Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION

Title: Powertech USA, Inc.: Dewey-Burdock

in Situ Uranium Recovery Facility

Limited-Appearance Hearing

Evening Session

Docket Number: 40-9075-ML

ASLBP Number: 10-898-02-MLA-BD01

Location: Hot Springs, South Dakota

Date: Monday, August 18, 2014

Work Order No.: NRC-1007 Pages 1-123

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	ATOMIC SAFETY AND LICENSING BOARD PANEL
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6	LIMITED APPEARANCE SESSION
7	x
8	In the Matter of: : Docket No.
9	POWERTECH USA, INC. : 40-9075-ML
10	: ASLBP No.
11	(Dewey-Burdock In Situ : 10-898-02-MLA-BD01
12	Uranium Recovery Facility) :
13	x
14	Monday, August 18, 2014
15	5:00 p.m.
16	Mueller Civic Center
17	Theater
18	801 South 6 th Street
19	Hot Springs, South Dakota
20	
21	BEFORE:
22	WILLIAM J. FROEHLICH, Chairman
23	DR. RICHARD F. COLE, Administrative Judge
24	DR. MARK O. BARNETT, Administrative Judge
25	

PROCEEDINGS

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2	5:01 p.m.
3	CHAIRMAN FROEHLICH: Good afternoon,
4	everyone.
5	We will resume our Limited Appearance
6	Session, the afternoon session.
7	We know that there are some people who
8	stayed from the morning session, and there are also
9	many new people this afternoon. So, I will just give
10	an abbreviated introduction as to what we will be
11	doing this afternoon.
12	My name is William Froehlich. I have been
13	named Chairman of this Atomic Safety and Licensing
14	Board, which has been designated to hear the matters
15	concerning the application of Powertech for an NRC
16	combined source of byproduct material license to
17	construct and operate a proposed in-situ uranium
18	recovery operation called the Dewey-Burdock In-Situ
19	Leach Recovery Project in South Dakota.
20	We are holding these Limited Appearance
21	Sessions this afternoon. This is in U.S. Nuclear
22	Regulatory Commission Docket 40-9095MLA. The "MLA"
23	stands for Materials License Application.
24	Today's proceeding was publicly noticed by
25	order of the Court issued July 3rd and was published

in The Federal Register on July 10th, 2014.

Once again, let me introduce the Board.

To my right is Judge Richard Cole. Judge Cole is a full-time technical judge and has been a member of the panel since 1973. He holds a bachelor of science from Drexel University, a master's degree from Massachusetts Institute of Technology, and a Ph.D. from the University of North Carolina. He is a Diplomat in the American Academy of Environmental Engineers.

To my left is Judge Mark Barnett. Judge Barnett is a licensed professional engineer. He holds a bachelor of science and master of science from the University of Tennessee and a Ph.D. from the University of North Carolina. He is currently the Malcolm Pirnie Professor of Civil Engineering at Auburn University. He is a part-time technical judge.

This meeting is open to all members of the public and members of the press and media.

We do have with us Mr. Eliot Brenner who is Director of the Office of Public Affairs at the Nuclear Regulatory Commission. If you have any questions about the procedures or anything you have heard today, you may speak with him about the background information or anything related to the

contentions that were filed in this case.

We have a court reporter, Matt Miller. A full electronic transcript will be made of all comments heard today, and a transcripts of that will be available in about a week and will also be posted on the NRC website. So, when you do take the podium, please speak softly and distinctly, so our court reporter can get down everything you say accurately.

We have over here to the right counsel for the parties to the proceeding. They don't get to say anything today. They get their turn tomorrow and the rest of the week when go to the formal evidentiary hearing, which will take place in Rapid City beginning tomorrow morning.

This session is for members of the public. The Board wants to hear from the public.

I am not going to go into the history of the particular proposal because I did that early this morning. I want to save enough time, so that we get to hear from everyone who wants to speak today.

In terms of the order of speakers, we are going to start with the people who have preregistered in advanced and, then, take people who came in afterward.

Also, we would be glad, as a courtesy, to

1 hear from any public officials or elected officials from the area, if there are any of those folks here. 2 3 Even though I call your name, when you 4 come to the podium, would you please state your name 5 again and spell it for benefit of the court reporter? Again, this is a session where you can't 6 ask any questions and, likewise, you can't ask us. 7 8 But be assured that we are listening to everything 9 that people have to say and presentations that they 10 make, and this will inform us and also help us in formulating our questions for the evidentiary hearing 11 that begins tomorrow. 12 At this point, I think we will begin. 13 14 let me ask if there are any elected or public officials who wish to lead off. 15 16 (No response.) 17 Then, could we please hear from Sandra Rodgers. 18 19 RODGERS: My name is Sandra Irene That's S-A-N-D-R-A, Irene, 20 Rodgers. I-R-E-N-E, Rodgers with a "D", R-O-D-G-E-R-S. 21 I am grateful to you, Your Honor, and all 22 the members of your staff for coming here. I want to 23 24 thank you for all your time and consideration. 25 My comments center on Contention 3, the

groundwater and the effects of the Madison aquifer as it flows through the Wind Cave. I have the Cave narratives of the organic green dye test of 2007 and '08, which explain who, why, and how this was accomplished and the results.

Professor Arden Davis of the School of Mines and Technology of Rapid City, South Dakota, oversaw the project, which included nine people. On their second trip, on February the 26th, 2007, they took along the State Hydrology Engineer and a PBS reporter and cameraman that wanted to do a story on the water issues in the park.

The case narratives, January the 8th, 2007, through 12-14-2007 have been submitted, along with other documentation. I have submitted that to you.

I met Professor Arden Davis at a hydrology conference at the Rapid City Convention Center earlier this year, when I joined him at a table during the break for breakfast. In the course of conversation, Professor Davis stated that he knew and respected his friend, my neighbor and friend, a geologist and retired professor of the School of Mines and Technology, Professor Daniel Noble.

