immediate substantial damage to the natural resources of the state,"

AND yet, on July 26, 2023, "Reliable" filed Articles of Organization for a new Co. (Reliable Enterprises Chillicothe LLC), AND the Ohio Secretary of State, Frank LaRose, signed the ok.

One month later, on August 29, 2023, ODNR was informed that "Reliable" did not have the financial ability to remediate the issues at the Frost No. 1 Well.

ANOTHER CHIEF'S ORDER IS ISSUED (2023-188) for LAPSED LIABILITY INSURANCE—September, 2023

One week later, on September 8, 2023, the Chief of ODNR would issue ORDER 2023-188 to Reliable for their lapsed liability insurance (the Co. was required to hold insurance for not less than 1 million). Reliable had provided proof of liability insurance to ODNR on December 28, 2021, but the policy had lapsed on Sept 26, 2022, and had not been renewed. This lapsed insurance was seemingly not caught by ODNR.

In his new 2023-188 ORDER, the Chief found the Co. had committed a material and substantial violation for failure to maintain insurance coverage, and ORDERED the Co. to immediately suspend all oil and gas operations in the state of Ohio until Reliable Enterprises Ohio Inc:

- complied
- obtained liability insurance
- filed proof with the Division
- or, transferred all wells owned by the Co. to an owner who had insurance and was not under a notice of material and substantial violation or under a suspension order, and who was properly bonded.

THE NIGHTMARE CONTINUES AT THE FROST WELL—ODNR CHIEF ISSUES YET ANOTHER ORDER (2024-15)—Feb, 2024

For the next 9 months, essentially throughout all of 2023, the contaminated fluid at the well pad just kept growing. By January 8, 2024, more than a year and a half since the June, 2022 ODNR serious violation notice had been issued, the well cellar fluid had reached the surface, and the containment area fluid was 16 inches from the top of the dike wall.

Since the Co. took no action to correct the issues that led to the May 1, 2023 suspension, on February 5, 2024, the ODNR Chief issued another ORDER (2024-15), and directed the Co. to, at long last:

- Plug and abandon the well within 90 days of receipt of the ORDER
- Submit a DECOMMISSION plan for review and acceptance by ODNR
- Following the plugging and abandonment, Reliable was directed to restore the well site in accordance with ORC 1509-07

The nightmare at the Frost Well just continued. By the end of February, 2024, parts of the storage tanks were falling apart, the unloading pad was completely full of contaminated fluid, and no well pressure was being monitored at the well. Had storms overflowed things at the well when no one was watching? Had ODNR checked for cracks, or, tears in the well containment liner, and for contaminated brine-waste seeping into the soil, and subsurface at the site? After all, drinking water supplies operate near this injection well.

ODNR STARTS MAKING PLANS TO CLEAN UP THE SITE & THE AGENCY'S LAST-DITCH EFFORT TO GET THE CO. TO ACT—ORDER 2024-125 (April, 2024)

By March 29, 2024, ODNR realized they had to start making plans to get a contract bid to haul contaminated fluid off-site from the Frost Well for disposal at a different approved Class II injection well. With this said, ODNR tried one more time to get the Co. to act. On April 29, 2024, the Chief issued ORDER 2024-125, directing, once again, the Co. to plug and abandon the well.

In this ORDER, the Chief provided a synopsis of the Frost Well issues:

(1) On May 1, 2023, ODNR issued ORDER 2023-93, and ORDER 2023-95 finding:

- The operation of the Frost well is impacting nearby production wells and such impacts endanger and are likely to endanger public health, safety or the environment
- If the well continues to operate, additional impacts may occur in the future, and are likely to contaminate the land, surface water, or subsurface water
- Continued operation presents an imminent danger to the health and safety of the public and is likely to result in immediate and substantial damage to the natural resources of the state
- Contaminated brine or other waste substances from the operation are outside the area of review
- The Co. failed to maintain positive pressure on the annular space between the casing and injection tubing of well sufficient to detect leaks
- Failed to continuously monitor annular pressure between the production casing and injection tubing of well
- Failed to test the injecting line of the well

The ORDERS required Reliable to suspend the well operation and submit a plan to address issues at the well. The Chief went on to write:

- (2) Since the Co. did not comply with ORDER 2023-93 and 2023-95, Chief issued ORDER 2025-15 on February 5, 2024, and directed the Co. to plug and abandon the well, submit a decommission plan for review and acceptance and restore the well site.
- (3) On January 6, 2023, the Securities and Exchange Commission filed a complaint against Reliable One, and on January 9, 2023, Reliable One's assets were frozen.
- (4) On August 29, 2023, a Reliable representative asserted Reliable did not have the financial ability to remediate the issues with the Frost No. 1 Well.

In ORDER 2024-125, the Chief found Reliable had NOT submitted the required plan, and must:

- properly plug and abandon the Frost No. 1 Well within 90 days, or, by July 29, 2024
- submit a decommission plan
- follow the proper plugging and abandonment
- restore the well site in accordance with ORC 1509.07

TAXPAYERS PAY FOR THE CLEAN UP AT THE WELL—May, 2024

Starting on May 7, 2024, according to ODNR inspection reports, ODNR would spend the next six months cleaning up the site, and removing contaminated fluid from the well pad's containment area:

- On May 7, the agency arrived with vacuum trucks and removed 42,840 gallons of contaminated fluid from the well pad's containment area. ODNR returned a day later to remove another 42,580 gallons.
- On May 8, ODNR removed another 26,040 gallons of the fluid.
- On May 9, ODNR brought out the ODNR radiation expert.
- On May 17, 2024, ODNR removed another 2100 gallons of fluid from the containment area, installed various new valves, and examined the storage tank levels left in nine 210-gallon tanks, and three 16,800-gallon tanks.
- ODNR identified a 100-barrel tank OUTSIDE the containment area.
- On July 29, 2024, an ODNR inspection of the site found the lines for the fiberglass primary tank(s) had been cut, and valves opened. Tank fluid and oil had released into the secondary containment area to a depth of 12 inches deep. Also, the electrical equipment was cut open and wires had been removed from the conduit and control boxes.
- Throughout September, 2024, ODNR was back on site with a vacuum truck removing fluids from containers and installing absorbent pads to collect oil in the secondary containment area
- The ODNR radiation expert came back to the site on 9/13/24, 9/16/24, 9/17/24, 9/18/24, 9/30, along with a Co. that would:
 - remove more contaminated fluid, along with sand, gravel and sludge from the secondary containment

- remove injection pumps
- clean out tank bottoms of the storage tanks
- cut up the steel tanks and remove them
- haul in 8000 gallons of fresh water to pressure wash the containment liner
- remove and clean piping and place it in a dump trailer for disposal
- remove scrap metal and debris and place in dump trailer for disposal
- remove contaminated soil under the "protective" containment liner
- backfill, grade and apply seed and mulch to the site

ALL of the above was paid for by Ohio taxpayers!

"YOU ALL COME BACK NOW YOU HEAR"—
THE MOST RECENT ODNR CHIEF'S ORDER ISSUED TO CO. (Bond Forfeiture)
(ORDER 2025-10) –Jan. 2025

By the end of 2024, Ohio tax payers had already paid a lot of money for clean-up costs at the Frost injection well. Would taxpayers also have to pay the costs of plugging the well, and restoring the well site? Yes, it looks like it. And, the only money ODNR would recoup for ALL of this work, unless the ODNR took the case to the Attorney General, which the agency would not be doing, would be the \$15,000 the company put down as its <u>surety bond</u>.

With this said, the Chief of ODNR gave the Co. one more chance to at least do the right thing regarding the plugging/restoration of the Frost Well, when, on January 15, 2025, he issued ORDER 2025-10. This time he gave the Co. a choice: Lose your 15,000, or, pay for plugging your well, and for its restoration (obviously, the much more expensive option).

Going back to the beginning of our D.A.R. entry, we know what happens: The company was/is being investigated for fraud, has no money to plug/restore the well, it forfeited its bond money, and ODNR has recommended the Well for the <u>Orphan Well Program</u>. In other words, the taxpayers will also be paying for the plugging, and restoration of the Frost Well.

If this is not galling enough, is the ODNR Chief really giving permission to this company to continue operating in Ohio? The ODNR Chief writes the following in his ORDER's conclusion:

Unless (these) requirements...are met, no one shall operate any of Reliable Enterprises' wells or produce from any of Reliable Enterprises' wells in the State of Ohio *UNTIL*: Reliable Enterprises posts a new surety bond with the Division, pursuant to R.C. 1509.07 and R.C. 1509.071 and the rules adopted thereunder, in the amount of \$15,000 for a single well, \$30,000 for two wells, or \$50,000 for three or more wells; or the wells are transferred to a new owner and the new owner meets the requirements of R.C. 1509.07.

ODNR FINALLY TESTS DRINKING WATER IN THE AREA TO ENSURE IT HAD NOT BEEN CONTAMINATED BY THE FROST WELL

ODNR was first notified of the contaminated brine-waste migration near the Frost Well in September of 2020. Although the Frost Well was the most obvious injection well culprit, as the next injection well was five miles away from this migration, ODNR would not suspend the Frost Well until May 1, 2023. And then, it would be an additional 8 months before ODNR decided it was time to test drinking water in the area for possible brine-waste contamination from the Frost the well.

Results of the testing luckily showed, thus far, there has been no contamination of drinking water in the area from the Frost Well. It begs the question, however: Since ODNR knew there was a possibility of contamination, why didn't the agency shut down the Frost Well immediately, begin the drinking water testing in September of 2020, and immediately set up continuous groundwater monitoring wells?

