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6	US ENVIRONMENTAL PROTECTION AGENCY
7	PUBLIC HEARING ON A PROPOSED PERMIT UNDER THE
8	FEDERAL UNDERGROUND INJECTION CONTROL PROGRAM
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11	Tuesday, December 11, 2012
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13	The transmist of a Dublin Hardin the bar hafan
14	The transcript of a Public Hearing, taken before
15	me, the undersigned, Jacquelyn P. Sherwood, held at
16	the Highland Township Fire Hall, Pennsylvania Avenue,
17	James City, Pennsylvania 16734, commencing at
18	7:13 p.m., the day and date above set forth.
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24	REPORTED BY:
25	JACOUELYN P. SHERWOOD, PROFESSIONAL REPORTER

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MS. JOHNSON: At this point I would like to open the public hearing. Good evening, ladies and gentlemen, I would 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 Seneca Resources Corporation, or Seneca disposal well No. 38268 in Highland Township, Elk 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 Kane Republican 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 will introduce myself and other members of the agency in

attendance this evening. I am Karen Johnson,

I'm the chief of the ground water and enforcement

branch of the water protection division of

the U.S. Environmental Protection Agency in

Philadelphia, Pennsylvania. With me tonight

are Stephen Platt, our senior hydrologist;

Roger Reinhart, our enforcement lead; and Dave

Rectenwald, our oil and gas inspector.

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

The Federal Safe Drinking Water Act of 1974 and its consequent 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 or the drinking water 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 nation's drinking water resources also needed protection from potentially harmful practices such as the underground injection of fluid. Sections 1421 through 1424 of the Safe Drinking Water Act addresses the provisions which authorize 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 does not 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 a thousand 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 USDWs, are basically defined as those aquifers which supply or could supply drinking water for

human consumption. The regulatory definition of an underground source of drinking water also includes consideration of the quality and quantity of water available. 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.

Any and all new injection wells constructed after June of 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 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 a federal program on this issue and the relationship to state and local authorities. Existing programs within the state have 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 your concerns you have for the protection of ground water supplies from contamination as well as protection of other natural resources.

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 as concerns.

The UIC permit 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.

The purpose of the UIC permitting process for new wells is to control and prevent any injected fluids from endangering underground sources 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

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. The EPA has several mechanisms for 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.

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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 afford additional protections.

Now having supplied you with a brief overview of the UIC program and purposes of this public hearing, I would briefly like to explain the protocol and procedures which govern this hearing.

Persons wishing to testify will be called in the order -- in the following order: Elected

officials representing federal, state or local governments first; second, representatives of federal, state and local agencies and; third, all private citizens, representatives of public and/or environmental groups or other representatives of industry and the regulated community.

1.

We will adhere as close as possible to the order in which you expressed your interest in presenting testimony either by your advanced 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. 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 points.

I stress the fact that this hearing is not a debate or a dialogue. We will not be responding to your comments or questions at this time 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

1	after this hearing may be made in writing no later
2	than one week from today, December 18th, in care
3	of Roger Reinhart, U.S. EPA Region 3, at 1650 Arch
4	Street, Philadelphia Pennsylvania. This
5	information is also in the statement of basis
6	that was available tonight.
7	If time allows we will have an informal
8	question and answer session and the opportunity
9	to ask questions and more fully understand the
10	UIC program and the permitting action before us
11	tonight.
12	I will ask: Are there any elected officials
13	representing federal, state or local governments
14	present? We'd ask that you come up and stand
15	about here.
16	And your name?
17	MR. WAGNER: Thomas G. Wagner, Thomas
18	Wagner.
19	(Discussion off the record.)
20	MS. JOHNSON: I'm sorry. Your name again
21	was?
22	MR. WAGNER: Thomas G. Wagner.
23	MS. JOHNSON: Got it, okay, thank you.
24	MR. WAGNER: Thank you for the opportunity to
25	speak this evening and testify.

I'm Thomas G. Wagner, I am the solicitor of the County of Elk in which this injection well is intended to be located. I'm speaking tonight on behalf of the Board of County Commissioners of Elk County, that would be Dan Freeburg, June Sorg and Jan Kemmer, they are in the audience this oftening.

"As the elected representative of the residents of Elk County, Pennsylvania, the Board of County Commissioners of Elk County wish to express their objections to siting and permitting of a waste disposal injection well in Highland Township proposed by Seneca Resources Corporation. We believe that the siting and operation of the proposed well is not in the best interest of the people of Elk County and creates a potential risk of serious damage to water resources that serve not only Highland Township but also Ridgway Township, Ridgway Borough and other fresh water sources in the Clarion and Allegheny River watersheds.

"The commissioners are aware that these injection wells are highly regulated by the Environmental Protection Agency both as to siting and operation. However, as recent incidents in

neighboring Clearfield County have demonstrated, regulation does not guarantee that private and public water sources will not be exposed to pollution when these wells fail to operate properly.

