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5	US ENVIRONMENTAL PROTECTION AGENCY
6	PUBLIC HEARING ON A PROPOSED PERMIT UNDER THE
7	FEDERAL UNDERGROUND INJECTION CONTROL PROGRAM
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10	Monday, December 10, 2012
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13	The transcript of a Public Hearing, taken before
14	me, the undersigned, Jacquelyn P. Sherwood, held at
15	the Brady Township Community Center, 71 Community
16	Street, Luthersburg, Pennsylvania 15848, commencing at
17	8:08 p.m., the day and date above set forth.
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24	REPORTED BY:
2.5	JACOUELYN P. SHERWOOD, PROFESSIONAL REPORTER



## P-R-O-C-E-E-D-I-N-G-S

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MS. JOHNSON: Okay. Good evening, everyone.

I'd like to call this public hearing to order.

Thank you for your attendance tonight.

This is a formal public hearing on a proposed permit under the Federal Underground Injection

Control Program, or the UIC program, for a project consisting of one brine disposal well known as the Windfall Oil and Gas, Incorporated, disposal well,

Zelman No. 1 in Brady Township, Clearfield County,

Pennsylvania. Public notices for this permit were distributed to state and local government officials, interested parties who have written or called EPA and also published in the Courier

Express on November 7th, 2012. I ask for your cooperation in adhering to the procedures I will outline for you shortly so that we may make the most of this opportunity for public comment.

First of all, however, I would like again to introduce myself and other members of the agency in attendance. I am Karen Johnson, chief of the ground water enforcement branch of the water protection division located in the U.S.

Environmental Protection Agency's office in

Philadelphia, Pennsylvania. With me tonight are Steve Platt, our senior hydrologist; Roger Reinhart, our enforcement lead; and David Rectenwald, our oil and gas inspector.

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For those of you who came here today out of genuine environmental interest and concern, I would like to acquaint you with the basic goals of the UIC program which EPA is implementing in the Commonwealth of Pennsylvania.

The Federal Safe Drinking Water Act of 1974 and its subsequent amendments recognized the importance of safeguarding our nation's drinking water supplies in a number of ways.

One program authorized by the Act is the Public Water System Supervision Program which is designed to ensure that public water supplies deliver safe drinking water to their users.

This program is currently being operated by the Pennsylvania Department of Environmental Protection.

Congress also recognized at the time of the law's enactment that our ground water resources which supply approximately half of our national drinking water resources also needed protection from potentially harmful practices such as the

underground injection of fluids. Section 1421
through 1424 of the Safe Drinking Water Act
addresses the provisions which authorizes the
UIC program, and covers the procedures under
which EPA must implement a Federally administered
program in those states, such as Pennsylvania,
whenever a state will not or cannot assume primary
enforcement for the program.

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Since June 25th, 1984 EPA has been enforcing the Federal UIC program in Pennsylvania. The program addresses a variety of different types, or classes, of injection wells including nearly 1,000 active oil and gas related wells in Pennsylvania. The objective of the program and permits authorized under it are to ensure that the construction and operation of these wells provides the highest level of protection to underground sources of drinking water.

Underground sources of drinking water, or
USDW's, are basically defined as those aquifers
which supply or could supply drinking water for
human consumption. The regulatory definition of
an USDW also includes consideration of both the
quantity of water available and its quality. It
protects all ground water with less than 10,000

parts per million total dissolved solids in order to allow for future uses of the resource.

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Any and all new injection wells constructed after June 1984 are required to apply for an EPA permit to ensure compliance with the construction and operational requirements to safeguard our ground water resources. It is our intent to enforce the provisions of the UIC program for Pennsylvania to enhance and protect the Commonwealth's ground water resources by assuring that injection operations meet protective standards mandated by the UIC program.

I would like to clarify the need for the Federal program on this issue and relationship to state and local authorities. Existing programs within the state had not historically addressed injection operations in the preventative sense as does the Federal program. EPA's program is designed to protect ground water resources through stringent casing, cementing, testing and continuous monitoring requirements. It is a program which seeks to address many of the concerns you have for the prevention of water supply contamination, as well as protection of other natural resoources.

The UIC program, however, does not address or have jurisdiction to enforce against issues such as noise, air emissions, truck traffic or siting related to residential buildings, et cetera, that you may also have concerns about. The UIC program does contain a condition that requires an operator to meet all required local and state laws. A UIC permit does not override

local or state regulations.

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The purpose of the UIC permitting process for new wells is to control and prevent any injected fluids from endangering underground resources of drinking water. All injection operations must comply with the construction, operation, monitoring and reporting requirements specified in the UIC regulations. The specific technical requirements for construction of the well, maximum injection pressure limitations and a corrective action plan in the area of review which is required to address any unplugged wells which penetrate the injection formation, and which may serve as conduits for fluids migration, are all designed to ensure that injected fluids are contained within the well and the intended injection zone.

identifying non-compliance and has made a commitment to strong enforcement of permit conditions and the overall program provisions.

EPA routinely inspects all facilities to assist in evaluating compliance by regulated facilities.

There are penalties for noncompliance. The severity of a penalty will be based on the seriousness of the violation. Violators of the UIC regulations are subject to either civil or criminal penalties ranging up to \$32,500 per day per violation. Parallel state enforcement authorities under the Commonwealth's oil and gas regulations may also afford additional protection.

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Now, having supplied you with a brief overview of the UIC program and purposes of this hearing, I would briefly like to explain the protocol and procedures which govern this hearing. Persons wishing to testify will be called according to the following order: 1, elected officials representing federal, state or local governments; 2, representatives of federal, state or local agencies and; 3, all private citizens and representatives of public and/or environmental groups, representatives of industry

and the regulated community.

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We will adhere as close as possible to the order in which you expressed your interest in presenting testimony either by your advance notice to EPA or to the order you registered for this hearing. If you wish to present testimony today but have not signed the register, please do so now. In presenting oral testimony we ask that you clearly identify yourself and your organizational affiliation, if any. We also request that you limit your testimony to a maximum of three to five minutes to ensure that all interested parties have equal opportunity to speak, and for those of you who are submitting written testimony this evening we ask that you supply us with a copy for the record of this hearing, and if possible, we would also appreciate a summary of your main points.

I stress the fact that this hearing is not a debate or dialogue. We will not be responding to your comments or questions because our purpose in being here is to formally solicit your input on the permit proposal before us. Any additional comments that you may care to make after this hearing may also be made in writing no later than one week from today, December 17th, in care of

Stephen Platt, EPA Region 3, 1650 Arch Street, 1 Philadelphia, PA. 2 As I said, I'd like to call elected officials 3 and representatives from federal, state and local The ones that we have identified are 5 governments. Diane Bernardo from city council. 6 Is there anybody else here who is -- if you 7 would, please come to the mic. State your name 8 and --9 MS. BERNARDO: My name is Diane Bernardo, 10 DuBois City Council. The following brief letter 11 was adopted and signed by everyone on our city 12 council including our mayor and our city manager. 13 This letter is to request a public hearing 14 on the Zelman No. 1 Class 2 disposal injection 15 well proposed for Brady Township, Clearfield 16 County, PA, and please put these comments on the 17 record. 18 Back when House Bill 2350 known as the 19 Injection Well Safe Water Act was introduced in 20 April 2012 the DuBois City Council, the mayor and 21 the city manager immediately responded with a 22 letter of support urging the Environmental 23 Resources and Energy Committee to adopt this bill. 2.4

As a municipal water service provider, the

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City of DuBois felt this proposed bill provided necessary water protection measures, some of those include a 5,500-foot setback from public water supplies. The bill also bans the deep water disposal wells in flood plains and provided for a 2,000-foot setback from trout streams and high quality and exceptional value waterways.

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Approximately six acres of deep mines exist within the quarter mile review area for this proposed disposal injection well. It's our understanding that the deep mines begin in Brady Township and stretch to the area known as the DuBois Mall. If there was ever a breach with this frack water, it could go so far as the DuBois Mall and into Sandy Lick Creek. Sandy Lick Creek runs along the city's parkway system and is a designated catch and release fishing site, and I can guarantee you that much volunteer time and our residents' taxpayer money and state taxpayer money made this facility and that park possible.

The earthquakes in Ohio, which have been linked to injection wells near Youngstown, were felt by the residents in the City of DuBois. It is our understanding that the geographic fault lines run through the Brady Township area where

the well has been proposed, and Brady Township is only two miles from the DuBois city limits and our corporate boundaries.

We must do everything possible to ensure the integrity and protection of our water resources.

Ohio has recently adopted new regulations to address many of the DIW issues, and we should do the same.

And now I'd like to present a representative from the DuBois Watershed Committee.

MR. VOLPE: This letter is from the watershed committee.

"Please consider this letter a request for a public hearing on the Zelman No. 1 Class 2 disposal injection well proposed for Brady Township, Clearfield County, Pennsylvania. Please also consider this a request to enter these comments on behalf of the City of DuBois Watershed Committee.

"The proposed injection well on the Zelman property in Brady Township is not only an issue for the residents of the surrounding communities but also the state of Pennsylvania as it would be the first injection well located within a residential area.

1	"The area in question happens to be located
2	near two watersheds, the Susquehanna and Ohio
3	River basins, and is also close to the DuBois
4	Reservoir which is a main water supply for the
5	city Of DuBois," as well as "neighboring
6	communities."
7	"The DuBois City Council was very quick to
8	respond to the Injection Well Safe Water Act,
9	which was introduced under House Bill 2350 in
LO	April 2012." A municipal water service
L1	provider "As a municipal water service
L2	provider," excuse me, "it was felt that this bill
13	would ensure necessary water protection."
L 4	"After earthquakes were linked to injection
15	wells near the Youngstown area, the state of Ohio
1.6	adopted regulations to address disposal injection
17	wells and it is strongly urged that we do the
18	same. Our water is one of our most valuable
19	resources and we must take every step necessary to
20	protect it.
21	"Your time and consideration concerning these
22	comments are greatly appreciated."
23	MS. JOHNSON: Sir, can you state your name?
24	MR. VOLPE: David Volpe, Planning Commission

for the city of DuBois.

