

# APPEAL

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PETITION FOR REVIEW of UIC Permit PAS2D013BIND

**Judy Wanchisn and Stacy Long**

**4/7/2014**

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BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.

In re:

U.S. Environmental Protection Agency regarding  
General Energy Company, LLC (PGE) PAS2D013BIND Proposal  
to Issue a Final Underground Injection Control Permit in Grant Township

PETITION FOR REVIEW

April 7, 2014

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## INTRODUCTION

Judy and Paul Wanchisn (husband and wife) and Stacy and Mark Long (husband and wife) petition for review of the conditions of UCI Permit No. PAS2D013BIND, which was issued to Pennsylvania General Energy Company, Inc. (PGE), on March 19, 2014, by the United States Protection Agency (EPA). The permit authorizes permittee to operate a Class II-D Well, (Marjorie C. Yanity Well 1025) in Grant Township, Indiana County, Pennsylvania. Petitioners contend that certain permit conditions are based on an important policy consideration that the board should review. Responsiveness Summary that was to provide responses from EPA including questions and issues raised by the people in written public comments or oral comments at the hearing on October 28, 2013 at Grant Township Municipal Building were not fully and adequately answered and need clarification. The permit, as it now stands, is blatantly deficient in its summary response and we find that this permit needs to have serious review, revision(s), or be denied.

### Issues Presented for Review

The issues of most concern involve input values, rationale for those, resulting AOR/ZEI calculations. The public was not informed of these and therefore could not comment on EPA's assumptions and AOR determinations. They were not described by the EPA and EPA did not identify those values for injection zone the EPA (not applicant) used to calculate the AOR. The Maximum Injection Pressure Values that EPA used were presented by the applicant. (PGE) p.2

Second issue is Rock Property Values and Net Fluid Balance to determine potential for fault failures. Third issue is the Huntersville Chert.

Fourth Issue is oil/gas extraction—negative pressure—not long term positive pressure common to fluid injection wells.

Fifth Issue is that the Integrity of outer casing can't be tested.

### Other Issues to Review in Question Form

1. Huntersville Chert and AOR---3 Questions
2. USDW---4 Questions
3. Injection Confining Zones—4 Questions
4. Maximum Injection Pressure—6 Questions
5. Geological and Seismic Review—9 Questions
6. Injected Fluid—4 Questions
7. Testing/Monitoring Report Requirements—4 Questions
8. Plugging and Abandonment—2 Questions
9. Expiration Dates—6 Questions

## **Additional Areas for Review**

1. Endangerment Standard regarding private and residential wells and/or springs since Grant Township residents have no public water supply.
2. Comprehensive Plan to replace water with a Corrective Action Plan for residents of Grant Twp. with PGE or EPA or both developing a plan with public input should the injection well fail and contaminate the water supply in Grant. Township.
3. A public comment and hearing should be conducted to allow input from Grant Township Residents.

These issues we raised in this Petition for Review had been previously raised during the comment period or at the hearing on October 28, 2013.

## **AREA OF REVIEW**

### **QUESTION 1**

While the applicant needs to consider any wells which penetrate the injection zone that is far below a mile from the surface, should these inventoried active and abandoned wells also include shallower oil wells, conventional and unconventional gas wells, test bores, and abandoned wells that are adjacent to the cased and uncased pipe?

### **QUESTION 2**

Will there be any prohibition of future unconventional wells that may drill and frack the Utica Shale that is below this injection zone? Such bores could intercept disposed wastes in the Huntersville Chert. In fact, these unconventional drilling operations into the Utica Shale are consistent with Natural Gas Development found in the Comprehensive Land Use Plan, Indiana County, PA.<sup>1</sup>

### **QUESTION 3**

It is interesting to note that the operator (PGE) considered a zone of endangered influence (ZEI) over the next decade to be one quarter mile beyond the injection well bore or 1420 feet. EPA modeling, however, extended the analysis to 100 feet beyond this distance. This would lead the public to believe that the current one-quarter mile “standard” utilized by industry (if PGE is representative of current practice) is inadequate. Is this the case?

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<sup>1</sup> [http://www.countyofindiana.org/plan/Where We Live Posters/Natural Gas Development Poster.pdf](http://www.countyofindiana.org/plan/Where%20We%20Live%20Posters/Natural%20Gas%20Development%20Poster.pdf)

## **UNDERGROUND SOURCES OF DRINKING WATER (USDWs)**

In regard to the casings safeguarding the aquifers, as described in the permit, the unanswered questions are:

### **QUESTION 1**

What protects the pipe from for the more than a mile - 5311 feet – between the bottom string casing and the intermediate casing?