Dan, will you please stand? Thank you.

(Applause.)

Okay. Now I would like to discuss the map that I have of the Wind Cave tours, and on it I made notes from the case narratives that are from the Wind Cave.

My artistic side took over, and I want it to look like a map of a treasure, a treasure map.

Okay, I'm sorry.

By the way, that is Jason in the lakes area with the organic green dye test that flew through the whole lakes area. Okay. Flowed.

The underground lakes are at the Formation Friday, and it has a Lakota name that I cannot pronounce, where on the 3rd of December three people prepared for an upcoming dye-tracing project with data loggers and dye bug.

And then, six people on February the 26th, including the State Hydrology Engineer -- sorry for any redundancy -- a PBS reporter and cameraman, dumped the organic green dye and What the Hell Lake. They have named all these places. It is incredible.

They dumped it after going to the Calcite Lake and, then, to the Rebel River, before returning to What the Hell Lake to dump the one gallon of fluorescein dye, which is organic.

1 And then, on March the 26th of 2008, Marc Ohms and Jason Walz made the trip to the lakes to 2 3 check for the dye. What then had to happen was their 4 findings needed to be verified at the lab. Okay. 5 The Wind Cave is explored by experienced cavers who volunteer their time to map, inventory, and 6 7 assist with biologic, geologic, and hydraulic studies. 8 This is just the tours. This little map 9 here is 123 miles of the cave that has been mapped so 10 and there's more to be mapped, and it connected, many believe it is connected with the Jewel 11 Cave. 12 This is a little map of the Black Hills 13 14 and the Badlands. And the border -- I put it in 15 fluorescent yellow -- that is the uranium, the richest vein of uranium in probably the world. 16 the Black Hills. And when Powertech is issued their 17 permit, there's many companies waiting in line who 18 19 also want to take our uranium. I can't prove it, but the trees and the 20 plants, all life in the Black Hills, if they take the 21 uranium and other minerals, they are killing the 22 planet and the people that are here. Okay, that's an 23 emotion statement. 24

This is a map of the Minnelusa aquifer and

1	the Madison aquifer in the center. And that is
2	Montana, South Dakota, Wyoming, and Nebraska with this
3	in the center.
4	And if I have time oh, sorry. Okay.
5	I was going to read a poem written by somebody, the
6	last paragraph.
7	"Listen, people. Listen to the animals,
8	the trees, the grasses. They already know what their
9	fate will be. The water, air, and dirt will no longer
10	be able to support life for themselves, much less for
11	you and me."
12	Thank you very much for your time.
13	(Applause.)
14	CHAIRMAN FROEHLICH: Thank you, Ms.
15	Rodgers.
16	MS. RODGERS: Thank you.
17	CHAIRMAN FROEHLICH: Paul Seamans, please.
18	MR. SEAMANS: Thank you for the
19	opportunity to testify.
20	My name is Paul Seamans. That's
21	S-E-A-M-A-N-S. And I am a rancher from Draper, South
22	Dakota. I have traveled 200 miles today to be here in
23	order to testify in opposition to the Dewey-Burdock
24	Project.
25	Some might wonder why a person not from
I	I and the second

the Black Hills area would be testifying today, maybe thinking that I don't have a vested interest in the matter. Actually, I do feel that the proposed mine would affect me personally.

Many ranchers in my area still rely on Madison aquifer wells for watering livestock. And if radioactive wastewater were to migrate between aquifers, this would make these wells unusable.

A bigger concern to me is the possibility of contaminated water entering the Cheyenne River. The Cheyenne enters the Missouri River at Lake Oahe north of Pierre. I would estimate over 50 percent of South Dakotans get their drinking water from the Missouri through various rural water systems, including our largest population area, Sioux Falls and the surrounding area.

The possibility of uranium waste contaminating our water supply is not just a local Black Hills issue, but will affect people across the entire State. I think it is interesting that the water that leaves this area via the Cheyenne will come back to this area by way of the rural water systems, most notably, the Mni Wiconi water pipeline that brings Missouri River water back to serve the Pine Ridge Reservation.

Thank you for your time. 1 2 (Applause.) CHAIRMAN FROEHLICH: 3 Thank you. 4 Georgia Homes, please. 5 MS. HOLMES: My name is Georgia Holmes, H-O-L-M-E-S, and Georgia like the State. I did speak 6 7 at the DENR process. I am a Council person, Council 8 woman. 9 I did listen to the testimony, most all of them, this afternoon, and I will try not to go over 10 anything in duplication. 11 But I wanted to let you know that I have 12 lived in Hot Springs about 30 years; Custer, about 18, 13 14 and Nebraska for five years. And as a member of the 15 Hot Springs City Council, I care deeply about our 16 water use, but I am here speaking on my own behalf. I am a medical technologist and daughter 17 of a miner. My family mined the Black Hills for over 18 19 My grandfather was a geologist and my 70 years. father was a well-known miner here in the Black Hills. 20 They owned about 28 surface mines before he passed 21 away in 1988. But my dad did teach me that our water 22 was more precious than any mineral we could mine. 23 24 He mined most of the rose quartz you see in this area, along with felspar and thallium. 25

since his death, few new surface mines have been opened or mined. And one reason is because of knowledge we now have to protect our forests and, yes, our water. I believe it is a good thing to have this protection, but I believe we may not be doing enough.

I became a medical technologist so I could work in the laboratory to help diagnose and to help treat illnesses such as silicosis, lung disease, cancers, and also to study the causes of them. If we can prevent an illness, we must use our knowledge to do just that. Why cause any physical pain if we can prevent it?

I support Contention No. 2, as I have worked with radioactive isotopes in the lab, and all employers are required to do QA monitoring and evaluate the amount of radiation employees are exposed to while working. If it reaches an unacceptable level, they are removed from the use of that material.