CONCLUSION

The Class II Frost Injection Disposal Well was in disrepair for years, as contaminated brine waste spilled out at the site, migrated in the subsurface, impacted production wells, and presented imminent danger to the health and safety of the public. For all of 2023, as ODNR kept reaching out to the Co., with violation notice, after violation notice, and issuing six important Chief's ORDERS to fix problems at the Well, to clean up the mess, renew their lapsed liability insurance, and more, the Co. simply ignored the directives. Now, we know why.

For nearly all of 2023, the owning company of the Frost Well:

- had an emergency action against it from the SEC
- was not operating and had been abandoned
- was most likely just used to perpetuate a fraud
- had been turned over to a court ordered "Receiver"
- had assets frozen

The obvious question is: Didn't ODNR see a red flag when a company, responsible for injecting contaminated, radioactive oil/gas brine-waste into our Ohio ground, kept ignoring the agency's important communications? No, not really. Because, unfortunately, this kind of scenario, where oil/gas company representatives ignore ODNR directives, is not uncommon. It just so happens this time, the Co. that was doing the ignoring, was operating a well that was presenting an imminent danger to the health and safety of the public. We have a broken Ohio oil and gas regulatory system in serious need of review an overhaul.

Following are just *SOME* important questions to be asked:

ODNR was first informed, on September, 2020, of migrating, contaminated brine-waste that was impacting 4 oil/gas production wells in the area. This waste could ALSO impact drinking water supplies in the area. The Frost Well was the closest injection well by far, the next closest being some ~5 miles away. So:

1. Why was the Frost Well not immediately suspended?

- 2. Also, why did the agency not immediately install monitoring wells in the area?
- 3. Why did it take until the summer of 2024 for ODNR to hire a Co. to test drinking water sources in the area for contamination?
- 4. And, and why is all of the above not legally required under law?

Furthermore,

- 5. Why, after all of the law and rule breaking by the Frost Well owners, did Frank LaRose, the Ohio Secretary of State, allow this same Co. and/or its affiliates, to file Articles of Organization for a new Ohio affiliate (Reliable Enterprises Chillicothe LLC)?
- 6. Why is this Frost Well, as of March, 2025, still not properly plugged?
- 7. Why did ODNR determine that this should NOT be submitted to the Ohio Attorney General, or, beyond?
- 8. Why do Ohio taxpayers have to pay for all of the clean-up, the plugging and restoration of this well?

Again, what the Frost Well illustrates is that we have a broken Ohio oil/gas regulatory system. It's a system that lacks comprehensive regulatory laws to protect Ohioans, drinking water, etc. from these injection wells, and other oil/gas mishaps; The system lacks a sufficient amount of ODNR inspectors; It lacks the punitive enforcement to make it effective, and much more. Many would argue this broken system is putting Ohioans in danger, and invites bad actors, as in the Frost Well case, to do bad things. This regulatory system is in serious need of review and overhaul. Otherwise, how could all of this have happened at the Frost Well?

EPILOGUE

We would be remiss if we did not report that the Frost Well is not the only Class II injection well in this SE Ohio area to experience subsurface contaminated brine-waste migration. Three other wells, known as the K&H injection wells in Torch, Ohio, and two injection wells, known as the Deeprock wells in Noble County, were also suspended for brine-waste migration. There may be other suspensions, due to waste migration, of which we are not yet aware.

END NOTES

Following is a quote taken from a radio interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is the Fractracker Ohio oil and gas incident/accident map, and a quote from Governor John Kasich:

Brundrett: (radio interview at 27:00)

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report.

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..." The Governor then signed Executive ORDER 2016-04K: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

D.A.R. (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

SOURCES

- ODNR Chief's ORDERS 2023-93, 2023-95, 2023-188, 2024-15, 2024-125, 2025-10
- On-line mapping tools
- ODNR inspection reports
- Legal documents on the case <u>Securities and Exchange Commission v. Reliable One Resources</u>, Inc, Quantum Filtration Inc, Clyde Cameron Cravey and Kenneth Wied Rich, No. 6:23-CV-00006-JCB (E.D. Tex. Filed Jan. 6, 2023)

The Daily Accident Report-Ohio Oil & Gas

Entry #95

Today's Date: March 20, 2025

TITLE:

"Monster Atop the Hill—

The Athens County K&H class II injection waste disposal wells"

- K&H Partners LLC
- The K&H Facility complete with 3 oil/gas class II injection disposal wells
- K&H (SWIW #8) 1 well, K&H (SWIW #10) 2 well, K&H (SWIW #11) 3 well
- API#34009238210000, API #34009238230000, API #34009238240000
- Troy Township in Athens County (Town of Torch)
- Athens County has 8 Class II injection wells (7 SWIW + 1 ERP Class II wells) (4 of the SWIW wells r suspended for waste migration)

WHO, WHAT & WHERE:

Up on a little hill, in Athens County, Ohio, near residential homes, and domestic water wells, sits not one, not two, but three oil and gas Class II SWIW injection waste disposal wells, along with their accompanying infrastructure. The K&H Facility is the largest Ohio oil and gas Class II waste facility we have come across thus far.

The facility operates off route 50/Appalachia Highway, just west of Youba Ridge Road. It's a mere ~2 miles NW of the Ohio River. The Hocking River flows just a mile to the facility's northwest, and then down and around to the facility's south, as the river makes its way to the Ohio River. Nearby to the K&H facility is also the town of Coolville (¼ mile to the SW), and the Blue Heron, Rivers Bend and Port campgrounds (~2 miles to the S).

When one tries to picture how big this K&H Facility is, and how much contaminated waste has been going up that little Athens County hill 24 hours a day, 365 days a year, for more than 11 years, picture this:

- 3 injection wells that reach thousands of feet into the ground
- 9-500 barrel above ground storage tanks holding 189,000 gallons of contaminated oil/gas waste
- 2-600 barrel separating tanks holding 50.400 gallons
- a 400-barrel oil tank holding 16,800 gallons of oil
- and a 60,000-barrel above ground storage tank holding 2,520,000 gallons, yes, over two and a half MILLION gallons of oil/gas contaminated waste
- and more

According to a 2015 Columbus <u>Dispatch article</u> on the subject, in 2015, the facility injected 168 million gallons of contaminated oil/gas waste into the underground up on that little hill.

The K&H facility is, at long last, in the process of having its three injection wells plugged, but from 2013, when it came on-line, to April, 2024, the facility injected tens of millions of toxic radioactive oil/gas waste into the ground of Athens' County, Ohio. Here's the story:

CLASS II INJECTION WELLS 101 & PATHWAYS TO CONTAMINATION

It is a well-known fact, both inside, and outside of the industry, that oil/gas brine-waste is contaminated with carcinogenic drilling chemicals, and dangerous heavy metals, including, but not limited to <u>radium 226/228</u>. In relation to the K&H injection wells, it was discovered that this facility was also accepting oil/gas waste that included dangerous, and forever PFAS chemicals.

When contaminated oil/gas waste is being injected into Class II injection wells, following are just three of the pathways for this contamination to reach humans and other living creatures:

(1) Surface spills: When contaminated brine-waste is transferred from brine hauling trucks to storage tanks, and then from tanks to injection wells, it involves a lot of attaching, and detaching, of hoses, pumps, etc. There are a LOT of stages AND moving parts. Human error happens, storage tank valves are left open, and/or fail and corrode, storage tanks corrode, and much, much more.

When spills happen, and if there are cracks in the unloading pad's cement, and/or tears in plastic lined containment area(s), etc., contamination can reach and seep into the soil, and sub-surface. If this happens, contamination could reach drinking water supplies. If spills go off well site containment areas, contamination can reach drains, surface water, soil, groundwater, drinking water, farm fields, and more.

This is why it is critical for any and all oil/gas related spills to be cleaned up as soon as they happen. By Ohio law, <u>OAC 1501:9-8-02</u> (Incident notifications), spills must be reported within 30 minutes of discovery, and remediated asap.

- (2) Loss of well integrity: To prevent contaminated brine-waste from leaking out of a Class II well, as the waste makes its way thousands of feet down into the ground, and to its assigned geologic zone, it is critical for disposal wells to be kept in the best of shape, continually monitored via an electronic monitoring system, and for all who are operating these injection wells to follow any and all injection laws. One such law is OAC 1501:9-3-07(D)(1): Design and Operational Requirements of a Class II Disposal Well or a Surface Facility. When rules and laws are not followed, there is a real danger of contaminated waste leaking out of the well, and into the ground/groundwaters/drinking water/etc.
- (3) Deep sub-surface waste migration making its way to the surface: The idea behind injecting oil/gas liquid waste into the underworld is that it can be injected into assigned geological formations, and that the waste will stay in these zones for safe keeping, in perpetuity. Unfortunately, the reality is that these contaminated, radioactive wastes, as evidenced by the K&H injection facility, and other injection wells in Ohio, and beyond, do NOT always stay in their assigned geological zone(s).

If injected brine-waste somehow finds its way to nearby production wells, unplugged abandoned wells, coal mines, etc., this contaminated waste can ride up these holes to the surface, to groundwater, etc. This has happened more than once in Ohio.

CONCERNING ISSUES AT THE K&H FACILITY

I. CONTAMINATION EVENTS AT THE K&H FACILITY—Surface Spills

(1) SPILL OF CONTAMINATED BRINE-WASTE: Discovered 1/16/14: While drilling an injection well at the K&H facility, the drillers hit formation water at 1432 feet. The surface pit was overflowing. 1680 gallons of formation water left the pit, crossed the location and entered a nearby stream, 60 feet away. Drilling "soap" foam was in the creek, and the contaminated water was

entering the stream. ODNR directed the Co. to remove all the contaminated materials, including drilling fluids and contaminated soil, and dispose of it properly (in an approved landfill), and to also draft and execute a remediation plan. Contaminated areas were delineated for soil removal. Contaminated waters and soil from stream bed were to be removed with a vacuum truck. 12 tons of contaminated soil were removed the next day.

