FROM: Laurie Wayne
DuBois, PA 15801
PAGE: 1
RE: Windfall Oil + Gas, Inc.
PERMIT #: PAS2D620BCLE

March 12, 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 (EAB),

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 two years now and our community is opposed to this disposal injection well. The December 2012 public hearing had full newspaper coverage and explained indepth 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 EAB appeal request is to "deny this permit" based on the following two regulations since sufficient evidence is available that the confining zone potentially has faults and fractures and the confining layers of Oriskany & above is unable to protect residents' water supplies due to all the fractures from prior deep and shallow gas drilling. 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 that is reviewed by the Environmental Appeals Board. Residents showed how hard they worked and felt the EPA Response Summary (EPA R. S.) was lacking in responding to comments. So many inaccuracies were found in the few days we had to respond and contact the EAB. Residents will be very disappointed if the EAB doesn't deny this permit or remand it back to the EPA.

Residents reviewed EAB cases and specifically looked at two more recent cases of Class II disposal injection wells that have been 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 two 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 this 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.

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

1 - Permit shows on page 1 that the longitude is different than what the permit applicant listed on pages in the application (-78.444895) is very different than what they have stated (78.444895). These figures being off could change the 1/4 mile radius of review by feet. Give or take 100 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 or 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 originally or even after we provided the information that it was lacking in the permit application. Residents request further study.

2 - 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 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 diposal 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. Residents request further study.

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. Residents request further study.

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. Residents request further study & permit be denied.

5 - Permit page 13 on financial responsiility 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. Residents request further study.

6 - Response Summary page 1 #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. Residents request further study.

7 - Response Summary page 2 #2 demonstrares you don't superceed 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 concems about this being a village in the planning of the township. Residents request further study.

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. Residents request further study.

9 - Response Summary page 2 #4 discusses casing & residents appreciate the changes in the original casing plan. Still residents concems have been stated & those that have knowledge of drilling and casing procedures & actual implementation are still dissatisfied based on field knowledge of construction. Residents request further study.

10 - Response Summary page 3 #5 see our concerns from item #9 listed above because residents still feel casings will not be sufficient protection in an area with so many fractures. Residents request further study.

11 - Response Summary page 3 #6 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. Residents request further study.

12 - Response Summary page 3 #7 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. Residents request further study since fault details need to be studied more indepth.

13 - Response Summary page 7 #7 mentions pore space yet if it is limited this will move other fluids underground as disposal fluid is injected. No matter what residents have question 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. Residents request further study.

14 - Response Summary page 8 #7 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 pemit 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. Residents request further study.

15 - Response Summary page 9 #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 before 12/2012 plus fluid has come to the surface in cases residents cited. Residents request further study.

16 - Response Summary page 9 #9 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. Residents request further study.

17 - Response Summary page 9 #10 shows confining layer thickness varied & 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 further study & the permit be denied on this basis.

18 - Response Summary page 10 #11 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 request further study & the permit be denied.

19 - Response Summary page 10 #12 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 6 Oriskany wells on the 1/4 mile line. Comments were numerous on these concerns. Residents request further study & the permit be denied.

20 - Response Summary page 11 #12 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 above the injection well, especially with a shallow well right near this site that had fracturing done. Residents request further study & the permit be denied.

21 - Response Summary page 11 #13 this again refers to our question above in #20 since this is based only on an assumption, which won't protect residents. Residents request further study & the permit be denied.

22 - Response Summary page 11 #14 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 further study & the permit should be denied.

23 - Response Summary page 12 #15 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 & the residents request further study.

24 - Response Summary page 12 #16 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 further study & the pemit be denied on the basis of all the doubt to confine the diposal fluid.

25 - Response Summary page 13 #17 needs to refer back to my item 4 that the funds for plugging & abandonment are insufficient. This really needs further attention. Residents request further study & the permit be denied.

26 - Response Summary page 14 #20 the construction of this injection well may deteriorate quickly. Residents presented facts on injection well violations, concerns & lack of oversight nationwide. Residents request further study.

27 - Response Summary page 14 #21 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 & request further study that will deny the permit.

28 - Response Summary page 15 #23 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 need to be protected if the EAB doesn't deny the permit. Residents request further protections.

29 - Response Summary page 15 #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 residents concerns, especially since so many residents took the time to attend the public hearing.

30 - Response Summary page 15 #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.

31 - Response Summary page 16 #25 this permit in a residential area needs to have an environmental impact study. Residents requested this & request further study.

32 - Response Summary mentions no drinking water wells in ¼ mile area of review. Yet 17 wells are in the ¼ mile area of review. Residents cited many concerns & request further study that will deny this permit.

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

34 - The 6 gas wells in the Oriskany formation close to this disposal injection permit are right on the other side of the ¼ mile area of review yet the EPA cited they were ½ a mile away or 1 mile. This is incorrect in the EPA Response Summary & residents provided this information previously. Residents request further protections & the permit be denied,

35 - The 2 plugged wells in the Oriskany formation may need to be checked & maybe replugged. Reidents cited many concerns & request further study that will deny the permit.

36 - The permit states it is for a five year period yet it can be extended & what appeal process will happen at that time, residents need protected now. Residents cited many concerns & request further study that will deny the permit.

37 - Response Summary 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 further study that will deny the permit.

38 - The EPA ignored comments on the fractures into the ¼ 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 further study that will deny the permit.

39 - 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 further study that will deny the permit.

40 - 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 concems &request further study that will deny the permit.

41 - 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 further study that will deny the permit.

42 - Provides no real proof that the faults are non-transmissive although the information we have may show it is transmissive. Residents cited many concerns & request further study that will deny the permit.

43 - Mentions 144,000 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 further study that will deny the permit.

44 - 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. Residents cited many concerns & request further study that will deny the permit.

45 - Request the area of review be extended to a ½ mile radius to consider all gas wells in the area, especially since 6 gas wells exist a few feet outside the ¼ mile. The Response Summary mentions the Oriskany wells were further away locating them at least ½ mile to one mile from the proposed disposal injection well. Residents cited many concerns & request further study that will deny the permit.

46 - Local residents found permit details to be inaccurate as presented. Residents cited many concerns & request further study that will deny the permit.

47 - Five governing bodies have demonstrated concern at the public hearing & most plan to submit comments although the 30 day period made 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 ¼ mile area of review. This means that this permit would violate the previously cited regulations: 40 C.F.R. §146.22 & 40 C.F.R. §146.22.

48 - Residents need assurances of future protection like insurance & a $1 million+ bond. In the back of our minds we feel this disposal injection well may fail due to concerns we see from industry wise individuals, 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 is insignificant to the operator & it should stay in place until the plugging has been completed.

49 - The recharging zone for this area is located right where the disposal injection well is proposed. Residents cited many concerns & request further study that will deny the permit.

Thanks for your consideration of all these concerns.

Sincerely,

Laurie Wayne

Laurie Wayne
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