Clyde Eisenbeis

20-Jul-2022

Department of Mineral Resources Oil & Gas Division 1016 East Calgary Avenue Bismarck, North Dakota 58503

RE: Application for Geologic Storage of Carbon Dioxide Hearing to consider application. 9am, 20 Jul 2022, Dept. of Mineral Resources Conference Room

My siblings and I own farmland

T146N R88W S34 N1/2 of NW1/4 T146N R88W S34 S1/2 of NW1/4

and mineral rights north of Beulah.

T145N R88W S3 Lot 1, Lot 2, and S1/2 of	T146N R88W S34 N1/2 of NW1/4
NE1/4	T146N R88W S34 S1/2 of NW1/4
T145N R88W S3 SE1/4	T146N R88W S36 N1/2 of SE1/4
T146N R88W S27 SE1/4	T145N R88W S10 S1/2 of N1/2
T146N R88W S27 SW1/4	T145N R88W S11 NW1/4

On 15 Oct 2021, Shauna Laber [Basin Electric] and Kevin Solie [Basin Electric] approached me to sign a seismic permit. I would not sign that permit until it was modified.

Shauna Laber invited me to meet again on 4 Nov 2021. Bruce Fulker [Cougar Land Services] was there too. They wanted me to sign the "unmodified" permit. I said that would not happen until it was modified.

I asked Bruce Fulker if Carbon Dioxide Injection would affect the Bakken Formation. Bruce Fulker

said no. The Bakken Formation is 2 to 3 miles below the surface. I responded that I thought Bakken is 1 to 2 miles below the surface in Mercer County.

Bruce Fulker said that I was wrong. The Carbon Dioxide Injection would be between 1 and 2 miles below the surface. Bruce Fulker said that the Bakken Formation is 2 to 3 miles below the surface.

I received the Bakken Formation elevation map from Kevin Solie [Basin Electric]. I added more numbers to put it into perspective (see enclosed maps). If injected, the Carbon Dioxide Injection could displace oil and gas in the Bakken Formation. All mineral rights owners should be told this.

Bruce Fulker lied to me. I wonder to whom else did Bruce Fulker and his cohorts lie?

I asked Shauna Laber if Bruce Fulker's lie was reported to Todd Telesz, Basin Electric CEO? She did not respond.

I asked Shauna Laber if Todd Telesz knew that the Carbon Dioxide Injection could displace oil and gas in the Bakken Formation, which could eliminate future income for farmers? She did not respond.

I asked Shauna Laber if Basin Electric will reimburse land owners for the future loss of oil and gas income? She did not respond.

I called my cousins Wayne Eisenbeis and Lyle Eisenbeis. They signed the permit. Lyle said he knew they would do it anyway with eminent domain, so he signed it to get rid of them.

Recently Shauna Laber emailed that the Carbon Dioxide Injection would be into the Broom Creek Formation.

I requested a Broom Creek Formation elevation map similar to the Bakken Formation elevation map. There has been no response.

After my meeting with Bruce Fulker [Cougar Land Services], I don't trust what they say.

If oil and gas were displaced, by accident, there is no way to fix that. It would be too late.

The CO2 should be put in a location where there is no potential problem. Zero chance is the best.

- 1) Have all mineral rights owners been informed that the CO2 could displace oil and gas under their land?
- 2) Have all mineral rights owners been given the Bakken Formation elevations map?
- 3) Have all mineral rights owners been given a Broom Creek Formation elevations map?
- 4) Have all mineral rights owners been informed that this could cost them, their children, and / or their grandchildren millions of dollars in the future?
- 5) Is it possible there is an opening between the Broom Creek Formation and the Bakken Formation that could allow CO2 to displace oil and gas in the Bakken Formation?
- 6) Is it possible that pressurizing the CO2 in the Broom Creek Formation could rupture the gap between the Broom Creek Formation and the Bakken Formation that could allow CO2 to displace oil and gas?
- 7) Is it possible that an earthquake could allow CO2 to displace oil and gas in the Bakken Formation?
- 8) Will Basin Electric reimburse mineral rights owners for potential future loss of oil and gas income?

During the hearing, it is difficult to listen to others speak, and, simultaneously, compile my thoughts.

Below are my thoughts that occurred throughout the hearing. I don't recall which ones I verbally stated.

North Dakota Century Code

I heard yesterday that the ND legislature created a law that allows "others" to remove minerals under your mineral rights land.

Can the state remove minerals, that are your property, with no just cause? The Industrial Commission should take this to a federal court, and if necessary to the US Supreme Court.

Bakken Formation

Why was the Bakken Formation not mentioned today until I mentioned it? I do not recall hearing the name Bakken (unless that happened when I went to the rest room).

Is the Bakken Formation in the reports submitted to the Industrial Commission? If not, why not?

