

January 28, 2025

Dawn Shepard
3470 County Road 87
New Salem, ND 58563

RE: Testimony in Support of HB 1574

To the Members of the House Energy and Natural Resources Committee;

My fiancé and I live on a 160 acre farm northwest of New Salem that we purchased in 2009. It's a property with a smaller home, outbuildings, and all pasture, which we need for our cattle and horses. Since moving there, we've cleared out dozens of dead trees, planted hundreds of evergreens, re-fenced everything, and cross fenced to make it through the dry years. We've worked hard on this property, because, more than anything, we love the location. We don't like traffic and it's on a gravel road. 3 miles from blacktop one way, 7 miles the other. The roads are incredibly maintained by our county. Our driveway is a quarter mile long, and our home is right in the middle, so neighborly traffic going by doesn't even faze us. And we have the best neighbors in the world there. Friendly, helpful, caring. Courteous when we meet on the road, slowing down, giving each other room. We have the greatest sense of safety and security living there. We can see Storm Creek and Danzig Dam just across the field SE of us, so we enjoy a great deal of wildlife near our home, especially when the birds are migrating. When we moved there, it was a beautiful, pristine, serene location on all four sides of our home. We loved it.

Since 2011, we've lost a lot of that beauty. A power company from MN started putting up wind towers that year. Apparently, it was something that had been a "done deal" they told us, before we bought this property. It was not disclosed to us by the seller, and these things called wind farms weren't even on our radar at that time. So we weren't happy with it, but there was nothing we could do. At first, we were only told of about a dozen turbines going up at that time. We thought it would be tolerable. Today, I can drive up our county road and when I get a mile from our property heading north; it's a skyline of wind turbines. Currently, I can easily count over 150 from the end of our driveway. 5 are just a mile from our home, with about another dozen in the second mile. When looking out my kitchen window, I am staring at 3 of them less than a mile of our home. When we work outside, they're always there. No more pristine view on three sides of us. I do a lot of photography and it's tough to get a photo without a wind tower in them anymore. We received no compensation for the loss of beauty or the loss of value in our home from them. Red lights flickering at night, certain days the noise is like a jet engine roaring. But we just learned to be grateful for the view from our front deck, where we could still sit and enjoy the scenery to the south. No turbines there. Nothing but blue skies, low rolling hills and Danzig Dam still there to make things beautiful and serene.

Fast forward to summer of 2023 when some strangers from a company out of Colorado were knocking on everyone's doors within 20 miles of our home with leases in hand, asking to turn over the rights to our property to them for a direct air capture facility. None of us had even heard of such a thing. We'd all heard about the Summit Pipeline, and carbon capture from the ethanol plants, but NONE of us had any idea of what this was. When we started doing some research, there was very little to go on. It was such a new concept; there was minimal information for us. What we did find was that it was massively energy intensive, required extreme amounts of water, and that it involved giant fans that were extremely noisy, that attempted to capture the CO2 from the ambient air. DAC attempts to capture CO2 that is normally at a rate of less than .04% in an area like ours. Plants need .03% to grow. Any lower and they start to die. As do humans and all forms of life. How are the crops and grass in our area supposed to grow if all residual CO2 is removed? We'd never heard of anything so insane, and to put it in a farming area where the air was clean and people lived because they didn't want to be around any industries! Common sense tells you that just building such a thing out there would create more pollution than it would capture.

This company said they REALLY wanted to put it up right across from us, because they were going to need a LOT of water, and figured they could take it from Storm Creek and the Danzig area. Over our dead bodies! We told them no, go away, and don't come back. And then we learned of all the government subsidies that would need to go to pay for these facilities. Insane amounts of taxpayer dollars...OUR dollars!

Neighbors started talking and a group of over 80 people met one night to discuss this facility and the leases. The DAC company was NOT invited. Everyone's questions were answered from others there about what direct air capture really was. There was not one person there who wanted this near their homes or in their neighborhoods, and we all agreed we weren't going to sign. Our beauty, privacy, peace, our sense of safety and our entire futures would be stolen from us; everything all of us had worked for, many who'd lived there their entire lives, it would all be gone if this thing went up near any of our homes.

