EPA

Moderator: Cindy Cook
September 17, 2020
6:00 p.m. ET

OPERATOR: This is Conference # 7962728.

James Bennett: Good evening, ladies and gentlemen. 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 renewal under the federal Underground Injection Control program for a project consisting of one brine disposal well known as the Windfall Injection Well Zellman Number One in Brady Township, Clearfield County.

Public notice – public notices for this permit were distributed to the state, local governmental officials, interested parties who have written or called EPA and also published in the (Carrier Express) on August 14, 2020. 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, however, I'd like to introduce myself and other members of the agency that I know are on the call. I am James Bennett, chief of the Source Water and UIC Section of the Water Division located in the U.S. Environmental Protection Agency's office in Philadelphia, Pennsylvania. On the call tonight are Kevin Rowsey, our (inaudible) (writer) team lead, and Dave Rectenwald, our class two injection well lead inspector.

For those who are 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 subsequent amendments

recognize 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 Supervision System 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 groundwater resources, which supply approximately half of our nation's drinking water, also needed protection from potentially harmful practices such as 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.

Since June 25 of 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 1,500 oil and gas related wells in Pennsylvania. The object 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 consumptions. The regulatory definition of an underground source of drinking water also includes consideration of both the quantity of water available and its quality to protect all groundwater sources with less than 10,000 parts per million total dissolved solids in order to allow for future uses of these resources – this 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 groundwater resources. It is our intent to enforce the provisions of the UIC for Pennsylvania to enhance and

protect the commonwealth's groundwater resources by ensuring that the 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. EPA's program is designed to protect groundwater resources through stringent casing, (seamanning), 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 resources.

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

The purpose of the UIC permitting process for existing and 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 to address any unplugged wells which (inaudible) (straight) to injection formation and which may serve as conduits for fluid migration, are all designed to ensure that injective fluids are contained within the well and the intended injection zone.

The EPA has several mechanisms for identifying non-compliance, and it has made a commitment to strong enforcement of permit conditions and overall program provisions. EPA routinely inspects all facilities to assist in evaluating compliance by regulated facilities.

The severity of penalty will be based on the seriousness of the violation. Violators of UIC regulations are subject to either criminal or several penalties.

Parallel state enforcement authorities under the commonwealth's oil and gas regulations may also afford additional protection.

Now, having supplied you with a brief you overview of the UIC program and purposes of this public hearing, I would like to briefly explain the protocol and procedures which govern this hearing. Person's wishing to testify will be unmuted by the operator. In presenting oral testimony, we ask that you clearly identify yourself and your organizational affiliation, if any.

We will also request that you limit your testimony to 15 minutes to ensure that all interested parties have an equal opportunity to speak. I'll stress the fact that this hearing is not a debate or a dialogue. We will not be responding to your comments or questions during this call because our purpose in being here is to formally solicit your input on the permit proposal before us.

For those of you who wish to provide a copy of your testimony in writing, 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. Copies may be emailed no later than September 24, 2020 to Kevin Rowsey at rowsey.kevin@epa.gov. If the file size is too large to send via email, please call Kevin Rowsey at 215-814-5463 to arrange alternate options. Thank you. (May), at this point, you can ask for testimony.

Operator: To ask your testimony, you will need to press star, one on your telephone keypad. Again, that is star, one on your telephone keypad. We have now the line of (Darlene Marshall). Your line is open.

(Darlene Marshall): Hi. This is (Darlene Marshall). Can you hear me?

James Bennett: I can, (Darlene). I have already submitted 83 pages to Mr. Rowsey. I want to thank you for holding this public hearing. And I want to first say that the original EPA public hearing was very valuable. There was 300 – around 300 participants. And all of that testimony would be appreciated to be incorporated into this because this is now a 10-year permit and that was looking at a five-year permit.

And the (DEP) has a hearing (for me) with – in front of the (inaudible) Environmental Hearing Board, and those transcripts would be valuable. But, I have condensed those into an attachment of my notes in case you don't have access to them. And I would appreciate any of that being a part of this review.

I would say that I understand the EPA's job is to protect our water supply. And I know that the EPA, if anything happens, would be cleaning up any contamination of the water supplies and there would be no way to restore (the) contamination of water supply. So, I believe God spent this number of years protecting us and I know that EPA is placed here by God and all of you as you are doing your job care about us. And I noticed those times that you really took time to notify interested individuals, and I appreciate that because in all these years that was the first time that had happened. So, thank you.

And I just want to point out that we want to avoid repeating the history of the first Pennsylvania injection well in Erie and the current incident in Ohio where waste has went five miles away in both cases above ground that potentially impacts our public water supply if it would be five miles away because (inaudible) and the surrounding area would be within – their public water supplies would be within that five-mile range.

And we have had (numerous old gas wells) all through this area that we don't even know about that are abandoned that we know on the edge of the quarter mile there are six old known gas wells that provide potential short circuits. And we want to avoid any short circuits in those old gas well as being conduit.