What is our baseline level here in Fall River and when was that level obtained? Was it last year? Two, three, four, twenty-five, or fifty years ago? Or when the last uranium mine was in service? We do have this level evaluated here in the City of Hot Springs, and the water levels that we send to the State are at a safe level. If anyone is interested in

1 this, it is printed in the local paper for public 2 knowledge. 3 What level will it need to be increased to 4 before it is recognized as a hazard? Do the people in 5 the Dewey-Burdock area know what a safe level is for 6 their family? If so, should they still be living 7 there? 8 We in Fall River and Custer Counties have, 9 unfortunately, given up our control to prevent the 10 sale or use of our water and, also, the spread of contamination into our waters. This was the result of 11 passing a Senate Bill 158. 12 To paraphrase this, our lifeblood could be 13 14 taken away from us or contaminated with a virus if we 15 allow this permit. And we have no ability to stop 16 this from happening except to plead to you now to vote 17 no. Contention No. 3 asks for an adequate 18 19 hydrogeological study to be performed to evaluate the migration of the water. I believe this is in the 20 process, and the city has been asked to contribute to 21 It is not a cheap request. 22 the cost. This brings up the subject of what one of 23 our Senators stated to me. "The State of South Dakota 24

can't afford to monitor this problem." We have no NRC

that can regulate this project.

President Theodore Roosevelt stated in the early 1900s, as a quote, "Americanism means the virtues of courage, honor, justice, truth, sincerity, and hardihood, AKA the virtues that make America. The things that will destroy America are prosperity at any price, peace at any price, safety first instead of duty first, the love of soft living, and the get-rich-quick theory of life."

Another quote from him was, "The nation behaves well if it treats the natural resources as assets which must turn over to the next generation increased, and not impaired in value."

And his third quote, which I think speaks to all of us and to me, as a public servant, "Public right comes first and private interest second."

Please represent the generations of people to follow us and safe our aquifers and our hills from earthquakes and unsafe waters. We have a serious problem, and I feel it has been ignored over and over. We have two fault lines in the Dewey-Burdock area that generates the Yellowstone. This fault line is already experiencing earthquakes at Yellowstone, and it has been stated that it is a cauldron waiting to erupt.

We have warm water springs and hot springs

1 because they are heated from deep in the earth's We are at risk at this fault if 40 holes are 2 3 drilled in a 150-square area that is surrounding that 4 fault line and, then, is left to cave-in or move and 5 weaken the sensitive earth's crust. The water that is pumped back into the 6 7 earth at this area under pressure could also set off 8 more earthquakes that we in the southern hills already 9 experience. We are a catacomb of tunnels. We cannot 10 risk having either the uranium or other metals partially removed, then diluted, and sent back to a 11 distributing area. 12 Eventually, it will contaminate our water. 13 14 I care too much for the pure water we do have in the Black Hills and our warm water in our city and our 15 16 historic Evans Plunge. 17 Contention No. 4 deals with the quantity of our water in the natural springs that we hold a 18 19 license from the State of South Dakota to use. this license be compromised? 20 There isn't enough information supplied to have this evaluated. 21 job is this to supply and who is paid to supply the 22 information? 23

Thank you.

Please vote not to give this permit.

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1 (Applause.) 2 CHAIRMAN FROEHLICH: Thank you. 3 Ben Sharp, please. 4 DR. SHARP: Hi. My name is Ben Sharp, 5 B-E-N S-H-A-R-P. I'm from Hot Springs. I grew up This is my home. 6 here. 7 I'm speaking to Contentions 3 and Specifically, I will assert that, one, if this mine 8 9 goes ahead, the aquifers will leak and underground contamination will spread, and, two, there will be no 10 cleanup. 11 I'm a scientist. I have a master's 12 I have a PhD. And for the last 10 years, I 13 14 have been traveling and representing the Native 15 American Government in international negotiations based on science. But I am back here now. 16 17 with my family. I tell you my background not to say that 18 19 you should trust me because I'm some kind of expert. Precisely the opposite. It's for me to point out that 20 have spent my professional life creating and 21 analyzing computer models, evaluating 22 scientific evidence, listening to expert testimony, and sometimes 23 24 this process helps us get closer to the truth.

just as often, the pretense of a scientific process is

used to manipulate or hide the truth.

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So, folks, don't be too impressed Trust your own experience and your common sense. Fair enough, sometimes common sense is wrong. But science is about logic and evidence. So, if your common sense is wrong, a scientist should be able to explain to you the logic and show you the evidence to demonstrate that the truth lies elsewhere. Anytime a scientist resorts to saying, "Trust us. We're the experts, " or "Because our computer models say so, " it is probably lying or trying means he to hide something.

With specific respect to computer models, let's remember that a computer model can only show you the logical consequences of its assumptions. If the assumptions are wrong or based on incomplete data, then the model is wrong.

In this case, we can see that the assumptions used in Powertech's hydrological model are not supported by the evidence, and the most relevant data is being withheld from us. The Powertech model assumes outright no vertical leakage of water between aquifers through the so-called separating layers.

The best-available evidence to test this assumption comes from extensive geological surveys and

tests done by the Tennessee Valley Authority in the 1 This was a government survey. It was not 2 3 conducted privately for a particular company that 4 already knew what answer it wanted. 5 And what did the TVA conclude? We already heard that this morning. The TVA concluded the Fall 6 7 River and Dakota aquifers leak, and they don't just leak from abandoned bore holes. They leak because the 8 9 geology itself is fractured in the whole region. 10 Similarly, we also heard this morning about breccia pipes and other fractures allowing the 11 12 water movement between deeper aquifers in the area, including the Minnelusa and the Madison. 13 14 Yet, Powertech comes along and reaches the 15 opposite conclusion: the geology isn't fractured. 16 The aquifers don't leak. Trust us. We're the 17 experts. We have a computer model. They never say how the original TVA report 18 19 got it so wrong, and I guess we are expected to just Even better, nobody is 20 forget it ever existed. allowed to look at the TVA data anymore because 21 bought it, 22 Powertech and it is now commercially-sensitive. 23 24 Under the rules of data access,

should have to share it anyway. And on August 8th,

the ASLB ordered them to do precisely that. And yet, they still refuse, and their reasoning is that the data somehow isn't relevant because they only bought the data for purposes of improving their profits, and their profitability isn't mentioned under the data-sharing rules.