(2) SPILL OF CONTAMINATED BRINE-WASTE: Discovered 9/4/15:

ODNR issued a violation to K&H. The sump pump at the facility failed and brine-waste spilled, travelled across the road, down the hill, and across the soil, roughly five feet on the other side of the road. The Co. removed ~15 tons of contaminated soil from the spill, and the contamination event was remediated.

(3) SPILL OF CONTAMINATED FLUIDS DURING SOLIDIFICATION PROCESS & K&H DOESN'T HAVE A PERMIT: Discovered 12/14/15:

There was a release of contaminated fluids <u>from the solidification facility</u> at the K&H facility. Fluids were being transferred, and not being monitored continuously. The fluid level in the truck filled up to the point of overflow, and caused the pressure relief valve to open. It sprayed contaminated fluid (oil and brine) over the side of the truck and onto the pad and gravel road. The access road was flowing rain water runoff. The oil and brine mixed with this.

As noted, Ohio oil and gas extraction/production create a LOT of contaminated, radioactive waste. This waste comes in the form of liquid brine-waste, and solid/semi solid waste known as drill cuttings, sludge, etc. The liquid brine waste is what gets injected into Class II wells. The solid/semi solid waste is taken to waste solidification facilities, where workers add various solids to the waste (corn cobs for example) to try and "downgrade" it. In theory, adding non-radioactive solids is supposed to lessen the radioactivity of this waste, and make it acceptable for landfill disposal. Some question the validity of this process. Both of these processes, injection and solidification, require permits.

Concerningly, ODNR inspection reports show the K&H facility had **NOT been granted a permit** by ODNR to operate their solidification "treatment" facility.

(4) SPILL OF CONTAMINATED BRINE-WASTE: Discovered 11/6/17: The brine spill happened at the site during a heavy rain event.

(5) SPILL OF CONTAMINATED BRINE-WASTE: Discovered 6/15/18

Contaminated brine began to leak near the wellhead. The brine escaped the gravel area, and ran down the hill into a low spot. Brine was on the hillside. Remediation was started. Three days later the Co. had filled 4 roll-off boxes with contaminated material. Remediation was on-going. The Co. continued removing contaminated brine from the gravel, and collecting run-off from the plastic lined collection point. On 6/27/18, remediation was still on-going. The stream was tested. Three weeks later, on 7/5/18, and 7/9/18, the remediation was still on-going. By 8/7/18, almost two months after the 6/15/18 brine release, ODNR inspection reports note that the pollution and contamination had been removed.

(6) SPILL OF CONTAMINATED BRINE-WASTE: Discovered 9/22/24:

Contaminated fluid was flowing from the pre-well-plugging operation. The fluid flowed off the well site. The company scraped up the contaminated soil.

(7) WELL BLOWOUT, SPILLS, FAILURE TO REPORT: Discovered 10/25/24 and 11/1/24: 10/25/24: There were well control problems during the pre-well-plugging operation that resulted in a release of 294 gallons of contaminated fluids off the containment area. ODNR notes in the inspection

report that the Co. failed to report this spill to ODNR in violation of Rule 3750-25-25, Release Notification Requirements and Rule 1501:9-8-02.

11/1/24: During plugging operations, brine-waste, and drilling fluids, spilled and impacted nearby land outside the containment area. Piles of contaminated soil and a dozer were next to access road extending down the slope from well. **The Co. failed to report this spill to ODNR in violation of** Rule 3750-25-25, Release Notification Requirements and Rule 1501:9-8-02.

(8) SPILL OF CONTAMINTATED BRINE-WASTE: Discovered 1/24/25:

There were 630 to 1260 gallons of brine-waste spilled, and it impacted land at the facility. An error with a vacuum truck released contaminated brine-waste on location, and down the lease road before it stopped from entering the roadside ditch. Remediation was ongoing overnight.

II. SUB SURFACE MIGRATION AT K&H FACILITY & THE HARROWING STORY

a. CREATION OF FIRST K&H INJECTION WELL: 11/13/12:

The first injection well at the facility was permitted by ODNR on November 13, 2012. According to a drinking water study that was commissioned by ODNR in 2024, complaints started shortly after that first well came on-line. The authors of the 2024 water investigation report write this: "...after injection operations began, complaints of impacts to nearby production wells were received by ODNR."

Was contaminated brine-waste migrating after being injected into the K&H well(s), and polluting nearby production wells, and/or nearby drinking water in the area? It was certainly possible. ODNR must have been concerned, but, to our knowledge, the agency did not launch a formal investigation. Did the agency take precautions? Seemingly not. Instead, the agency just kept allowing the K&H facility to grow, and for more contaminated waste to be injected with higher pressure.

b. CREATION OF SECOND K&H INJECTION WELL (12/9/13), INCREASE OF INJECTION PRESSURE (12/23/14) & A THIRD K&H WELL PERMITTED 3/18/15:

The second K&H injection well would be permitted by ODNR on December 9, 2013.

A year later, on December 23, 2014, the ODNR Chief of DOGRM (Division of Oil & Gas Resources Management) would issue ORDER 2014-554, and allow for K&H to increase their injection pressure from 435psi to 520psi.

Just a few months later, on March 18, 2015, ODNR would grant a permit for K&H to drill a third injection well at the facility up on that hill. Along with this third injection well, would come a new 2,500,000 gallon above ground waste storage tank, and other additional infrastructure, including an additional unloading pad for more trucks to un-load more contaminated waste.

c. CITIZENS WERE AND STILL ARE DEEPLY CONCERNED

Citizens of Athens County were very concerned when they got word, in 2012, of that first K&H injection well. And, they were NOT blindly concerned--They had consulted with experts, such as geologist Dr. Julie Weatherington-Rice, who would say:

All injection wells have the potential to leak...it's going to go into all the fissures and the joints and the cracks ... and you're overloading the system. Eventually the glass is going to overflow....This is particularly problematic since geologists do not know the locations of many

fault lines or of many abandoned wells and mines through which injected brine can reach surface and groundwater sources...

Among other things, citizens were rightly concerned with Class II disposal wells being placed on that little hill, considering the areas' seismic realities. As described in a 2018 study published on the American Geophysical Union website: "From a structural geological standpoint, Washington County (adjacent to Athens county) is one of the most complex areas in Ohio...The area contains several basement-involved fault zones..."

Undoubtedly, on the minds of Athens County citizens back then, was the 4.0 earthquake that had just happened up in Youngstown, and that authorities determined had been caused by a Class II injection well in northern Ohio.

As ONDR kept permitting more, and more oil/gas waste to be taken up that hill, citizens grew more and more concerned--They protested, blocked the driveway up to the facility, and some even got arrested. In 2014, a majority of Athens residents voted to ban injection wells in the city of Athens, but any county ban would be impossible when the Ohio Supreme Court ruled against home rule saying "municipalities cannot discriminate against, unfairly impede, or obstruct oil and gas activities and operations that the state has permitted."

In an effort to protect themselves from what they believed to be a real threat of oil/gas contamination from the K&H facility, citizens turned to taking legal action, and filed suit to try and stop ODNR from permitting another injection well at the K&H facility-- Fracking Action Network vs. Richard J.Simmers/Chief, Division of Oil & Gas Resources Management, Ohio Department of Natural Resources--Citizens lost the suit, and the third K&H well was drilled.

Despite citizens protests, ODNR allowed the K&H facility, and the contaminated waste it was injecting, to keep growing.

d. FEARS REALIZED: NEARBY PRODUCTION WELLS BECOME POLLUTED WITH BRINE-WASTE & ONDR STARTS INVESTIGATING: 2016:

It was in 2016 when ODNR started investigating allegations that a K&H injection well was impacting nearby production wells (the S. Moore No. 1, H Dunfee No. 1 and the Holdren-Dunfee Unit No. 1 production wells). At that time, the agency would conclude it was unlikely being caused by the K&H injection well(s). It would be nine years later, in a 6/26/23 ODNR Chief's ORDER 2023-139, when the Chief of ODNR would admit that this initial 2016 assessment and conclusion was wrong. More on this below.

e. K&H WANTS A FOURTH WELL (10/9/18),

REPORTS OF MORE IMPACTED PRODUCTION WELLS (5/20/19) &

THIRD PARTY INVESTIGATION, a TURNING POINT (2019)

On October 9, 2018, K&H filed an application with ODNR for yet ANOTHER injection well (No. 4). Word in the area had continued to swirl that oil/gas production wells were being negatively impacted by injection wells, and ODNR continued to be contacted by unhappy production well owners.

On May 20, 2019, ODNR met with an impacted well production owner operating ³/₄ mile east of the K&H facility.

In late 2019, more oil/gas well owners, in nearby Washington County, reported impacts from brine-waste coming from, they suspected, a new injection well known as the Redbird No. 4 Class II well. This would elicit ODNR to hire an expert petroleum engineer, and a third-party investigation team (Resource

Services International). They would investigate the Redbird No. 4 injection well. Their <u>Redbird report</u> would be a turning point.

