

**Darlene Marshall, 1070 Highland Street Extension, DuBois, PA 15801**  
**(814) 583-7945**  
**Email: mrdewy@yahoo.com**

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

January 12, 2021

Clerk of the Board  
Environmental Appeals Board  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue N.W.  
Mail Code 1103M  
Washington, DC 20460-0001

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. The permit decision and the permit's conditions are being appealed based on objections because of: 1) factual error and 2) the EAB should review a policy consideration. Please note that I have already participated numerous times in public comment periods and at the public hearing.

This EAB appeal request is to "deny this permit" based on the following two regulations since sufficient evidence is available that the confining zone may be fractured and unable to protect residents' water supplies. Residents have already demonstrated that conduits exist from old gas well casings in the area to their water sources. Additional evidence has also been presented concerning faults in the review area. 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 by utilizing your guideline that meets less than 30 pages. It stated in e-CFR (3/6/2014) that, "in lieu of a word limitation, filers may comply with a 30-page limit for petitions & response briefs." No table is included because I utilized numbers.

After all the work residents did to review this permit application we felt the EPA Response to Comments was inadequate in responding to our questions. We found many additional inaccuracies.

Please incorporate the original EPA public hearing as 300 individuals attended and gave valuable testimony that varied on the issues facing this injection well site. Also, please incorporate the

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

PERMIT #: PAS2D020BCLE

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

Environmental Hearing Board Docket, Exhibits, and the Decision by Judge Bernard A. Labuskes, Jr. for Case Number: 2018034, Appellant #1: DARLENE MARSHALL found at [https://ehb.courtapps.com/public/document\\_shower\\_pub.php?docketNumber=2018034](https://ehb.courtapps.com/public/document_shower_pub.php?docketNumber=2018034)

The Environmental Hearing Board may be able to provide the transcript from the three days of the hearing that would prove very valuable. My prior written comments for the EPA public hearing in September 2020 to Kevin Rowsey provided a condensed 83 page summary of the concerns.

- 1) My comments to the EPA on the draft permit give me standing to appeal the final permit as mentioned in the EPA Response to Comments that, “any person who commented on the draft permit can appeal the final permit by filing a written petition for review with the Clerk of the EPA Environmental Appeals Board (EAB).” Based on the date that I received the notice this appeal will be filed within the thirty day time frame. The appeal clearly sets forth why the EAB should review the permit as these items were addressed in the EPA Response to Comments. These are factual errors in the permit and the EAB should be reviewing these for policy considerations for all injection wells.
- 2) An evacuation plan due to known chemicals being stored on the Injection Well Site falling in the PA Right-to-Know and the company data sheets showing a ½ mile evacuation plan should already have been implemented and required. Plus a notification plan for area residents if contamination happens to the USDWs should be setup before the EPA permit was even approved even though the EPA Response to Comments states that, “not having an evacuation plan is not part of the UIC program” yet this should have already been completed and approved to meet the other federal guidelines in place. Residents showed they reviewed all the USDW guidelines and took the time to be very involved in the process and respect for their safety should be foremost before the Injection Well is operated. Lack of planning for emergencies and incorrect emergency contact information in the Injection Well application plans submitted should be unacceptable. The public shouldn’t even have needed to bring these concerns to the attention of the EPA as the EPA should have already addressed these items over the last ten years during the permitting process. Simple things like this and the one mile map that took so long to be provided demonstrate to the public the lack of concern for safety and attention to detail. The public will not trust the EPA and company in the future if the public continue to see these type of details overlooked.
- 3) Corrective Action in the permit still only addresses if an abandoned well in the ¼ mile Area of Review is found to need corrective action and fails to address those wells on the edge of the ¼ mile Area of Review. At minimum, six (6) wells are known to be at the same formation depth as the Injection Well and it is known that the injection fluids will intersect with these wells in the first couple years. These wells should be monitored as it is already known that two of these wells have some type of issue and the Injection Well has potential to cause further problems over the next ten years. Totally ignoring these reported issues on these wells further erodes the public



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

PERMIT #: PAS2D020BCLE

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

trust in the EPA and company after over ten (10) years of public involvement. The original public hearing testimony for this Injection Well was very well attended and provided very extensive details on USDW concerns and those concerns being ignored after all this time is unacceptable.

