

From: [George Colvin](#)
To: Tomastik, Tom
Subject: RE: UIC Permit Application APATT022697
Date: Tuesday, September 10, 2013 8:17:10 AM

That explains it

From: Tomastik, Tom [mailto:Tom.Tomastik@dnr.state.oh.us]
Sent: Tuesday, September 10, 2013 8:13 AM
To: George_Colvin@CoxColvin.com
Subject: FW: UIC Permit Application APATT022697

FYI

Tom Tomastik, Geologist 4
Division of Oil and Gas Resources Management
2045 Morse Road, F-2
Columbus, Ohio 43229-6693
(614) 265-1032

From: Tomastik, Tom
Sent: Tuesday, September 10, 2013 8:05 AM
To: 'Hanish, Mark'
Subject: RE: UIC Permit Application APATT022697

Mark:

This is basically a form letter created by these folks and passed along so they can signed it with their name. Check out their website below.

<http://www.acfan.org/injection-wells/>

Tom Tomastik, Geologist 4
Division of Oil and Gas Resources Management
2045 Morse Road, F-2
Columbus, Ohio 43229-6693
(614) 265-1032

From: Hanish, Mark [mailto:Mark.Hanish@arcadis-us.com]
Sent: Tuesday, September 10, 2013 8:02 AM
To: Tomastik, Tom; George_Colvin@CoxColvin.com
Subject: RE: UIC Permit Application APATT022697

Although I suspect this one is better written than most....except for ending a sentence in mid-

thought on item 11.

Good luck with all that.

.....and Hi George....checking to see whether you are still alive.

From: Tomastik, Tom [<mailto:Tom.Tomastik@dnr.state.oh.us>]
Sent: Tuesday, September 10, 2013 6:57 AM
To: George_Colvin@CoxColvin.com; Hanish, Mark
Subject: FW: UIC Permit Application APATT022697

Here is the kind of crap I have to deal with from our folks who live in Athens. This is just one of about 80 letters we have gotten so far.

Tom Tomastik, Geologist 4
Division of Oil and Gas Resources Management
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Columbus, Ohio 43229-6693
(614) 265-1032

From: Harvey, Rebecca [<mailto:harvey.rebecca@epa.gov>]
Sent: Monday, September 09, 2013 3:35 PM
To: Tomastik, Tom; Miller, Anna
Subject: FW: UIC Permit Application APATT022697

From: The Herbal Sage <tealady@herbalsage.com>
Sent: Sunday, September 08, 2013 1:08 PM
To: Harvey, Rebecca
Cc: oilandgas@dnr.state.oh.us
Subject: UIC Permit Application APATT022697

Underground Injection Control Section
Division of Oil and Gas Resources Management
2045 Morse Road, Columbus, Ohio 43229.
Re: Permit Application APATT022697
September 6, 2013

Dear Director Zehringer and Chief Simmers,

As a business owner and member of Athens Farmers Market, I am writing to protest granting of the permit by K&H Partners of West Virginia, UIC Permit Application APATT022697 for a Class II Injection Well in Athens County based on a highly deficient application that will not prevent pollution of land, surface water, and drinking water sources as required by Ohio law (OAC 1501:9-3-04). My protests concern the permit application's inability to protect health, safety, and environmental conservation

in the county in which I live, work, and recreate.

I request a public hearing in Athens County based on my substantive concerns with the serious deficiencies of this permit application to prevent contamination and pollution of surface of the land, surface water and groundwater, as required by Ohio Administrative Code 1501:9-3-04, which states: (A) All persons engaged in any phase of saltwater disposal operations shall conduct such operations in a manner which [sic] will not contaminate or pollute the surface of the land, or water on the surface or in the subsurface..." My concerns, substantive and relevant to public health, safety, and environmental conservation, merit a public hearing because Ohio law requires that the Chief grant a public hearing if ANY comments are substantive and relevant to health, safety, or good conservation practices. (OAC 1501:9-3-06 (H)(2) (c)).

My family and I are all law abiding voting citizens, we respect the written law and expect others to respect and uphold these laws. I have seen the effects of Injection wells in community's much larger than Athens County. The families that are affected adversely, by the hardship it causes due to earthquakes and disruption of their neighborhoods. The constant noise due to the traffic of the trucks depositing this unusable water, as well as to damage to the roads and safety of these peoples communities is haunting.