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"Highland Township has been heavily developed with oil and gas wells, many of which have been abandoned without proper closure, and there are also abandoned wells that are not identified. Studies show that these abandoned wells present a prime source for the failure of injection wells that result in the pollution of drinking water Information on injection wells also sources. point out that the safe operation of an injection well requires the deposit of the waste into a geologic formation that has no fractures that might allow the waste to escape from the formation and eventually find its way into underground drinking water sources. At the high pressures needed for these injection wells, there is also risk that a well failure will bring the pollutants to a surface discharge into surrounding water sources. The permit application" required -- "as required by regulation identifies the zone of concern around the proposed well site to be only

one fourth of a mile or 1,320 feet. Even the Pennsylvania legislature in its recent adoption of Act 13 recognized that the area of concern for drinking water pollution around gas wells using high pressure injection," like those of Marcellus Shale drilling fluids, "should be 2,500 feet. Why should there be a lesser standard here?

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Because the application involves a Class 2 well, the regulations require a mechanical integrity test only once every five years. This means that the failure of an injection well may result in the discharge of pollutants to surrounding ground water for years before the damage is discovered. The recent well failure in Clearfield County involved such an undetected and unreported failure.

"While the regulations address the issue of safe drinking water, there is another issue also at stake, the pristine streams and rivers of the northern portion of our county, which are a significant source of recreation and tourism. A surface discharge or even an underground discharge threatens these resources also.

"The Board of County Commissioners are proponents of economic development and understand

that a continuous and bountiful supply of natural gas is important to the economic and political security of our nation. But there is no resource that is more important to the welfare of our citizens then safe drinking water. The people of Elk County know well that the effects of environmental damage can be insidious and long lasting as we can see from the streams and rivers in our county which still run red from the effects of coal mining nearly 100 years ago. We fear that history may repeat itself with these injection wells.

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"There are other ways to safely dispose of the brine water from gas drilling, though the commissioners understand that these methods may be more expensive, but that would be a small price to pay to protect such as important resource as fresh water.

"We, therefore, respectfully request that the agency deny this permit."

And I have also to present to you along with the position statement itself, a resolution which was adopted by the county commissioners last week expressing their objection to the grant of an application. Do you need more than one copy of

1	the position statement?
2	MS. JOHNSON: No, just one is fine. Thank
3	you.
4	MR. WAGNER: Thank you.
5	MS. JOHNSON: Thank you.
6	Paul Burton?
7	MR. BURTON: I want to know, why did you
8	choose that particular well? Why did they choose
9	that particular well to inject? There's other
10	wells they could inject. I'm sure they have other
11	ones in mind, but why did they choose that one?
12	I can't understand that. It's easily accessible,
13	I understand that, it's right off the road, but
14	the drinking water is just down over the hill.
15	I don't know what you're injecting in there,
15 16	I don't know what you're injecting in there, nobody else knows. You got to be a chemical
16	nobody else knows. You got to be a chemical
16 17	nobody else knows. You got to be a chemical engineer to figure it out if you get on the
16 17 18	nobody else knows. You got to be a chemical engineer to figure it out if you get on the Internet, there's several solvents, and I don't
16 17 18 19	nobody else knows. You got to be a chemical engineer to figure it out if you get on the Internet, there's several solvents, and I don't know many things and I don't understand, but I'd
16 17 18 19 20	nobody else knows. You got to be a chemical engineer to figure it out if you get on the Internet, there's several solvents, and I don't know many things and I don't understand, but I'd like to ask a geologist and the other man there
16 17 18 19 20 21	nobody else knows. You got to be a chemical engineer to figure it out if you get on the Internet, there's several solvents, and I don't know many things and I don't understand, but I'd like to ask a geologist and the other man there why they chose that particular well.
16 17 18 19 20 21	nobody else knows. You got to be a chemical engineer to figure it out if you get on the Internet, there's several solvents, and I don't know many things and I don't understand, but I'd like to ask a geologist and the other man there why they chose that particular well. MS. JOHNSON: That's not something we can

1	MS. JOHNSON: Thank you.
2	Let's see. Are there any other elected
3	officials present this evening?
4	Then I'm going to just go through the order
5	in which you signed in and indicated you wanted to
6	make testimony, and if each of you would come up
7	and stand near the stenographer and make your
8	statement.
9	Mary or Lloyd Morris?
10	MS. MORRIS: That's me.
11	Excuse me, folks, I haven't got good legs
12	anymore.
13	MS. JOHNSON: If you want to just rest here.
14	MS. MORRIS: What I was about to ask was some
15	questions that she already answered and some other
16	person already answered for me. I wanted to know
17	what contaminants might be in that water and I
18	wanted to know what chemicals might be in there
19	that would be injected into that well.
20	What chemicals are currently used in the
21	hydrofracking process that may end up in that
22	injection?
23	What is the name of the sand formation that
24	is near the injection well?
25	How deep is it from our formation?

What is the surrounding rock formation that may cause seepage?

What direction is the sand formation located?