The report concluded that the Redbird Injection Well was impacting production wells. The injection pressures at the Redbird No. 4 Injection Well was allowing natural fractures to be increased in size or propagated in the Ohio shale injection zone. The fractures allowed injected brine to travel **UPWARDS** of at least 1800 feet from point of injection, which is outside of the permitted injection zone and area of review. Prior to this report, ODNR did not contemplate that injected fluid could migrate in the manner described by this report. The report concluded brine had also travelled 5 miles.

f. WITH THIS NEW INFO., ODNR KNEW THEY HAD TO START TESTING THE GROUND WATER NEAR THE REDBIRD WELL (2021)

In early 2021, the Division hired a private contractor, Groundwater and Environmental Services (GES), to conduct a study of private water wells. The GES investigation was conducted to verify that brine had not migrated into shallower aquifers that provide drinking water supplies to private water wells located within a one-half mile radius of nine oil and gas wells permitted to operate by the Division. The goal was to locate, identify, and sample private water wells, and determine if any and all private water wells in the area were impacted by the operations of the Redbird No. 4 injection well. Thankfully, the GES investigation concluded that none of the water wells that were sampled were impacted by brine associated with the Redbird well. With this said, many still have questions about ODNR's water testing.

ODNR records show the Redbird No. 4 well was permitted in 2018. So, this means ODNR was testing the water 2 to 3 years after the Redbird injections. Were there impacts before ODNR tested? One will never know. Another question is this: If the Redbird Report found brine migration had travelled at least 5 miles, why did ODNR only test within a half mile radius? Furthermore, the agency identified 48 wells to be vulnerable—Why did the agency only test 9 of these?

Also, the question then became, was drinking water being impacted by the K&H injection wells? ODNR wouldn't look into this until 2024. Luckily, the K&H 2024 water <u>report</u> found no groundwater impacts from the K&H brine-waste migration either. The first K&H well started injecting in 2012. Had there been impacts to drinking water from 2012 to 2024? One will never know.

g. ODNR, AT LONG LAST DENIES, K&H THEIR 4th WELL, SUSPENDS ENTIRE K&H FACILITY with ODNR CHIEF'S ORDERS 2023-121(6/2/23), 2023-122 (6/2/23), and 2023-139 (6/26/23):

The new 2019 revelations, brought on by this new data from the Redbird Report, would, seemingly, lead ODNR to look at injection wells in the area differently. And yet, as production wells in the area kept being polluted and impacted by brine-waste, it would take ODNR another couple of years to act on the K&H wells. It would not be until June 2, 2023 that the ODNR Chief of the Division of Oil & Gas Resources Management (DOGRM), would write that the reservoir into which K&H wells were injecting, was fractured, and the agency could no longer use the same calculations to reliably conclude the K&H facility was not impacting production wells. With ORDER 2023-121, the Chief, at long last, denied K&Hs permit application to drill well #4.

On this same day, June 2, 2023, the ODNR Chief of DOGRM issued ORDER 2023-122. Three weeks later, on June 26, 2023, he issued another ORDER 2023-139, and with both of these ORDERS he SUSPENDED all three K&H injection wells. Reason given: The Chief found that:

"K&H's operations of the K&H Injection Wells violates Ohio Administrative Code 1501:9-1-07(A)...(and) that the operation of the K&H Injection Wells has and is impacting nearby production wells and that such impacts endanger and are likely to endanger public health, safety, or the environment...(and) that if the K&H Injection Wells continue to operate, additional impacts may occur in the future and are likely to contaminate the land, surface waters, or subsurface waters...(and that) the continued operation of the K&H Injection Wells presents an imminent danger to the health and safety of the public and is likely to result in immediate substantial damage to the natural resources of the state...(and that) brine or other waste substances from operation of the K&H Injection Wells are outside of the area of review...(and that) K&H Injection Wells should be immediately suspended..."

In his June 26, 2023, ORDER, the Chief of ODNR would also say something chilling: He would admit that the initial assessment and conclusion the Division had made in 2016, the conclusion that the K&H facility was NOT responsible for impacting nearby production wells, was wrong. He writes this:

"The Division previously investigated allegation that injection wells were impacting the S. Moore No. 1, the H.Dunfee No. 1, and the Holdren-Dunfee Unit No. 1...and concluded in or around 2016 that it was unlikely the K&H No. 3 impacting these wells...(s)ubsequent developments including, but not limited to the following, undermine that 2016 investigation and demonstrate that its conclusion is wrong....the Division did not contemplate that injected fluid could migrate in the manner described by (the Rebird) report..." (ie: that injection fluid could travel over 5 miles via geological fractures, AND upwards of 1800 feet).

h. ILLEGAL INJECTION AT K&H FACILITY? 7/11/23:

Even though the Chief had issued his suspension ORDER on June 2, 2023, the company was observed by an ODNR inspector to be actively injecting waste into a K&H injection well on 7/11/23.

i. THE OIL & GAS COMMISSION ISSUES A STAY ON THE CHIEF'S ORDER, THUS ALLOWING IMMINENT DANGER (INJECTION OF WASTE) TO CONTINUE: 10/3/23: After the Chief's June 2, 2023 suspension, the Co. was, undoubtedly, unhappy. The Co. requested an informal hearing regarding the Chief's ORDER. ODNR listened to the company's side, but the ODNR Chief of the Division of Oil & Gas (DOGRM) did not change his decision.

The Co. then appealed their case to the Oil & Gas Commission, the body that oversees decisions made by the ODNR Chief. On October 3, 2023, even though ODNR, the experts, had suspended the K&H wells for presenting an imminent danger to health and safety, the Oil & Gas Commission stepped in, and issued a STAY on the Chief's ORDER, thus allowing K&H to resume injection of oil/gas waste while the Commission considered the Co's appeal for the next six months.

j. COMMISSION AGREES WITH ODNR AND FACILITY IS FINALLY SHUT DOWN: 4/19/24:

Six months later, on April 19, 2024, the Ohio Oil & Gas Commission issued an ORDER of the commission revoking the STAY, and the wells were finally shut down.

III. MORE DOCUMENTED RULE/LAW-BREAKING & NUISANCE AT THE K&H WELL FACILITY

Along with the violations already mentioned above, how K&H Partners operated an oil/gas "solidification facility" at the K&H Facility without a permit, and failed to report contamination events, K&H Partners broke other rules/laws as well.

(1) EXCESSIVE NOISE AND VIBRATIONS:

Phyllis R called to complain about excessive noise and vibrations that were shaking her floor. ODNR checked and the Co. was sucking out a tank bottom. The pump was very noisy. The Co. said they performed duty only two to three times a year.

(2) ILLEGAL STORAGE TANKS AT SITE & LEAKING TANKS:

For years, the facility stored illegal tanks with contaminated waste at the site OUTSIDE of the containment area(s). NOTE: A liner in a containment area at an oil/gas, if in-tact, will prevent spills of contaminated waste from going into the soil and sub-surface. Obviously, if a spill happens in an un-lined area, contamination can reach the soils, the sub-surface, the groundwater, the aquifers, etc.:

- On 8/20/19, ODNR issued a violation to K&H for housing 9 unapproved mobile storage tanks. Tanks were in use outside of the containment dike. The Co. had given ODNR no notification. The agency directed the Co. to discontinue use of the tanks, and to remove the tank fluid.
- On 10/11/23, an ODNR inspection revealed 6 mobile tanks and 6 roll off boxes outside of the secondary containment. They were being used to de-water the tank bottoms from the 2,500,000-gallon storage tank. ODNR was NOT notified of this, and had not approved the additional tanks and roll offs outside the containment area.
- On 10/23/23, an inspection found 6 mobile tanks and 5 roll off boxes outside the containment area. They were still being used to de-water the tank bottoms from the 2,500,000-barrel tank. ODRN was not notified and had not approved.
- On 11/8/23, 6 mobile tanks and 6 roll off boxes were outside the secondary containment.
- On 11/15/23, a violation was finally issued for the 6 mobile tanks and 6 roll off boxes outside the containment area, and being used to de-water. The Co. was directed to discontinue using the tanks and roll off boxes, to remove the fluids, to dispose of it in approved class II wells, and to properly dispose of material in roll off boxes, to remove the mobile tanks and roll off boxes. All modifications must be submitted and approved by ODNR: 1501:9-3-06(C)(4)—Amendment to surface facility (a) a request for an amendment to an operating surface facility shall be submitted in writing to the chief prior to implementation of any revision to surface facility.
- 11/17/23: same as above

(3) LEAKING FROM THE 2,500,000 GALLON OIL/GAS WASTE STORAGE TANK

- 5/18/20: The 2,500,000-gallon waste storage tank had a brine seep. Co. was told to send a plan of repair to ODNR.
- 12/28/20: The 2,500,000-gallon waste storage tank dike has been damaged from a tree falling on the fence and pieces hitting the plastic liner. This resulted in multiple small areas at the top of the liner that need repaired.
- 5/4/21: Sealing seams on the 2,5000,000-gallon tank

- 5/20/21: Currently working on sealing seams on the 2,500,000-gallon tank
- (4) WELL PRESSURE ISSUES IN VIOLATION OF OHIO RULES/LAW:

Exceeding permitted maximum allowable injection pressure is a serious thing at any injection well, but especially, in an area that is experiencing impacted production wells. Exceedance of permitted maximum allowable injection pressure would be a violation of 1501:9-3-07 (D). Following are the days ODNR found the Co. violating this law/rule:

- 3/1/18: Exceedance of maximum allowable injection pressure. ODNR directed the Co. to reduce inject pressure, AND reduce the well's auto shut down switch to not exceed this maximum allowable pressure.
- 3/5/18: Exceedance of maximum allowable injection pressure.
- 2/11/19: Injection pressure exceeded the allowable injection pressure by 55 psi.
- 5/13/19: Injection pressure exceeded the allowable injection pressure.
- 11/9/20: The Co. representative adjusted injection pressure limits to original pressure on permit
- 2/17/21: K&H staff were instructed to set the injection pump high limit to original inject pressure on permit
- 7/1/21: K&H staff was advised to set the high limit shut off to the permitted pressure
- 1/8/24: K&H staff was instructed to lower max inject pressure to original permitted max inject pressure.