1	MS. JOHNSON: Thank you.
2	Please state your name.
3	MS. MOORE: Hi, I'm Nancy Moore, and I chair
4	the planning commission of the City of DuBois.
5	"The waste injection well proposed by
6	Windfall Gas and Oil and the Hoovers on the Zelman
7	property in Brady Township is not just a Brady
8	Township concern. It is an issue for the DuBois
9	area, Clearfield County and all of Pennsylvania.
10	"Historically, industries have targeted small
11	municipalities with limited financial resources
12	and multiple municipal borders for locating this
13	type of unacceptable land uses which we call ULU.
14	They take advantage of a natural reluctance of
15	municipalities to influence land uses in adjoining
16	municipalities.
17	"Five area municipalities with adjoining
18	borders worked together to formulate the Northwest
19	Clearfield County Regional Comprehensive Plan.
20	Representatives from the City of DuBois"
21	(Discussion off the record.)
22	MS. MOORE: "Representatives from the City of
23	DuBois, Sandy Township, Brady Township, Huston
24	Township and the Borough"
25	MS. JOHNSON: It's not working, just wait a

1	second.
2	(Discussion off the record.)
3	MS. MOORE: "Representatives from the City of
4	DuBois, Sandy Township, Brady"
5	(Discussion off the record.)
6	MS. MOORE: "Township, Huston Township"
7	(Discussion off the record.)
8	MS. MOORE: "and the Borough of Falls
9	Creek invested in two"
10	MS. JOHNSON: It's off.
11	(Discussion off the record.)
12	MS. MOORE: "invested in two years of
13	planning meetings and the hiring of a professional
14	consultant with the vision of future area growth.
15	The comprehensive plan was unanimously adopted by
16	all five municipalities in 2009.
17	"The Northwest Clearfield County Regional
18	Comprehensive Plan clearly identifies the Highland
19	Street area as a village. This neighborhood
20	residential designation of Highland Street as it
21	crosses the boundaries of DuBois, Sandy Township
22	and Brady Township has been longstanding. Sandy
23	Township and Brady Township neighborhoods are
24	predominantly single family homes with onsite
25	wells and septic systems.

"If the proposed Hoover Zelman waste disposal well is allowed to locate in this long established residential area, it will be the first such well located in a residential area in Pennsylvania.

This action will negate countless hours of hard work on our area's future land planning and will open the door for more of these unacceptable land uses in residential areas.

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"We have a unique opportunity for local governments to retain some control over land use within their municipalities. It is time we stood together as municipal governments with a strong participation by county governments.

"Consider this a request to enter the

Northwest Clearfield County Comprehensive Plan as

part of the comments and testimony."

There are some things that are featured in the plan. One is the need to preserve the character of our residential neighborhood; the need to provide more housing; the need to extend water and sewer lines where possible to developable areas; the need to protect our water sources both municipal and on site; the need to encourage development in appropriate areas by enacting land use ordinances.

The waste water injection well proposed by 1 Mike Hoover on the Frank Zelman property in Brady 2 Township is in direct conflict with these plans. 3 Can I ask a question? It's my understanding 4 and I don't have it, you know, completely 5 verified, that it was proposed at a meeting or put 6 out there at a meeting with Windfall that this 7 being identified as the Zelman Well No. 1, they 8 said they expect more injection wells to be 9 permitted. What information does DEP have on 10 those proposed doubling of amounts of waste water, 11 truck traffic and the expressed intent to increase 12 the number of wells by modifying the application 13 14 and amending it? And they state in the permit as I read it 15 that they are required to test water wells within 16 2,000 feet prior to construction and only annually 17 after that? On a well that's on three acres of 18 leased land, there's just too many questions out 19 20 there. Thank you. MS. JOHNSON: Are you going to turn in your 21 comments? Thank you. 22 23 MS. MOORE: Thank you. MS. JOHNSON: Are there any Clearfield County 2.4

commissioners who wanted to speak?

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MR. SOBEL: Thank you, members of the panel, ladies and gentlemen, my name is John Sobel. I'm the chairman of the Clearfield County Board of Commissioners.

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I'm here with Joan McMillen and Mark
McCracken, my fellow commissioners. I'd like to
read into the record, if I may, a record we have
already mailed out to the Environmental Protection
Agency, and it is addressed to Mr. Platt, the
gentleman at the table.

"Dear Mr. Platt: Please be advised that we, the Clearfield County Commissioners, are opposed to the construction of the injection well," in Brady Township. "The proposed well is to be located in a residential neighborhood stretching along Highland Street, which extends across two townships and up to the City of DuBois. The potential for contamination of the residents' water supply and potential impact of increased truck traffic upon their quality of life causes us to request that you deny final issue of the above draft permit."

We are aware that issues of traffic are within the purvue of the Commonwealth, but this is a practical problem that the citizens of Brady

Township and the additional municipality will have to deal with if the injection well is approved.

"Additionally, we are troubled that the process of fulfilling the EPA's monitoring requirement of the proposed well would be self-reporting in nature. The inmates are, in effect, being asked to run the asylum. There is just too much potential for critical information not to be shared with the EPA, as what happened at the Bell Township, Clearfield County, injection well site."

Finally, "We believe the fracking fluids are better treated and recycled as opposed to being injected underground. Modern treatment plants have the technology to properly dispose of frack water such that the gas industry can develop an environmentally safe manner.

"We absolutely support the development of Clearfield County as a leader in the production of energy in the 21st century. However, it must be done safely and not at the expense of our citizens' quality of life. Therefore, we would ask that you not approve the proposed permit."

And just two points of summary, ladies and gentlemen. Thank you for the opportunity to speak.

1	Two points: Number one, we do not believe
2	that the operations model is one whereby tracking
3	of what's going on with the well can be safely
4	handled where information is being provided to
5	EPA. We feel it's better handled with the EPA
6	physically retrieving information.
7	Secondly, in the 21st century we do believe
8	that there is technology such that produced
9	fluids, frack water, brine water can be properly
10	disposed of. That's with treatment, that's with
11	filtration, things of that nature. Although
12	federal regulations do permit injection well
13	technology, that's technology that was developed
14	in the 1930s and basically we would like that
15	issue disposed of in the 21st century with 21st
16	century technology. Thank you very much.
17	MS. JOHNSON: Is there anybody else here from
18	Brady Township?
19	What about Sandy Township? Oh, I'm sorry.
20	MS. BEATTY: I'm a Brady Township supervisor
21	and we're going to have Wilson Fisher for my
22	name is Darla Beatty.
23	MR. FISHER: I'm Wilson Fisher, Brady
24	Township engineer. There's a copy for the record.
25	The several points that I'd like to

address and the first interestingly John Sobel just referred to and I feel as though this is a primitive or archaic technology for disposal. As John indicated, it goes back a long time. We've advanced a long way with distillation, reverse osmosis, ultra-filtration technologies, and even others that are on the drawing board.

The disadvantage of permitting a system of this old style, it's a cheaper methodology so it encourages the gas industry to continue to use what's cheaper. The advanced technology is a little bit more expensive, but if we had our druthers from an environmental perspective we would embrace the current technology rather than the old technology.

The casing and the cementing of the first ground water protective string is scheduled for 170 feet. I feel more appropriately and recommend that it be at least 350. The hillside, the hilltop that the well is scheduled for is about 150 feet above the homes in the nearby valley area and some of the private wells are almost 200 feet deep. So the first string should be greater than or at least equal to 350 feet.

Also, the long string casing which extends

from the surface to the full depth of the well about 7,300 feet, I recommend that it be cemented back to the surface instead of 5,000 feet below the surface and then we'd have more complete isolation.

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My next point goes to the legality of the injection fluids which obviously are going to disperse more widely than just the well area, and the question is: Does the -- are our subsurface rights being infringed upon? I didn't see any reference to a lease or other legal instrument that expresses the right of the company planning to venture to be able to inject fluids under adjoining property to which they are certainly going to migrate into and this is a serious legal matter, especially in Pennsylvania where frequently subsurface rights are owned by others, and there may be serious legal issues of trespass and perhaps even unlawful taking of rights by contamination of resources that would be prohibitive to recover by the rightful owner if and when they elect to do that and if there is no lease that grants that legal right.

EPA is the regulatory agency obviously in charge of issuing the permit, but I didn't hear

EPA's role from an inspection basis, especially during the construction phase and through random inspections during the operation phase. I presume that the agency does that.

MS. JOHNSON: Um-hmm.

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MR. WILSON: But I didn't see that so the -whenever a construction project is undertaken of a public works project or an industrial activity of significance, a performance bond is required. I see that none has been asked for or offered in this particular case, and it's an industry standard to compel a performance bond. The bond's characteristics would be specific to a financial guarantee, and in this particular case if the well as developed is guaranteed to be consistent with the plan; secondly, if the well fails, there's adequate resources to repair or seal it, even if the company goes out of business or goes elsewhere; private supply owners have a source of funds, if necessary, to build a public water line to their home and; that nearby public water wells owned by the Brady/Troutville Water Association are adequately at least financially protected. I didn't hear anything about a bond. I'd like to see a bond provision developed.