Is that a joke? I mean, why don't they just go out and say they bought that data to paper the walls of their office? And wallpaper isn't mentioned, either.

Folks, if that sounds like a stitch-up, it's because it is. In 1980, the TVA concluded, on the basis of these data, that the geology is fractured and the aquifers leak. It couldn't possibly be more relevant to Contention 3.

Until the TVA model is made available to these proceedings, not just some expert summary, the actual data, not just to the NRC, but to everyone here, then this process is incomplete. And if the NRC rubberstamps this mining permit before that happens, they are derelict in their duties as public officials. So, I guess we'll see you all back here again next year.

My second assertion is that there will be no cleanup. To understand this, we need to think a

bit more big picture than the information being presented to us.

Azarga, which has acquired Powertech, is a Chinese company. The United States is in debt to the Chinese Government for \$2 trillion. That debt will never be repaid. Even if the IRS were to confiscate 100 percent of the income of every U.S. citizen, that debt is unpayable. The U.S. can't pay by the usual means of producing things of value and selling them back to China because our manufacturing base has been dismantled and shipped overseas.

So, under international free trade agreements which our government has signed, what happens next is the indebted country is forced to liquidate its own infrastructure and natural resources for the benefit of the foreign creditors. In this situation, the creditor country holds all the power. The U.S. Government will have no power to compel a Chinese corporation to do anything, including cleaning up their mess when this project is over or, just as likely, long before that when they have a bad flood or an accident.

There will be no cleanup. This same process has happened for decades in dozens of countries all around the world. Foreign corporations

from the creditor nations, they come up, they take what's valuable, and then, they pack up and they leave. And the locals are left to live in a toxic aftermath.

If you want to see what that looks like, go to Azerbaijan, go to Papua New Guinea, go to Ecuador. Except on the reservation, most of us here in America don't know what that feels like because, until now, we have always been the creditor nation. Times have changed, folks. Evidently, someone thinks it is our turn.

Evidently, someone in Washington is saying to the Chinese, "Hey, be cool, guys. Don't spend your \$2 trillion just yet. We've got some really good water and perhaps a bit of uranium in South Dakota you can have. Just a bunch of cowboys and hippies and Indians out there. We're sure no one will notice."

You can put your sign down. I'm almost

We're noticing. And I say this: nobody asked us in the 1980s before they dismantled Detroit and shipped America's manufacturing capacity overseas. Nobody in this room got rich over the next two decades while the bankers printed \$2 trillion in IOUs to buy back the products that used to be made here at home.

done.

1 And yet, somehow it is our home that we have raped and 2 processed and shipped overseas to pay the debt? 3 To the politicians who sold us out and the 4 bankers who got rich off of it, I say, "Pay your own 5 bad debts." This is our home, not for sale. To you guys in the NRC, you know, I'm sure 6 7 you don't feel like the paid agents of a foreign 8 government. I'm no Chinese man in a trench coat has 9 been giving you envelopes full of cash. It's not like But, with all due respect, if you 10 in the movies. rubberstamp this process, that's exactly what you will 11 have become, whether you understand it or not. 12 Finally, to all you quys locally who 13 14 signed your deals and bought Powertech stock and are 15 trying to push this through to make some quick cash, 16 I mean, you know, all through history in every foreign 17 invasion, every foreign occupation, there are always those local turncoats and petty local officials who 18 19 are eager to collaborate with the occupying power and sell out their own people for a pocketful of silver. 20 It has been that way for 5,000 years. I guess this 21 time is no different. 22 But this is important. This is our home. 23 24 These are our lives and our children's lives.

maybe you need to go home, take a long, hard look in

23 1 the mirror, and decide whose side you're on. The rest 2 of us are watching. We're not going anywhere. is our home. Not for sale. 3 4 (Applause.) 5 CHAIRMAN FROEHLICH: Richard Ellison. Richard Ellison. 6 7 MR. ELLISON: Hello. My name is Richard That's Richard, then E-L-L-I-S-O-N. 8 9 resident of Seattle, Washington, but I have been coming here for about 30 years. I first came here --10 I have family who live here and I have friends who 11 live here. 12 And Dan Noble, funny running into him here 13 14 tonight; I actually worked with him. It was my first 15 job out of getting out of college, looking at the uptake of cyanide by plants from wastes from gold 16 17 mining. And now we are trying to looking at the effects of a potential mine down here for uranium, 18 19 which is a lot more serious runoff. 20 My concern I would like to address is related to peak-storm events, which are not very well 21

My concern I would like to address is related to peak-storm events, which are not very well dealt with in the final EIS. In fact, it seems that the way they are dealing with the weather and precipitation is that they talk about a year average of about 12.4 inches per inch or a monthly peak of 3.8

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inches in May. They are not showing any history for what the peak-storm events are in this area and how they might affect the mining site.

It typically impacts on the storage ponds and evaporation ponds, which are located in the 100-year flood plain. They will hold, supposedly, each pond will hold 5 cubic yards.

Some of the concerns are, if there was to be a peak-storm event, which would cause an overflow of any of these holding ponds or evaporation ponds, the impact to the local wildlife would be significant; impacts to the runoff into the creeks would be significant.

It talks about great blue herons and white pelicans and a variety of other birds that are attracted to the water here. And there is an assumption being made that the holding ponds and evaporation ponds would not attract wildlife, but, in fact, in an area which is a semi-arid desert any pond of water is going to be very attractive to wildlife. It is going to be very difficult to dispel the wildlife from being attracted to these areas.