Winter came, and we all thought we were out of the woods and that these people had given up and gone back to Colorado. Until early February of 2024, when we received a letter from our county planning and zoning that this company had filed for a Special Use Permit to put this facility a mile and half straight south of our home, with a sequestration area that would border the gravel road right across from our pasture where our cattle graze and just 1/4 mile from our home. I was shaking when I read that letter. Stunned, thinking, how could this happen? My neighbor across the road called me and she was in tears. She and her husband and daughter and parents still lived on the same property they always had...she'd grown up there. She felt her entire world collapse when she read that letter. It was an instant fear that this safe, peaceful, serene way of life we'd been living was over. It gripped us all.

Word spread like wildfire to neighbors. We only had 2 weeks to figure out how we were going to stop this and save our way of life and our neighborhood from this noisy, ugly, industrial complex that an unknown out of state company was trying to put up here. And who had signed the leases with them? We found it was people who'd grown up there, still owned the land, but had moved far away. None who signed leases lived anywhere near us. Some of them even lived out of state. They wouldn't have THEIR lives destroyed, but they had no problem destroying ours. They were talking about a 100+ acre facility with 144 units approximately 30'wx60'lx35' high - and each with 6 huge fans on them...before the sequestration land was even included.

Long story short, we fought back. We didn't sleep, we didn't eat. It consumed every moment of our daily lives. We banded together. Neighbors from 25 miles or more away stood by our side, as we would do for them if it had been in their back yard. Our stomachs were in knots. The stress, the fear and grief was immeasurable. Our entire futures, our livelihoods, our health, the safety and security of our families rested on the outcome of this meeting. That night, after over 3 hours of testimony from opponents of the facility, the planning and zoning committee voted to recommend a denial for the permit. It was an immediate ton of bricks lifted off our shoulders. We felt like we had our lives back. The permit application would still get a chance with the County Commissioners, but we at least had some breathing space & hope.

Because of our continued concern they could still be permitted, we and our neighbors pitched in and hired an attorney, should another permit battle ensue. We were glad we did, because though the DAC applicant withdrew that application, they reapplied in June. Our county had already started the procedure to issue a temporary moratorium on DAC, as much discussion had taken place on the subject that there were no current county land use standards for DAC siting or anything even close to it. But because the applicant applied before the moratorium could be fully enacted, they were allowed to go through the permitting process a second time with their newly beefed up application.

Our peace of mind had been short lived. And once again, here we were preparing for another battle against DAC in our neighborhood. For the next month leading up to the permit meeting, we were all more stressed than the first. None of us slept, barely ate, missed family activities staying home to do research, sent emails and letters to the P&Z with our findings, and prepared testimony for the meeting.

We were mentally, physically and emotionally drained, again, at the thought of losing our sense of safety, our health, security, and livelihoods should this thing get permitted and go up near our homes. We were not going to have another massive industry on the fourth side of our home, destroying our lives and devaluing our property even more, making it nearly worthless. Who would want to live near this monstrosity?

At the P&Z hearing for the second application in late July, another full house was there battling it out. This hearing went as long as the first one. The planning and zoning finally voted again to recommend a denial of the DAC permit. The joy and relief we all felt was immense. The applicant ended up withdrawing their application a month later, before it went to the county commissioners. The moratorium had passed and was now in effect, and we could all finally breathe a real sigh of relief and enjoy our lives again, instead of every waking moment being consumed in fear and stress with this battle.

In October, the P&Z Subcommittee began meeting to work on land use codes to develop specific use standards for direct air capture facilities. This is the way things SHOULD be done. Land use codes and standards specific for such a facility need to be developed by all counties in order that rural families like ours can avoid going through what we did. Blindsided, months of stress, emotional, physical and mental strain, wear and tear on family relationships because of the pressure, thousands of dollars spent in legal fees to protect our families, our homes, our very livelihoods and our futures.