Lastly, given the public and the municipality 1 concern and anxiety, as well as the apparent 2 diminishment of value of the nearby private 3 properties, one would have to question and has 5 questioned, why here? And I think it was stated before and I'll 6 reinforce that. Pennsylvania has thousands of 7 acres of public lands, that would be a much better place for it. It's out of sight and certainly not 9 next to private property. Thank you. 10 MS. JOHNSON: Thank you. 11 MR. FERRARACCIO: My name is Blaise 12 Ferraraccio and I'm the solicitor for Clearfield 13 County. I'd like to begin by offering to the 14 panel today an opinion that was written in the 15 Courier Express today by the editor Denny Bonavita 16 and I will just read the caption, "Injection Well 17 Won't Dispose of Anything. EPA Should Deny 18 Permit." 19 (Discussion off the record.) 20 MR. FERRARACCIO: If you were to permit this 21 injection well, in my opinion and in the opinion 2.2 of the supervisors of Brady Township, you would be 23

permitting an industrial outhouse. Instead of

treating the problem, you're burying the problem

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thousands of feet underground.

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Clearfield County has become the dumping ground of Pennsylvania. You spoke earlier of the well that failed in Bell Township; we have this well that is presently before you individuals.

20 miles away in Elk County you have one of the largest landfills in Pennsylvania, Greentree, and there are presently two other landfills that are attempting to be permitted in Clearfield County.

It's central Pennsylvania. We're turning into the dumping ground.

I was a former teacher and I always taught my students, those who do not know their history repeat their history, and alls we have to do is to go back a hundred years ago and we are still dealing with the red, the green and the purple waterways that have been ruined because of the mining industry and we don't want that to happen again to our children and to our grandchildren.

Presently Brady Township is in the process of securing a \$6 million loan from the U.S.

Department of Agriculture to put a sanitary sewer system to eliminate the poisons from the septic tanks, from the sand mounds that go down into the earth. So on the one hand the government is

saying we want to eliminate this, but on the other hand we're speaking of injecting 33,000 barrels of contaminated water that none of us would drink down into this hole, down into the outhouse.

We speak of brine water, that's a nice word to use, but what does this brine water contain?

It contains toxic chemicals that is a mystery.

People don't want to tell what these toxic chemicals are, but yet we make it sound nice and warm and fuzzy as brine water and that's what we're putting down this hole.

It's a cheep way to dispose of it, a very cheap way to dispose of it. You pour it down a hole and you forget it. Out of sight, out of mind. Why don't we treat it? We treat our sewage, why don't we treat the brine water? Why don't we treat this, take the chemicals out, put it in a landfill and then recycle the water that is there?

Finally, I ask each and every one of you, if you had the opportunity to purchase a home within the radius of this well, ask yourself in your heart, would you buy a house there? Would you buy a house there? No. If you had a water well, no. None of you would, none of us would, and these

poor people who are in the immediate vicinity as 1 well as the surrounding area, their property values are going to go down to zero because no one 3 will want to buy, no one there wants to come close 4 to their properties. 5 This area has been undermined for years and 6 years and years. The City of DuBois has just 7 drilled three or four new injection wells to help 8 supplement the reservoir. 9 MS. JOHNSON: Water wells. 10 MR. FERRARACCIO: Water wells, thank you, I 11 12 apologize. Brady Township is supplied by water wells, 13 all right, and the fear is that what goes down has 14 to come up, and no one in this room and none of 15 you individuals here can sit here and tell us 16 where this water is going to go. Is it going to 17 go up? Is it going to go out? Is it going to 18 go down? And on behalf of Brady Township I 19 respectfully request that you deny this permit. 2.0

MR. BEATTY: Again, my name is Ronald

Beatty. I'm against the injection wells for several reasons. I don't even think we can comprehend the truck traffic that we're going to

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Thank you.

encounter nor the problems from it.

We also have some noise ordinances in this township which people in this community would have the opportunities to complain to the township, and we as supervisors would have to try to appease you guys with that ordinance. So, therefore, the amount of truck traffic, I can't even think we can comprehend how much problems we're going -- it's going to be created from this.

And I just listened to EPA say that this goes back to local ordinances. I've been always told that EPA and DEP supersedes local governments; so, therefore, I'd kind of like to have them answer where our noise ordinance comes into play. What we're going to do with the truck traffic, how much problems is going to be created from it?

There's schools out on this road that's only about two miles from this injection well, and I still feel in Brady Township we don't have any room for screw-ups. In other words, with the amount of people that's on our water system, we can't afford -- everywhere you go in Brady Township you have iron waters and right now we need to probably drill a new well which is going to cost us about \$100,000 after we go through all

the EPA and DEP studies, and with the people out of Highland Street, yes, probably Brady Township water system could probably supply the water, but where is the money going to come from to do this?

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And we also had a gentleman in Brady Township that had lost his water earlier, probably about a year or so ago, he lives out on McGees Mills Road. He was over 2000 feet away from the gas wells. As soon as they started drilling, they lost the water, and of course he went to DEP and because he was out of the limits, they didn't want to do anything for him. The poor bird had to figure out how to get funds to run city water to him which was going to cost quite a bit of money, but fortunately after they quit drilling for whatever reason the water came back, but he never had any problems with that prior to that.

So I don't feel that we have any room for screwing up here. Our water lines go almost into Curwensville across the Belgers Rock Road. It supplies Troutville Borough with water and there is no room for error. Thank you.

MS. JOHNSON: Thank you.

MR. MUTH: I'm Charlie Muth, Brady Township supervisor. I want to commend the solicitor and

engineer for the excellent job they've done with
their comments. I don't have a lot more comments
to make, but I do have a couple questions. And if
I missed this in the permit application, I'm
sorry, but I didn't see it.

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One of them pertains to the contaminating of the fluids to the drinking water system. If by chance the drinking water is contaminated, I agree with our engineer, there should be a bond or something in writing that states that Windfall will be 100 percent responsible not only for furnishing those people water on a temporary basis, but putting water there on a permanent basis.

I'm sorry again if it's in there, I missed it, but I couldn't find that in the application.

I'd appreciate that that be looked at as one of the concerns.

I notice also in the application that fracking of this well is not to be -- there's not going to be any fracking of this well.

I have a question on the area of injection.

How does absorption come into this picture?

You're pumping fluids down a hole into a

formation, it's still under pressure and through

1	that pressure there's got to be some absorption,
2	and if absorption takes place in the formation,
3	how far out will this absorption go? And if it
4	goes out far enough, is there a chance of it
5	showing up in other residential type wells outside
6	that quarter mile area, and maybe even some of the
7	plugged areas where it could force itself back out
8	of the cemented portion of the piping in those
9	older holes?
_0	I do understand the plugging of the wells
1	today are a lot better than what they were back in
2	the '50s and '60s, but there is a chance and we
L3	know well, at least I know there has been times
L 4	where there has been a suppression of deep holes
L5	where they have been leaking and companies have
L6	been going in and replugging them.
L7	That is my concern. Thank you.
18	MS. JOHNSON: Thank you. Are there any
19	representatives from Sandy Township?
20	We'll call the City of DuBois next.
21	MR. LaBORDE: My name is Brady Laborde and I
22	am a supervisor for Sandy Township. I've also
23	written a letter to Mr. Platt, and I'm going to
24	read a portion of the letter.

I am opposed to the drilling of Zelman No. 1

injection well in Brady Township, Clearfield

County for the following reasons. According to
the map that was supplied by Lional Alexander,
professional land surveyor, there are seven other
gas wells in that area within 1,800 feet of the
proposed injection well. I understand that maybe
three of these are plugged, and whatever that
means I'm not real sure, but there are also deep
mines, a shaft No. 1 and No. 2, located beneath
this area. It's my understanding there are
numerous private water wells also within the
immediate area.

2.2

My concern is that the pressure that is applied to the Zelman well No. 1 while injecting the waste water will make its way to the surface in one of these areas described in the above paragraph and cause contamination. The seven wells mentioned above may have been drilled as far back as in the 1950s, and even if they were properly sealed at that time, over the past years the seals could have eroded.

Now, I heard -- it's not part of this letter -- that they have to plug those wells, but what does plugging mean? That needs to be defined.

I know that there are some Oriskany wells
that are 7,000 feet deep and there is also shallow
gas at about 3,500 feet. So plugging a well,
plugging the Oriskany gas off and allowing the
shallow gas to continue, that's a question that
needs to be answered.

The mine water from shaft 1 and shaft 2 comes to the surface on the DuBois Mall property and runs into Sandy Lick Crick. This is alkaline water with a pH of approximately 7, which is pretty good water.

If the pressurized water from the injection well makes its way to any of these sources listed above through any type of method, it will be a disaster especially those who live close by and obtain their drinking water from the ground.

I respectfully request that the permit for the proposed Zelman injection well No. 1 be located in Brady Township, Clearfield County be denied.

Respectfully submitted, Brady Laborde.

I also have a -- I've seen a map, I got a copy of the map, it's not a very good copy, but the map of the underground mine that we talked about is available from the DuBois Historical

1	Society, and that water, if you go over to the
2	DuBois Mall right behind the mall, I believe it's
3	the Army Corps of Engineers come in there and put
4	two caps, one cap where the old mine shaft caved
5	in and the other cap is where the water comes up
6	out of the well and surfaces, runs under the
7	DuBois Mall and into Sandy Lick Creek, they had to
8	cap them. It's just like big platforms about a
9	size of a forth of this room over there.
10	MS. JOHNSON: Thank you. Did you submit the
11	maps before of the 11 wells?
12	MS. LaBORDE: No.
13	MS. JOHNSON: Could you do that, please?
14	MS. LaBORDE: Okay.
15	MS. JOHNSON: Thank you.
16	City of DuBois?
17	MR. REPINE: I am from the DuBois School
18	Board. My name is Tom Repine, I am the president
19	of the DuBois Area School Board and we have some
20	concerns because one of our schools lies within
21	two miles of the injection well. That's the
22	Highland Street school.
23	At three and a half miles the way the crow
24	flies you have Oklahoma Elementary which has a
25	student population of well over 400 that lies over

a number of these mines that Brady and some of the other people have referenced to. Our major concern is the welfare of the students and the residents of this area.