Historically, in a place like California, they try to take guns and shoot them off in the air to try to detract from nesting or coming to visit some of

1 these ponds. But, if the ponds are holding a toxic soup of metals and salts, they are going to be coming 2 3 to this pond regardless because it is a semi-arid 4 And this needs to be discussed in the FEIS. 5 The peak-storm events which could here --I heard this morning talking about a 20-foot wall of 6 7 water coming through the area. I heard that there was 8 a derailment a year ago of a train somewhat related to 9 flooding. What are the mitigations proposed? Well, 10 the mitigations that I am reading about are fencing 11 and storm bales, collection ditches, and diversion 12 structures and berms, to direct the water into these 13 14 holding ponds. But, again, if these holding ponds 15 overflow, then what are the mitigation opportunities that are being passed by, not doing a full evaluation 16 in the EIS? 17 My background, by the way, is I am a 18 19 I teach. I am an adjunct professor in biologist. some community colleges in Seattle. I teach biology 20 environmental science. Ι 21 and have written environmental documents like 22 EISes in the working for private consulting firms. 23 24 And those are my comments. Thank you. (Applause.) 25

1 CHAIRMAN FROEHLICH: Dennis Yellow Thunder. 2 3 MR. YELLOW THUNDER: Good afternoon. Мγ name is Dennis Yellow Thunder, 4 D-E-N-N-I-S Y-E-L-L-O-W T-H-U-N-D-E-R. 5 I am very honored to be here tonight as a 6 7 part of the Oglala Sioux Tribe Historic Preservation Some of my colleagues are seated over here 8 Office. 9 who will be speaking tomorrow in Rapid City. 10 I would like to speak today. First of all, I want to ask something of our honorable judges 11 I would like for you to place your hand up there. 12 over your heart, if you could. Just indulge me for 13 14 one brief moment. Thank you. Do you feel that 15 That's where I'm coming from here today. heartbeat? I'm talking to you from my heart, just as all of these 16 other people have been. 17 1(a), Ι address Contention 18 want to 19 protection or lack of protection for our cultural resources, our historical and cultural resources out 20 in the Dewey-Burdock area. As you know, we are very 21 connected to the land. We are very connected to the 22 sacred water that is out there. 23 And I wanted to share some of the stuff I 24 have written for you. Yesterday I was at Lakota Lake 25

1 up in the Black Hills. There were many children, families swimming, fishing, having fun. The water out 2 3 there was clear and clean, ready to drink by everyone, 4 animals, plants, people, birds. 5 And as I said there and I listened, the 6 wind spoke to me from the trees and said, "Help us. 7 Help us to survive. You are the voice that we don't 8 have." 9 The water hit the shore, hit the rocks, 10 and from that rippling noise, I heard more cries, You are our voice." 11 "Help us. Without us, nothing can live. These trees 12 The plants won't grow. You will have no 13 won't grow. 14 water to drink. Future generations will have no water 15 Nothing can exist without that water. to drink. 16 We cannot defend ourselves. So, you must 17 defend us. Please do your best to defend us because it cannot rise up out of this ground to take the 18 19 So, it is up to you and all the other people, all the wonderful people that are in here today. 20 is up to us to defend that water. It is up to us to 21 defend cultural 22 our resources out there in Dewey-Burdock. 23 24 So, I want to explain that to you, here to listen as well as to learn what those things mean to 25

us. Your ancestors that are buried in the ground in the area of potential effect, they lay in peace, they lay at rest. Would you want your ancestors disturbed? Would you not go into your graveyard and drill holes? Don't come to ours and drill holes to disturb our dead that lay resting for years, centuries, thousands of years.

These are way of life. These are our beliefs. These are our traditions that you are here to learn about today, to hear as well as to learn what they mean to us.

So, I implore you from my heart to think really, really clearly. And when you lay in bed at night and you hear your heart beating, you will hear the beat of the Black Hills, the heart of the nation. That is what's beating in all of your hearts, all of us here today.

So, when it comes to making that decision, feel that heartbeat. The blood pumping to your veins is like the blood pumping through the water on the Mother Earth. When you inject that poison in your blood, it affects your whole body. That's what is going to happen when you start shooting lixiviants down into the earth. You are going to be poisoning earth, the blood of Mother Earth. Nobody will

survive, nothing. 1 2 I feel for all of our future generations, 3 the little children I saw playing in that Hot Springs 4 Creek last night swimming, playing, laughing. 5 are not going to be able to do that because that water is going to be contaminated. 6 7 So, I wanted to share some of that with 8 you today in Contentions 1(a) and 1(b), to help you to 9 hear us and to learn. Those are what's important. 10 Those are the things that we are here to defend today. Think about it. When we are talking about 11 historical and culturally-significant places, 12 these are the stone features that are put upon the 13 ground in Dewey-Burdock. These are the same kinds of 14 15 features that are created at Stonehenge in England, in 16 Carnac in France, the Maori in New Zealand. 17 sacred places and they remain undisturbed because they are sacred. 18 19 So, I wanted to share about that most with you today and to remind you, when you make your 20 decision, feel that heartbeat. 21 Thank you. 22 23 (Applause.) 24 CHAIRMAN FROEHLICH: Allen Scott, please. My name is Allen Scott,

MR.

SCOTT:

A-L-L-E-N S-C-O-T-T.

Mr. Chairman and Members of the Board, thank you for the opportunity to let me make a few points today.

I'm from Custer, South Dakota. That's about 25 miles from the proposed Dewey-Burdock site. My family homesteaded just a couple of miles from the very project site we're talking about. My family has been here since the 1870s.

I am an environmental scientist with over 32 years' experience and also the owner of a tourist business in Custer. I support the in-situ uranium project proposed by Powertech.

I have heard that some of the opponents of the project have repeatedly stated that this project would hurt our tourism industry. As a local business owner, I don't see how this project could possibly have much effect on it.

The project we are talking about is in a very remote area, nearly on the Wyoming border. There are no paved roads to Dewey and no tourist attractions anywhere in the area. I would hazard a guess that only a handful of tourists that ever visited the Black Hills even know where Dewey is, let alone go there.