- 4) The EPA calculated a Zone of Endangering Influence of only 400 feet for five years and now that the permit has been issued for ten years it states that the fluid for a ten year period will only go 400 feet. These calculations were originally contested as they don't actually consider all the factors properly and the public wasn't provided any calculations to actually verify the EPA calculations, since the company just took the minimum required area allowed by the EPA. The public needs the documentation to review that is verified to show these calculations are truly accurate. Ten years is twice the original length of the permit and it is illogical to think that the fluid will only go 400 feet when the time has been doubled. Additionally, the faults will affect the calculations and need to be taken into consideration.
- 5) The natural gas process recovered the gas and fracturing was used along with pressure, so the conclusion that the confining layer has "no fractures" is inaccurate with six gas wells already in the same formation on the edge of the 1/4 mile as the response to comments states, "The natural gas and fluids in the formation were under pressure prior to and during production." This violates the EPA guidelines of no fractures in the injection formation. The faults will affect the pressures and needed to be taken into consideration. Faults can change from being non-transmissive to become transmissive and this is not addressed in the response to comments.
- 6) It is already known thanks to the Pennsylvania DEP that the fluid will quickly intersect with the known fault in the area. This will affect all data relevant to this Injection Well.
- 7) Naturally occurring fissures occur everywhere and this area has six gas wells that had additional fracturing done. That pressure along with natural fissures has been an on-going concern for the public. A lot of the original public hearing testimony demonstrated concerns for the gas wells in the same formation, fracturing, improper plugging methods, along with the potential for fluid migration into all the coal mines throughout the area. The public testified this was a disaster waiting to happen and it wasn't if it would happen -- it was when it would happen. The best testimony presented was from our local township supervisor that worked in storage of gas for years and his experiences monitoring the storage of gas. The original testimony presented to the EPA came from valid resources not just public concerns and that has been the case all along.
- 8) The permeability has been a long contested question in the data of this Injection Well (see the original documentation between the EPA and Windfall). Low permeability seemed to be an issue just like the case of the Ohio Shale. Actually, the permeability has never been accurately decided for this Injection Well. In the example from Ohio (see Response to Comments page 6), "the fluid traveled considerable distance and impacted conventional gas wells" and that is the

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

PERMIT #: PAS2D020BCLE

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

same problem with this Injection Well as it is already known that the formation has at minimum six (6) penetrations on the edge of the Area of Review. The faults will further restrict the fluid and impact the flow towards the gas wells in the same formation as the Injection Well.

- 9) As stated in the EPA Response to Comments, “the potential faults identified within the one quarter mile area of review of the Windfall disposal well were determined to be non-transmissive, and do not extend to the surface and show displacement caused by the faults extending upward” thus the faults have ability to cause the fluids to flow upwards towards the USDWs. This data should be reconsidered.
- 10) EPA has the job of protecting our water supply and cleaning up any contamination of water supplies. EPA depends on the public to provide comment on the local area and realizes that they will be working along with the residents if anything happens to the water supplies. Below are the comments already provided to the EPA during the September 2020 public hearing: There will be no way to restore the water supply once it becomes contaminated. Please avoid repeating history of the first Pennsylvania injection well in Erie and the current incident in Ohio as noted by The Columbus Dispatch on September 5, 2020 by Beth Burger that injection well fluid migrated five miles away and this story repeats the history of Pennsylvania’s first injection well.