2.2

And what are we getting for this injection well? Well, we're probably going to get lower property values which is going to cut into taxes with the DuBois Area School District. It is very close to the city and it could even affect property taxes or property values near the city. I know that's kind of a ridiculous way to look at it, but you're going to have an injection well that's going to probably be worth millions of dollars which cannot be taxed because we can't tax anything under the ground.

So like I said, our major concerns are the students and the people of this area and we have two schools that are right in kind of the zone. So thank you.

MS. JOHNSON: Was there anybody here from representative Gabler's office?

MR. GABLER: Thank you very much. My name is Matt Gabler, I'm the representative for the 75th District which covers all of Elk County and the northwest portion of Clearfield County which

includes Brady Township as well as the townships of Huston, Sandy and Union, and the borough of Troutville and the City of DuBois. I'm here tonight to express my opposition to the proposed underground injection well site here in Brady Township.

2.4

"One of the central themes of the EPA's underground injection control program is to prevent the contamination of drinking water supplies. In fact, the EPA is required under the Safe Drinking Water Act to develop minimum federal requirements in order to prevent contamination of water supplies from injection wells.

"In Pennsylvania the EPA has primacy over the premitting of disposal wells in the state, and so I urge the EPA to err on the side of caution when considering the application for the site here in Brady Township.

"I have supported the safe development of our natural resources in Pennsylvania, but in doing so, I have advocated for the proper restrictions on this industry so that the protection of our citizens and the environment is not compromised.

"This proposed well presents several challenges that must be considered before the

process moves forward.

2.5

"First, as indicated in the plat that accompanied the permit application, nearly two dozen homes are situated within a quarter mile of the proposed well site. Each of these homes relies on drinking water wells for their drinking and household water. Four of these homes have residences within a thousand feet which constitutes the liability radius, or area of rebuttable presumption, for oil and gas wells under Title 58, Chapter 3218 of Pennsylvania state law.

"Nearby families depend upon clean ground water to meet their everyday needs, and given the proximity of this proposed disposal well to their water sources, it is not unreasonable to be concerned about potential damages that could result if the well were to be installed at this site.

"Second, while I recognize that the EPA's primary focus is on subsurface geology, it is important to note that on the surface the proposed well site is up gradient or uphill from the residential water wells that surround it.

Therefore, the possibility that operations at the

top of the hill could affect the surrounding 1 propertiies at the base of the hill, or at least 2. place them at greater risk, must be considered. 3 "Finally, it must be pointed out that while 4 the area is rural, it is still a residential 5 neighborhood. The access to the site by truck 6 would be seriously disruptive to the neighboring 7 residents who will be affected. The risk of an 8 accident or mishap at some point over the life of 9 the well is unacceptable in this proximity to a 10 residential area. There are better places for a 11 well like this. This site in Brady Township is 12 not ideal, and on behalf of my constituents, I 13 would argue that it should not be approved." 14 And I thank you very much for your time this 15 16 evening. MS. JOHNSON: Are there any other elected 17 officials present? 18 Then with that, I would like to start calling 19 residents in the order in which they signed in or 20 as close as we can with the sheets that we have. 21 Duane and Darlene Marshall, please? 22 MS. MARSHALL: Thank you all for coming 23 tonight, I appreciate it. 2.4

I'm going to present to the EPA a binder that

summarizes all the concerns of the Highland Street

Development Extension. So a lot of the people in

this room have helped to develop this binder and

also there's some written testimony from people

who could not be in attendance.

2.0

2.1

For my testimony I'm going to summarize just a little bit of what's in the binder.

I started out learning about this situation at a neighborhood meeting and so then from there I started as a librarian who has a master's degree looking into what I needed to know as a resident. The first thing I did was I went to a conference and at a library conference I met a professor who wrote a book called Earth. Richard Alley is a geology professor from Penn State and he asked me what happens when you push on a desk, and gave me that example, and told me that evening that eventually something has to give if you push on it. So his example made me start thinking and in his book he says since the 1960s pumping waste underground has caused earthquakes.

So during this last year I've researched and learned so much as a librarian. I got the job to pull all this information together for the residents of Highland Street Development and so

I'm presenting the binder for the residents of all of our findings, and there is a lot.

My testimony is 17 pages long so we do not want to be here all night reading it. I have four pages of a cover sheet summarizing everything that is in the binder. These testimonies and attachments are supporting documents along with pictures.

This written testimony covers the need for more time to review the permit application and respond. Local leaders didn't have enough time for meetings and the engineer didn't have enough time to review the geology, so we need more time.

There was no one mile topographic map submitted in the permit application. The location of my home is outside of the quarter mile radius. My husband is going to show where my home is. This is in the permit application, it's the map, and my home is right outside the quarter mile radius right here (indicating). So right behind my home there is a deep gas well into the Oriskany.

We found in the permit application that from surface down 1,160 feet, that is air space. I do not want anything coming up into my yard, but also

we found that there are five of these deep gas wells in our area, not only in my yard -- not in my property, but behind my yard. There's one down here (indicating) and these are the two I'm going to point out because in the permit application they show a fault line, these fault lines are in a triangular form. At the end of this fault line you can see that these deep Oriskany wells reside.

If these casings have been perforated over time, they'll have worn out and this waste could leak up if the casings aren't plugged properly.

There are also coal mines in this area and those coal mines sit right here (indicating), and as you can see, if the fault lines as the permit application states confine the waste to this spot (indicating), it goes right towards the deep gas wells and the coal mines. Thank you.

As you heard from Brady Laborde, these coal mines go into -- eventually they can come out at the Sandy Lick Creek at the DuBois Mall. The coal mines are not addressed appropriately in the permit application.

Something else I learned when I was writing my testimony is the significance of the Onondago formation that has a fault in it. In the binder

there is information on the Onondago fault received from a Penn State professor. Those faults are in the containing layer above the Oriskany.

2.4

If those faults are there, that Oriskany is where they say the fluid will go. If the faults are in the formation above that is supposed to contain the waste, this fault may make the waste come up. So faults on the permit application are also a concern and the faults in the Onondago formation.

Right near my home, I showed you the map, there are 16 water well sources right within that area. They are not in the quarter mile review.

So I ask that the quarter mile review be expanded. If it was toxic waste as we believe it is, it would be reviewed for two miles and two miles we would be into the City of DuBois, and if these 16 water well sources would be affected by any leak from these deep gas wells improperly plugged, we would have to find water.

There are 26 old gas wells in a one mile radius, the map is in the binder, with at least five deep gas wells.

There was no map in response to the

deficiencies showing water sources outside the quarter mile radius. I believe there was a list of property owners, but this was on the map.

What is in the binder is the cost to replace the contaminated water. Sandy Township gave us an estimate for well over a million dollars in the end because you have to go along the highway, that's a state highway, plus every home would have connection fees which would be well over \$3,000 a piece if you're a hundred feet from where you would connect.

The plugging may cost well over \$60,000 for a gas well that goes 3,000 feet down based on a Carnegie Mellon study and this is more for over 7,000 feet.

The United States General Accounting office found the need to review financial assurances for deep injection wells, and the information is in there, and this is certainly true for our area to decide what the financial assurances should be.

Highland Street Extension Development has 57 wells, five springs and one cistern. Brady township has over 800 customers; City of DuBois has over 4,485 customers.

Remember the two mile radius? We know in the

1 1960s in Erie waste went underground for five
2 miles and came up in 1968 and it came out five
3 miles away. If waste goes two miles away, two and
4 a half, we are to our city water source, we can't
5 take that chance.

2.0

So the City of DuBois has over 4,485 customers. Sandy Township has 684 and City of DuBois is at 3,801. They also serve the Sykesville area because I know my family lives there, and in a one mile radius we have 107 water well users still in use. Most of the homes have a water well in their property with 370 properties in a one mile radios.

In the binder there's a list of all the Highland Street Extension Development residents and their water sources. In the binder there's a list of every resident in a one mile radius and their water source, if we were able to identify it, and pretty much we were, thanks to a lot of people.

Property values are at 17 and a half million dollars in a one mile radius.

The proposed site is near headwaters of local water sources.

This area has deep gas wells all over and

1 needs further study.

2.0

The Caledonia Syncline, there's a map in the binder, goes through this area and brings fluids to the surface, and it looks like that syncline goes right through our area.

We have questions on low permeability and I believe one of our residents is going to address low permeability, but it's a very big concern because it was well lower than the lowest EPA noted in the dificiencies. I believe it was 6.1 millidarcies.

This is just a brief summary of what the residents have already found in a short amount of time. I want to thank our residents who came out to show their support against this and to have this application denied. Thank you to everyone.

The three application dificiencies we find lacking: One, coal mines not addressed in the application; two, no one mile topographic map, and; three, no map of water sources outside the quarter mile review in response to the dificiencies.

If you have any other questions, it's in the binder.

MS. JOHNSON: Thank you.