The appearance of a series of well fields

in pastureland will certainly not be any kind of an eyesore and certainly not a deterrent to tourism. A lot of people I've talked to in my business through the summer aren't even aware that an in-situ uranium project has been operating near Crawford, Nebraska, which is only 60 miles from 12729BU over 20 years. I have never heard any business being adversely affected by that project.

The Town of Crawford, as a matter of fact, seems very supportive of that project. They say it is a good corporate citizen. Tourism at Fort Robinson, agriculture, and in-situ uranium recovery all coexist very well in that area.

The generic and final Environmental Impact
Statements include no environmental impacts outside
the mining area. The South Dakota DENR, the EPA, and
the NRC are there to protect the environment and the
aquifers. Do we believe these professionals, whose
lifelong jobs are to protect the environment, or do we
believe misinformation being spread around?

I also believe that, if we don't produce uranium here, then we are going to have to burn more fossil fuels for energy or we will have to import uranium from other countries, by the way, where environmental regulations are sometimes non-existent.

1 I would rather create the jobs right here under our 2 better environmental controls. 3 In addition, I welcome the jobs, the tax 4 revenue for Custer and Fall River Counties, and the 5 related economic activity for our area. As a local businessman, I can say this unequivocally: 6 7 more year-round jobs. I am an environmentalist by education and 8 9 experience, and I really believe that this project can be done in a safe manner. 10 I don't see any negative impacts, but, believe me, I see some very real 11 12 positive impacts. Thank you. 13 14 (Applause.) 15 CHAIRMAN FROEHLICH: Joe Allen. Joe Allen. 16 J-O-E A-L-L-E-N. 17 MR. ALLEN: I have lived in Fall River County, South 18 19 Dakota, for 65 years. I'm currently serving a second term as a Fall River County Commissioner. 20 The of 21 following comments are ΜV own and not representative of the full Fall River Commission. 22 During the past several months, I have 23 24 researched the issue of the feasibility of proposed in-situ mining operation, proposed at the 25

Dewey-Burdock site located on the western edge of Fall 1 2 River County. I have attended the meetings and read 3 the material presented by both the opponents and the 4 proponents. Ι attended two of Powertech's 5 presentations. I toured the in-situ mining operation located at Crow Butte in northwest Nebraska. 6 7 also contacted Dr. Perry Rahn, well-known professor of geology and hydrology. 8 Rahn has served the staff of the South Dakota School 9 of Mines and Technology in Rapid City for over 40 10 No single individual is more well-read and 11 years. versed on the underground aquifers of the Black Hills. 12 An example of Dr. Rahn's studies: in the 13 14 late 1950s, the government conducted a nuclear test located in the Pacific Ocean. The fallout from this 15 test was carried by wind currents and deposited over 16 17 the proposed Dewey-Burdock site. Twelve years after this test, Dr. Rahn 18 19 conducted a research project of the Inyan aquifer, finding fallout particles as a result of this 20 nuclear test -- in twelve years. This tells me that 21 permeability of the soils in this area are not suited 22 for in-situ mining operations. 23 24 Another example of Dr. Rahn's studies: he

stated that the underground flow of the water located

under the Dewey-Burdock site flows in a southwest direction at a rate of .05 feet per year. The Cheyenne River is located approximately three miles southeast of the proposed Dewey-Burdock site, three miles.

His research points out that the following mining residual fluids in the project are able to migrate through aquifers. Two of several elements are selenium and uranium.

Dr. Rahn also states, and I quote, "During a mining operation, hazardous materials are set free within the aquifers. It is like walking by a hornets' nest and the hornets are in there and you just kicked the nest."

I cannot grasp the concept that this company proposes to take a fistful of uranium in one hand and a gallon of drinking water in the other hand, mix the two together, and return this water to the soils or aquifers, and expect me to think all will be well. My research and findings are conclusive that this proposed mining site at the Dewey-Burdock site is unacceptable.

In the late 1800s one of our respected statesmen and leaders stood before a group of Congressmen and dignitaries and he stated, "Only after

1	the last tree has been cut down, only after the last
2	river has been poisoned, only after the last fish has
3	been caught, only then will you find that money cannot
4	be eaten." This quote was spoken by Chief Sitting
5	Bull. Not long after these words were spoken, greed
6	and money took the buffalo, the livelihood of Sitting
7	Bull's people.
8	The waters of these Black Hills cannot be
9	compromised for the greed and money of foreign
10	investors.
11	Thank you.
12	(Applause.)
13	CHAIRMAN FROEHLICH: Wayne Bennett,
14	please. Wayne Bennett.
15	MR. BRENNAN: Yes, thank you for allowing
16	me to speak here. My name is Wayne Brennan, spelled
17	B-R-E-N-N-A-N; first name Wayne, W-A-Y-N-E.
18	CHAIRMAN FROEHLICH: Excuse me, Mr.
19	Brennan. There is also a Wayne Bennett.
20	MR. BRENNAN: Is there?
21	CHAIRMAN FROEHLICH: Is he here?
22	(No response.)
23	No? If not there's no Mr. Bennett
24	here?
25	Please, Mr. Brennan.

(Laughter.)

MR. BRENNAN: Off to a good start.

I'm a foreigner, and I come to Hot Springs every year. I have been here for about the last four years. And I have been following this development for quite a while. My contention has to do with Contention 1, but also 2 and 3 interest me as well.

My background, I'm an archeologist and ecologist. I specialize in protection of natural culture heritage in the World Heritage Area in the Blue Mountains just west of Sydney. I work for a government agency, but I do not represent that government agency today. I represent myself and a lot of the country and a lot of the people of this country.

And what I hear and what I see in the documents that I have looked at and the people I have talked to is very similar to what is occurring in my country, too. There is lot of smoke and mirrors when we have mining companies come into an area, and it is the people that live here that best know how to look after the area, and they are the ones that have to fight for it. And personally, I would like to see back in my country a little bit more respect for the cultural natural heritage.