The Bakken Formation could be affected by CO2 injection into Broom Creek. This could result in millions of dollar losses to the mineral right owners. This should be included in the reports.

Models

Today I heard the word "model" multiple times. Models are often inaccurate.

A good example is the global warming models which supposedly proved, many years ago, that parts of the US would be underwater by now. This did not happen. That model was incorrect.

Code writers, who write code for models, can produce any result they want. If the model result is not what they want, they can keep modifying the code until the model produces the result they want.

Today I heard that that EERC, at one point, switched to a different model. I interpret this as meaning that the first model produced a result that EERC did not like, so they switched to a different model that did produce a model result they did like.

As an example, the global warming folks identify areas where there is new water on top of the land. This is misleading.

A good example is Florida / sink holes. The land elevation is dropping. The ocean is not rising.

The ocean cannot be higher in some places and not higher in other places. Higher ocean levels would affect "all" land throughout the world, not just some parts of the world.

Broom Creek 3D map

Today I heard the there is no Broom Creek 3D map. I also heard that the spacing between Bakken and Broom Creek is 1,000 feet. A distance of 1,000 feet may seem like a lot, but that is less than the length of three football fields including end zones. That is very close.

How does EERC know the distance between is 1,000 feet, without a 3D map?

Is that 1,000 feet from the "top" of Broom Creek to the "top" of Bakken? Or is it 1,000 feet from the "bottom" of Broom Creek to the "top" of Bakken?

Is it 1,000 feet over the entire area of the CO2 storage? Or does the distance vary? Maybe it is as close as one foot in some places? Or maybe they are already connected?

Did they drill vertically through Broom Creek until they hit Bakken? If so, there is already a breach between Broom Creek and Bakken.

When I worked at Emerson, I spent a few days in the Williston area oil field. Oil companies have "sniffers" at the end of their drill bits. When they smell the natural gas / oil, they start drilling horizontally. The depth and thickness of the Bakken Formation varies.

How can EERC models accurately determine the distance between Broom Creek and Bakken? Oil companies do not know the exact depth and thickness of Bakken in various locations.

Drilling?

In our farmland valley, there is an aquifer 80 to 100 feet below the surface. There as another aquifer 180 to 200 feet below the surface.

A well was dug in that valley for the CO2 project. Are there any protections in place to prevent contaminating the water in the aquifer? The water color is changing.

Dakota Gasification Company (Basin Electric) puts sulfur into the ground. There is lots of sulfur in lignite coal. The fly ash pits are one of the culprits as wind can spread the fly ash in many directions.

Rodney Weigum lost some cattle. The veterinarian analyzed one cow, and found too much sulfide killed the cow.

Sulfur can also kill people.

Perhaps Dakota Gasification Company should be shut down?

Perhaps Basin Electric should remove the fly ash, and remove all sulfur from the ground?

No one living on the land?

I heard the statement that no one lives on the land. I know Lucille Sailer, Lyle Eisenbeis, and Karen Waltz do live on the land in that area at various times of the year. There may be others, but I do not know.

I was mistaken when I said that Lucille Sailer did not sign a contract. She did sign a contract. I did not know.

When I visit with her, she provides a lengthy list which includes coal mining pond water discharge into a farmland creek that floods her farm house basement, and floods her farmland. Some of her farmland is covered with cattails.

In addition, when she signed the contract, she was not told that CO2 injection could displace the oil / gas under her land, was not given a Bakken Formation map, was not given a Broom Creek Formation map, was not told that this could affect her water.

"All" contracts should be invalidated as they did not provide adequate information.

Technology

I heard the comment that it is not economically feasible to extract oil / gas under our farmland.

The same was said years ago in the Williston area. Oil / gas extraction "was not" economically feasible.

The new technology of horizontal drilling has made it economically feasible, as is evidenced by the current oil / gas extraction in the Williston area.

It is possible that future new technology could make it economically feasible to extract oil / gas underneath our farmland.

I heard someone state that it takes heat to cook the gas to convert it into oil. Perhaps a new, future technology could heat the gas and convert it into oil. While this is an unknown now, it could still happen in the future.

If a leak is detected

If the testing discovers a leak:

- How will they find the location of the leak?
- How will they fix the leak?
- How will they ensure the leak does not displace oil / gas?

Access to surface land?

During a break, Kurt Swenson told me about a permit that he and his neighbors refuse to sign. That permit grants access to install a CO2 pipe under their farmland.

The primary problem is that the permit also grants access to the surface of their farmland without any restrictions, which means they could build a variety of infrastructures, including buildings, on their farmland.

What authority grants access to someone else's farmland?

"Know" there is zero risk?

