

RECEIVED
U.S. E.P.A.

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

2014 NOV 25 PM 12: 11

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE **ENVIR. APPEALS BOARD**
PERMITTED FACILITY: Class II-D injection well, Zelman #1

November 13, 2014

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
1201 Constitution Avenue, NW
WJC East, Room 3334
Washington, DC 20004
PHONE NUMBER - 202-233-0122

Dear Environmental Appeals Board:

This is a petition for review (appeal) of the EPA permit for Windfall Oil & Gas for a disposal injection well in Brady Township. This petition for review will provide sufficient evidence that the permit be denied for this proposed location. This issue has been followed by our entire community through the news media coverage for over three years now and our community is opposed to this disposal injection well. The December 2012 public hearing had full newspaper coverage and explained in-depth most of the concerns presented by residents. These residents worked hard to review the permit application and research the local facts to present a valid case at the public hearing as it related to the underground sources of drinking water (USDWs).

This Environmental Appeals Board (EAB) appeal request is to "deny this permit" based on the following two regulations since sufficient evidence is available that the confining zone has faults and fractures and the confining layers & above is unable to protect residents' water supplies due to all the fractures from prior deep and shallow gas drilling. Regulations that deny this permit are: 40 C.F.R. §146.22 (a) All new Class II wells shall be sited in such a fashion that they inject into a formation which is separated from any USDW by a confining zone that is free of known open faults or fractures within the area of review. 40 C.F.R. §146.22 (c) (2) & (d) (2) Well injection will not result in the movement of fluids into an underground source of drinking water (USDW) so as to create a significant risk to the health of persons.

This letter is in compliance with your word limitations. Residents researched and presented valuable evidence that is easiest to cite comments found in the binder presented on behalf of the residents by Darlene Marshall or public comments summarized by our local newspaper. We request the testimony provided in the binder at the public hearing be entered into evidence

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

that is reviewed by the EAB. Residents showed how hard they worked and felt the EPA Response Summary was lacking in responding to comments. So many inaccuracies were found. Residents reviewed EAB cases and specifically looked at two more recent cases of Class II disposal injection wells that were remanded back to the EPA. One was in Michigan and one was in Pennsylvania, these cases were remanded back to the EPA for further study. What we did find is that the confining layer must not have any chance of faults or fractures. This is what our residents have been concerned about for the last three years. Many locals have worked in the drilling industry and actually have some of the biggest concerns for our area and they provide a wealth of information. These real life experiences from the actual work done on these wells speaks volumes about the concerns being demonstrated. Residents have stated old deep gas wells have affected their water wells, so casings already have been faulty in the past. Plus old deep gas wells improperly plugged have been mentioned repeatedly with concerns for the endangerment of USDWs.

A new report shows findings from the Government Accountability Office in June 2014 on the "EPA Program to Protect Underground Sources from Injection of Fluids Associated With Oil and Gas Production Needs Improvement leading to pollution of underground sources of drinking water (USDWs)," which shows residents' concerns. Risk is unacceptable in this residential area that depends on private water wells.

Just to summarize as briefly as possible I have a list of our concerns with the EPA Response Summary & Permit:

1 - The permit figures show an accuracy of 10 feet +/- and these being off could change the 1/4 mile radius of review by feet. Give or take feet you would have the old deep gas wells inside the 1/4 mile area of review. Comments provided information on the Oriskany gas wells being just outside the 1/4 mile area of review & requested that the area of review be extended to take these old gas wells into consideration. They range from 60 feet to 400 feet from the 1/4 mile line based on the permit application if the map provided is found to be accurate. We would request these details be reviewed by a third party because we want another provider to verify the information, especially since we weren't given the one mile topographic map from boundary lines originally or even after we provided the information that it was lacking in the permit application.

2 - The permit shows on page 2 that the effect of the permit shall not allow movement of fluid to contaminant USDWs. Concerns were raised during the public comment period numerous

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

times that this is a very real possibility and needs further research with so many unknowns like a) faults, b) fractures, c) old deep gas wells, d) confining layer thickness, e) confining layers ability to confine disposal fluid, f) zone of endangering influence needs extended further, and g) many more concerns exist like the future of seismic activity. The "effect of the permit" is also not to affect the property of others or invade others rights yet a real estate evaluation showed an appraisal addendum that was submitted in the binder by residents demonstrating concern of their property values.