What is the evaluation -- I can't even say that word -- the James Springs on the lower part of it and they are on the high part of it, and if you're going to pump that water down there, you're going to have gravity flow down to our springs and James City is known for crystal spring water. Any time you go down to the bottom of the hill, then up at the top of the hill and you get a glass of water, it's clear water, it don't have anything in it. That's why it's called crystal spring water, and these people might not know, but that's what it was years ago and still is, crystal spring water.

And how can you be certain the contaminated water will remain in the sand formation or in the shale for as long as it might be? The older wells that have been drilled next to that site have been torpedoed and glycerined with use and are surrounding the rock formation fracture. That is not — that will not make it stable. Will that keep it stable?

1	Across the road from it, up the road from it,
2	there's already been wells fractured. Will that
3	fracture interfere with the fracture at the well
4	location site now?
5	MS. JOHNSON: Again, we aren't going to be
6	answering questions.
7	MR. MORRIS: That's all right, dear, I just
8	want to make
9	MS. JOHNSON: If you'd like to leave those
10	with us, that would be great, too.
11	MS. MORRIS: Thank you.
12	MS. JOHNSON: Thank you.
13	John or Mary Dean?
14	MR. DEAN: I decline to speak at this time
15	because the gentleman from Elk County, he
16	summarized a lot of the things that are on my mind
17	about the testing every year. It takes a long
18	it could happen tomorrow and years from now it's
19	going to be tested, that's not sufficient for me.
20	And another thing, if our underground waters
21	are contaminated, say we have earth tremors or
22	whatever, and what is to guarantee the possibility
23	that this could leave and go into our underground
24	waters our underground waters? This isn't a
25	steady stream one way, they branch out and it

1	could contaminate that way, so that's my concerns,
2	but the gentleman from Elk County, he said
3	basically what I wanted to say.
4	MS. JOHNSON: Thank you.
5	Lisa Pence?
6	MS. PENCE: Most of my concerns were also
7	addressed.
8	MS. JOHNSON: Thank you.
9	Thomas Wagner already spoke.
10	Duane and Darlene Marshall.
11	MS. MARSHALL: Roger, can I borrow your big
12	binder, can I borrow your binder?
13	Hi, I'm Darlene Marshall. I live in
14	Clearfield County, Highland Street Extension,
15	DuBois. I work in Brockway, Jefferson County, and
16	I am assistant administrator of Jefferson County,
17	so I'm a librarian for the Brockway Library and
18	the county.
19	So the reason I have interest in this is in
20	the last year I have been studying about disposal
21	injection wells for my neighborhood, and since I
22	work in Jefferson County and there's been a lot of
23	activity on the watershed for Brockway, I'm very
24	concerned about neighboring watersheds, and so I
25	came today to present some testimony, but after I

wrote my testimony I ran into a couple concerns.

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One is that this is the watershed for James City and others and that it probably flows toward Clarion and the Clarion River watershed and the Allegheny River watershed, so it might not flow towards Brockway, but that is a watershed and as the lady said before it's known as Crystal Springs.

MS. MORRIS: Crystal Springs.

MS. MARSHALL: The other thing I ran into is that leaders in the community do not understand that there is a packet that many of us get in the mail when we ask for information about this and it's this size (indicating), and then there's a packet that's housed at a library that's this size (indicating), and so everyone thinks they got everything in the mail this size (indicating) and it's just miscommunication because this packet says, "See the library," and as a librarian we know many people do visit the library, but they think they got it all in here. You guys need to visit the library, and I'm not sure -- I think it's Highland Township.

AUDIENCE MEMBER: It's Memorial Library.

MS. MARSHALL: So as a librarian, I find that

very important that leaders in your community need to know where the real information is found, so just to the EPA, I know it's confusing because we have a lot of community members who don't understand.

I want to first thank the EPA because I've been working with them and they are doing a great job. They only can do what their job is and that's regulate the underground sources of water. Our job is to look at the community and ask: Is this right? And as our geologist, our hydrogeologist, our community that we know and say these are our concerns and present them to them. And so for a year we were fortunate in Clearfield County to do that.

Here, I don't know if you've had that opportunity and I don't believe you have, they are thick.

What Seneca said was they have a vested interest in this area, and they do, and we all appreciate what they do for the area, but a gas well is not the same as a disposal well, and I'm not against the gas industry because I have family in it, and when I was learning about this I went to the drillers and one of the drillers I gave our

packet that big to and said tell me what your concern was out of that if you were a driller.

And he said I'm a driller. I said yes. He said my paycheck.

So think about it. When they're drilling, they're there doing their job, drilling, but when we put it on paper, it's the ideal presentation, and so that's my concern is because a gas well is not a disposal well and instead it's taking gas out of the ground, it's putting something into the ground that is waste.

So this testimony for EPA is only based on the statement of basis, a very brief overview because, you know, I've been working on the other one, and so like I said, I'd like to thank the EPA.

And, secondly, I'm requesting an extended period of time to review this permit application based on the several concerns that I stated, and there's six concerns in the statement of basis that I saw quickly and I just would ask that you address them a little more fully.

One of those is reusing existing traditional gas wells for purposes of waste disposal. I know this one isn't very old, but we met someone when

they pulled an old casing out that over time these chemicals and things that are put into it degrade it. So that's my first one.