As a librarian, I have tried to review all points of view and provide the details that still need addressed. My most concerning information comes from the past industry practices recorded and stories from grandfathers working on these old gas well sites that were relayed to their children and grandchildren of improper practices performed on wells in this area. Even as recently as this past Labor Day, I met a young man who told stories of the unsafe practices of his grandfather working for Fairman Drilling and the improper practices known to be done in this area.

Many old gas wells drilled at the same depth as the injection well reach the same zone as where the injection fluid and the old gas wells were done before the EPA enacted the Safe Drinking Water Act at a time when it was known that things weren’t done correctly. Waste traveling five miles away and coming above ground impacts the public water supply for the entire DuBois and surrounding area with these old gas wells providing short circuits or conduits to water supplies. It is vital to avoid short circuits acting as conduits from old gas wells and this area already has over six (6) old known gas wells at the edge of the ¼ mile drilled to the same depth as the injection zone that provide short circuits with plugging records already showing issues and improper plugging. The Carlson well records show a partial plugging was done as the casing wasn’t able to be removed. Other abandoned wells are in unknown locations throughout the area including the vicinity of the public water supplies for DuBois.



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

PERMIT #: PAS2D020BCLE

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

The original permit was figured for five (5) years and now it is proposed for ten (10) years and that is illogical as the public has no details to figure (calculate) the ten (10) years. Yet we know injection fluid will intersect with the faults in less than two (2) years and that means it will intersect in less than two (2) years with old gas wells improperly plugged, old gas wells with partial plugs with known issues that go through the coal mines, and still active old gas wells. For example, the Ginter gas well known to affect two of our neighbor's water supplies as early as the 1970's before the EPA enacted and put in place the Federal Safeguards Program in 1974. Based on Mr. Harry Wise's (DEP) testimony it was stated the injection fluid will intersect with the faults in less than two (2) years at the case before the Environmental Hearing Board in October 2019. These old deep gas wells have no monitoring plan in place.

Still we have no known way to restore water supplies in this area after all these years of research, even now grants haven't been able to be applied for to bring water. Windfall has spent no time working with the local township or County Commissioners to assist in finding options as the community researched all the options. Windfall's original water testing started this research as they stated, "not to worry if anything happened, water would be provided." No one-half (1/2) mile evacuation plan was provided for the chemicals listed that needed evacuation plans on the Pennsylvania Right-to-Know lists and a better Emergency Plan is still needed. Windfall just recently completed the one (1) mile map after all these years. If residents have to wait this many years to get a required document from the original application, just imagine how they feel not having protection measures put in place for emergencies and water supplies.

Personally, I have resided with my brother and lived off a water buffalo after he lost his water supply due to seismic testing for natural gas. So I know what it is like to haul water, conserve water, and manage without a regular water supply. Our township supervisors on their own have looked at planning for these issues as the emergency management officials for our area and this should have been planning done by the company.

11) Mr. Fisher reviewed the calculations for me. On his own he provided testimony during the EPA September 2020 public hearing and his points are still very valid. Mr. Fisher followed my testimony with important points on the injectate issues and the fault system around the well causing seismic activity. The draft permit had questioned the faults in the area and Mr. Fisher provided the background in 1971 of the mapping of the Oriskany formation data showing the faults reach up from the basement and were mapped into the Oriskany. Mr. Fisher explained the two faults that show evidence of existing in the ¼ mile Area of Review with one to the North East at 600 feet and the second one to the South East at 1,280 feet. The difference in the gas production shows the faults exist as you can NOT claim faults do NOT cause gas trap. Assume faults exist and then you need to know what kind of faults they are – sealing or non-sealing. The important factors are (1) pressure and (2) location. The change in pressure could change the nature of the faults and injecting brine changes pressure. Concern over time that brine migrates and makes the faults transmissive and induces seismicity that is known to happen. Reports

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

PERMIT #: PAS2D020BCLE

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

submitted in Ohio show lateral flow and this is an issue. Mr. Fisher pointed out his concern is that this injection well is located in the wrong place. The faults if non-transmissive increase pressure and it is easy to quantify the pressure as much as possible. A well near a fault is a mirror image as if another well. How the faults impact the injection well is basic stuff and due diligence must be done and should have been done already.