### **QUESTION 2**

Will this increase the risk of the potential movement of fluids into the previously fracked intermediate strata and even the aquifer from degradation, structural collapse, or other forces?

### **QUESTION 3**

Is the “bare” un-cemented area, which is less than 1000 feet below the aquifer and extends only 700 feet above the injection site adequate? Without knowing the diameter of the pipe relative to the hole diameter at the bottom, it is also difficult to determine the actual thickness of the cement casing.

### **QUESTION 4**

The age of the existing well to be converted is not stated. Cement is subject to degradation. Given this conversion of an existing natural gas well, initial improper cementing could result in some failure during the first decade. Because, over time, all casings will fail.<sup>2</sup> Is the EPA going to have essential oversight on the cement casing?

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<sup>2</sup> <http://oilprice.com/Energy/Energy-General/Shale-Gas-Casing-and-Cementation-Will-Fail-but-When.html>

## **INJECTION AND CONFINING ZONES**

### **QUESTION 1**

The limitation of the permit to a 76-foot interval (7620 feet – 7544 feet) in this area of Huntersville Chert is perplexing. If there are no faults or fractures in the area of review, as claimed in the geologic and seismic review, where will the fluid go?

### **QUESTION 2**

If the chert is dense and brittle, yet lets gas escape, it must be full of fractures as noted earlier. Will the injection of fluids cause further fractures and faults into which the brine will flow?

### **QUESTION 3**

What is the anticipated total volume of fluid that such a zone will contain?

### **QUESTION 4**

Will the waste material ultimately extend outward from the well bore farther than the modeled 1420 feet?

## **MAXIMUM INJECTION PRESSURE**

### **QUESTION 1**

High pressures, although monitored, can be problematic. This is particularly true when pipe tolerances may be inadequate to withstand pressures of about 7,000 psi for the life of a well. Just what is the design pressure for such a pipe?

### **QUESTION 2**

Will the pressure of the waste fluid increase or decrease from the projected 7,000 psi over time?

### **QUESTION 3**

Can the public have confidence in the integrity of the injection well given that EPA “expects” that the pressure limitations will meet the regulatory criteria and on what is this expectation based?

### **QUESTION 4**

Is consideration given to both the compressive and tensile strength of the pipe?

### **QUESTION 5**

How thick is the pipe?

## **MAXIMUM INJECTION PRESSURE (cont'd)**

### **QUESTION 6**

What standards, if any, is it required to meet?

## **GEOLOGIC AND SEISMIC REVIEW**

### **QUESTION 1**

What considerations lead the EPA to state that the probability of injection induced seismicity to be low at this site, given data showing correlations in other parts of the country, specifically, in regard to the August 23, 2011 magnitude 5.2 quake in Virginia, caused IUP students to evacuate their buildings--Was this information included in your data to the "present?"<sup>3</sup>

### **QUESTION 2**

What would seismic activity of such magnitude do to the integrity of the proposed injection well and its casing?

### **QUESTION 3**

Are tremors of this nature sufficient to dislodge any of the cement or create cracks?

### **QUESTION 4**

Given the high pressures of 7,000 psi, even small fractures could result in the escape of large quantities of waste up the borehole that could put water supplies in jeopardy. Are the construction standards for cement withstanding "significant amounts" of pressure greater than 7,000 psi after seismic events?

### **QUESTION 5**

Regarding shut-in pressure, the EPA then placed pressure limits in the draft permit to the surface and bottom hole pressures to prevent new or further expansion of "existing" fractures. Where are these existing fractures? Are they in the area of the uncased pipe?

### **QUESTION 6**

The "shut-in" device would hopefully prevent or limit problems in the event of an incident. Does this work to plug the entire bore, plug the top, or "squeeze" the pipe to prevent fluid from migrating upward?

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<sup>3</sup> <http://www.indianagazette.com/news/indiana-news/59-earthquake-rattles-east-coast,109848/>



## **GEOLOGIC AND SEISMIC REVIEW (cont'd)**

### **QUESTION 7**

If the well is shut in, can it still be plugged effectively and permanently to prevent the escape of injected fluid wastes?