The proponents of CO2 injection "supposedly know" there is no risk of CO2 displacing oil / gas. If those proponents "know", they should willingly sign a legal contract that gives "all" of their assets to the mineral rights owner if there is a problem.

If displacing oil / gas does not occur, everyone is happy. If displacing oil / gas does occur, the proponents lose money. The mineral rights owners do not lose money.

This includes things such as earthquakes. Today, I heard that the odds of an earthquake are little. This means the odds are not zero. If an earthquake does occur, the mineral rights owners should not lose money. The proponents should lose money.

If the proponents do not sign these types of legal documents, this indicates they "do not" know. They are guessing.

Oil companies will not drill on CO2 land?

Today I heard Mary Ricker state that their attorney told them that oil companies will not drill where CO2 is stored.

This makes complete sense. If I were an oil company, I would NOT drill where CO2 was injected. That is too much of a risk that could have many complications.

CO2 storage should not be placed within a hundred miles of the Bakken Formation. Otherwise we, and our descendants, could lose a lot of money

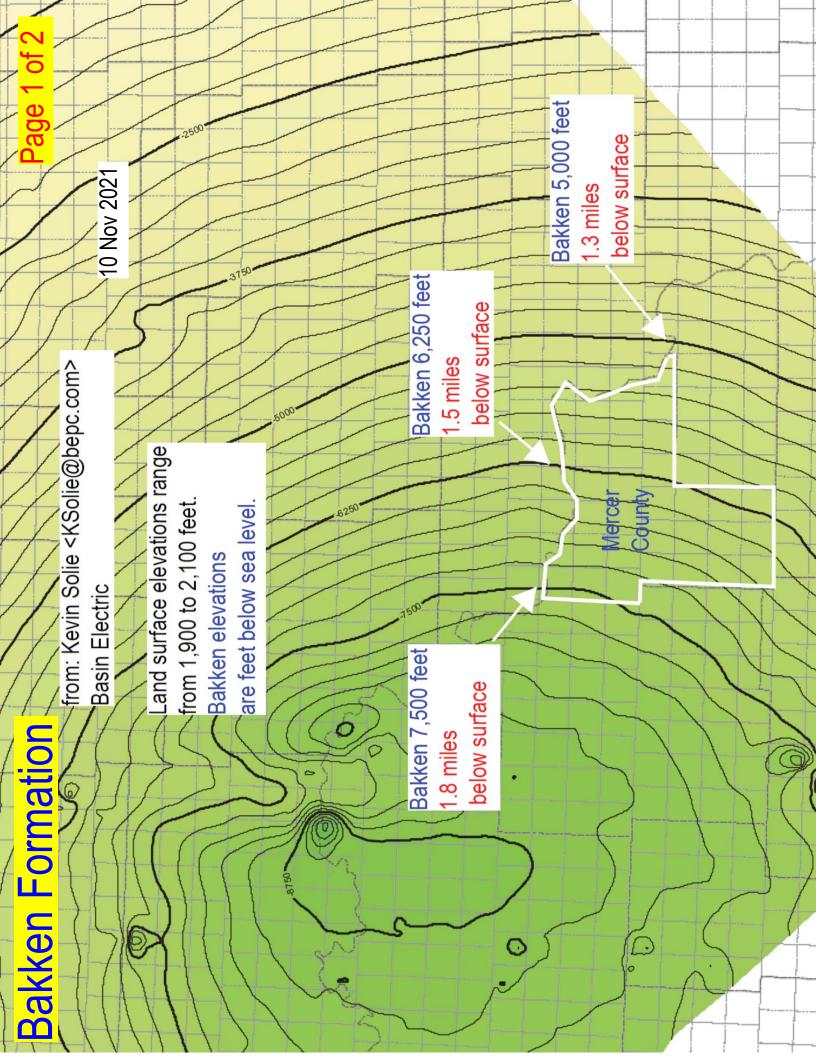
Another hearing

There should be another hearing, that includes us, which discusses the responses from Basin Electric and EERC.

This would give us the opportunity to discuss those responses and ask more questions. There is a lot of money at stake.

Best Regards,

BTW Enclosed are the Bakken Formation elevation maps.



Edward C. Murphy, State Geologist Lynn D. Helms, Director Dept. of Mineral Reources Bakken Formation Index Map Typical Log SENW Sec. 11, T.160N., R.95W Conoco, Inc. #17 Watterud "A" Structure on the Top of the Bakken Formation Julie A. LeFever Scale 1:1,000,000 Top of Bakken Formation (in feet below sea level) Explanation Land surface elevations range from 1,900 to 2,100 feet. County Boundaries Bakken elevations are feet below sea level. Bakken 7,500 fee 1.8 miles below surface North Dakota Geological Survey Geologic Investigations No. 59 Bakken Formation Map Series: Sheet 5 2008