12) The injection well site is where our water supply comes from and at the September 2020 public hearing Mr. Baird presented all concerns are still valid and relevant. Injected fluid surfacing miles from injection sites. The permitted area is a geologic refresh zone. Mr. Baird logged water tests for eight years at least and took a base line average before and after site work was completed on the injection well. Daily TDS (Total Dissolved Solids) testing of water shows injection well property has been disturbed. The TDS went up by 18.06 parts per million compared prior to July 20 (November 2019 to July 10, 2020) average versus after July 20, 2020. An operator error or catastrophe will cause degradation of water even if no further development takes place. The injection well is on a hill above the community and the injection well site is a refresh zone as the logs show. Mr. Baird cited his rights under the Constitution Article 27 and the toxic injection well site is an infringement on our values that should be based on moral, safe, and right. No man may poison his fellow man for profit.

13) We have a responsibility to care for our environment. Mr. Rowsey and all those in the EPA Water Protection Program have been placed in positions by God to protect the public interest and you know that the public helps you do your job to protect the people. Mr. Rowsey showed his heart for the people by contacting them individually to notify them of the public hearing as he has done more than any other EPA representative in the last ten years. He realizes if anything happens to contaminate groundwater he will be the one working with the people to solve the problem. Mr. Rowsey's job is to issue a permit and the EAB is to review the policies and procedures that protect the U. S. citizens.

As a librarian, I have tried to follow the governmental rules and procedures to help compile the story of the concerns. Imagine now how much more important during a pandemic it is for individuals to feel safe in their home and how the fear of not knowing the future quality of their own water supply causes fear and distrust. Answering and responding to the questions is based on understanding all of the concerns. When people lack trust in the system it causes fear. Putting faith in God more than any other is the only thing that has gotten me through this tedious process of listening to so many fears, worries, and sorting through the facts. The stories of the people matter. I'm asking you to incorporate and review all the public hearing record given at the first EPA hearing that was recorded as it was a demonstration of what God can do to provide all the facts from so many sources of all the concerns that still are causing fear after ten years. Everyone brought their individual concern and rationally presented their numerous valid concerns.



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

PERMIT #: PAS2D020BCLE

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

- 14) Proposed Site Depth in Oriskany Sandstone Formation
- 15) Hydrology
- 16) Elevation of Proposed Site
- 17) Proposed Site Recharging Zone for Private Water Supply
- 18) Quality Private Water Supply
- 19) Protect Water Supplies
- 20) Water Supply
- 21) Historical Private Water Well Issues
- 22) Alternative Public Water Supply Options Cost Prohibitive
- 23) Source Water Protection Plan Zones and City of DuBois
- 24) Improved Monitoring of Private Water Sources
- 25) Depth of Casings to Protect Water Supplies
- 26) Understanding Automatic Shut-off Switch & Pressures
- 27) Drill Cuttings Disposed on Proposed Site
- 28) Cost of Future Water Well Testing
- 29) Homeowners should receive instructions and testing devices to monitor private water supplies
- 30) Burden of Proof Falls on Homeowner
- 31) Faults
- 32) Fluid Communication
- 33) Continuous and Ongoing Seismic Monitoring After Five Years