### **QUESTION 8**

*These next 2 questions pertain to contradictions that need to have clarification within the permit.*

The first paragraph states that EPA evaluated factors relevant to seismic activity such as the existence of any known faults and/or fractures. The following paragraph states that the Permittee shall inject only into a formation which is free of known open faults or fractures within the Area of Review. In the same paragraph it is noted that the Permittee submitted geologic information that indicates the absence of faults in the confining injection zone. In the fifth paragraph, it states EPA limited in the draft permit the surface injection pressure and the bottom hole injection pressure to a level lower than both the ISIP and the fracture pressure to prevent the initiation of new or the propagation of existing fractures. What are the sizes, depths and distances from the well of these fractures?

### **QUESTION 9**

In the previous paragraph, it states that PGE identified in the Permit Application, significant gas production in the vicinity of the proposed Injection Well (both shallow gas production at depths of approximately 3500 feet as well as deeper gas production at depths similar to the proposed injection zone). Based on this information, the fractures related to these production wells seem to exist in the vicinity of the well at depths where the conveying pipe lacks cement casing and where waste fluids will be discharged. Does the cited report "Induced Seismicity Potential in Energy Technologies" speak the reduced pore pressure as a potential liability in the migration of fluids?

## **INJECTION FLUID**

### **QUESTION 1**

If we do not know the composition of the fluids, would it seem prudent to add tracers to the wastes as a means to determine sources of potential future contamination to our waters?

### **QUESTION 2**

Will the EPA expand this list to include toxic chemicals known to be in the composition of fracking fluids?

### **QUESTION 3**

Given the recent Duke study about brine from Marcellus Shale wells, will the waste fluid also be assessed for its radioactivity? <sup>4</sup>

## **INJECTION FLUID (cont'd)**

### **QUESTION 4**

How do the walls of a tank trunk thwart radioactive risks since such hazards are not readily dissipated in cases of accidental spills?

## **TESTING, MONITORING AND REPORTING REQUIREMENTS**

### **QUESTION 1**

Would monitoring wells around the perimeter of this site by an independent agency be a prudent precaution?

### **QUESTION 2**

Will there be required provisions that accompany the granting of this permit for the periodic, long-term, independent testing of water supplies in our area?

### **QUESTION 3**

Additionally, will reported data be made available to the public?

### **QUESTION 4**

Will this five-year cycle EPA review continue through perpetuity or just until well closure?

## **PLUGGING AND ABANDONMENT**

### **QUESTION 1**

Is the \$60,000 requirement to demonstrate financial responsibility by Pennsylvania General Energy, as specified in the permit, adequate?

### **QUESTION 2**

Will the costs of plugging injection wells such as this be passed on to taxpayers?

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<sup>4</sup> <http://nicholas.duke.edu/news/radioactive-shale-gas-contaminants-found-wastewater-discharge-site>

## **EXPIRATION DATE**

### **QUESTION 1**

Will the five-year review be open to public comment?

### **QUESTION 2**

Will there be brine containment or storage facilities at the well site?

### **QUESTION 3**

Will vehicles be equipped with features to prevent accidental loss of liquids during transit?

### **QUESTION 4**

Is there a site-specific, comprehensive plan for spills as well as for detecting any future groundwater and surface water contamination?

### **QUESTION 5**

What provisions have been made by PGE to train local emergency responders in the event that spills occur?

### **QUESTION 6**

Without the knowledge of what exactly is contained in the injection fluids, how can emergency teams deal with accidental spills or traffic accidents involving waste-carrying vehicles, particularly in the case of benzene—a known by-product found in brine/waste fluids from gas companies, is considered to be non-hazardous in Class II wells yet is a hazard in a Class I well?

**The Applicant has not met its burden to demonstrate that its injection will not cause endangerment of underground sources of drinking water. The Permit should be denied or significantly revised because the endangerment standard has not been met, EPA does not have the authority to issue the permit.**

**The following comments were submitted by environmental engineer, Daniel S. Fisher, PG, of Wetstone Solutions, LLC,** as his comments were extremely valuable regarding our case. We as a township did not have time to gather vital and pertinent geological information between the times of learning that the draft permit was being created and when the EPA meeting was scheduled. Mr Fisher writes, "These comments are submitted in response to the extended comment period [the 16 day government shutdown—October 1 - 16-- led the EPA to allow an extension for the public to submit comments until November 4] for UIC Permit PAS2D013BIND and the accompanying Statement of Basis for the proposed permit."