The second one is the proposed depth of the traditional gas well is very shallow and disposal of waste fluids have potential to quickly migrate up natural pathways into water sources in a two mile radius or more since waste goes out underground for miles. And I would just cite -- I don't believe it may have contaminated water, but it did back in the 1960s in Erie go out under the ground for five miles. So we don't know how far this waste goes and that's why I'm concerned.

The fluids, waste, that would be disposed into this proposed disposal well need to be defined since the Marcellus gas waste is known to be toxic, and of course we know it's exempt from being made toxic because of the Halliburton loophole, but it is totally different fluids than fluids disposed of from traditional gas well brines. So I would like to understand the difference, if they're taking it from a traditional gas well or if they're taking it from a Marcellus well, and to me the statement of basis said fluids from oil and gas production and so I

would like it to say if it's shallow, it's shallow, if it's Marcellus -- because if it's Marcellus, it's two different things. If the fluids being disposed of are able to come from Marcellus gas production, then this permit needs an area of review for two miles showing all water sources in this area.

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The fifth is, the confining layer looks to be shale and from what I have learned shale is not a good barrier for fluids. So I would like more information from geologists to understand what is the containing cap rock to protect this wonderful watershed we have.

Pennsylvania geology is not ideal for disposal of waste or disposal injection wells and more research should be done by the community on the actual geology in the area. Pennsylvania has went from like five to eight, we're not sure how many disposal wells actually are in Pennsylvania.

And then my other big concern was an adequate review time for this permit needs to be provided to this community and I request that the EPA take into cosideration some key points.

The permit applicant has as long as it takes to answer all the questions and find the

answers for an EPA permit application for a disposal injection well to be submitted. So the applicant -- they have as much time as they want to apply, then they also have as much time as they want to respond to your deficiencies, and I know EPA gives public comments for 30 days or approximately that, and I appreciate that you do, but this community is still kind of reeling from knowing about it and by the time they got to know about it, they still don't know anything about disposal waste, so they need time to understand and research and have a geologist and a hydrogeologist and local leaders just look at the ground and know where the gas wells are because if they had a little bit more time, they would understand, they've had time to review this and they could get -- have more input and maybe they wouldn't be as concerned. Any dificiencies found to the disposal

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Any dificiencies found to the disposal injection well application are provided to the permit applicant with no retraint on timeframe. Sorry, I'm repeating myself.

So community leaders need to be involved in the process and often they have limited time to learn about the disposal injection well process,

and representatives for the community need to have input from the geologist and engineers as well which they don't have adequate time to employ or contact within the EPA public comment period.

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Local residents who have experience in the drilling industry and the water sources for the area need to be involved and provide input as well.

These are just some of the reasons the permit application review time for the public needs to be extended.

This community has just experienced a major issue of an environmental nature due to their sewage treatment plant. Wastes were being discharged into Wolf Run. Human error is what caused this environmental impact. This is a good case for the EPA to consider that allowing those who are working — who are doing the work for a disposal injection well company to monitor and self report becomes an issue that needs to be addressed before a permit is issued.

I just want to mention a geology professor

I met. He wrote the book "Earth: the

operator's manual," and his big statement was,

"hydrogeologists have lent their weight to

1	efforts to keep pollutants out of the ground,
2	because keeping them out is often a lot easier
3	than getting them back out," and that's why I
4	would ask for an extended amount of time.
5	And one other study was subsurface
6	liquid waste disposal and its feasibility in
7	Pennsylvania. One of the findings says, "The
8	long-term injection of large volumes of waste must
9	eventually result in the upward displacement of
10	the brine intraformationally or through fractures
11	into the fresh water zone."
12	So these are things that I just ask that more
13	time and preparation be given. So thank you for
14	your time. I wrote some notes on the back that I
15	didn't email Roger.
16	MS. JOHNSON: Which is more complete?
17	MS. MARSHALL: You can keep that.
18	MS. JOHNSON: Thank you.
19	Daniel Freeburg?
20	MR. FREEBURG: I'm a commissioner and we
21	already testified.
22	MS. JOHNSON: Thank you.
23	Brian Punk.
24	MR. PUNK: I'm Brian Punk, I'm from the water
25	authority.

1	I just want it to be on record, if they are
2	permitted to do this, our local source of water
3	should be monitored daily at their cost. Anything
4	that happens with this injection well should
5	not it should not cost the people of James City
6	anything. If something does happen with our water
7	source, there's only one thing that will correct
8	it and that is laying a line to Kane to bring a
9	water source to our town, and that should be at no
10	cost to us. It should be all on them.
11	MS. JOHNSON: Thank you.
12	Jim Bergman?
13	MR. BERGMAN: My name is Jim Bergman, I'm
14	here as a concerned citizen.
15	My house is less than a mile from the
16	injection well and I have a water well, and
17	reading from this DEP paper, it says any unplugged
18	or abandoned well within the area has to be
19	plugged or, located and plugged. Well, I
20	personally know of five of them that are abandoned
21	that aren't plugged and I want to know if they're
22	aware of them. 'Or if you're aware of them, if
23	they are going to be plugged? That's all I want
24	to say.
25	MS. JOHNSON: If you have information about