I ask myself who in their right mind would live in an area such as those? My answer is those that have no other choice but to stay.

Please allow this public hearing, so the people of our county may share these concerns relevant to their homes and their wellbeing. I understand that large companies do not often respect nor care about those affected, but our lives do matter.

Below are some concerns that have been forwarded to me, I shall pass them on to you for your consideration and review.

My concerns address the following substantive and relevant deficiencies:

1. The application states, "K&H #1 Unloading and Containment Facility will be used for the #2 well." There is no schematic or description of this facility, built for K&H Partners #1 well. How does this existing facility get evaluated by the public? How does the public know the facility's capacity for containment and mitigation?
2. In #32-D -- nothing attached. Therefore the unloading facility, which can affect the likelihood of spills and explosions and therefore surface contamination of land and water as well as air pollution affecting the health, safety, and environment, including wildlife and environmental protection required by "good environmental conservation" (OAC 1501:9-3-04), cannot receive public scrutiny here. It did not receive scrutiny when K&H 1 was permitted because it was only added to the application after the comment period closed. This is a serious and substantive concern, especially given that the total volume daily for K&H Partners' #1 and 2 wells is 5500 barrels a day or almost 84,000,000 gallons a year to be unloaded ad infinitum at this facility that has not received any public scrutiny.
3. There is no information on how the waste will be transferred from the holding area to the injection well. This is a serious and substantive deficiency of this application that affects the

operator's legal obligation to prevent pollution of the surface of the land, surface, and groundwater and public health, safety, and environmental conservation (OAC 1501:9-3-04). (See also #2 above)

4. How can a maximum psi also be an average as stated in the public notice?

5. How can the average psi be zero as listed on this application? This is a serious and substantive concern with this application that will affect public health, safety, and environmental conservation, given that the permit application allows up to 4000 barrels a day of injectate, or 60,000,000 gallons a year, more than 10% of the total amount injected into over 170 Ohio Class II wells in 2012. Together with the allowable volumes in the nearby K&H 1, the volumes permitted into the land near Torch and the Ohio River come to more than 83 million gallons a year, more than 125 Olympic size swimming pools worth of fluids ANNUALLY AND WITH NO LIMIT EVER, YEAR AFTER YEAR. This application does not and cannot support the Division's legal mandate to require that this operation will not pollute groundwater or surface water or area drinking water supplies.

6. The unrealistically low maximum psi, given the high volumes that can be injected daily into non-porous shale through a 2 3/8" tube, suggest that the psi will likely be increased after the permit is granted as occurred in Youngstown, where levels of 2500 p.s.i. were eventually allowed and earthquakes occurred.

7. Earthquakes associated with injection of fluid have no upper bounds according to emerging peer-reviewed literature. Furthermore, the 5.1 quake in Oklahoma linked to injection wells occurred years after initial injection, and in Colorado, "the largest earthquake (Mw 5.2) occurred on 10 April 1967 more than a year after injection ceased on February 1966 [Healy et al., 1968]."

8. Whether seismic activity occurs immediately or not does not mean it won't happen years later, meaning that reducing pressure at that point may be too late to prevent future quakes. Given that nearby Washington County has experienced recent earthquakes associated with increased deep well activity and that Youngstown, which had never experienced quakes, had close to 100 earthquakes associated with injection wells, please provide to the public, in a manner in which the public can respond before a permit is issued, the evidence used to determine that seismic testing was not necessary for this well and the peer-reviewed science on which this determination was made.

9. The application does not provide information that allows citizens to determine how the director reached the conclusion that seismic testing and a seismic survey were not necessary. Given the huge amount of frack waste liquids permitted for injection in this well and for the nearby K&H #1 and the recent documentation of the problems caused by injection wells in Youngstown, this is a serious and substantive deficiency.

10. What is the seismic detection capability of the region, as is necessary to know if your assessment of no seismic potential (assumed) is incorrect? Authors Kim et al. state that "the locations of these shocks [initial small quakes] were not very accurate due to sparse seismic station coverage." Where is evidence that ODNR has determined that drinking water, surface land and water, public health and safety can be adequately protected per state and federal mandates if this issue is nowhere addressed?

11. No analysis is provided to show how the maximum

Thanks You,
Respectfully,
Maureen Burns-Hooker
Athens County Ohio

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