IV. THE FORMAL ODNR VIOLATIONS ISSUED to K&H PARTNERS, LLC

- (1) 1/16/14: VIOLATION: Contamination event, brine release of 40 barrels outside containment area.
- (2) 3/7/14: VIOLATION: Truck unloading NOT brine, but residual waste, waste oil placard, waste from cleaning out tanks, unloaded this waste at the K&H "treatment facility," for which K&H had not received an ODNR permit to operate.
- (3) 9/4/15: VIOLATION: Sump pump at injection facility failed and brine released, travelled across road, down the hill, across soil, ~5 feet on other side of the road.
- (4) 3/1/18: VIOLATION: Review of Co's Annual Report shows exceedance of maximum allowable injection pressure in violation of 1501:9-3-07 (D)
- (5) 6/15/18: VIOLATION: Contamination event, brine release outside containment area.
- (6) 8/20/19: VIOLATION: 9 mobile storage tanks were outside of approved containment dike, and being used as a temporary surface facility. Mobile tanks were not approved for use. This modification to the facility must be submitted to and approved by ODNR-DOGRM UIC section.
- (7) 11/15/23: VIOLATION: Since 10/23/23, 6 mobile storage tanks and 6 roll off boxes were outside the approved secondary containment area. These were being used to de water the tank bottoms from the 60,000-barrel storage tank on-site. All modifications must be submitted and approved by ODNR 1501:9-3-06(C)(4)-Amendment to surface facility

- (8) 1/8/24: VIOLATION: The ODNR inspector witnessed a Co. tanker unloading brine on the unloading pad. The truck was not labeled with UIC#, brine, or Co. #. K&H staff stopped unloading the tanker and sent the truck off-site. Also, K&H exceeded their allowable maximum injection pressure.
- (9) 11/1/24: VIOLATION: ODNR inspector arrived at the facility to find piles of contaminated soil and a dozer next to access road extending down the slope from the well containment pad. No brine-waste/fluid spill notification had been made.

CONCLUSION

This ten-page D.A.R. report only touches on a very long and complicated Athens County Class II injection well story. The story involves, unfortunately, a lot of suffering that, it seems to us, could have been avoided. Residents have worried for years about drinking water contamination from migrating oil/gas brine-waste. And, although ODNR water testing has shown no groundwater contamination related to the Redbird No. 4, or, the K&H injection wells, that's for now. What does the future hold for drinking water? No one knows--The free and clear was given in regards to a limited sampling of residential water. This weighs heavily on the minds of those who live in this area.

Furthermore, oil/gas production well owners have lost energy production due to this migrating brine-waste. Some of these production wells are on private property, and provide the energy for heat in the winter. Yes, lawsuits have been filed by small oil/gas well production owners, against K&H Partners, but what chance do they have going up against K&H's billion-dollar mother company, Tall Grass Energy?

In the ODNR 2024 water investigation report, it states that production well complaints started immediately upon that first 2012 K&H injection well being brought on-line. Why didn't ODNR immediately shut things down back then, until answers could be found? Why didn't the agency call for a large-scale investigation back in 2013, 2014, 2015? Why didn't they immediately hire those third-party investigators that they would hire six years later, and that would help to, at long last, solve so many of the migration questions?

At the very least, why didn't ODNR allow for just one, small injection well atop the Torch hill? Or, why didn't ODNR immediately install an extensive groundwater monitoring system when complaints started. Better yet, WHY doesn't OHIO law require, among other things, EVERY injection well in Ohio to install ground water monitors downgrade from the wells?

Furthermore, why didn't ODNR listen when Ohio experts on the issue, experts such as Dr. Julie Weatherington-Rice, expressed concern? Dr. Rice was concerned about injection wells being placed up on that hill in Torch, Ohio. She knew there were fault zones, orphaned wells, etc. still not identified, and that the geology was like swiss cheese. ODNR knows this too. Why place injection wells there? Why put injection wells in one of the most complex geological areas of Ohio? AND, WHY has ODNR insisted on putting not one, two, or three, but NOW 8 class II injection wells in Athens County? AND, why does the agency continue to place injection wells in this area? There are so many questions.

<u>ODNR seismic records</u> show there have been 69 seismic events in Washington County (adjacent to Athens County) since the end of January, 2025. Have we learned nothing from the Youngstown 2011 4.0 earthquake, and the other earthquakes related to Class II wells and fracking?

Let us end with this thought: Most Ohioans have NO IDEA what a Class II injection well is. They have no idea oil and gas extraction and production creates billions and billions, and tons upon tons of radioactive oil/gas waste. AND, they have NO IDEA this contaminated, radioactive waste is being trucked throughout their communities, sometimes spilled, and injected into their underground.

Shouldn't it be the law that residents are informed of the many risks of Class II injection wells when they are placed in their county? Our guess is if the average citizen was informed of all of these oil and gas radioactive realities and risks, oil and gas would have been voted out a long time ago, and safer, renewable energy would be king. As it is, Ohio citizens remain in the dark, as more and more Class II injection wells inject more and more contaminated, radioactive oil/gas waste into the underworld.

END NOTES

Following is a quote taken from a radio interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is the Fractracker Ohio oil and gas incident/accident map, and a quote from Governor John Kasich:

<u>Brundrett:</u> (radio interview at 27:00)

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on."

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report.

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..."

The Governor then signed Executive <u>ORDER 2016-04K</u>: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

D.A.R. (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. oil & gas industry spin.

SOURCES

- ODNR Chief's ORDER 2014-554 (12/23/14: increasing allowable injection pressure)
- ODNR Chief's ORDER 2023-121 (6/2/23: denial of a permit application to drill a well)
- ODNR Chief's ORDER 2023-122 (6/2/23: suspension of injection operations)
- ODNR Chief's ORDER 2023-139 (6/26/23: suspension of injection operations)
- ODNR incident tracking sheets
- On-line mapping tools

The Daily Accident Report-Ohio Oil & Gas

Entry #96

Today's Date: April 3, 2025

Title: Spitting in the Face of the Law—The Hazel-Ginsburg Class II Injection Well

The Hazel-Ginsburg Oil & Gas Waste Class II Injection Disposal Well Athens County, Alexander Township Carper Well Services, Inc API 34-009-22704-0000 (Athens County presently houses 8 oil/gas class II wells)

NARRATIVE SUMMARY

CLASS II WELLS 101

Did you know oil and gas companies create hundreds of <u>millions of gallons</u> of liquid <u>contaminated brinewaste</u> each day right here in Ohio? This waste will be created at the more than 65,000 production wells scattered throughout our beautiful state, mostly in eastern Ohio. Throughout the day, this waste will be trucked away from these wells, along our Ohio roads, and throughout our communities, as brine-haulers make their way to the more than 250 Ohio Class II injection wells.

What are injection wells? Injection wells house various kinds of wastes. In the United States, there are six classifications of injection wells. Class II wells are specifically for contaminated oil/gas waste(s). Don't be misled, these wells are NOT closed containers. They are simply the vessels that take the contaminated waste down to geological formations deep in the earth.

While there are six classifications of injection wells, there are three categories for Class II wells. Our <u>Daily Accident Report</u> (D.A.R.) specifically focuses on what is called Class II Saltwater Injection Disposal Wells (SWIW). Don't be misled, either, by the innocent sounding word: "saltwater." This salty brine-waste is, yes, salty, but it is also, and this is a well-known fact inside and outside of the industry, contaminated with drilling chemicals, and dangerous heavy metals, including, but not limited to the radioactive radium 226/228.

Because oil and gas waste can be very dangerous for humans and the environment, the regulation of these Class II wells is incredibly important. In Ohio, one must secure a Class II permit to drill one, or, to convert a production well into one, and, must construct, or, convert a production well following very specific guidelines. It is equally important for well owners to follow the laws and rules related to the *plugging* and *abandonment* of these wells. Why? Because as ODNR puts it: "Proper plugging of orphan wells is necessary to protect public health and safety."

The laws/rules that govern Class II wells are laid out in Ohio Revised Code such as <u>1509.22</u>, which outlines the rules related to the storage and disposal of brine, and Ohio Administrative Code <u>1501:9-3</u>, which outlines all aspects of a Class II operation, and OAC Chapter <u>1501:9-11</u>, plugging of Wells.

THE HAZEL-GINSBURG WELL--SPITTING IN THE FACE OF THE LAW

1982: WHO, WHAT, WHERE

There are regulations for lots of things in our lives. There are neighborhood regulations, restaurant regulations, and more. When some regulations are ignored, there's no harm, no foul. When Class II well regulations are ignored, it can have dire consequences. If <u>brine contamination events</u> happen, or, a well's integrity fails, radioactive waste can spread to the ground, surface water, groundwater, drinking water, etc., causing danger to public health, safety and the natural resources.

The Hazel-Ginsburg Class II well was initially permitted to be an oil & gas well in 1982. Royal Petroleum Prop Inc. secured the permit from the Ohio Department of Natural Resources (ODNR), Ohio's oil/gas regulator. Shortly thereafter, the company would drill a well some 3000 feet into the Athens County ground.

The well is located at the corner of Ladd Ridge and Center Stake Roads, 5 miles south of Athens, and two miles east of the town of Albany. Goose Creek flows ~1 mile to the well's south, while Biddle Creek and the lake at Margaret Creek Conservancy District are 1.3 miles to the well's NE. Margaret Creek flows 1/5 miles W/NW of the well. There are domestic water wells within a mile of the Ginsburg injection well.