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

PERMIT #: PAS2D020BCLE

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

34) Non-Transmissive Faults

35) Fault Block

36) Transmissive Faults

37) Faults Changing Due to Pressure

38) Basement Rock

39) Future Need of Earthquake Insurance

40) Gas Wells

41) Old Deep Gas Wells in Oriskany Sandstone Formation

42) Plugging of Old Deep Gas Wells in Oriskany Formation

43) Active Old Deep Gas Wells in Oriskany Formation

44) Well Integrity Review in Regards to Old Gas Wells

45) Old Shallow Gas Well Fractured Various Depths

46) Well Plugging of Abandoned or Orphaned Wells

47) Monitoring Gas Wells

48) Emergency Plan

49) Local Emergency Contacts

50) Hazardous Response

51) Chemicals

52) PA Right-to-Know

53) ½ Mile Evacuation Plan

54) Radiation Plan



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

PERMIT #: PAS2D020BCLE

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

- 55) Immediate Notification to Residents of Violations
- 56) Bonding and Plugging Plan Inadequate
- 57) Financial Assurances
- 58) Prevailing Wage
- 59) Special Protections - 25 PA Code 93 for Cold Water Fisheries
- 60) Geology
- 61) Fluids Already Exist in Oriskany Sandstone Formation
- 62) Permeability
- 63) Porosity
- 64) Pressures
- 65) Confining Zone
- 66) PA DEP's Well Score Card
- 67) Testing and Updating Public Access to Information
- 68) Fractures
- 69) Propagated Fractures
- 70) Existing Fractures
- 71) Stimulation
- 72) Area of Review
- 73) ¼ Mile Minimum Area of Review
- 74) Zone of Endangering Influence Calculations

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

PERMIT #: PAS2D020BCLE

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

75) Simplifying Assumptions Used for Modeling Data

76) Fluid Samples

77) Fracture Gradient

78) Specific Gravity

79) Modifications of UIC Permit Progress Without Public Knowledge

80) Mechanical Integrity

81) Single Point of Failure - Similarities Gas Storage and Mechanical Integrity

82) Characterization of Waste

83) Abandoned Coal Mines and Monitoring

For further details on all of these remaining issues, especially the problems with items 14 through 83, see the 78 pages submitted to the EPA during the September 2020 Public Hearing and the information was taken directly from the Environmental Hearing Board for the Pennsylvania Department of Environmental Protection (DEP) documentation presented in Darlene Marshall's Post Hearing Brief on December 4, 2019. After all these years the people deserve to be heard and protected, especially as it has been reported to the EPA and DEP that the old gas wells in this same formation as the injection well have impacted water supplies already, even if they are on the edge of the Area of Review. The people deserve to be heard, someone needs to research this further and protect the public water supplies that are private. Water determines the value of our homes and property and is vital for every day use. All the information shows the injection well is sited where the water supply for these homes is located and public water supplies are not going to be available for future generations.

Sincerely,

A handwritten signature in blue ink that reads "Darlene Marshall". The signature is written in a cursive, flowing style.

Darlene Marshall



**Darlene Marshall, 1070 Highland Street Extension, DuBois, PA 15801**

**(814) 583-7945**

**Email: mrdewy@yahoo.com**

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

PERMIT #: PAS2D020BCLE

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

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

PERMIT #: PAS2D020BCLE

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

Certificate of Service

I hereby certify that copies of the enclosed petition for review (appeals) were sent to the following persons in the manner indicated.

By Electronic Filing sent to [www.epa.gov/eab](http://www.epa.gov/eab):

Environmental Appeals Board

U.S. Environmental Protection Agency

1200 Pennsylvania Avenue N.W.

Mail Code 1103M

Washington, DC 20460-0001

By email sent to [rowsey.kevin@epa.gov](mailto:rowsey.kevin@epa.gov):

Kevin Rowsey, Source Water & UIC Section

Water Division

U.S. EPA Region III

1650 Arch Street

Philadelphia, PA 19103

215-814-5463

By email sent to [mhoov16@verizon.net](mailto:mhoov16@verizon.net):

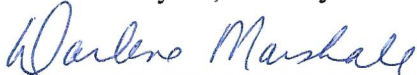
Windfall Oil & Gas Inc.

305 Chan Road

Falls Creek, PA 15840

814-771-9686

On January 12, 2021 by:



Darlene C. Marshall

1070 Highland Street Extension

DuBois, PA 15801

814-583-7945

[mrdewy@yahoo.com](mailto:mrdewy@yahoo.com)