Mr. Fisher's comments were prepared after acquainting himself with the proposed draft permit and he was asked specifically to provide us with geological information for the purpose of providing geological information regarding the injection of fluids into the Huntersville Chert formation. These comments were submitted by Judy Wanchisn on November 4, 2013, the last day for the public to submit comments to the EPA.\* None of his concerns were addressed in the permit, and we are including his concerns in our appeal and are resubmitting them in their entirety.

His data concludes: The Applicant has not met its burden to demonstrate that its injection will not cause endangerment of underground sources of drinking water. The Permit should be denied or significantly revised because the endangerment standard has not been met. His conclusion: the EPA does not have the authority to issue the permit.

### **Legal Background**

In determining whether to issue any Underground Injection Control (UIC) permit, Congress required that "the applicant for the permit to inject must satisfy the [permitting Authority] that the underground injection will not endanger drinking water sources." [42 U.S.C. § 300h (b)(1)(B)]. Congress established a minimum standard for endangerment of drinking water sources as the following [Id. at § 300h(d)(2)]:

Underground injection endangers drinking water sources if such injection may result in the presence in underground water which supplies or can reasonably be expected to supply any public water system of any contaminant, and if the presence of such contaminant may result in such systems not complying with any national primary drinking water regulation or may otherwise adversely affect the health of persons.

EPA has issued regulations that define the underground sources of drinking water (USDWs) that must be protected as "an aquifer or its portion...which contains a sufficient quantity of ground water to supply a public water system; and...contains fewer than 10,000 mg/l total dissolved solids" [40 C.F.R. § 144.3 (a)(2)(ii)].

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*\*Documentation of Read Receipt by Steve Platt enclosed*

## Comments

1. **The Statement of Basis for the Yanity 1025 Well does not show all the input values, their rationale for inclusion, nor the resulting AOR/ZEI calculations performed by EPA; this did not allow the public a meaningful opportunity to comment on EPA's assumptions and AOR determination.**

The Applicant used a fixed radius for a proposed Area of Review (AOR); however, EPA calculated its own AOR and Zone of Endangering Influence (ZEI) for the Yanity 1025 Well (using the modified Theis model) in the Statement of Basis. EPA's rules require that a statement of basis "...briefly describe the derivation of the conditions of the draft permit and the reasons for them...." [40 C.F.R. § 124.7 (emphasis added)].

All of the model input values have assumptions associated with them and also have a direct impact on the size of the AOR/ZEI and the allowable rate, volume, and/or maximum pressure of injected fluid; however, all specific values for the model and the assumptions behind them are not described by EPA. As a result, the public cannot examine, nor adequately critique, the EPA's assumptions in the determination of risk to USDWs from the proposed operation of the Yanity 1025 Well without specific information on EPA's (not the Applicant's) inputs for the AOR/ZEI calculation.

The modified Theis equation (model) is:

$$r = (2.25 KHt / S 10x)^{1/2}$$

where:

r = radius of endangering influence from injection well (ZEI) (feet)

K = hydraulic conductivity of the injection zone (feet/day)

H = thickness of the injection zone (feet)

t = duration of injection, project life (days)

S = storage coefficient (dimensionless)

$x = (4\pi KH) (hw - h_{bo}) * SpGb / 2.3Q$

Q = injection rate (ft<sup>3</sup>/day)

hw = hydrostatic head of USDW (feet) measured from the base of the USDW

h<sub>bo</sub> = observed original hydrostatic head of injection zone (feet) measured from the base of the USDW

SpGb = specific gravity of fluid in the injection zone (dimensionless)

EPA does not identify many of these values for the injection zone that EPA, not the Applicant, used to calculate the AOR that was acceptable to EPA. The public cannot accurately examine nor critique EPA's decision on the AOR without an explanation of EPA's assumptions and full calculation of the ZEI used to confirm the validity of the calculated AOR. Without the assumptions, methodology and results used by EPA in their calculations, the public cannot adequately comment on the AOR determination.

Similarly, EPA provides a limit for the maximum injection pressure without describing the reasons that EPA believes that the maximum allowable surface injection pressure is appropriate. EPA merely states that it used the values presented by the Applicant in making its determination (without providing the actual input values aside from specific gravity and well depth). EPA also states that “[t]hese pressure limitations will meet the regulatory criteria...,” but does not state its reasons for that belief. EPA has not provided the public with any information about the inputs that it has used to determine the proper maximum injection pressure.

**40 CFR 146.22 (g) states:**

At a minimum, the following information concerning the injection formation shall be determined or calculated for new Class II wells or projects:

- (1) Fluid pressure;
- (2) Estimated fracture pressure;
- (3) Physical and chemical characteristics of the injection zone.