1	the location, if you got them on a map, that would
2	be very beneficial to us to add to the record.
3	The record will be open for another week. If you
4	can either contact us and either give us well
5	numbers, usually there's a marker or something on
6	the well, if you can give us the number for it,
7	that would be
8	MR. BERGMAN: Two of them are Shell which is
9	Kane gas and it was East and Shell, and one of
0	them is Mountain Gas which went defunct years ago.
1	In fact, my neighbor has Mountain Gas, it's got a
_2	hole in the casing. So my concern is it migrating
13	to his well or my well.
_4	MS. JOHNSON: Okay, that kind of information
.5	is very beneficial, so if you could send it to us,
16	that would be helpful.
.7	William Granche?
_8	MR. GRANCHE: My name is Williams Granche,
_9	I'm a citizen of Elk county and I was going to
20	address I have about 12 bold face questions
21	here, but the representative of Seneca and
22	Mr. Wagner covered a lot of them, but some of them
23	need a little bit more coverage and specificity in
24	regards to, for instance, what's in the water?

You know, in 1980 it was declassified, as

anything that was in the water that was released from drilling gas and oil was to be classified as non-hazardous, okay. So that's a concern that I have. One of the other -- and that includes things like benzine which we know isn't good for us.

The issue of abandoned wells is also a big issue. I think anybody who spends much time in the woods hunting, fishing, running, camping, hiking, has come upon them. Oh, look at this, look what is around here, and so it's incumbent upon Seneca if they do this, they have to be 100 percent sure they got them all and they plugged them thoroughly and that's a major issue.

Somebody mentioned earlier an issue about paychecks and that certainly is something that we can all understand that people need jobs and I'm for that as well, but when I consider even the risk to the workers, you know, when I said earlier about the -- what's in the water, one of the things is radioactivety and it's not just salt water, okay. When some people say salt water, they think of the ocean and breezes, and this is no water you can breathe and think this is good for us.

But the radioactivity, there was a spill in November 2009 and when it was sampled, the amount of radioactivety was 3,600 times more than federal safety limits for drinking water and 300 times higher than a Nuclear Regulatory Commission limit for industrial discharges to water. Radiation is not confined by the walls of the tank truck and I'm thinking of the man driving the tank truck with the tank at his back.

So as Mr. Punk mentioned it and, you know, five years for a mistake to take place, that kind of regulation has got to be changed. That number of years I think -- or, that number of times, daily checks just makes sense because of the potential for poisoning.

What is Seneca's emergency contingency plan?
What is their protocol? This isn't a buzzing
metropolis, we don't have all kinds of highways
and et cetera. And access, what happens if
there's a spill? What's the reaction time, what's
the communication? Are the people who are sent to
the emergency going to be adequately protected?

Will tracers be put in the water? We all know that accidents occur and have occurred, but then it becomes a legitimate -- I mean, a

1	litigation as to, well, that's not our garbage,
2	that came from them. I mean, thinking of I
3	mean, it's a different story, but Halliburton and
4	the people in the gulf all blamed one another, it
5	took forever to find out who was at fault. So
6	tracers should be put in the water so we know
7	where this came from.
8	Liability insurance, as Mr. Punk mentioned,
9	it shouldn't cost the people of this community a
10	dime, and the real problem is that without water
11	they become sort of a love canal or a Centralia, a
12	ghost town, because what's your home without
13	water?
14	MS. JOHNSON: Thank you.
15	Kevin Moran?
16	MR. MORAN: I'm the chairman of the James
17	City Water Authority. The questions I had was
18	pretty much what Brian already covered.
19	MS. JOHNSON: Thank you.
20	Robert Vaughn?
21	MR. VAUGHN: My concerns have been addressed
22	also.
23	MS. JOHNSON: Thank you.
24	Michael Brock?
25	MR. BROCK: My name is Mike Brock, I'm from

Saint Marys, PA.

What I'd like to know, and of course this is kind of a rhetorical question, but I followed this quite a bit since, you know, the gas drilling has really become — at least the Marcellus Shale drilling, and even before that actually, but I know the information that was passed on from the industry was that this waste water would not be put in injection wells in Pennsylvania because the geology didn't support it, the same way we have a different geology than say Texas or Oklahoma. So I guess my question — and I think Mr. Freeburg alluded to that a few weeks ago in saying that the industry had said on more than one occasion that Pennsylvania was not suitable for injection wells.

So my question is: If the Earth is approximately 4.5 billion years old, has the geology changed in the last five years, five years out of 4.5 billion? I don't think we're getting, you know -- they said years ago we weren't going to do it, now we're going to do it, so I find it extremely difficult to believe that it was inappropriate years ago, but it is appropriate today. Thanks.

MS. JOHNSON: Thank you.