As I stated, the original permit was (good) for five years. And I had a volunteer help me that had qualifications to run the figures, and we went to the DEP and we showed them that the figures that we were provided before our Environmental Hearing Board hearing – that the figures were incorrect and the public has not received the details for the figures for the 10 years.

We know that Windfall has chosen the quarter mile. We know that the injection fluid will intersect with (salts) in less than two years from testimony of the Environmental Hearing Board from the Department of – DEP – Department of Environmental Protection. And that means that in two years,

they will also intersect with old gas wells that are improperly or partially plugged based on the documentation and known issues.

And they also go near the coal mines here in our area that go through the whole area. They also have – closest to my home is the (Carlon) Well and, also, (Vinter) Well is still active. And two of my neighbors have testified in the past that their water supplies were affected as early as the 1970s before these federal safeguards the EPA set up – in 1970s before the safeguards that were put in place that were enacted by this program – both of those neighbors had problems with that (inaudible) (well).

The (inaudible) has some problems, but it's not fully plugged. I know that if you fully cemented something, it would be better off. But, there is no monitoring of there old gas wells. And just recently, you finally got (inaudible) after all these years. And I know how hard it was to just get a one-mile map for the public. So, if something happened, I cannot imagine what it will take to get our water supplies rectified.

But, we have spent all these years (since we know) neighbors had (inaudible) are up for the water test originally and they asked what the waters (inaudible) and were told if anything happened the water would be (supplied). But, we had spent all these years trying to find a way. And recently, even grants were not even able to be applied through it to bring water to our now.

So, I've lived with my brother on a water (inaudible). I know what it's like to have water brought to a home through water (inaudible). So, I know all of the ins and outs of this. As I librarian, I have researched this. I have listened to all sides. And I think the thing that concerns me the most as a librarian is the past industry practices recorded and stories from grandfathers to their children and grandchildren of (impact of practices) performed on wells in this area.

And I just heard another person on Labor Day tell me about the past practices that his grandfather told him about. And we need a better emergency plan. We have no one-half-mile evacuation plan provided for the chemicals listed to understand – (inaudible) (right to know) (inaudible) some chemicals that are supposed to be on this site. And it says there should be a half-mile evaluation

plan in place. That plan – I am not seeing that plan yet and it was not provided as – in the documentation I reviewed.

And, so, there is no way if the groundwater or the water supply gets contaminated. There is no way to restore those water supplies. The township doesn't have the capacity to bring us water from the water supplies currently. They are already running into problems providing what they have for the families that are on it and some people have gone off of it because of the supply.

And it would take (inaudible) just to bring our water supply from (inaudible) to our area. That is not even the (inaudible). And documentation shows the plugging on the (inaudible) closest to my home to be partial – for just an example. If that (Carson) Well would have any problems, that could contaminate my water supply because my new well is drilled about the same depth as the (Carson) Well – the plugging issues.

We just need better emergency plans, better review of all this. And I have done my best – three days of being with the Environmental Hearing Board and asking questions of the company. And the Department of Environmental Protection staff – they did not have (their own) witnesses. So, I asked the questions – and God gave me the right questions to ask. And I've done my best to summarize the three days of that hearing into 70 points (for you of) (inaudible) that needs to be addressed.

And that was based on asking experts and just a review of everything from all these years (inaudible) listening to everybody and putting it all together. So, I have done my best to give you all the information that I could research and find and look at both sides of it because I understand the company wants to do business and I know that we need that business. I understand that. But, I also know that we need to protect our water supply. And I appreciate you holding this hearing so that I can share these comments with you and I thank you for your time. And I am done with my testimony. Thank you.

James Bennett: Thank you, (Darlene).

(Darlene Marshall): Thanks.

James Bennett: (May), you can have the next person.

Operator: The next person is (Dan Fisher). Your line is open.

(Dan Fisher): Hi. This is (Dan Fisher). I am a professional geologist in the State of Pennsylvania and several other states. I have talked to (Darlene) about this problem, this proposed well. And as a – as a citizen of Pennsylvania, I am concerned about two things, basically – that the injectate, the brine, will migrate into unintended areas laterally and untargeted zones vertically.

I am also concerned that with the fault system around this proposed well that the injectate will induce an increasing number and magnitude of seismic events. I did submit written comments, and I will be summarizing those and try to keep it as short as I can. There are several unsubstantiated but I think very key assumptions that the draft permit includes about the geologic faults near this well, and I want to go through at least a couple of them.

In the draft permit, it was stated that – it was doubted that these faults actually exist. But, that is actually – these faults were mapped by (Edmunds and (Berg) back in 1971 using the top of the Oriskany Formation as the datum for the displacements within the Oriskany. So, U.S. EPA cannot claim that these basement faults don't reach 9,200 feet up to the Oriskany from the basement because they were mapped within the Oriskany.

Let's see. Moving on. Yes. They seem – U.S. EPA has seemed to doubt the existence of these faults at all. But, there are two within a quarter-mile area of review. One is about 650 feet to the northeast, and the other one is about 1,280 feet to the southeast.