My contention is with the surveys. They are relatively incomplete. They haven't involved the Native groups that want to be involved. But why do they want to be involved? The process has been a shambles, to say the least, and I don't need to go into details of these.

But I think what it shows me across the board is the inaccuracies of these reports, the inaccuracies of the actual work that is being done, and the lies and the deception that is going on to hide these things.

In Australia we have a full mines policy, and that has been challenged as well. There is huge concern in our natural areas for all sorts of minerals and poisons that are entering our aquifer systems through all sorts of mining, but uranium in particular.

You know, it might take 10,000 years to get down to Edgemont through the aquifers, but what will those people be saying in 10,000 years? "What were these people thinking?" You know, the water already is contaminated. And to think that you can go and just contaminate it because it is already dirty is just lunacy. It's just not rational thought.

And for me, I really feel that, again, the

Native Americans are being taken for a ride, as much as the people here in Hot Springs. This land, the Black Hills, is still in contention. This is why people need to be consulted that actually are still required to manage this land. Even though they don't have a mandate, they still feel responsible.

The water connects everybody. It connects the totems. It connects the sites. You know, I would hate to think that I have to come back to Hot Springs in 20 years' time and these people can't go to their sacred land, to their ceremonies, because it is a hotspot.

I would like to say more, but there's a lot of other people who need to talk. And, you know, this tourism thing, if people know your water is poisoned, they won't be coming. It's first medicine. First medicine it is, indeed.

You know, I don't want to see Hot Springs' name being changed to "Hotspot Springs". So, let's just try and get some sanity here because this is madness. This is absolute madness.

And the bottom line here we are facing is wide across the world, and people will fight hard to keep their water clean and to keep their country clean.

1 Thank you. 2 (Applause.) Thank you. 3 CHAIRMAN FROEHLICH: 4 Leola One Feather. 5 MS. ONE FEATHER: Good afternoon. My name is Leola One Feather, L-E-O-L-A, 6 7 One, O-N-E, capital F-E-A-T-H-E-R. I am from the community of Wounded Knee. I come from Chief Smoke's 8 9 Band of the Bear People. I come from many lineages of 10 which I carry history today. And I am concerned and I am here today 11 because I want to go back like 100 years. 12 I want to go back to things that are very uncomfortable and I 13 14 might upset you a little bit, but this is American 15 history. The first violation we have of invasion of 16 our territory after the 1851 treaty is called the 17 Sawyer Expedition. They were funded by the St. Louis 18 19 Tribune and the Omaha World Herald to come here, to do an exploration through our territory. 20 And at that time our territories came all 21 the way from probably Minnesota, St. Paul, all the way 22 to the Rocky Mountains as far as Canada, all the way 23 24 to the Kansas Republican River. This is the home of

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the northern buffalo herd.

1 our people, in this history the 2 buffalo followed the stars, and we followed 3 The buffalo do something very beautiful. 4 When they run, they plow the earth and there they 5 deposit manure. And this is what Americans, foreigners who 6 7 came here, enjoyed in the agriculture. The land was It was beautiful. This is what America 8 prepared. 9 had, a life. This is America's bread basket. Us Indians at Pine Ridge pay \$3 for a loaf 10 bread. So, don't benefit. We 11 we are economically-deprived for being who we are, for who 12 are grandfathers are and our grandmothers. 13 14 So, our story today is we have become 15 dependent. When they rewrote the treaty with General Crook in the Chicago rewrite, he wrote the railroad as 16 17 far Kearney, Nebraska. And at that point, General Wild who was friends with General Red Cloud took 2,000 18 19 Oglalas captive to enslave them, to have them build a railroad in the South. 20 And at this point, our hero is always the 21 people of Crazy Horse. They didn't go to the fort, so 22 23 they didn't die. They didn't catch smallpox, cholera, 24 or typhus.

And in this battle site, this is how this

1 economy with these banks were created. So, they had a battle. And from there, the railroad had to build 2 3 banks to distribute money for violating this treaty. 4 So, right down here at Cascades is the My great-grandmother used to come 5 railroad bank. 6 there to get her railroad check. Not anymore. 7 money is sitting in escrow. We've never been paid. 8 So, what you see in our history that we 9 teach children is always what we look at as conspiracy 10 to kill us. We are human beings. We were here. more and more of our people, we can challenge the 11 Bering Strait theory. 12 Right here, this lady presented the cave, 13 14 the Wind Cave. That is our story. That is our only 15 story. And our story today, I can tell you that this 16 probably happened all over the world. A star fell in 17 the Black Hills. This star contained all the right minerals, complicated carbohydrates, amino acids to 18 19 create human life. And not too far from there, we came out of this cave. And beneath this cave, 20 Macauchi Dethaha (ph.), is a lake. 21 And we know all these things because our 22 ancestors came from this cave. 23 And as a NAGPRA 24 Native American Graves Repatriation

Protection person, I got to read the State files.

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The

State files minimize who we are as a people.

We were very advanced. Our temples were these mountains. The rivers were our holy water where we could come and drink water, where we could bathe. The word to swim and to bathe are the same words.

So, we know from the archeological trail the first place we came after the weather was contained and the Buffalo Nation gave us the fire and taught us how to hunt them, we came to Flint Hill. And this is where we made arrowheads and this is how we ceremonially killed the buffalo.

So, we know that when there are fallen stars, the Leonid showers and the Perseid showers, this is when we do the "Wagnasa" (phonetic Native American word), which is the buffalo jump site.

And as a former monitor, the Oglala Sioux Tribe sent me, when Dakota, Minnesota and Eastern, the latest railroad line, maybe in preparation for Powertech to create a spur to transport uranium directly out of here -- I was that monitor.