1	Diane Bester?
2	MS. BESTER: Thank you, Karen. I'm here for
3	both my husband Raymond Bester and myself Diane
4	Bester. We're property owners in Highland
5	Township. We have three problems with this
6	request.
7	One, we don't feel there is adequate
8	supervision over Seneca Resources' activities to
9	make them accountable for their activities.
10	Two, we do not want a reactive situation
11	after damage has already been done requiring us as
12	taxpayers, as a township to bear the burden and
13	cost to provide proof before any further damage
14	and activities continue. The cleanup could be
15	costly, timely and with permanent damage.
16	Three, we do not have the controls in place
17	to stop a run away freight train once it gets in
18	motion.
19	I am sure this will be argued, but let me
20	explain why we feel this way. Already this year
21	we have lost a spring for a total of two months,
22	one year after a well was started with fracking,
23	this well was owned by Seneca Resources. This is
24	the first time in 130 years that this spring has

went dry. It has a substantial flow and is

perfectly good quality water which also supplies 1 2 our five-acre lake. Upon investigation we found out that at the 3 same shallow elevation as our spring, Seneca's well has a permit to draw off 375,000 gallons of 5 water per day, that's over a million gallons of 6 water every three days. That's over two million 7 gallons per week. 8 Now, this same water they can use to truck 9 10 to any well they choose to go to. There was no monitoring over this activity. I tried to contact 11 Seneca Resources regarding our situation with no 12 13 I had to contact your Department of Environmental Protection. 14 15 MR. BESTER: DEP. 16 MS. BESTER: DEP. 17 MS. JOHNSON: Yeah, the state. 18 MS. BESTER: The state. 19 I want you to know that they have a different 20 idea of what was going on than what was actual. 21

Upon investigation what they thought was a
500-foot well and a deep well drawing off water
way below the surface, the permit and actually the
water -- the initiation of the well when they did
the testing showed differently. At 41 feet they

stopped the casing because they hit water, the same elevation as our spring. They went down another -- until they hit 200 feet, got some more water. They went down to 400 feet and stopped.

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So this shallow well is drawing off a million gallons of water every three days and can be trucked to any one of their wells. Do you think perhaps that this might have some kind of impact on our drinking water supply? Without adequate good quality water, our property is worthless. It could happen again.

It is my understanding that there may be other property owners as well who are even closer to this well than I am who may have water problems also.

Now, the burden of proof rests with us, a small taxpayer against the joint gas company with their full-time legal staff. Now we are at a meeting called by the same company, Seneca Resources, to approve another activity that they are again promising will not impact our township. I do not have very much faith in their promise. We had no knowledge of the well that was drilled that we feel may have impacted us. Since we have this opportunity to speak up and the opportunity

1	to prevent a crisis, we need to make sure that
2	nothing can happen to us because we have not been
3	able to successfully monitor this company to date.
4	We feel more investigation is needed.
5	My husband and I are opposing this injection
6	well permit and/or activity for the above reasons.
7	Perhaps as a community we need to get more
8	involved to preserve what we have left. Thank
9	you.
10	MS. JOHNSON: Were you going to turn those in
11	or
12	MS. BESTER: I have one handwritten copy.
13	MS. JOHNSON: That's fine.
14	Michael Kamandulis?
15	MR. KAMANDULIS: Good evening, thank you all
16	for showing up and thank you for the testimony
17	that's been given.
18	My name is Mike Kamandulis, I'm from Elk
19	County and I have some questions that we can all
20	ask.
21	This is from a book by Dr. Ben Carson, a
22	leading pediatric neurosurgeon. Every day he has
23	to ask these questions to himself before he goes
24	into the operating room and works on children's
25	brains and tries to repair the damage that's been

done. These are the questions.

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No. 1: What are the best things that can happen if we inject contaminated water in your neighborhood? Some of the answers: The gas industry won't have to drive to Ohio to inject their waste. The gas industry won't have to spend millions of dollars constructing a waste water treatment plant. Stockholders and the gas industry may likely receive added value to their shares.

Question No. 2: What are the worst things that could happen if we inject contaminated water near a neighborhood? Ground water aquifers and water supplies may become permanently contaminated. Very serious adverse health effects may affect some nearby residents. Injection of contaminated waste water near neighborhoods may cause other unknown and/or adverse environmental impacts, earthquakes. Nearby housing property values may dramatically plummet. The presence of these so-called industrial outhouses as they've been referred to will spur continued shale gas development, which I know many of you are for, but which is a fossil fuel and will thereby exacerbate global climate change.

What are the best things that can happen if we don't inject contaminated water in your neighborhoods? Well, we will preserve your state's fresh water aguifers, clean air, and the natural, scenic, historic and aesthetic values of the environment for a longer period of time, and by the way those are guaranteed in our state constitution. We will very likely protect the health of the residents in those neighborhoods. We may develop a mind set aimed at sustainability and begin to develop innovative sources of clean energy, and therefore, we may teach future generations that we have finally learned that humans are an integral part of the Earth's natural system and that we can no longer destroy nature in order to power our civilization.