1	Okay, Valerie Powers is next.
2	(Discussion off the record.)
3	MS. POWERS: Good evening, my name is Valerie
4	Powers, and I live within the quarter mile area of
5	the review.
6	When this injection well leaks, not if,
7	either the overflow or the underneath the surface
8	will flow through the bedrock formed directly to
9	my well. The toxic fluids will be channeled into
10	my water well just feet away. That's not
11	acceptable. We have good water.
12	It also states in the permit application that
13	my water well will be tested while drilling and
14	filling the injection well. No one from Windfall
15	Oil and Gas asked permission to test my well
16	water, but printed it in the permit application.
17	That's not acceptable. It is not acceptable that
18	the well owners in the area are forced to pay to
19	test their water and feel unsafe to drink it on a
20	daily basis.
21	Residents have been told by Brady Township
22	that they cannot afford to bring them water when
23	the contamination happens. When we purchased our
24	homes, they came with clean water and we want it
25	to stay that way. If this well is permitted, I

1	will never feel safe drinking a cup of water
2	again. I ask respectfully that you reject this
3	permit. Thank you.
4	MS. JOHNSON: Marianne or Richard Atkinson?
5	We ask if you're giving written testimony that you
6	give a summary of it rather than reading it the
7	whole way through. That would be great, thank
8	you.
9	MR. ATKINSON: My name is Richard Atkinson.
10	My wife and
11	MS. JOHNSON: Can you push the mic up just a
12	little bit?
13	MR. ATKINSON: My name is Richard Atkinson.
14	My wife and I have a property and we own about
15	15 acres of the land inside the area of review,
16	and I'd like to respectfully disagree with Karen
17	Johnson. She said that EPA has jurisdiction over
18	the casing and cementing of the well, but I gave
19	myself a headache and I read Act 13 as best as I
20	could and it defines in there that there are three
21	kinds of wells. One is an unconventional well,
22	another is a conventional gas well and the other
23	one is a plain well, and a plain well includes
24	disposal wells.

And if you read further down, it says to

drill a disposal well you have to have a DEP permit, which Mr. Hoover probably knows, and if you have a DEP permit you have to follow the guidelines in the DEP drilling regulations, and the EPA draft permit doesn't have that casing plan that Mr. Hoover presented specified in it and I believe that the permit should be changed to have a casing plan as Mr. Hoover proposes.

2.0

There are two other points where I disagree with the DEP draft permit. One is a relatively small disagreement, but it could be important.

The statement of basis says that the Onondago confining layer for the well is 50 feet thick. I went through all the well records of the wells surrounding the area of review and came up with an actual thickness of the Onondago containing layer to be between 14 and 18 feet, and in Mr. Hoover's plan over there he has 14 feet for the thickness of the Onondago, not 50 feet.

The other thing is the EPA claims they did a calculation of the zone of endangering influence and I looked up in the code of federal regulations and there's five assumptions you have to make to do that, assuming that's the way they did it.

One of them is that the home of the injection

zone is homogenous and isotropic, and another one -- number two is the injection zone has infinite area extent. You can see on that map that they had up back there that has since fallen down there's two faults that go right through the area of review and in the statement of basis it says, "The permittee submitted and EPA Region II has also obtained geological information of public record which indicates the possible presence of several faults within one quarter mile. Historic gas production results in the vicinity of the injection well site have shown that nearby faults appear to act as a geologic trap for gas production," and on down it says, "This would indicate that the faults are not transmissive to gas migration and would also indicate good confinement of injection fluid and existing formation fluids as well."

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Based on that I concluded that this circular area of review which is based on the injection fluids radiating from the injection well is invalid. There's a V shaped confinement zone that opens up towards the west and it's going to cause all the fluid flow -- and the Chert/Oriskany is already full of fluid. I know that because

1	there's a gas well on our property and they pump
2	fluid out of it all the time. Well, it's not
3	running now, but anyway, that's another story, but
4	I know it's probably already full of brine down
5	there.
6	So any brine that they inject is going to
7	have to push away the brine that's already in
8	there and it's going to go west right over to
9	Darlene's house and Darlene has the Carlson well
10	up behind there and that well is famous because
11	you can go up to the vent and it smells terrible.
12	I don't know what's coming out of there, methane
13	isn't supposed to have any odor, but there's a bad
14	odor coming out of there, and supposedly you can
15	light it.
16	So I would like to see before this permit is
17	granted, if it is granted, I would like to see the
18	technical corrections that I mentioned made to it.
19	Thank you.
20	MS. JOHNSON: Are you going to turn those
21	in?
22	MR. ATKINSON: Yeah, Marianne will turn it
23	in.
24	MS. ATKINSON: My name is Marianne Atkinson.
25	I'll briefly bring up four subjects, just

summarize them, and just give a couple of excerpts from the UIC permit application. It states, "Submit a topographic map extending one mile beyond the property boundaries," and "Within the area of review, the map must show the following:

Mines (surface and subsurface)."

Well, I went to the DuBois Public Library and examined the permit application and did not find a single topographic map extending one mile beyond the property boundaries as required in the permit application. Furthermore, there are approximately six acres of subsurface mines within the western side of the area of review. Nowhere in the permit application materials is the presence of these mines shown on a map or even mentioned. These subsurface mines are continuous for several miles out to the DuBois Mall where ground water is discharged into the Sandy Lick Creek. You can see this map probably at the DuBois Historical Society, it's a very old map that shows the extent of the mines.

Right here the Zelman property actually looks like it's under Highland Street Extension on this side of the road or real close to this side of the road, that's probably within 400 feet.

1	MS. JOHNSON: Are you going to turn this map
2	into us?
3	MS. ATKINSON: Who owns this map?
4	Val, can they have this map, can EPA have
5	this map?
6	And they also mentioned the discharge coming
7	up by the DuBois Mall. Where this shaft comes out
8	at the DuBois Mall there is big cement caps over
9	them, they're next to the Italian Oven if you ever
10	go there, take a look at them. Therefore, since
11	there is no single topographic map extending one
12	mile beyond the Zelman boundaries and no
13	indication there are subsurface mines within the
14	area of review, the application is deficient.
15	And this is about injection fluid, the draft
16	permit states that "the permittee shall be
17	restricted to injecting fluids produced solely in
18	association with oil and gas production
19	operations." Well, in the permit application
20	Windfall says that they intend to add additional
21	fluids to treat the injected fluids. These fluids
22	are FE Ox Clear and Alpha 2278W. Windfall says

that one is an oxygen scavenging agent and the

other is for corrosion control. Windfall will

also add Alpha 3207 after the waste fluids are

23

24

filtered, which is a corrosion inhibitor before injecting. Since the draft permit states that Windfall is only permitted to inject fluids produced solely in association with oil and gas production operations, adding the additional fluids would constitute a violation of the permit.

And the third one is fractures of confining zone in the area of review. There are two deep conventional wells that are just outside the area of review which also go into the Oriskany formation which is where they want to inject the fluids. Both of these deep gas wells have been fracked.

The draft permit for the injection well states that the injection well shall inject only into a formation that is free of known open fault or fractures within the area of review. How can we know that the fractures from these fracked gas wells do not compromise the confining layer and, therefore, violate the disposal injection well construction requirements? These fractures could provide a conduit for toxic injected fluid to work its way into USDWs, which is underground sources of drinking water, which supplies private water

1 wells.

The last thing is USDW replacement or remediation. The owners of water wells within the actual zone of endangering influence have no assurance that their water supply will be replaced or remediated if their water wells are contaminated by the construction, operation or plugging and abandonment of the disposal injection well. It could take many years for the brine or frack flowback from the Zelman disposal injection well to work its way through the strata to possibly contaminate USDWs.

So this brings in my questions. Is the DEP or EPA responsible to enforce the replacement or remediation of ground water which is used in drinking water wells if it becomes contaminated from toxics fluids?

Will the drinking water be replaced or remediated for an indefinite period of time?

Will the drinking water be replaced or remediated for an indefinite period of time at no cost to the water well user?

Who will be financially responsible to replace or remediate drinking water if Windfall Oil and Gas or any other subcontractors who work

1	for Windfall Oil and Gas go bankrupt?
2	Will the water well owner need to hire an
3	attorney and go to court in order to be made whole
4	if their water is contaminated?
5	So I have many details supporting what I
6	mentioned and what my husband Richard has
7	mentioned, so thank you.
8	MS. JOHNSON: Rona or Ted Crytser.
9	MS. CRYTSER: My name is Rona Crytser. This
10	will be short. My specific concerns deal with
11	contamination of the underground sources of
12	water.
13	We live within a fourth mile radius of the
14	proposed injection well. In fact, we live
15	directly across the street from it. When an
16	accident happens, who is responsible for our
17	water? What do you propose we do then? We are
18	in a residential area here with no public water
19	access. Why in the world would you allow a toxic
20	waste dump to be located here?
21	MS. JOHNSON: Darryl Beatty?
22	MS. MARSHALL: He already spoke.
23	MS. JOHNSON: Okay, thank you.
24	Lester Wacholb?
25	(Discussion off the record.)

1	MS. JOHNSON: And next will be Michael
2	Murray.
3	MR. WACHOLB: My name is Lester Wacholb, I'm
4	president of the Brady Township/Troutville Borough
5	Water Association and the nice thing about being
6	last anything I say is repetitious, you know that,
7	but I work with an engineer over in Huntington,
8	Pennsylvania, he's been with me 48 years.
9	I hear these people talking 20 and 30 years,
10	I'm 48, but I deal with water, water wells. Brady
11	Township system comes off of deep wells. We have
12	one in Troutville that's 50 feet deep. It was
13	636. We had to plug the bottom part of that off
14	because of salt.
15	We have one on the London property here in
16	Luthersburg that is about 336, on the Beatty
17	property, it's 450 or, 436, I beg your pardon.
18	The email we sent Mr. Platt was from our
19	engineer. We wanted to address a couple of items
20	I know you're all concerned mostly for your
21	water for one thing and then of course the
22	valuation of your properties. We know that's
23	going to affect them. So the email we sent to
24	Mr. Platt, we've I'm not going to read it

because it's just strictly repetitious with what's



already been mentioned, but I deal with water wells, that's my pay grade. I don't go deep, I stay up high, so I can speak from that angle, and I think I know what I'm talking about because I've drilled a lot of wells.