And that is why I am supporting HB1574. A 2 year statewide moratorium would give all counties the time to work on specific use standards for direct air capture facilities that work for their residents, where special use permits should not be approved for projects that adversely affect the health and safety of the residents, or the farming in the area. As our subcommittee has been going through the process, each meeting seems to open up another area of a DAC facility that needs standards that had not been considered at the previous meeting. They are immense and complex facilities.

There are numerous types of methods, equipment, fan sizes, and chemicals used to capture and process the minimal amount of CO2 they claim they can capture. Some of the chemicals are cancer causing and can drift to people's front yards. DAC noise is a major problem in a rural community. People live in the country to get away from city and industrial noise, not to have it shoved down their throats nonstop, 24/7/365 from fans and generation systems and power plants needed to supply electricity for these facilities.

Power must come from their own generation source, which is normally natural gas and therefore creates more CO2 for them to capture and get paid for that didn't exist in the first place. They create more of a problem than they solve and need to be regulated and sited very carefully to avoid a massive waste of taxpayer dollars and destruction to the lives of those living closest to them, and to the wildlife in the area.

These facilities are the most expensive and energy intensive, while also the least productive, form of carbon capture in existence. They can cost 3-4 times the amount of what it costs for a normal carbon capture unit to be built at the site of the emissions. As of November 2024, DAC facilities were still averaging a cost of \$700-\$1100 per ton of CO2 captured versus on site carbon capture facilities, averaging \$50-\$150 per ton. That's a lot of wasted taxpayer dollars that could be used more wisely. Additionally, most DAC facilities only capture 15-30% of their "expected capability" because it takes 1600 tons of air to be moved around to capture just one ton CO2. At this time, DAC just cannot survive without continual government subsidies. It is NOT economic development when taxpayers are footing the bill.

Water availability is a major issue with a DAC. They need it for cooling, for separating, for rinsing the fan blades; the applicant we fought were talking millions of gallons per year for theirs. Where are they going to get it? There are also lighting standards needed. People live in the country so they can gaze at the stars at night, not so the skies can be invaded by lighting from a massive facility they don't want there.

Fire safety is a major issue. When these facilities are in a remote rural area, who's going to put a prairie fire out that could start from an industrial fire on a windy day? Local rural volunteer fire fighters are at work. By the time someone could get to it, hundreds to thousands of acres and homes could be burning. All of this needs to be considered when siting a DAC, for the safety of the residents in the area.

Traffic is a big issue. The areas DAC companies want to build have gravel roads, families traveling on them, young teen drivers with little experience, farming equipment during planting and harvesting, school buses. Rural residents know their neighbors, their community and their traffic flow and use caution, looking out for their neighbors. A 5-6 year construction plan for a DAC means drivers and large trucks on the roads unfamiliar with the residents and a high risk of accidents, some serious or deadly. Not to mention the wear and tear on the roads and the dust, and all of this needs to be considered in siting standards and road use agreements before permitting.

People don't want CO2 sequestered next to their property, where it can spread and leak into underground water sources, or worse yet, have a leaking pipe that causes it to dangerously escape into the air. The state of Illinois has once again recently enacted a moratorium on CO2 sequestration because of the underground leaks they are finding. Caution needs to be used for sequestration siting in a residential area. We need to pay attention to what is happening in other parts of the country and learn from it.

Don't let the residents of North Dakota become guinea pigs for this industry. A two year state moratorium on DAC would give the people of the state time to research the need for safety regulations for this new technology, as there is very little history for it that can be used for human health and environmental impact studies at this time. We still don't know enough about this technology to even know what conditions to apply for siting. We are researching and learning. This moratorium will give counties time to create land use standards necessary for safe and responsible siting of this technology. It will save massive amounts of taxpayer dollars being wasted for something that is proving futile, and instead allows those funds to be used for something more productive and useful for the state of North Dakota.

My personal story and the knowledge gained about DAC because of it, brings me to support HB1574. I urge the members of this committee to vote to pass this bill.

Thank you for your consideration.

Dawn M. Shepard

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