

James E. Rosenberg
Testimony Before the Fayette County Zoning Hearing Board
ZHB 13-39, August 28, 2013

Good morning. My name is James E. Rosenberg. I am one of the owners of parcel # 30-06-0248 in Redstone Township, Fayette County, and reside at this property, with postal address 555 Davidson Road, Grindstone, PA 15442. This parcel is approximately 1.9 miles as the crow flies from parcel 30-21-0001, the parcel in question in this hearing. As an owner of this parcel I received a letter from Chevron dated January 14, 2013, informing us that Chevron intended to drill a well on the Whetsel property within 3000 feet of our property, informing us that this affected our rights, and requesting us to return one of two forms either giving or denying a right of entry to perform a pre-drilling water survey. It is a reasonable surmise on my part that the water to be used for hydraulic fracturing of this well will come from the storage facility that is the subject of today's hearing, ZHB 13-39. Accordingly, I assert that the Chevron letter of intent to drill a well within 3000 feet of my property provides me with standing to speak today.

Most of my testimony this morning consists of *questions* which I believe the Board should evaluate before making its decision. In formulating these questions, I had hoped to be able to consult whatever Land Use Plan Chevron might have submitted with its application. In conversation with the Chief of Zoning on Friday, August 23, 2013, I was informed that no Land Use Plan was submitted with the application. If Chevron is submitting such a document today in conjunction with this hearing, I would request of the Zoning Hearing Board that this hearing be continued to provide the public and interested parties the opportunity to review this plan. Now for my questions.

1. Nature of the water to be stored

The public notice for this hearing identifies the facility as a "water storage facility" without specifying what type of water will be stored. This is an important question, on which terminology can be confusing. In particular, the term "fresh water" does not mean in oil & gas industry common use what the public thinks it means. When the public hears the term "fresh water" we are apt to think it means water "freshly drawn" from a source of drinking water. However, in oil & gas parlance, water containing flowback and produced water can be transported from one location to another and still be called "fresh water" at the receiving site by the oil & gas industry.

Accordingly, I believe the Zoning Hearing Board should receive clarification from Chevron specifically as to whether the water to be stored at this facility will include either flowback or produced water.

A parallel question is whether Chevron will be providing Material Safety Data Sheets (MSDSs) for the water to be stored. The answer "it's just water" is not likely to be correct. How will the trucks delivering water to this facility be marked? "Residual Waste"? What is the actual contents of "Residual Waste"?

What type of DEP permits does Chevron intend to apply for for this facility? Will they specifically be waste permits? What is the status of these applications? If the facility will require any form of waste permit from the DEP, why was this not indicated in the public notice for this hearing?

2. Provisions for Compliance with Zoning Code §1000-502

The Fayette County Zoning Code, in section §1000-502, states unambiguously:

"No activity shall emit radioactivity at any point"

There is voluminous scientific evidence to show that the Marcellus Shale is "naturally" radioactive. That means there is a clear concern at the county level over compliance with §1000-502 with any form of Marcellus Shale waste products, and in particular with flowback and produced water. There are many cases on record of

produced water testing positive for radionuclides. Laboratory experiments have shown that hydraulic fracturing fluids can leach radionuclides from the Marcellus Shale. Radioactivity in produced and flowback water has been the subject of several articles in the press, including the New York Times (which provided documents giving radioactivity readings from Fayette County, among other places) and a recent 4-part series in the Uniontown Herald-Standard.

Accordingly, the Zoning Hearing Board should carefully evaluate answers to the following questions:

- What provisions will Chevron undertake to insure compliance with §1000-502?
- What sort of *testing* will be done to assess radioactivity of the water stored at this facility?
- What sort of *testing* will be done on water trucks at egress to make sure radioactivity is not carried elsewhere in the county?

3. Compliance with Chevron-endorsed CSSD “Best Practices”

On March 20, 2013, a new organization was announced called “The Center for Sustainable Shale Development”, of which Chevron was a founding member, dedicated to formulating best practices in the development of shale gas and a certification procedure for verifying adherence to those practices. Notwithstanding the fact that “Sustainable Shale Gas” is a non-sequitur, it is important for the Zoning Hearing Board to verify whether the facility at issue here today will comply with CSSD best practices. In particular, will the facility in question adhere to CSSD Performance Standard 3: operators “shall contain drilling fluid and flowback water in a closed loop system ... *eliminating the use of pits*” [emphasis added]. Evidently, the application of Chevron for ZHB 13-39 does not say whether the intended construction is for a tank farm, one or more impoundments, or both, so that is a question I put before this hearing. The CSSD standards — endorsed and promoted by Chevron itself (supposedly) — do not allow the use of impoundments. If Chevron intends to construct impoundments on parcel 30-21-0001, the Zoning Hearing Board should ascertain from Chevron why Fayette County should be giving Chevron a Special Exception to undertake what Chevron itself says are not best practices.

Fayette County is entitled to Best Practices. If Chevron is not willing to follow its own guidelines for best practices, the Zoning Hearing Board should defer granting this special exception until Chevron is able to comply. The Zoning Hearing Board should not be granting a special exception to Chevron for what Chevron itself believes is less than best practice. The Fayette County Zoning Hearing Board should not be giving a special exception for the construction of any oil & gas facility impoundment or pit for storing water.