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And then finally question No. 4: What are the worst things that can happen if we don't inject contaminated water in your neighborhoods? Well, the answers would be the gas industries may be forced to build an appropriate waste water treatment plant, although that would incur greater cost to them. The price of natural gas may rise due to these added expenses. Certain injection well related businesses may experience losses.

1	There may be a reduction of natural gas on the
2	world market, and then finally there may be other
3	adverse economic impacts to the economy. So thank
4	you very much.
5	MS. JOHNSON: That brings us to the end of
6	the individuals who have identified that they
7	wanted to make testimony.
8	Is there anybody who did not note that they
9	want to and now wish to give testimony?
10	MR. WAGNER: Thank you. Reintroduce myself?
11	MS. JOHNSON: Yes.
12	MR. WAGNER: Thomas G. Wagner, again I
13	testified on behalf of the county commissioners
14	earlier and in light of some of the other
15	testimony that was given by local residents I
16	would like to ask the agency to consider two other
17	points.
18	I've attended a good number of seminars over
19	the years, recent years about the Marcellus Shale
20	industry and drilling, and one of the points
21	that's always made by the industry is that
22	fracking is an activity that has occurred for
23	dozens if not hundreds of years in the United
24	States so that is not a new technology and it is
25	a technology that has been used in shallow gas

wells in Pennsylvania.

I know that Seneca takes the position that
the fluids that it intends to inject into this
well are not from Marcellus horizontal well
drilling and presumptively do not contain some
of the chemicals that might be in frack water,
but if they do use fracking techniques in shallow
wells in Pennsylvania as the industry does do,
then we very well may see those chemicals in this
injection well and I wish you would consider that.

The other thing is a point that was made by a gentleman back here about abandoned and unplugged wells and you asked about locating them. If we're given enough time, and I don't know that seven days is an adequate amount of time, but if we're given enough time, the county has the ability if it's given GIS coordinates, to provide the EPA with a map of those wells if they're identified by the gentleman who says he knows where they are.

So I would ask if you would be in touch with the county commissioner's office about that issue, perhaps we could help with that.

MR. BERGMAN: Why is it up to me to identify them? That's the question.

MR. WAGNER: Well, I appreciate it's not up

1	to you to identify them, but it is, whatever we
2	can do to oppose this application, whatever we can
3	do to demonstrate to the agency that there are
4	substantial risks with locating this injection
5	well in this location, you ought to do that
6	because they may not have the resources to go out
7	and do that on their own, but we know, so it's
8	incumbent upon us to tell if we do know.
9	MR. BERGMAN: Aren't there any state agencies
10	that can help with locating these wells?
11	MR. WAGNER: Well, you know the lay of the
12	land, if you have a GIS device of some kind, it's
13	not hard to do, and we have the ability to
14	MR. BERGMAN: They're right on two dirt roads
15	right here.
16	MR. WAGNER: We probably need a little bit
17	more time.
18	MS. JOHNSON: It's very difficult to have a
19	conversation back and forth for the stenographer.
20	What I would like to point out and we are
21	going to raise after the formal testimony, some of
22	the comments that came into the office immediately
23	after the proposal was out to the public was that
24	individuals did identify a number of additional
25	abandoned wells that were not initially on the

maps, and those maps have been updated as part of 1 Seneca's responsibility to identify wells. So in the last couple days those wells have been -- a 3 number of additional wells have been located. 5 So if you know of specific wells, those maps have been updated and you can pretty much find out whether those wells are included or whether there 7 are still issues that are missing. 8 (Discussion off the record.) 9 MS. JOHNSON: Can you start over again? 10 11 MR. BRZEZINSKI: What are you going to do 12 with all the wells they shoved the casing over with the bulldozer and jammed a big stump in 13 there? We frack open hole wells all the time and 14 they'll be a hundred feet away and you'll never 15 16 know they're there. I mean, the ones you can find are great, but how many aren't you going to find? 17 18 MS. JOHNSON: Okay, thank you. Your name? 19 MR. BRZEZINSKI: Matt Brzezinski, I lived a 20 quarter mile away and just built a new house 21 down --22 MS. JOHNSON: B-r-z-e-z-i-n-s-k-i? 23 MR. BRZEZINSKI: Yes. 24 MS. JOHNSON: Thank you. 25 MR. WAGNER: And just to finish my comment, I

1	would request more than seven days in which to
2	submit that information about the wells.
3	MS. JOHNSON: Thank you.
4	Is there anybody else who wanted to make
5	formal
6	MR. HULES: Yeah.
7	MS. JOHNSON: If you'd come up and state your
8	name clearly.
9	MR. HULES: My name is Don Hules and I live
10	on some property down here that I own, and this
11	injection well thing, my brother lost his well, he
12	lives he's on the outskirts of James City, he's
13	probably 500 feet from anybody else. ARG injected
14	some fluid down here and ruined his well. He's
15	now on city water.
16	And my other concern is our water supply is
17	the head waters of the south branch Tionesta, I
18	don't know if you people are aware of that or
19	not. Thank you.
20	MS. JOHNSON: Thank you.
21	And I think, sir, you had
22	MR. EDINGER: Yeah, I am Bill Edinger, I am
23	the fire chief here in Highland Township. Our
24	main concerns are the truck traffic that is going
25	to be coming in and out of there with all this

contaminated stuff. Last couple days ago we just had an incident down on 948 with the Marcellus wells and stuff coming out and all the truck traffic caused a major accident down there.