3 - Permit shows on page 7 the "monitoring requirements" yet it doesn't provide a comprehensive monitoring plan yet residents provided comment on page 12 #23 of the binder specifically requested a full monitoring plan. Residents know other area wells are able to be used to monitor the fluid in the Oriskany. It is known that the increase in brine found on the monitoring gas wells would be a sign of concern. Residents want more protections put into place if the EAB doesn't deny the permit.

4 - Permit shows page 13 the financial responsibility and it has already been stated by residents that \$30,000 is insufficient to plug & abandon this injection well. Yet this didn't even seem to address residents concerns and ignored studies on the cost. Further research by residents find that it would cost between \$100,000 to \$120,000, which is three to four times what the EPA is requesting. Even using their own equipment this company would have more cost to plug the well than \$30,000 & engineers think this is a ridiculously low figure.

5 - Permit page 13 on financial responsibility ignores the concerns of residents on additional financial responsibilities & requested the EPA also protect their property & water with other means through a bond or insurance.

6 - Response Summary page 2 #1 we realize the EPA only oversees the protection of USDWs yet spills would have the potential to affect our USDWs so as residents commented we expect you to work to protect us from above ground spills in the future, too. Representative Gabler commented about a state law and the proximity of homes to this site, which needs further study.

7 - Response Summary page 2 #2 demonstrates you don't supersede state or local laws. Plans for the area to be developed continue yet this will affect our property values & tax value by ruining the rest of the potential for land development to provide new homes & businesses. Residents raised concerns about this being a village in the planning of the township.

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

8 - Response Summary page 2 #3 we realize the EPA doesn't pick the site yet the EPA permits the actual site. Residents have provided so many concerns that give doubt to the site location being feasible for this industrial operation.

9 - Response Summary page 5 #7 discusses casing & residents appreciate the changes in the original casing plan. Still residents concerns have been stated & those that have knowledge of drilling and casing procedures & actual implementation are still dissatisfied based on field knowledge of construction. Residents still feel casings will not be sufficient protection in an area with so many fractures.

10 - Response Summary page 3 #5 states a one mile map was provided yet this is an incorrect statement even after reviewing the map mentioned it still doesn't provide the information sufficient to fulfill the EPA documentation request.

11 - Response Summary page 6 #8 we appreciate the EPA holding a second public comment period on seismic activity. Residents provided many concerns & being a closely monitored county for seismic activity makes residents wonder how much more they will need to be concerned in the future with 9 faults located in the 1/4 mile area of review. Residents in areas with no seismic activity have experienced seismic activity due to injection wells, so all the statements provided in the Response Summary still don't protect residents when they believe the faults would be a path to other public water sources, which would include my water source the City of DuBois.

12 - Response Summary page 7 #8 mentions pore space yet if it is limited this will move other fluids underground as disposal fluid is injected. The EPA is ignoring the fact that residents have questioned the confining layer & still believe layers above the confining zone will not be enough to be sufficient due to all the fracturing utilized for deep & shallow gas well drilling.

13 - Response Summary page 11 #8 provides information on the differences in other seismic activity for other injection wells yet various sites were mentioned & even if geology is different so many cases demonstrate concern. The only faults being addressed seem to be at an 18,000 foot depth yet residents see faults on maps in the permit application at shallower depths that would be closed to the confining layer & Oriskany. Plus a fault block is cited as confining the disposal fluid. Things aren't presented well enough to clear up all the confusion on the details provided.

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

14 - Response Summary page 10 #8 proves interesting since we are unable to compare other areas with our geology for seismic activities yet we can compare our area for the permit to all the other injection wells that seem to have never contaminated water wells. Yet residents presented that Pennsylvania has a very limited number of injection wells for disposal, which the number varies depending on circumstances like the Irvin well violation & other injection wells being shut down. Yet we don't present evidence of more than 10 injection wells in Pennsylvania before 12/2012 plus fluid has come to the surface in cases residents cited.

15 - Response Summary page 12 #10 even though Clearfield has two other injection wells doesn't mean this site should be permitted since all these sites are different and a mile away would be very different than this site. Residents presented data on fractures, faults and concerns with old deep gas wells in the same formation just outside the 1/4 mile & we continue to request the 1/4 mile area of review be enlarged to include these other deep gas wells.