After operating for a couple of years as a production well, Royal Petroleum converted the Ginsburg well to a class II injection well in September of 1984, most likely because the well wasn't producing much oil/gas. ODNR would issue Royal Petroleum their Class II well permit outlining the following construction and operational stipulations, common for an injection well permit:

- The casing cement must go down to 300 feet above the top of the injection zone.
- The Co. must squeeze cement into perforations at 2500 to 2676 feet to seal off a geological zone.
- The well to be pressure tested at 675 psi.
- The surface facility must contain a concrete pad with a drain to contain any spillage of brinewaste during the unloading of trucks.
- The well must only accept brine-waste and well treatment fluid.
- All fluids must be stored in approved tanks and allowed to settle before injecting.
- The well annulus must be monitored, either continuously during injection of fluids, or, at least monthly at a minimum pressure of 200 psi.
- Injection pressures and volumes must be monitored on a daily basis.
- Upon discontinuance of injection, the owner must apply for permit to plug and abandon the well, and must plug and abandon the well with 60 days.

CHIEF'S ORDER 86-543: Issued on 12/9/86:

Suspend Injection Operations: No Mechanical Integrity

The Ginsburg well operated as a Class II well for just a couple of years before the Chief of ODNR's **D**ivision of **O**il & **G**as **R**esources **M**anagement (DOGRM), issued his first ORDER to the company. The ORDER would be issued on 12/9/86. The well's Mechanical Integrity Test (MIT) had failed. This indicated the well was leaking, AND causing, as the Chief wrote in his ORDER: "imminent danger to public health or safety or...immediate substantial damage to the natural resources."

The company was ordered to immediately cease injections, and to submit a plan to repair, and test the well. Did the company comply? We think not. ODNR inspections took place after the 12/9/86 ORDER. The inspections of the well took place on 3/9/87 and 6/3/87, and the inspection notes merely say "ACTION legal 1501:9-3-07(E)(F)."

CHIEF'S ORDER 87-344: Issued on 6/15/87:

Plug Idle Well: Incapable of Injecting Fluids

Another indication the company did not comply with ORDER 86-543, is the fact that the Chief of ODNR issued a second ORDER soon after. Six months after the Ginsburg well had failed its test, and was found to be leaking, the ODNR-DOGRM Chief would issue ORDER 87-344. The Chief would direct the company to plug and abandon the well within 30 days, and to properly restore the land surface within six months. Three months later, on 9/14/87, ODNR would issue another violation notice to the company, regarding their violation of 1501:9-3-07(E)(F). Did the company comply? We see no evidence in the ODNR files that they did.

It was now the end of 1987, and we can only assume from the records, that the Ginsburg well was still leaking. Remember it had failed a well integrity test, and had been determined to be leaking in December of 1986. The owning company had now ignored the Chief's ORDER to fix the problem, and to retest, AND had ignored the Chief's ORDER to plug the well. The Ginsburg injection well was getting off to a rocky start.

CHIEF'S ORDERS 88-1303 (issued on 8/26/88) & 88-1629 (issued on 10/24/88): Suspend & Revocation

At this point in time, ownership of the well changed from Royal Petroleum Prop Inc. to the Titan Energy Corp. Once again, the Chief of DOGRM issued a well suspension, because the well had NOT demonstrated mechanical integrity. The Chief issued ORDER 88-1303, and directed Titan Energy to immediately cease operations, AND to remove all disposal apparatus within 30 days. Two months later, on 10/24/88, after the company had ignored the ORDER, the Chief would issue ORDER 88-1629, and REVOKE disposal authorization. The Chief told the new operating company to immediately cease operations, and to remove all disposal apparatus within 30 days. Did the company comply? We can find no records showing they did. So, we can only assume, at this point in the well's history (October of 1988), that the Ginsburg well was still leaking, and had been leaking since December, 1986.

1987 – 2000: NO RECORD OF ODNR WELL INSPECTIONS

Disturbingly, from September, 1987 to February, 2000, we don't know what went on at the Ginsburg class II injection well, because there are, seemingly, no ODNR inspection records. In other words, it seems no inspections took place of the well during a 13-year span of time. Of course, this begs several questions: We know the well was NOT plugged and abandoned, so, was the well being injected with oil/gas waste during this time? Did the companies that owned the well during this time EVER demonstrate mechanical integrity? Why are there no inspection reports of this well during this time? Why did ODNR, after directing the company to plug the well in 1987, never enforce this directive?

2000/2001: MORE VIOLATIONS & CHIEF'S ORDER 2001-1

After 13 years of no inspections (or, again, no recorded inspections), ODNR found violation (s). In February of 2000, ODNR issued a violation saying the well was idle, and incapable of injecting brinewaste. There was no pressure on the injection or annulus of the well. Weeds were growing in the storage pit.

Four months later, in May of 2001, the next inspection took place. A valve on the well was found to be broken and in violation of 1509-03 and 1501:9-3-05(A)(3). At some point during this time period, the DOGRM Chief would issue yet another ORDER, (2000-1--no date given). This time it was issued to Peoples Petroleum Corp, the new owner of the Ginsburg Well. In this order, the Chief found the well was incapable of injecting fluids, and directed the company to either get it working within 10 days OR, to plug it within 30 days. Did the company comply? There are no records showing they did.

It would be around this time, when the present owner, Carper Well Service, Inc., would take ownership of the Ginsburg injection well.

2001- 2004: CARPER WELL SERVICE INC. TAKES OWNERSHIP, WELL PROBLEMS CONTINUE & ATHENS COUNTY TAKES DRASTIC MEASURES

In June, 2001, Carper Well Services took ownership of the Ginsburg well, and, for the next couple of years, the well continued to have problems. It would be months before the company fixed that broken valve found a month earlier. There were well pressure problems, and, as noted in ODNR inspection reports, the well STILL needed a mechanical integrity test. On 1/22/02, ODNR noted the well: "need(ed) a mini test done." Did *this* test ever get done? Again, there are no records indicating as such.

In May of 2002, another ODNR violation notice would be issued, this time for pollution and contamination at the well site. ONDR found the company was improperly storing contaminated filters at the well site. The agency told the company to remove the filters.

In 2003, something VERY interesting happened at the Ginsburg well site. In April of 2003, ODNR found a ditch had been dug across the lease road that prevented any trucks from hauling contaminated waste into the Ginsburg well-site. When ODNR called the company, it was said that Athens County representatives had cut the ditch to stop trucks from entering the site. ODNR told the company representative the Ginsburg well was in VIOLATION, and the company MUST plug, or, produce at the well, AND that the well needed a test to demonstrate mechanical integrity. Does this mean that the Ginsburg Well went 17 years without an integrity test?

For the rest of 2003, and part of 2004, ODNR inspection reports note no violations at the site. With this said, these same inspection reports make no mention as to whether or not the well owner conducted the required Well Integrity Test, or, mini test, mentioned after that ditch was cut outside the well site. Is it possible that the Ginsburg well operated from 1986 to 2003 having never passed a Well Integrity Test? Is it possible that ODNR allowed this to happen, EVEN after determining leakage in 1986 that presented imminent danger? Records seem to show it is certainly possible.

ANOTHER SUSPENSION ORDER: Issued 2006

It was now 2005, two years since the Athens County representative(s) had cut the ditch outside the Ginsburg well to stop the brine-trucks, and ODNR had told the company it was in violation and in need of a well Mechanical Integrity Test. ODNR was, once again, demanding that the Ginsburg well be tested for integrity:

- On 9/16/05, the ODNR inspection report reads: "The well needs tested."
- On 10/4/05, ODNR notes: "No action was taken to test the well."
- And, again in June of 2006: "Well needs a MIT (Mechanical Integrity Test). Suspension order was issued 4/18/06."

At this point, in 2006, in regards to the Ginsburg Well, the Chief had issued 10 violation notices, 3 suspension orders, 2 orders to plug the well, a revocation order, AND Athens county officials had actually cut a ditch to prevent trucks from getting to the well. Would the company comply with the new 2006 Suspension ORDER, and, at long last, test the well?

THE GINSBURG WELL AFTER THE 4/18/06 CHIEF'S ORDER: MORE IGNORING & A LARGE OPEN PIT OF RADIOACTIVE BRINE-WASTE

For the next year and half, following the 4/18/06 Chief's ORDER, the company continued to ignore. ODNR inspection reports note the following—

- On 7/14/06: "No action taken to comply with Chief's ORDER."
- Notes on 10/19/06: "No action has been taken to comply with order."
- And again on 12/15/06: "no action has been taken to comply."
- Inspection notes on 2/21/07: "Well remains in noncompliance."
- And then on 9/10/07: "No action has been taken to plug *or operate the well*."

Earlier ODNR inspection reports seem to contradict ODNR's above assumption that the well was not being operated. Since 2004, contaminated brine-waste was accumulating in an open pit at the site. This, of course, begs the question, where was this waste coming from if the company was not operating the well? This accumulation of contaminated fluids in an open pit at the site was noted in many inspection reports prior to 2007:

- It was first noted in an inspection report on 7/15/04—Notes say: "Fluid level in pit is 1/5 of a foot (~2 inches) below the top."
- Then on 5/9/05: "The fluid level was 4 inches from the top of the storage pit."
- And on 4/4/06: "Pit was found completely full. Called operator and instructed him to take a load out of the pit ASAP,"
- etc.

This large collection of toxic radioactive oil and gas liquid waste would be stored in this Ginsburg open, cement pit for more than 15 years, and continue to go up and down, up and down. Fortunately, a citizen, who followed the violations happening at the well, kept a keen eye out on this pit. She would call ODNR to say "the radioactive waste is almost over-flowing the pit," and ODNR would direct the company to lower its open pit levels. Our question is this: When the 1984 ODNR Ginsburg injection well permit clearly states that "All fluids must be stored in approved tanks…" WHY was ODNR allowing for this large open pit to even be here?