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The first well we drilled here in the Brady Township area was 700 feet and guess what? About one gallon a minute, that's what we call dry. Now, how do you run a town on a gallon a minute? It's pretty hard. So we had a gentleman come up, he was a ground water geologist come out of Harrisburg and he come up and said gee whiz, Mr. Wacholb, there's no water where you drilled. I said I know, I hope you didn't drive from Harrisburg just to tell me that. He said you drilled in the wrong spot. He said you got to go down in Mr. Halster's pasture field where those two ravines run together, that's double fracture traces there and I can guarantee you'll have more water than you know what to do with. That's about 800 from that other well and that gentleman is certainly right.

So all of our wells is drilled on fracture traces and you have them there. Our fracture trace as near as we can tell is quite a bit to the

northeast from there if it runs straight across, and most geologists tell us fracture traces run straight as an arrow from what I understand.

1.5

But you are concerned about your water and I am, too, and it's very important if a well is going to be spotted and used that that water string be put in properly, and that's one of our questions to the engineer. We didn't see the picture, why he has 170 foot string of pipe in there is beyond us. We would look at the water string as that 1,000 foot, but you got to 170. I don't know if you can answer that or not, but he shows two water strings really.

MS. JOHNSON: There are actually three strings of surface casing for us -- we're not to answer questions, but there are three strings of surface casings for us covering the underground sources of drinking water. They added the shallow ones because of the location of the shallow wells.

MR. WACHOLB: One of the requirements of people that come to our meetings, I spoke on this, is they use a basket and that basket is put on a water string prior to the first source of water. That's a no-no in my book. First of all, a basket is an umbrella upside-down visualized is what it

is. It's spring loaded, it's got material around it that holds some water, cement or water, either one, and their concern is they don't want surface water going down to that first aquifer that has water in it. I understand they're changing some of that, at least I hope, but if you do that and you — and they talk about grouting back to surface. What happens if it doesn't come back to surface or you put enough cement in there to get it past that basket to surface? Once it's in the basket, it won't go back down, it stays there.

1.5

Well, we don't know what's happening underneath that until they stop putting cement in it. So you may have different sources of water and aquifers mixing together and that's the bad part. If you eliminate the basket and put centralizers on that water string so that you can put a tube down, if it doesn't come to surface, and this is the thing we're looking at, if it doesn't come to surface when they're grout back, you can use a tube and we use a cement pump and we pump cement down that tube until it comes back to surface, but if you got a basket in there and nothing centralized on that water string, there's no way to get a tube down there.

So that's the thing I'm concerned about,
that's just one of them, but I understand you
understand better perhaps of what's coming up
there, but our engineer is concerned as to just
how that well is being built. How big is that
hole that they're going to put that casing down?
And what type of centralizers are they putting on
it? Are they the centralizers that will still
permit a tube to be put back down it if it doesn't
come to surface?

You know, once you put X number of bags down that pipe and put water behind it to push it back up, if you don't have enough cement to do the job, how are you going to get anymore in there? You can't. You got a plug down there with water on top of it and there's no way to add more cement to that casing and push it back up. You have to use another process and that is a tube going down around the outside of that casing in that bore hole and get that cement back up to the surface. So that's one of our big concerns when that well is drilled, to be sure that that water string that protects all you people's water is done properly and that's very important to us and that's one thing our engineer and I are looking at. Thank

1	you.
2	MS. JOHNSON: Michael Murphy Murray,
3	Michael Murray?
4	Okay, we'll come back if he stepped out.
5	(Discussion off the record.)
6	MS. JOHNSON: Jack Donahue?
7	Ralph Hemby?
8	MR. HEMBY: Hi, I'm Ralph Hemby, a citizen of
9	DuBois, Pennsylvania.
10	My big concern about the project is currently
11	I believe the fines and penalties that are
12	attached from violations aren't significant enough
13	to really stop individuals from doing something
14	that's improper. If it's cheaper for me to pay
15	the fine, I'm going to pay the fine and continue
16	to dump whether that well is good or not. So who
17	is going to make sure those rules and regulations
18	are followed 24/7?
19	As we know, business owners today sometimes
20	have unscrupulous acts that they do to get their
21	bottom line and their profit. So who is going to
22	protect the citizens and our water?
23	The EPA said its bigger function is to
24	protect the water. Really, its major function is
25	to protect the people. We, the taxpayers, pay

1	their bill. We own this country and we own our
2	property around this area. So you need to listen
3	to the public, the people that are present here
4	when they're asking that this project does not go
5	forward. Thank you.
6	MS. JOHNSON: Mike Kamandulis,
7	K-a-m-a-n-d-i-l-u-s?
8	MR. KAMANDULIS: Kamandulis, u-l-i-s.
9	My name is Mike Kamandulis. I live up in Ell
10	County, but we have an injection well meeting
11	tomorrow night for James City so that's going to
12	be a repeat performance I'm afraid.
13	Marcellus Shale produces the fossil fuel
14	known as natural gas which many of us use and
15	appreciate. Unfortunately the production of this
16	resource produces a waste material that must be
17	dealt with which is the focus of this meeting
18	tonight.
19	I wish to remind anyone here that
20	anthropogenic climate change is occurring and
21	science has spoken on this area, water scarcity
22	may occur sooner than any of us would wish. I
23	earnestly hope that someday soon all of us may
24	change the conversation to a rapid and serious
25	switch from fossil fuels to renewables. Thank

1	you.
2	MS. JOHNSON: Thank you.
3	Terry Lawson?
4	MR. LAWSON: Darlene has my written
5	testimony.
6	MR. JOHNSON: Is it in here already?
7	MR. LAWSON: That's Darlene's packet.
8	My name is Terry Lawson. I live 600 yards
9	outside the critical quarter mile area.
10	When I moved in 30 some years ago I started
11	remodeling the house. One day I woke up no water.
12	Well, the first person I call is my dad, he has a
13	little bit of knowledge about drilling. He said
14	I'll come out. He came out, he started laughing
15	at me and he says your water will return in three
16	days. My mouth fell open, I didn't know what to
17	say. Three days my water came back.
18	They had cased off the well they were messing
19	with which is just across the road at Atkinson's
20	place. Twice since then when the drilling
21	companies have messed with that well I get dirty
22	water and it goes away, my water is drinkable.
23	That well is over 7,300 feet deep, the same
24	depth they want to drill. The Oriskany, the other
25	word for the Oriskany is Oriskany Sands, sand is

1	porous, it's going to come through, there's no
2	doubt about it. You cannot take a chance with as
3	many wells and the way they were put in back in
4	the '50s that my father knows about and other
5	drillers. You have a lot of drillers in this area
6	that know what was done back in the '50s to those
7	wells, deep and shallow, it's not pretty. You
8	have 40, 50 years on those plugs. No, they're not
9	holding. You cannot take a chance. It's like
10	Russian roulette, it's coming. Thank you.
11	MS. JOHNSON: Brady Laborde?
12	Janet Robinson McMillen?
13	MS. MCMILLEN: Joe did.
14	MS. JOHNSON: John Sobel?
15	Well, all done.
16	Nancy Moore I think we also had, yes.
17	Randall Baird?
18	MR. BAIRD: My name is Randall Baird, I'm one
19	of the residents of Highland Street Extension.
20	This proposed injection well would be
21	approximately 400 and some odd feet from my
22	property line, 400 and some odd feet from my well.
23	Some of the information I have here is probably
24	redundant, but I'm going to go over it again. I
25	also have many other paragraphs that I can't read

because of time, but I'll try and hit on the most important ones to me.

Within a half mile of the proposed injection well are many old gas well fracks. These fracks can open to 600 feet according to the oil and gas industry. That would put some of these fractures inside the quarter mile review area and create a path for injected fluids to flow uncontrolled. Five of these old wells are into the same formation that is proposed for the injection well and other places outside the quarter mile review area.

Unplugged or poorly plugged wells are a serious obstacle to all potential uses of the subsurface. They provide a direct flow path through which saline water can reach the water aquifers. These waters may also leech into one of the many mine shafts within the review area and travel towards DuBois, DuBois Mall area where they reach Sandy Lick Creek. No question these wells could contribute to the contamination of many waters and ecosystems.

The Caledonia sink line is approximately 2,750 feet from the proposed waste well and I believe the permit says 5,000 feet, but it's 2,750

feet. Sink lines are typically bad places also to inject fluids because it tends to travel up the top of the sink line or up into fresh water aquifers.

One professor contracted to investigate the earthquakes in Youngstown, Ohio that were caused by the injection of fracking waste said this stuff plumes out for miles.

The periodic operation of a water well supply at a cannery is detectable in a gas storage field ten miles away. Water flooding is reflected in pressure responses in another pool 12 miles away within a few days. Salt water from a ruptured casing in an oil well is detected in a water well for two months. Oil field and ground water experience shows too many examples of far ranging and unpredictable displacement and pressure to justify these simplistic calculations based on idealized conditions.

The complexities of the geology of

Pennsylvania creates particular difficulty in

developing truly reliable interpretations of the

subsurface without extensive exploratory testing.

There has not been extensive testing of the

proposed well site or the zone of endangering

1 influence.

In almost any kind of commercial endeavor there is a reluctance on the part of the people responsible for an operation to report a failure and defects to their superiors. We saw this just several months ago at the Irwin injection well in Clearfield County where they were fined \$160,000 for over pressure in order to inject waste.