The other concerns are, the equipment needed to take care of this stuff once everything comes about, are we going to be able to handle a lot of this equipment? Do we need any special equipment or anything like that as a fire department?

Our main concerns are just evacuation. James City Road over here, this is our main evacuation out of town. We have another evacuation plan, but it's all dirt roads and big hills and everything.

MS. JOHNSON: All right, thank you. Are there any other comments before I close?

MR. GRANCHE: My name is Karen Granche and I just have a couple of comments and a couple of questions. My first questions are: Who's your boss? Who's your boss's boss? Ultimately we are their boss. We have the right to self-government. We do not -- they meaning the DEP, EPA or Seneca Resources do not have that right to tell us what we have to do.

Now, from sitting here it sounds to me like there's nobody that wants an injection well here

1	and I'm just going to quote something that you
2	probably already heard because this is what
3	someone from Warren County said.
4	They said, "Who are we? Regular people who
5	give a damn. We are in a battle, perhaps the
6	greatest of our lifetimes to preserve what we
7	hold dear. What is it stake? Everything. Our
8	natural environment, our small town quality of
9	life, our property values, our health, our living,
10	our future. Who are we fighting? Those who
11	would put our lives, property and environment
12	at stake for the sake of corporate profit, those
13	who would lie to us on matters of utmost
14	important, those who try to eliminate our right
15	as individuals and communities to make choices
16	that affect the very air we breathe and the water
17	we drink. We are fighting for our lives and
18	yours. Please remember we are the boss. We have
19	the right to self-government, we have the right
20	to clean air, clean water and clean healthy
21	ecosystems. Thank you.
22	MS. MORRIS: I'd like to say one more thing
23	if I can get up again.
24	MS. JOHNSON: Certainly.
25	MS. MORRIS: You'll have to excuse me, I'm

getting too dang old to walk anymore.

I've lived in James City darn near all my life and almost all on the same street. At the end of the road out here when I was a young child there was a water trough, so when a car come up over James City Hill, they could stop and get water and put it in those cars because in those days they didn't have antifreeze to put in cars. By the time it got to the top of the hill the thing was out of water, they had water or the horse needed to drink.

That water feeds James City water supply.

That well is not 200, 200 feet from that spring location. It's on that side of the Lamont side of Lamont Road and that well is on that side of Lamont Road. Somebody better check to make sure what's going on there. The last time I looked the bridge is still running that. That spring is used to serve James City properties down over the hill. That spring now still serves James City water supply.

And years ago when my husband and I first lived back out here on West Penn Road just outside of Kane, we wanted to put a trailer out at the end of the road so when I was a CB radio operator, I

1	still am, I wanted to have truckdrivers stop and
2	get a place to go to the bathroom so they're not
3	getting out of their truck out there. They told
4	me, no, because you can't put a septic tank out
5	there, you'll ruin the watershed. Well, you guys
6	are doing the same thing. I can't understand it.
7	Thank you.
8	MS. JOHNSON: And thank you so much for your
9	comment. Is your name again Mary Morris?
10	MS. MORRIS: MaryEllen Morris.
11	MS. JOHNSON: Thank you.
12	MS. MORRIS: Everybody calls me Gabby because
13	I talk too damn much.
14	MS. JOHNSON: Thank you. Any further
15	comments?
16	MS. ENDINGER: I am Misty Edinger. I am
17	also from the Highland Township Volunteer Fire
18	Department. I'd like everybody to look around,
19	this is what houses our fire protection area.
20	Yeah, we are not only fire protection, but we are
21	also rescue, that's out there on the highways with
22	these extra heavy truck traffic. As you can tell
23	we are not a very big organization, we are not
24	equipped to handle the type of magnitude of truck
25	traffic and emergencies that may come from this.

We're not just equipped and we're not funded for 1 it. MS. JOHNSON: Any further comments? Okay. 3 In closing remarks, on behalf of the Environmental Protection Agency, I would like to 5 thank you all for your participation here and your 6 7 well thought out comments on this permit proposal in Elk County under the EPA's program for the underground injection control in Pennsylvania. 9 assure you that all of these comments will be 10 11 given serious attention as we prepare a final decision in this permit request. 12 I would also like to remind you that the 13 comment period on this proposal will remain open 14 until December 18th, 2012, if anyone cares to 15 submit written testimony to our attention at EPA. 16 Again, thank you for your interest in this 17 proposal. This concludes the formal part of this 18 public hearing. My staff and I will remain 19 available to discuss the issues raised if you 20 21 should desire and to answer general questions. 22 (Thereupon, at 8:19 p.m., the hearing is 23 concluded.) 24 25

1	REPORTER'S CERTIFICATE
2	
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 of the above petition and that it is a
7	correct transcript of the same.
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10	Jacquelyn P. Sherwood
11	Court Reporter
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