THE GINSBURG WELL 2008 – 2012: A Mechanical Integrity Test is Conducted

2008-2010:

A Fairly Uneventful time at the Well:

The first ODNR inspection report of 2008 would note a service rig was at the well. For the rest of 2008, 2009, and 2010, ODNR inspection reports were uneventful, save for the open pit at the site getting filled up again to the top with contaminated fluid(s). With this said, reports make no mention of any Mechanical Integrity Test being conducted.

2011-2012:

More Violations at the Well: The Mechanical Integrity Test

Starting in 2011, more violations would be issued to Carper Well Services, Inc. ODNR would issue 4 violations for injection pressures being too low, for corroded, inoperable parts on the well, and for the

company not replacing these parts when told to do so. Also, ODNR would find contaminated soils at the site that the agency would direct the company to remediate. To give an idea of how much toxic brinewaste was being injected into the well, an ODNR inspection report documents that from January 1, 2012 to September 19, 2012, the company injected 4-million gallons of oil/gas waste.

In April of 2012, an inspection report, at long last, talks about how an ODNR representative witnessed a Mechanical Integrity test at the well. Additional notes in this same report talk about how the pressure in well's annulus needed to be released. The ODNR injection well geologist specifically directed the staff to monitor the well. We've never come across such a post-test ODNR directive. A mere 8 months later, ODNR would shut down the well, after well pressure, once again, dropped to zero. The agency would call for another well integrity test which failed due to a leak in the wellhead. After the wellhead was tightened, the well passed the integrity test.

ATHENS COUNTY CITIZENS GROW MORE AND MORE CONCERNED

It was now 2012, and Athens County citizens had had enough. It had been 9 years since someone(s) from the county had cut that ditch to stop trucks from getting to the Ginsburg well. Now, a young woman decided she would chain herself to a cement filled plastic drum in front of the facility, blocking the entrance. Meanwhile, on the other side of Athens County, citizens were getting fed up with the K&H injection wells. Word was spreading like wildfire that these injection wells were leaking, and contaminating nearby oil/gas production wells. People were worried about their drinking water becoming contaminated too. Citizens blocked the entrance to the K&H well pad, and got arrested for doing so.

Of course, it would be many years later when these citizens' protests would be validated. <u>ODNR would discover</u> the Athens County K&H and Frost wells, AND the Redbird No. 4 well, had been leaking waste from their permitted geological formations, and contaminating nearby oil/gas production wells. ODNR would conduct tests of drinking water. To date, thankfully, the agency has found no contamination of drinking water in the area near these wells.

Of course, this begs the question: Since the Ginsburg Well injects into the same geological formation (Oriskany) as the Frost, K&H and Redbird Wells, has ODNR done any testing of groundwater/drinking water near the Ginsburg Well, especially during all of the years the well was determined to be leaking and, seemingly, went so long without a Mechanical Integrity test? No, disturbingly, there has been no private well testing!

THE GINSBURG WELL 2013 - 2015

2013-2014 and most of 2015:

Another ditch is dug in front of the well-site:

Throughout 2013 and 2014, and most of 2015, brine-waste continued to be injected into the well. Between the start of 2015, and January 28, 2015, for instance, ODNR noted 117,432 gallons had been hauled to the site. During this time period, ODNR inspection reports show concerning things at the site: ie: an injection pump freezing, un-labelled trucks coming to the injection well with their waste, the open pit filled with contaminated waste, ODNR finding a spot along the access road, below grade from the well's unloading pad, being scalded and devoid of vegetation (a sign of brine-waste contamination).

Also, during this time, ANOTHER ditch was dug at the Ginsburg Well. An Athens' County employee had <u>cut another ditch</u> because of the amount of brine truck traffic tearing up the road. The county filed a law suit against the company.

End of 2015 - 2019: Contamination and More:

On 11/19/15, ODNR inspected the well site, and would issue a violation for an open Rumpke dumpster being used at the well site to store contaminated filters (a water tight container must be used). If this sounds familiar, it's because the company had been issued a similar violation for improper filter storage in May of 2002.

Inspection notes talk of how the dumpster had large holes in the bottom portion. ODNR directed the company to remove the contaminated soil to an EPA approved landfill. More than two weeks later, inspection reports note how the company removed the dumpster, but had made no effort to remove the contaminated soil. Some two months later, the soil *still* had NOT been removed.

Throughout 2016, ODNR inspection reports note how the injection pump had been removed for service, how the injection line was disconnected, how valves were open, then closed, etc. Also, ODNR inspection notes make specific, and continued reference to the different levels of the contaminated waste in the open pit:

- On 3/14/16, the waste was 18 inches from the top of the containment wall
- on 4/7/16, it was 14 inches
- On 6/14/16, it was 18 inches feet from the top
- On 9/15/16, it was 40 inches from the top
- On 3/13/17, it was 9 inches from the top, etc.

From the beginning of 2017, to August 6, 2019, below is a bird's eye view into the Ginsburg Well:

- The contamination in the open pit would keep going up and down
- The injection pump would return to the well, and then be removed again
- The well pressures would go all the way down in November of 2017 to 28 psi, when it should be at 200 psi
- ODNR would note that waste had not been injected into the well since the first quarter of 2016, and then, on 7/20/18, the injection pump was in operation again
- The well ID was illegible, and then the ID listed the wrong API # of the well
- The injection pump crank broke, and the injection line wasn't connected. Then the injection pump was connected with all valves open
- Etc.

2019: CITIZENS' ACTIVISM, A PERMIT TO PLUG THE WELL & CLOSING OF THE OPEN WASTE PIT

Citizens were becoming more and more aware of the contaminated brine waste being held in an open pit at the Ginsburg well. Was this radioactive fluid overflowing the containment walls when it rained, and seeping into the ground and groundwater? Were animals going into it and becoming contaminated? There were many questions about this open waste pit, especially since, again, the 1984 Ginsburg permit clearly said ALL fluid at the well site must be stored in approved tanks.

In May 2019, citizens finally took their questions, and evidence of ODNR violations, NOT to the Chief of ODNR's Division of Oil & Gas Resources Management (DOGRM), BUT, instead, to the Director of the entire agency, Director Mary Mertz. In the meeting, when Director Mertz saw pictures of the almost

overflowing open pit at the Ginsburg well, and asked what this fluid was, her colleagues said it was radioactive radium 226/228. One month later, an ORDER was issued to clean up, or, to shut down ALL open pit injection wells in Ohio.

It was not long after this, on August 6, 2019, that ODNR received an application from Carper for a permit to plug the Ginsburg well. Shortly thereafter, on September 19, 2019, there was a brine release at the Ginsburg well. Contaminated waste went down the slope of the well, and spread an oily residual material in multiple areas. The company was directed to take all contaminated liquid from the pit to an approved Class II well, and all contaminated soils to an approved landfill.

2019 – 2020 Decommissioning the Well Site

For the rest of 2019, the contaminated areas at the well site would get remediated. The contaminated waste pit was cleaned out, and vacuumed. The fence was removed. The unloading pad line, and pad drain line were cut off outside of the containment pit. The pit pump was disconnected. The electric was disconnected. Confusingly, even though the company had submitted a plugging application for the Ginsburg Well, and ODNR had issued a plugging permit, an ODNR inspector, upon visiting the well, informed the company that they MUST pass a Mechanical Integrity test before injection operations resumed. The company would remind ODNR that they had received a plug permit, and would not be using the well for injection.

At long last, in mid-2020, the demo of the contaminated waste storage pit finally began. The contaminated concrete was jack hammered, placed in a roll off box, and taken to Austin Masters, an Ohio oil/gas contaminated "processing" facility. Injecting tubing at the well was disconnected, electric poles were taken down. All debris was removed, and the ODNR radioactive specialist started visiting the site, taking samples, and more. We have it on good authority that some debris was also taken to a landfill in Pennsylvania, and the liquid brine-waste was taken to a different injection well. (NOTE: The Austin Master facility would later be <a href="https://shutto.com/s

2021 Plugging Permits Expire

The first ODNR plugging permit the company acquired, expired before the company started the plugging process of the Ginsburg Well. On 11/2/21, Carper filed for a second permit to plug. It too expired before any plugging of the well would take place. The company has filed a third permit application with ODNR, but as of March 2025, we do not know if a plugging permit has been granted.

It was August, 2019 that Carper filed their first application for a plugging permit. Here it is April, 2025, and no plugging as of yet. And what did that ODNR 1984 injection well permit require: "Upon discontinuance of injection, the owner must apply for permit to plug and abandon the well, and must plug and abandon the well with 60 days." This, of course, begs the question: IF ODNR says that plugging MUST happen within 60 days, AND "Proper plugging of orphan wells is necessary to protect public health and safety," WHY do they allow wells to go 6 years, or, more, unplugged? 2022- 2025

Non-Sensical Violation Notices & Chief's Orders Issued:

Confusingly, in 2022, the company would receive a total of 6 ODNR violation notices for not having submitted well disposal fees and well reports. Why would the company need to send this waste injection information to ODNR, when the well site was being de-commissioned? Equally confusing was another Chief's ORDER issued during this time. Order 2022-262 was issued to the company for failure to file

quarterly reports for the Ginsburg well. Again, why would the ODNR Chief be issuing such an ORDER when the company had filed for three permits to plug, and the well site has been taken apart, and remediated? Is this an oversight, or, is this yet another case of ONDR's negligence? With 95 Daily Accident Reports now under our belt, we fear it is the latter.

Finally, throughout 2023 and 2024, ODNR continued to inspect the Ginsburg well. ODNR notes talk of how the injection tubing was still disconnected, the surface facility was being removed, the how the well was not being continuously monitored, etc. Then, on 2/12/24, ODNR issued a violation directing the company to develop a plan to achieve Mechanical Integrity, and to submit this plan to the Chief of DOGRM by March 12, 2024. This directive was, of course, reminiscent of how an ODNR inspector said something similar back in 2019, and had to be reminded that a plugging permit had been issued for the well.