16 - Response Summary page 12 #11 shows confining layer thickness varied & permit applicant stated 50 feet of thickness yet nothing in the permit application shows this figure as accurate, so what else is inaccurate. It looks to residents that this confining layer varies in thickness from 11 feet to 18 feet in thickness. This is a huge concern to peace of mind & knowledge that fluids would be confined, especially with fracturing of old gas wells that may have actually fractured the confining layers or all surrounding layers. Residents request the permit be denied on this basis.

17 - Response Summary page 13 #12 fractures not compromised is based on pressures yet no one knows what will happen or what is below our ground here. This data is insufficient to protect residents from prior fracturing due to drilling in prior years. Residents the permit be denied based on these facts.

18 - Response Summary page 14 #13 you cite that old gas wells need to be corrected yet no further study was done of the wells we cited & the 1/4 mile needs to be extended to include the Oriskany wells on the 1/4 mile line. Comments were numerous on these concerns. Residents request the permit be denied since the injection zone already has been penetrated by these old gas wells.

19 - Response Summary page 15 #13 the zone of endangering influence even being 400 feet has potential to affect our area if anything happens or a fracture exists in the confining layer

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

above the injection well, especially with a shallow well right near this site that had fracturing done. Residents request the permit be denied.

20 - Response Summary page 17 #14 this again refers to our question above in #19 since this is based only on an assumption of no penetrations in the injection zone, which won't protect residents in our area.

21 - Response Summary page 18 #16 is based on an assumption that no penetrations exist in the 1/4 mile. Residents cited repeatedly that the other deep gas wells in the area in the same formation are right on the 1/4 mile radius line. This assumption is flawed & causes grave concerns. Residents request the permit should be denied.

22 - Response Summary page 18 #16 makes an assumption that our area is a site that would be ideal for injection of fluids that even though exempt due to oil & gas have been known to prove toxic. Taking any risk near all these homes is irresponsible & has been stated by our Representative. We realize this may be the best way to dispose of the waste yet the EPA has control to oversee this permit & increase the review area along with the review of the zone of endangering influence. As residents stated, the confining layer has potential to allow fluid migration & this site is almost on top of the local coal mines. This permit needs to be denied.

23 - Response Summary page 17 #15 assumes that the coal mines will not be contaminated because of their depth yet we do have other deep gas wells penetrating the Oriskany able to endanger USDWs & our coal mines. Residents provided many comments & concerns. Residents request the permit be denied on the basis of all the doubt to confine the disposal fluid.

24 - Response Summary page 20 #18 the construction of this injection well may deteriorate quickly. Residents presented facts on injection well violations, concerns & lack of oversight nationwide.

25 - Response Summary page 21 #20 even if injection well technology has improved it doesn't fix the problem of fluid migration underground or through existing fractures. Residents cited many concerns & requested that the permit be denied.

26 - Response Summary page 22 #22 self-reporting is not enough in this permit since the residents have seen that another injection well in our county has violated EPA laws three times during operation along with over pressurization. This permit site is not the same & residents

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

need to be protected if the EAB doesn't deny the permit. Residents request further protections.

27 - Response Summary page 23 #23 understands that the EPA extended comment periods. Residents showed up at the meeting & planned to give testimony yet the evening went late & they had to leave the meeting before their turn was called & being older they don't find it easy to write. These procedures aren't easy for regular citizens & require extensive research to understand the process. Even the EAB procedures are discouraging to the general citizens. Residents request further consideration be given to resident's concerns, especially since so many residents took the time to attend the public hearing.

28 - Response Summary page 24 #24 shows the EPA is taking some steps to improve Class II well protections for residents yet these aren't enough. Taking away peace of mind, ability to feel comfortable utilizing or drinking water sources, burdening residents with additional costs to evaluate water and much more makes this a poor decision. Residents request further study to ensure that residents have the most protection available if the EAB doesn't deny this permit.

29 - Response Summary page 24 #25 this permit in a residential area needs to have an environmental impact study. Residents requested this & request further study.