These must be clearly listed in the Statement of Basis. Therefore, EPA should revise the Statement of Basis to include the derivation of its reservoir modeling input values and any other calculations that helped the agency determine the proper AOR and the maximum injection pressure since the agency apparently relies on that information to form the basis of its opinion that the maximum injection pressure will ensure that USDWs will not be endangered by the proposed injection due to induced seismicity.

**2. EPA’s Statement of Basis fails to meet the Endangerment Standard by failing to characterize rock properties and Net Fluid Balance to determine the potential for fault failure.**

EPA should require that the Applicant provide scientific data to allow the agency to properly determine the potential for an induced seismic event due to the proposed injection activity. EPA did not require the Applicant to provide information on any of the recommended site assessment criteria developed by the EPA Underground Injection Control National Technical Workgroup in November 2012 [EPA Draft on Minimizing and Managing Potential Impacts of Induced-Seismicity from Class II Disposal Wells: A Practical Approach, *available at*: [http://www.eenews.net/assets/2013/07/19/document\\_ew\\_01.pdf](http://www.eenews.net/assets/2013/07/19/document_ew_01.pdf)].

EPA should also follow its own draft guidance in the area of well operations, monitoring and management (Id. at 30-33). In addition, EPA should require the Applicant to evaluate and provide data on regional rock stress components, which would allow the agency to estimate the potential for fault failure due to localized injection zone pressure increases, and net fluid balance as recommended by the National Academy of Sciences (National Academy of Sciences study, p.1). This would allow the agency to make an educated determination about seismicity before

permit issuance and EPA could provide the required information in the statement of basis for public evaluation and comment.

Calculations of critical shear stresses and rock failure envelopes can be determined through the use of rock properties data gathered from whole cores taken from the injection zone during well drilling. EPA should request that cores be gathered and petrophysical analyses performed. After subjecting that information to public notice and comment, EPA may determine whether the endangerment standard has been met. The National Academy of Sciences' recent publication "Induced Seismicity Potential in Energy Technologies"(2013) states that "[t]he factor that appears to have the most direct consequence in regard to induced seismicity is the net fluid balance (total balance of fluid introduced into or removed from the subsurface)...." However, EPA does not require the Applicant to determine the net fluid balance to allow a proper determination and proper public review under the endangerment standard.

There are several ways in which EPA or an applicant can determine structural geology:

- (1) examination of rock cores obtained during drilling,
- (2) well logging and testing, and
- (3) prior experience with similar wells

Another reason for pre-injection review of structural geology is that fractures (i.e., joints and/or faults) can "channel fluids rapidly away from an injection well in a single direction or where they provide flow paths through confining strata" [Final Injection Well Construction Practices]. However, EPA does not provide data related to any of these possible ways of determining the geology and seismic risk related to injection from the Yanity 1025 Well in the Statement of Basis.

### **3. The highly fractured nature of the Huntersville Chert makes standard AOR and ZEI determinations wholly inadequate.**

The Huntersville Chert is widely known as a poor cap rock for the underlying Oriskany Sandstone because of its brittle and highly fractured nature. The National Academy of Sciences' recent publication "Induced Seismicity Potential in Energy Technologies"(2013) states:

...the equivalent permeability and diffusivity of these fractured rocks (with fractures and rocks viewed as a whole) can be very high. ...The combination of high transmissivity, small storativity, and the planar nature of fractures imply that significant pore pressure changes can be transmitted over considerable distances (several kilometers [miles]) through a fracture network from an injection well.

This finding precludes the use of standard methods of AOR determination

(such as the modified Theis equation) in the Huntersville Chert or similar fractured formations. The assumption that the Huntersville Chert will react to injection pressures as a homogeneous and porous formation is not valid. Another, more suitable method must be used to determine the AOR/ZEI and protect USDWs.

**4. Oil/Gas Extraction Wells were designed to extract fluids under negative pressure; they were not designed to withstand the long-term positive pressures common to fluid injection wells.**

The casing seat cements of oil/gas wells are designed for a maximum of 350 psi and the inner casing for 1200 psi. These designs are inadequate for the allowable maximum injection well surface casing pressures of 2933 psi.

**5. The integrity of the outer protective casings of an old well cannot be tested (only the innermost casing can be tested).**

Since the well was constructed in the past, there is no way to test the existing outer casings; therefore, the integrity of the entire well string cannot be assured.