Also I feel the area of review should be extended to two miles. That would encompass more residents and water sources that may eventually be affected by leaks, spills, accidents, well failures and leeching toxic waste from this well.

Within Pennsylvania there are no known reservoirs of truly good disposal quality.

Pennsylvania has few reservoirs of adequate permeability and porosity for feasible liquid waste disposal.

Faulting is in close proximity and referenced in the permit. It also states that there have been earthquakes in Pennsylvania. These faults are inside the quarter mile area and pose another threat to the well casing.

Unanticipated avenues of fluid migration is a very real possibility, and it's feasible in

Pennsylvania.

Fractures and sluice channels are possible in almost all lithologies. The transmissibility of the fractures and sluice channels may equal and furthermore they are directional both vertically and laterally. These fractures and channels may conduct the injected fluid rapidly and in large volume to wholly different locations than what was originally anticipated thus threatening fresh water aquifers.

Most so-called impermeable formations have measured permeability. Exploration reveals geological situations where from all available evidence should have supplied a trap yet failed to do so. The actual flow pattern, therefore, depends on the path and the greatest permeable amount may be more complex than indicated by generalized flow lines inferred from broadly spaced potential metric data.

The long term injection of large volumes of waste must eventually result in the upper displacement of the brine intraformationally or through fractures into fresh water zones. It is difficult to predict where an injected liquid will be at any given point in time.

Since I was once in the employ of a well service I have a fair understanding of the industry operations. In my opinion spills and failures are all too frequent and drilling is a risk by this industry's own admission. If our water becomes contaminated from the injection well, there are no other sources available to us at this time. The Northwest Clearfield County Regional Comprehensive Plan of Brady Township states no significant expense of the water system is recommended at this time.

2.0

The Brady Township Water Authority says that they are running at or close to their capacity.

I want the water I have now and I have an inalienable right to it under the Pennsylvania Constitution Part 1, Section 27.

I have a son in the home who has a serious neurological disorder. Many of the chemicals that we know are in fracking fluid are highly toxic neurological agents. Obviously the last thing my son needs to come in contact with is any of these toxins either in the water or the air.

As demonstrated here there are many and varied ways these injection wells can sell highly toxic and sometimes radioactive waste into our

aguifers through the geological locations of 1 Pennsylvania. Protection comes before the fact 2 and I sincerely hope that we warrant that 3 protection. 4 There are many other concerns with this well 5 and well site which I know the EPA does not 6 address due to regulatory issues that will not be discussed at this time, and then my references are 8 on the bottom for everything I've written there 9 and I already gave Steve a copy. 10 MS. JOHNSON: Good, thank you. 11 12 Jenny Lisak? MS. LISAK: The risks of an injection well in 13 a residential area are just too great especially 14 considering that there are viable alternatives 15 such as already existing injection wells and waste 16 water treatment facilities. There are now more 17 than 150,000 Class 2 injection wells in 33 states 18 into which oil and gas drillers have injected at 19 least 10 trillion gallons of fluid. Don't you 20 think that's enough? And what happened to the 21

This area of PA is rife with unique geological features that pose dangers for the

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about?

recycling plan that the Marcellus industry talked

successful containment of hazardous waste. In addition, most of our aquifers in this area of coal mining, despite a neutral pH, are highly corrosive in nature due to acid mine drainage which can cause steel and cement to prematurely age, corrode and dissolve, according to the testimony of acid mine drainage expert Robert Hedin.

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It's indisputable that injection wells cause earthquakes which therefore could possibly compromise water quality. University of Oklahoma seismologist Katie Keranen reported earlier this year that there was a compelling link between injection and the magnitude 5.6 earthquake in November that injured at least two people and damaged up to 200 structures east of Oklahoma City.

It's indisputable that the Safe Drinking
Water Act was initiated because of a failed
injection well. ProPublica analyzed records
summarizing more than 194,000 Class 2 well
inspections conducted between 2007 and 2010.

1,000 times in the three-year period operators
pumped waste into Class 2 wells at pressure levels
they knew could fracture rock and lead to leaks.

In at least 140 cases companies injected waste 1 illegally and without a permit. 2 I have to wonder how boring it must be for 3 you ladies and gentlemen who live in Philadelphia 4 and don't have to live with frack waste in your 5 backyard to have to listen to the same testimonies and pleas over and over. Does one form some 7 sort of mental callous? I don't want to be disrespectful, but I feel that it must be a 9 certitude that you hear repeatedly about injection 10 wells and earthquakes, injection well failure 11 rates, injection well violations, injection wells 1.2 and PA geology, et cetera, ad nauseam. 13 What will it ever take to take the -- to have 14 the laws changed to protect human and animal life 15 rather than the profits of a few? I hope Windfall 16 withdraws the permit. I'm afraid they may see 17 everyone in a three-mile area of the injection 18 well sue them for subsurface toxic trespass. 19 Thank you. 2.0 MS. JOHNSON: Do you want to turn that in? 21 Judy Amik? 22 MS. AMIK: My name is Judy Amik, I'm from 23 DuBois. 24

25 First of all, I'd like to thank all the folks

that have spoken ahead of me. Like Mr. Wacholb said, they made my speaking a little bit easier.

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There have been many fine points that have been brought out this evening concerning mines, different deep wells, but I have some information as it was given to me that I think you will find very interesting.

I also want to share this with you folks. A few years ago my husband and I had to -- we had to employ a mining attorney and through the course of us meeting with him he told us that the Cramer mine shaft which begins down at Stump Creek and it ends up by the mall, which many have testified here tonight, that this mine shaft was opened in 1920, it was closed in 1957. In 1929 that mine shaft was the No. 1 bituminous coal producer in the world. Now, this isn't a little hole in the ground, this is the main No. 2 mine shaft. I bet you there's not a person in this facility that has not heard of the No. 2 mine shaft. As it began in Stump Creek, it went underground, and this does not include all the tributaries that came from this mine shaft, and it ended up at the mall.

Now, many people have talked about this this evening and I'm so glad when they presented you

with this map. This entire area has been connected by numerous -- this isn't just one deep mine shaft, there are other mine shafts as well.

I always thought I knew a lot about the history of DuBois, but I practically fell on the floor when this attorney told us this because he had taken this back over a hundred years.

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Now, what you need to recognize is this, and I address this to you folks from being from Philadelphia, this entire area is honeycombed and it's not just by one deep mine shaft, it's by numerous ones, and these other deep mines, they were connected by various tunnels. So not only here in Brady Township, but this goes to Falls Creek, it goes practically all under DuBois, and if you just go and do a little bit of the history of it you'll understand why.

So if they can be the No. 1 coal producer in the world in 1929, those holes are still here.

Sure, some of them may have caved in, but like most have testified ahead of me, just a few earthquakes and whatever, but we have been known for this for years and years and years up here.

There's many of the relatives that are related to those here in this facility, I'm sure that worked

1 in the mines.

So I just ask that you consider this because this is not conducive for this type of procedure of injection wells. I only ask this and you take that into consideration.

And I'm very grateful that they presented you with that mine map. I saw this map years ago.

And as a young girl I remember seeing the open mine shaft that's up by the mall. So it's there,

I've seen it, and I just hope that they rule in favor of all of us and for the many, many points, fine points that have been made in this course of this evening. So at the risk of letting all of you at least get up and stretch, I'm done.

MS. JOHNSON: Thank you.

Ross Orner?

MR. ORNER: I want to thank you for the opportunity tonight for coming here and leaving us speak. I'm outside the review area, but I came tonight to learn a little bit about the review area and how far this stuff stretches underneath the ground.

Now, I'm a local dairy farmer out of Home

Camp which is where the DuBois reservoir is and

where you have all types of practices then to

protect that water, but around that reservoir in the soil survey of Clearfield County you'll find in the 1950s there was quite an area of Oriskany wells and a lot of those wells are still producing today, some has been plugged.

We also have a little thing called the Continental Divide on our farm and I'm not sure how the geology works underground if that weakens it or whatever, but there's Oriskany wells very close to the reservoir there and if there's any chance at all of this material, brine water, coming into that area coming up, you've polluted a major water supply of this whole area. You've polluted Anderson Creek, you've polluted the west branch of the Susquehanna, you've polluted the Chesapeake Bay with this stuff. I mean, as agriculture, EPA is on DEP to protect water supply, so please take -- like I say, I don't know if that's possible, but it's very feasible to pollute that water supply out there, let alone the local water supplies here, so please take that into consideration. Thank you.

MS. JOHNSON: Thank you.

Brenda Peoples?

MS. PEOPLES: Peoples.

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1 MS. JOHNSON: How do you spell it?
2 MS. PEOPLES: P-e-o-p-l-e-s. I don't own a

3 bank or a drugstore or anything.

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My name is Brenda Peoples and I live within the radius of this so-called injection well and my husband and I thought 12 years ago that we were building our dream house on four and a half acres on Highland Street Extension, and I was told then that I would never get cable for my television and I can live without that and I still haven't got it, but I can't live without water. And, you know, everybody is talking about what's going to happen with the water going in the well. I'm more worried about what happens with the water coming out of the trucks going up the hill. I mean, there's all kinds of waste this water is going to be dripping. You're not going to tell me they can stop all of it and, I mean, it's a big concern of mine. I'm really worried about it.