Then, confusingly, on 7/17/24, the ODNR DOGRM Chief would issue ORDER 2024-353, whereby the Chief would, once again, suspend the injection operations at the Ginsburg well. What injection operations? The site had been remediated in June of 2020! The well had no injection tubing.

In the ORDER the Chief found:

- The company had failed to continuously monitor the annular pressure between production casing and the injection tubing in violation of OAC 1501:9-3-07(D)(1)
- The company had failed to continuously monitor and record injection pressures in violation of OAC 1501:9-3-07(F)(2)
- The well cannot demonstrate mechanical integrity
- The company must immediately suspend operations under Ohio Adm. Code 1501:9-3-07(N)(1)(b).

The Chief then ORDERED Carper Well Services to:

- Immediately suspend all injection and storage operations at the Hazel Ginsburg No. 1 and associated surface facility
- Submit a plan in accordance with Ohio Admin. Code 1501:9-3-07(O)(1).

The ORDER continued to say that the injection operations at the Hazel Ginsburg No. 1 and associated surface facility shall not resume until the Chief, or his authorized representative, determined that the conditions that caused the suspension have been corrected and the Chief has terminated this Order.

CONCLUSION

There is so much that is disturbing about the Athens County Ginsburg Class II injection well, and so many unanswered questions:

- When the 1984 ODNR permit for the Ginsburg well clearly says that "All fluids must be stored in approved tanks," why did ODNR allow the open pit storage of contaminated, radioactive fluids to exist for 15 years?
- Also, after the 1986 failed well test, when the well was determined to be leaking, how long was it, exactly, before the well was tested again, and shown to NOT be leaking?
- Did any injections of fluids happen before a passing test took place at the well?
- Did ODNR ever conduct any groundwater/drinking water testing around this leaking well?
- Where are the ODNR inspection reports from 1987 to 2000?

- Did Carper Well Services do any injecting of oil/gas contaminated waste between 1987 and 2000?
- Did they store any waste at the site during these 13 years?
- If yes, where are the ODNR inspection reports? If not, how could ODNR, and Ohio lawmakers, have allowed for this unplugged status to go on and on, when ODNR clearly says that "(p)roper plugging of orphan wells is necessary to protect public health and safety."
- When Athens County is said to have cut a ditch to prevent brine trucks from going into the Ginsburg well, what exactly happened here, and, how it got resolved?
- And finally, when the company filed and received a permit to plug in 2019, why did the ODNR Chief continue issuing violation notices, and ORDERS regarding disposal fees, reports and the suspension of well operations?

A LIST OF THE ODNR VIOLATIONS & ORDERS ISSUED in REGARDS TO THE GINSBURG WELL

- 12/9/86: Chief's ORDER 86-543: Well suspension, no mechanical integrity indicating a well leak
- 3/9/87: Violation: ACTION legal 1501:9-3-07(E)(F)
- 6/3/87: Violation: 1501:9-3-07(E)(F)
- 6/15/87: Chief's ORDER 87-344: Plug idle well within 30 days
- 9/14/87: Violation: 1501:9-3-07(E)(F)
- 8/26/88: Chief's ORDER 88-1303: Well suspension of annular disposal authorization; Remove all disposal apparatus within 30 days
- 10/24/88: Chief's ORDER 88-1629: Revocation of Annular Disposal Authorization; Remove all disposal apparatus within 30 days
- 2/14/2000: Violation: Well is idle and incapable of injecting brine. No pressure on the injection or annulus of well.
- 5/31/01: Violation: Inspection revealed ½ valve at well on injection side is not working; Valve needs replaced, 1509.03 and 1501:9-3-05 (A)(3)
- 2001: Chief's ORDER 2001-1: Plugging required; Within 10 days place well into operation, or, if not, within 30 days cause the well to be properly plugged and abandoned
- 1/22/02: Violation: Pressure on injection and annulus still the same, 85 lbs. Last inspection, both sides were 40 lbs. Need mini test done on well.
- 3/7/02: Violation: Pollution/Contamination from contaminated waste at site.
- 5/8/03: Violation: Well is in violation, and a violation will be issued to plug or produce at the well, AND a Mechanical Integrity Test needs completed.
- 5/9/05: Violation: Fluid level 4 inches from top of storage pit. Well needs tested.
- 4/4/06: Violation: Open storage pit found completely full. Called operator and instructed him to take a load out of the pit ASAP.
- 4/18/06: Chief's ORDER (Order # unknown--Info. on this ORDER only referenced in inspection notes. No further details).
- 2/20/11: Violation: Pump not running at time of inspection. Injection pressure at 10 psi. Couldn't inspect pressure on annulus because the ¼ needle valve was corroded and unable to accept the gauge. Told Co. to replace valve by 12/21/11.
- 1/5/12: Violation: Valve on injection was inoperable. Annulus pressure was zero psi. Functioning valves shall be put into place on injection tubing. Mini test will be performed in near future to ensure Mechanical Integrity. ¹/₄ nipple needs replaced on injection side of well.
- 1/25/12: Violation: ¹/₄ valve has not been replaced on inject side and is still plugged off. Notified pumper of violation. ¹/₄ valve needs replaced.

- 12/4/12: Violation: Annulus pressure was zero. I called rep and told him they need to test annulus. Because of the low pressure on annular space between injection tubing and casing, ODNR called for a Mechanical Integrity Test to be conducted.
- 11/19/15: Violation: The dumpster has large holes in the bottom portion. The dumpster is used to dispose of used brine filters. The areas are contaminated, and soil must be removed and taken to EPA approved landfill. A water tight container needs to be used to store used filter prior to disposal.
- 2/14/17: Violation: Injection pump is not on location. Injection line is not connected to anything. Containment pit level is 1 foot 2 inches from top of pit and it has an oily substance floating on top.
- 12/1/17: Violation: The well is not in compliance. Well ID is not legible.
- 6/21/18: Violation: Contaminated fluid is 15 inches form top of containment pit. ID at well has wrong API # listed.
- 2/11/19: Violation: Division has not received 4th quarter disposal fees for 2018.
- 9/10/19: Violation: Release of contaminated waste at well. All contaminated liquid taken to approved Class II injection well, and all contaminated soil shall be taken to OEPA approved landfill.
- 2/28/22: Violation: Division has not received injection well disposal fees/fee reports for 2021.
- 4/22/22: Violation: Division has not received Annual Report. Please submit by May 23, 2022.
- 8/1/22 OAC violation: 1501:9-3-07, G.
- 11/9/22: ORDER 2022-262: Notice of Material and Substantial Violation for failure to file quarterly reports in violation of OAC 1501:9-3-07(G).
- 2/23/23: Violation: 4th Q 2022 Q report and manifest/spreadsheet due to division by Feb 14, 23, fees, fee reports for 2022
- 3/17/23: ORDER 2023-63: Suspension of Operations.
- 6/13/24: Violation: failure to submit class II disposal well Quarterly Report.
- 7/17/24: ORDER 2024-353: Suspension of injection operations; Failure to continuously monitor the annular pressure in violation of OAC 1501:9-3-07(D)(1); Failed to continuously monitor and record injection pressures in violation of OAC 1501:9-3-07(F)(2); Well cannot demonstrate Mechanical Integrity; Immediately suspend injection and storage operations at the well; Submit a plan in accordance with OAC 1501:9-3-07(O)(1)
- 8/16/24: Violation: Failure to submit class II well Quarterly Report.

END NOTES

Following is a quote taken from a radio interview of Rob Brundrett (President of Ohio Oil & Gas Association). Also included below is the Fractracker Ohio oil and gas incident/accident map, and a quote from Governor John Kasich:

Brundrett: (radio interview at 27:00)

"Environmentally, I think the record pretty much stands for itself, we've not had any real instances environmentally, the oil and gas industry here in Ohio...we work very hard to ensure that we are good stewards of the properties we work on.

Accident Map:

Here is a link to an Ohio oil/gas incident map recently created by the wonderful organization, Fractracker. This was created from ODNR oil/gas incident records secured and provided to Fractracker by the Daily Accident Report.

Governor Kasich:

2016: "Now, therefore, I, John R. Kasich, Governor of the State of Ohio, have determined the following: That an emergency exists that requires the immediate adoption and amendment of rules..." The Governor then signed Executive ORDER 2016-04K: To create and implement the One-Call Emergency Notification System for oil and gas related emergencies and for the emergency adoption of rules.

D.A.R. (Daily Accident Report):

We hope our Daily Accident Report has been helpful, and that we have helped you consider the realities vs. industry spin.

SOURCES

- ODNR Chief's ORDERS, On-line mapping tools, ODNR inspection reports.

WHAT IS THE D.A.R.?

The Daily Accident Report was started in June, 2024 by Ohio health and environmental activist, Jenny Morgan. Morgan started D.A.R. after listening to a radio interview with the president of the Ohio Oil & Gas Association. The oil/gas representative claimed fracking to be environmentally friendly and having caused only a couple of accidents/incents in Ohio. Morgan immediately filed a public record request with ODNR, and found, not just a few, but nearly 2300 oil/gas related incidents on file since January, 2016. In 2025, the D.A.R. is partnering with the Buckeye Environmental Network to specifically study Ohio Class II Injection Wells.

Jenny Morgan has written many other oil and gas related incident reports apart from the ones authored for Buckeye Environmental Network. You may find them on her Facebook Page: https://www.facebook.com/profile.php?id=61560490386193

best of our ability. If any inaccuracies are unintentionally communicated, please let us

know, and we will make corrections immediately.

The information in the Daily Accident Report is shared in good faith, and to the