Now, there is evidence that these faults exist because there is a difference in the amount of production of natural gas on either side of these faults. On one side, the gas is gone. On the – on the other side, the gas was very productive. So, U.S. EPA cannot claim that these faults don't exist within the Ariskany when they actually provide a gas trap for the natural gas.

So, assuming these faults do exist – that I believe they do and, yes, there is evidence that they do – what kind of faults are they? Now, there's lot of documentation that I submitted that shows that faults can be both sealing and non-sealing, that is, both transmissive and non-transmissive, depending on pressure conditions, depending in location, also when you change the pressure.

Well, the pressure has already been changed. The Ariskany has already been depleted of a lot – of a lot of the pressure when the gas was produced. That possibly could have changed the nature of the faults. When you increase the pressure by injecting brine, that can also change the character of these faults.

And since these faults run vertically 90 to 200 feet down to the basement, I am concerned that over time the brine will migrate, it will change the equilibrium pressure and not only make the fault transmissive but induce some seismic events. And that's been known to happen in Pennsylvania and Ohio.

Just recently, there has been an investigation of the (inaudible) class-two brine injection well in Ohio. It's been documented that the brine five miles laterally through a fracture. And I have the report. I can submit that as part of this as well. Those are (inaudible) think about. So, I am not against injection well. But, I am concerned that this is the wrong place for one.

(I will check and see) where I am here. Yes. The last point I want to hit is that if these faults are non-transmissive, that is going to increase the pressure according to what's called image well theory. In hydrogeology, we get trained – first-year students get trained in what image well theory is. If you've got a – if you've got a well near a – near a fault and it's acting as a no-flow boundary, that is actually a mirror image and you will get drawdown doubled as if there were another well exact – the same distance on the other side of the fault. This is also the principle of super position.

And it's easy to do. If we are going to be doing these kinds of things – and this is fairly new in Pennsylvania at least – we need to quantify as much as possible how these faults were going to impact the injectate. So, if you've got two faults, you've got to take into account two image wells. And that has not

been done. I mean this is basic stuff. That's due diligence and it should have been done. And that ends my testimony.

James Bennett: Thank you, (Dan). (May), you can have the next testimony.

Operator: To state your testimony, you will need to press star, one on your telephone keypad. Again, that is star, one on your telephone keypad. The next person comes from the line of (Randall Berg). Your line is open.

(Randall Berg): Thank you. I would just like to say that all previously submitted concerns are still valid and relevant and may be even more so since, as time has passed, there have been more reports of the injected fluid surfacing miles from injection sites. The permitted area is also the geological refresh zone of the water wells and water supply on (Holland Street Extension) as per the geological survey.

I test my water on a daily basis – yes, daily basis – with a TDS, EC, HM digital meter. Readings have shown since they have disturbed that piece of property an average increase of 18.06 parts million total dissolved solids and 35.93 microsiemens in conductivity. That's since they started disturbing the property on July 20. Prior to that, the average I took was from November to July 10. I have been taking readings since day one of this deal back eight years ago. So, I have quite a collection of logs from my water.

What's very disturbing – it shows that any accident spill, operator error, mechanical failure, act of God and nature could or would cause a catastrophe here for the residents' freshwater supply. Any further disturbance of that zone will continue to cause degradation of our water even if there was no further development of the well itself.

It's just ludicrous to me that they would allow a well on a hill above a community with freshwater supply in a – in a geological refresh zone for the wells that's proven at the (inaudible). And these – and these prove to me that, yes, it is definitely the refresh zone for our wells here on (Holland Street Extension).

I always – and I have done this forever – pointed out the Pennsylvania Constitution, Article One, Section 27, that people have a right to clean air, pure water and the preservation of the natural, scenic, history and aesthetic values of the environment. And this toxic well site definitely is an infringement on those values.

Just because it's – just because of current political climate encourages these types of activities, it doesn't make them moral, ethical, safe or right. That's in my opinion. "And no man may poison the people for his private profit." That's a quote from Theodore Roosevelt. That ends my comments.

James Bennett: Thank you for your testimony. (May), if there is another caller willing – wanting to give testimony, you can add them to the call now.

Operator: Yes. To state your testimony, you will need to press star, one on your telephone keypad. Again, that is star, one on your telephone keypad. There is no testimony at this time. Please continue.

James Bennett: (May), do you want to try one more time before I give closing comments to see if anybody wants to give testimony?

Operator: Sure. To state your testimony, you will need to press star, one on your telephone keypad. Again, that is star, one on your telephone keypad. Excuse me. There is no testimony at this time. Please continue.

James Bennett: OK. On behalf of the Environmental Protection Agency, I want to thank you, all, for your participation here and your well-thought-out comments on this permit proposal in Clearfield County under the EPA's program for Underground Injection Control in Pennsylvania.

I assume you that all of these comments will be given serious attention as we prepare a final decision in this permit request. I would also to add that because of the time and the nature that we are giving these comments that I ask you to submit your – if there's any copies of written testimony that you haven't submitted, please submit it by September 24, 2020. Once again, you can send that to Kevin Rowsey at rowsey.kevin@epa.gov.

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

END