And as I mentioned before, I want this to go on the record, that I think if the state wants to regulate the gas and wants to regulate the drilling, then the state should put the wells on the state land and then they can regulate it and everybody in the state will share in all the

1	troubles and all the problems and all the suing
2	and all the money because they're going to get the
3	money, they're not going to get the problems, we
4	are. Thank you.
5	MS. JOHNSON: Thank you.
6	Melissa Troutman?
7	MS. TROUTMAN: My name is Melissa Troutman.
8	I currently reside in Westmoreland County, but my
9	family lives in DuBois and works there, owns
10	multiple properties, so they couldn't be here so
11	I'm here on behalf of them.
12	By the way, you're doing a great job because
13	some people are talking really fast, so slow down
14	a little.
15	"Casings don't last forever. The EPA cannot
16	guarantee that ground water aquifers will not be
17	contaminated in five, ten, 20 years or even during
18	injection. So understandably this is a grave
19	concern for those who live near these injection
20	wells for folks that will depend on this drinking
21	water forever, unless it's contaminated.
22	"What is the lifetime maintenance plan for
23	this well? Does the EPA require one? After the
24	well is plugged, a hundred years from now, who
25	will be monitoring this well?

"A June 21st, 2010 article by investigative news nonprofit, ProPublica.org, reported that a review by ProPlublica of 'well records, case histories and government summaries of more than 220,000 well inspections found that structural failures inside injection wells are routine.

From 2007 to late 2010, one well integrity violation was issued for every six deep injection wells examined,'" one in six, "'with more than 17,000 violations nationally. More than 7,000 wells showed signs that their wells were leaking.

"'ProPublica's analysis of case histories and EPA data from October 2007 to October 2010 showed that when an injection well fails, it is most often because of holes or cracks in the well structure itself.

"'Operators are required to do so-called'" -by the way, I'm sorry, I should have mentioned,
I'm quoting the article at this point.

"'Operators are required to do so-called 'mechanical integrity' tests at regular intervals, yearly for Class 1 wells and at least once every five years for Class 2 wells. In 2010 the tests led to more than 7,500 violations nationally with more than 2,300 wells failing.

"The article also quotes 'Mario Salazar, an 1 engineer who worked for 25 years as a technical 2 expert with the EPA's underground injection 3 program in Washington, 'Mr. Salazar stated," and I quote, "'In 10 to 100 years we are going to find 5 out that most of our ground water is polluted. A 6 lot of people are going to get sick and a lot of 7 people may die, '" end quote. 8 "As someone who has personally investigated 9 water contamination cases in northcentral and 10 northeastern Pennsylvania, I know some very sad 11 cases of illness resulting from consumption of 12 residential drinking water contaminated by faulty 13 oil and gas wells where the contaminants were not 14 detected because of the lack of taste, color or" 15 smell "until it was too late." 16 So please consider and please take all of 17 this into consideration for this permit. My 18 family lives, works and owns multiple properties 19 in DuBois and they couldn't be here tonight, but 20 their safety is in your hands. Thank you. 21 TMS. JOHNSON: Do you want to turn in your 22 notes? 2.3

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MS. TROUTMAN: I apologize, it's handwritten.

MS. JOHNSON: That's fine, thank you.

1	Henry Mileski?
2	MR. MILESKI: Hi, my name is Henry Mileski.
3	I live on Highland Street Extension.
4	There's not really a whole lot to add about
5	everything that can go wrong because with all
6	the with the local well, pre-existing wells
7	and the extension mine No. 2 shaft so close to it
8	and extension into the No. 1 shaft, everything is
9	depending on your calculation for how much
10	pressure that strata in that area can hold and on
11	the well itself structurally remaining intact.
12	For as many things and as many variables as
13	there are in the area, I don't think it's worth it
14	to trust that, and also depending on the operator
15	to continue to do the right thing which I don't
16	think anything about this operator in particular,
17	but that doesn't always happen. There's just too
18	many risks to allow this to happen, to allow this
19	to go in there with all the local water sources
20	that are dependent on the water right there.
21	That's all.
22	MS. JOHNSON: Thank you.
23	Timothy Rosefke?
24	(Discussion off the record.)
2.5	MS. JOHNSON: Timothy Rosefke,

1	R-o-s-e-f-k-e?
2	Grace Bergin?
3	AUDIENCE MEMBER: They left.
4	MS. JOHNSON: Tim Bodt?
5	AUDIENCE MEMBER: He asked questions earlier
6	and both of them left.
7	MS. JOHNSON: Yeah, there were a number of
8	duplicates.
9	Veronica Coplis?
10	MS. COPLIS: It's okay, it's good, go ahead,
11	you can move on.
12	MS. JOHNSON: Let's see.
13	Jack Chewning, C-h-e-w-n-i-n-g?
14	AUDIENCE MEMBER: He left.
15	MS. JOHNSON: Thomas Repine? I think we
16	already had yes.
17	Matt Gabler already went.
18	Linda Ferraraccio?
19	MS. FERRARACCIO: Did you say Ferraraccio?
20	MS. JOHNSON: Yes, I mutilated it and my
21	voice is going too.
22	MS. FERRARACCIO: Well, my name is Linda
23	Ferraraccio, I've never spoken in public before.
24	MS. JOHNSON: Good opportunity.
25	MS. FERRARACCIO: I thank you for your

information and the respect you've shown everyone, but a few things were brought up tonight that caused me concerns.

My only credentials are I'm a wife, a mother and a registered nurse and I'm passionate about the prevention of illness and the promotion of health, and in my opinion there's absolutely no way to assure that our water will not become contaminated.

These dear people could theoretically test their water daily and not know that it's not going to be contaminated the next day.

A few words were brought up tonight that caused me a lot of concern. They were words specifically, quote, "a break could never happen," and "we are always regulated," in quotes. These in my opinion are false reassurances.

I want to share with you a personal experience that our family had. We lived in a community with naive confidence that our gas lines were safer. A beautiful new development, new homes, we lived there for several years and our neighbors house blew up with them in it and they both died, and it was determined and confirmed that it was human error, that there was a specific

1	error that caused the break in these yas lines.
2	So regardless if these lines are checked, there's
3	always the potential for human error. It's not
4	God's will, it's human error, and I just want to
5	share that with you.
6	Can we really afford to be naive about our
7	water quality? Can we just believe that there's
8	no error in these casings or anything else? I'm
9	sure that everyone here is concerned for the
10	quality of their children's health and their own
11	health and their water, but we can never be
12	assured that there's not human error. Thank you,
13	that's all I have to say, thank you.
14	MS. JOHNSON: Thank you.
15	Dave McKolanis it looks like?
16	MR. McKOLANIS: You're getting towards the
17	end of the line here, so I might be the last one
18	and everyone can go home.
19	My name is Dave McKolanis, I'm a member of
20	the Pennsylvania Alliance for Clean Water and Air
21	and we pretty much heard you all heard enough
22	tonight about this well, but I'm here to give you
23	a little bit of an overview, okay. Now
24	MS. JOHNSON: Could you use the mic?
2.5	MP Makalanis. I think it's loud enough for

everybody to hear.

Dave McKolanis, Pennsylvania Clean Water and Air here in this part of the state, and I just watched a Travis Smiley show last night or the other night where they did an interview with a guy that wrote a book that said the biggest problem in this coming century is not going to be terrorism, it's going to be clean water and that's going to be worldwide.

So with that in mind you people are supposed to be the Environmental Protection Agency, not the expediting permits agency. So we are asking you to show some protection because presently right now in Vancouver there's small aquatic life, oysters that their shells are being eaten away by the acid water that they're exposed to in the ocean. New York City is planning -- it's been mentioned that they want flood gates put in after that hurricane that went through, Sandy. Norfolk, Virginia is already starting to have their streets flooded from the rising sea level.

We all know that the arctic circle, the ice is getting thinner and it's getting smaller so we're going to have a problem here with our environment. Now, a little bit by little bit by

1	little bit these problems are getting bigger and
2	bigger and bigger and it's going to be up to you
3	people to try and stop this little bit by little
4	bit of ruining our environment, not just for you,
5	not just for us, but for everybody and it's in
6	your hands to do that.
7	All we can do we've given you enough
8	information on this little bit. It's crucial to
9	us in our area. To you people in Philadelphia,
10	you're going to review this stuff and is it going
11	to be sided with the permit side or is it going to
12	be for the protection side, which you are supposed
13	to be standing for, Environmental Protection
14	Agency. Thank you very much.
15	MS. JOHNSON: Thank you. And I think Wilson
16	Fisher has already spoken.
17	MR. FISHER: I did.
18	MS. JOHNSON: Michael Hoover, you're the last
19	on the list.
20	MR. HOOVER: That's all right, I said my
21	piece at the beginning, it's going to take me
22	about a week to respond to most of this stuff.
23	MS. JOHNSON: Are there any other individuals
24	who didn't sign up or who we missed in going
25	through the forms who would like to say

## something?

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Then I'd like to make my closing remarks and also I want to stand up. I think we should all stand up and just let our knees stretch for the first time in a couple hours.

On behalf of the Environmental Protection

Agency I would like to thank you all for your

participation here and for your well thought out

comments on this permit proposal in Clearfield

County under the EPA's program for the underground

injection control program in Pennsylvania. I

assure you that all of these comments will be

given serious attention as we prepare our final

decision in this permit request.

I would also like to remind you that the comment period on this proposal will remain open until December 17th, one week from tonight, if anyone cares to submit written testimony to our attention at EPA.

Again, thank you for your interest in this proposal. This concludes the formal part of this public hearing.

My staff and I will remain available to discuss the issues raised if you should care to stay for a few minutes afterwards. Thank you and

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good night.
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                    (Thereupon, at 10:16 \text{ p.m.}, the hearing was
 3
              concluded.)
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1	REPORTER'S CERTIFICATE
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3	I, Jacquelyn P. Sherwood, hereby certify
4	that the above proceedings are contained fully and
5	accurately in the stenographic notes taken by me of
6	the hearing cand that it is a correct transcript of the
7	same.
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10	Jacquelyn P. Sherwood
11	Court Reporter
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