**ENDANGERMENT STANDARD IN REGARD TO  
SAFE DRINKING WATER ACT, SECTION 1431, PAGE 12 IN PERMIT.**

Drinking water supply system or underground source of drinking water “which may present an imminent and substantial endangerment to the health of persons,” and (2) the appropriate state or local officials have not taken adequate action to protect such persons.

**The “Endangerment” Standard**

As noted, the SDWA states that UIC regulations must “contain minimum requirements for effective programs to prevent underground injection which endangers drinking water sources.” Known as the “endangerment standard,” this statutory standard is a major driving force in EPA regulation of underground injection.

The endangerment language focuses on protecting groundwater that is used or may be used to supply public water systems. This focus parallels the general scope of the statute, which addresses the quality of water provided by public water systems and does not address private, residential wells. The endangerment language has raised questions as to whether EPA regulations can reach underground injection activities to protect groundwater that is not used by public water systems.

Since this clearly states that the Endangerment Standard does not address “private residential wells”, which all residents of Grant township use, we ask the Appeals Board to deny the permit OR allow PGE



and the EPA to submit a detailed and thorough Corrective Action Plan for replacing and/or restoring potable and household water (in quality and quantity), to residents by revising the permit to add safeguards to all residents who rely on private wells/springs in Grant Township.

Corrective Action Plans are integral to protection of USDWs 40C.F.R. §144.25(a)(3). Applicants must submit a plan for corrective action and a corrective action condition must be placed in a permit. No such plan is contained in this permit. EPA must carefully consider corrective action plans before issuing a permit. 40C.F.R. §146.24(a)(8). The corrective action plan is a necessary part of any application for a UIC permit. And EPA has the authority to deny a permit if an application is incomplete. 40C.F.R. §124.3(c)-(d). In fact, EPA is required to “not issue a permit before receiving a complete application” 40C.F.R. §144.31(d). An application is not complete until EPA reviews the information sought in a notice of deficiency.

The board should require a new notice and comment period on the issue of a detailed plan for replacing and/or restoring potable and household water (in quality and quantity) to residents of Grant Township, since they rely on private wells and springs.

**All residents of Grant Township (700+ residents) rely on private wells and/or springs as a source of drinking water. There is no access to public water. The permit skips over this fact and asserts that PUBLIC water is protected. The fact is that residents use PRIVATE wells. The permit allows that PGE will protect PUBLIC drinking water, in regard to the Safe Drinking Water Act, Section 1431.**

In the Permit, Section 15, on pages 11-12, paragraph 1, citing Section 1431, under the Safe Drinking Water Act:

***“ 15) PGE must provide financial resources should a well failure occur.***

*Although a separate issue from the financial responsibility required for plugging and abandonment, the public also asked whether the operator is required to set money aside to remediate contamination of their drinking water if the injection operation fails and allows fluids to migrate into a USDW. The operator is not required to set money aside for ground water 12 remediation. However, EPA does have emergency authorities in place under the Safe Drinking Water Act (SDWA) if endangerment to USDWs should result from injection activities. Section 1431 under the SDWA allows EPA to take an action against a responsible party if the potential for endangerment exists. This action can include a requirement that the responsible party provide alternative drinking water to citizens affected by the endangerment.”*

The environmental engineer, Dan Fisher, provided data that supports this.

According to the Safe Drinking Water Act Regulatory Issues, R41760, CRS Report for Congress, January 10, 2013, Section 1431 applies broadly to the SDWA and grants the EPA Administrator emergency powers to issue orders and commence civil actions to protect public water systems or underground sources of drinking water.<sup>35</sup> (FOOTNOTE 35 42 U.S.C. §300i. The Administrator may take

action when information is received that (1) a contaminant is present in or is likely to enter a public drinking water supply system or underground source of drinking water “which may present an eminent and substantial endangerment to the health of persons.” And (2) the appropriate state or local officials have not taken adequate action to protect such persons. Again, Grant Township relies on private wells/springs and this does not protect residents for restoring water if contaminated.

### FINAL SUMMARY

The Environmental Protection Agency has a critical role in protecting human health and the environment. We trust that you will consider the emerging information about Class II injection wells, examine the specifics of this site, research evolving technologies to deal with such wastes, reflect on the special exemptions enjoyed by the oil and gas industry, investigate cumulative impacts of such operations, and act in the public interest of those in Indiana County and throughout our Commonwealth. We want our comments and the comments of others to serve to guide modifications to the final permit whether it be reviewed, revised or denied.

April 7, 2014

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