30 - Monitoring of gas wells in the permit, we note that the EPA doesn't state as much on this issue in the Windfall permit in Clearfield County as they do for the Seneca permit in Elk County we requested a comprehensive monitoring plan. Residents cited many concerns & request further study that will deny the permit.

31 - The gas wells already in the Oriskany formation close to this disposal injection well permit are right on the edge of the 1/4 mile area of review yet the EPA cited they were 1/2 a mile away or 1 mile. This is incorrect in the EPA Response Summary & residents provided this information previously. Residents request the permit be denied. (Page 13 #12)

32 - The wells into the Oriskany formation need to be checked & maybe replugged. Residents cited many concerns & request that the permit be denied.

33 - The permit states it is for a five year period yet it can be extended although residents need protected now. Residents cited many concerns & request the permit be denied. (Page 24 #26)

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.

PERMIT #: PAS2D020BCLE

PERMITTED FACILITY: Class II-D injection well, Zelman #1

34 - Response Summary page 10 #8 shows information on a fault block that residents find questionable & an Oriskany formation gas well may be listed incorrectly in the permit application in relation to the faults. Residents cited many concerns & request the permit be denied.

35 - The EPA ignored comments on the fractures into the 1/4 mile area of review. EPA mentions other confining zones would be above the proposed confining layer yet these layers would also have fractures from all the shallow gas drilling in the area. Residents cited many concerns & request the permit be denied.

36 - The two faults on the permit map would actually block the fluid towards two gas wells that are of most concern to residents plus also the coal mines. Residents cited many concerns & request the permit be denied.

37 - Another inaccurate statement seems to exist based on the map information showing faults in relation to the old gas wells that mentions plugged wells not producing outside the fault block. This is an inaccurate statement. Residents cited many concerns & that the permit be denied.

38 - They didn't prove a fault block exists the faults may or may not be transmissive. With no way to prove if the faults are non-transmissive or transmissive we request the permit be denied. Plus if they are using the basement fault at 18,000 feet how does that confine the fluid. Residents cited many concerns & request the permit be denied.

39 - Provides no real proof that the faults are non-transmissive although the information we have may show it is transmissive.

40 - Mentions 30,000 wastewater wells & no known contamination of water wells yet we know in McKean County water wells were contaminated by an enhanced recovery well, which is very similar to an injection well. This is why we are concerned with all our old gas wells in the area. Residents cited many concerns & request the permit be denied.

41 - Doesn't address the Irvin well violations that concern our residents due to water wells so close to this proposed disposal well. The Irvin well wasn't in a residential area near so many water wells yet it violated the EPA regulations.

Laurie Wayne
5498A Wayne Road
DuBois, PA 15801

RE: Petition to Review (Appeal) Permit for Windfall Oil & Gas, Inc.
PERMIT #: PAS2D020BCLE
PERMITTED FACILITY: Class II-D injection well, Zelman #1

42 - Request the area of review be extended to a 1/2 mile radius to consider all gas wells in the area, especially since gas wells penetrate the injection zone close to the 1/4 mile line and maybe inside the review area. The Response Summary mentions the Oriskany wells were further away locating them at least 1/2 mile to one mile from the proposed disposal injection well.

43 - Local residents found permit details to be inaccurate as presented.

44 - Five governing bodies have demonstrated concern at the public hearing & most plan to submit comments although the 30 day period makes it hard. Clearfield County Commissioners, Brady Township, Sandy Township, City of DuBois, DuBois School Board along with local State & Federal Representatives participated. Residents request this permit be denied based on inaccuracies along with fractures & faults into the 1/4 mile area of review. This means that this permit would violate the previously cited regulation, 40 C.F.R. §146.22.

45 - Residents need assurances of future protection like insurance & a \$1 million+ bond. We feel this disposal injection well may fail due to concerns we see from those knowing the industry, so we ask the EAB to give us more protection & ensure water will be provided. Spending \$1 million+ to put this disposal injection well into operation means that a \$1 million+ bond should be in place until the plugging has been completed.

46 - The recharging zone for this area is located right where the disposal injection well is proposed. Residents cited many concerns & requested the permit be denied.

Thanks for your consideration of all these concerns.

Sincerely,

A handwritten signature in cursive script that reads "Laurie Wayne". The signature is written in black ink and is positioned above the printed name.

Laurie Wayne