And what I was able to bring there is you could visibly see hearts all along this route going to Dewey-Burdock. The head guy, an archeologist from the University of South Dakota really feels that in this whole area is that archeologists, paleontologists,

anthropologists, when you work for the government or the State, if you don't do what you are told in every parts, you are retired. So, you have to go along with them until you are older to write your own papers, your dissertations.

But if you do not consult with the tribes on what we tell you -- like this other lady talked about the fractures underneath the Dewey-Burdock area, we know that. We know that the Black Hills sits on its own tectonic plate. And everything, the water taken out, the water put back in, will create earthquakes. And someday, if this land separates, this is going to be the only safe place in the Great Plains that is left where there is water, where there is food, where there is wildlife.

So, when I was a little girl, Burdock was a very important place to me. My grandfather, they brought us to Wounded Knee after they killed our Chief Crazy Horse at Fort Robinson. Our reservation would have been in the Bears Lot. So, we had to go to Red Cloud Agency. So, my grandfather and his father, Pacer, Tutu, and Bear Foot took 14 families to Wounded Knee, and we're still there.

And what we had to do every year was sneak to the Black Hills to do our ceremonies and gather our

medicine when our people got sick. 1 And in the fifties, when they had the uranium in Provo and Igloo, 2 many of our people got sick. 3 And I stand today here in front of you. 4 5 have to have a treatment called heavy metal chelation. Rural water, the Oglala Sioux water, rural 6 7 water delivery system brought me water that almost 8 killed me. And it is not even coming from the 9 Missouri. These are aquifers. The aquifer beneath is I almost died. 10 contaminated. I was blind. aluminum, cadmium, mercury, tungsten, barium, tin, and 11 uranium. 12 have survived. 13 Ι Ι 14 producer. I did radio programs in California to get 15 people interested in what is happening here to us, 16 because we are not isolated. We have all kinds of 17 technology to reach out to the world to have people come and help us. 18 19 And in my family, 14 of my grandchildren had to be born C-section because, when this water 20 contaminates the fluid in the mother and the placenta, 21 the placenta dies and the baby dies. And that is what 22 we call genocide. 23 24 So, maybe the way that I feel as a Lakota the United States developed a war policy 25 woman,

against us. General Sherman said, "Kill those women, too, because they fight as hard as the men." Those were my grandmothers and they died.

And we know that this land we fight for comes from our people. So, we are only doing what the Creator told us to do. We are protecting our land.

So, I have a little grandson whose name is Anoshwa. He weighed 1 pound and 9 ounces. One summer, nine years ago, 68 babies were born C-section at Pine Ridge Union Hospital.

And if that does not present enough evidence that the water on our reservation is contaminated because it has migrated into aquifer, then we know no one cares. There is an active policy to kill us.

So, Ι started project that а Morningstar Grandmothers, there are 34 of us -- we found a way, we found a man in Colorado who could build us filters. His name was Jack. We have raised enough money for five filters now to deliver these filters to places like Hawaii, to downtown Los So, once we make money from these filters, Angeles. we can deliver these filter systems to indigenous communities where women can have children born without diseases and live adequate lifestyles.

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1 And let me say, while they live, how are they going to eat? Well, now we have to sell that 2 water, so we can produce food and build better homes. 3 4 So, that is what I have done. All I can 5 say is, right here with some of the fellow tribal members who see my complaints, no one ever sent me to 6 7 a doctor, never helped me. I found a way. And when 8 found this chelation therapy, it is very harsh 9 because it takes all the minerals out of your body. We have a medicine here in the Black Hills 10 that we used for 28,000 years now I can take. 11 So, today I am a walking miracle and so is my family, and 12 my 1.9 grandson is 10 years old now. 13 He will be a 14 fluent speaker and he loves this land. We bring him 15 swimming here. So, this is my testimony today. And I say 16 17 no, because you have to do, under Section 106, you have do these cultural surveys. Our grandmothers are 18 19 buried there at Dewey-Burdock. And not only 50 feet away, Union Carbide dug a uranium test pit. 20 So, we used to have scaffold burials, but 21 500 years ago our holy people said, "A strange race is 22 So, many of our burials had to 23 coming." 24 underground. And it's very dangerous because,

somebody did research of all the forts where people

1	caught cholera, typhus, smallpox, that is the
2	information we need today because none of us are
3	inoculated for those things. So, for our own
4	protection, when we bury our people, we leave them
5	there. Anywhere on the earth is a resting place.
6	So, thank you today for listening to me.
7	And like Dennis, feel with your heart because your
8	children will one day be very thirsty. There might
9	not be no water for them.
LO	Thank you.
l1	(Applause.)
L2	CHAIRMAN FROEHLICH: Thank you.
13	Behr Turner.
L4	MR. TURNER: My name is Behr Turner. Behr
L5	is spelled B-E-H-R. Turner is spelled T-U-R-N-E-R.
L6	I would like to extend my gratitude to the
L7	Nuclear Regulatory Commission for allowing me to speak
L8	on the Dewey-Burdock In-Situ Uranium Recovery
L9	facility.
20	Today I represent myself and my concerns
21	for an area that I love. My educational and
22	professional background is in the environmental
23	assessment field, in which for about four years I
24	specialized in developing assessments for surface

waters and groundwater contaminated with plutonium

production byproducts, which include transuranic waste, numerous other heavy metals, and other contaminants that were released into the environment.

In summary, acids and in-situ processes make heavy metals biologically available and distribute them. Unfortunately, once heavy metals become biologically available, they are extremely difficult to contain. Sadly, one of the ideological traps of a contaminated environment is the argument that future technologies will be developed to fix it all. To my knowledge, these future technologies have not manifested.

When I analyze environmental concerns, I ask myself how future generations whom my children and I will never know would judge the decisions that we make today. The United States was founded July 4, 1776. That was over 238 years ago. What geologic and weather-related events will the site of the Dewey-Burdock In-Situ Uranium Recovery facility experience in the next 238 years?

I have found that such questions are not legally valid because they are based on a legal term referred to as speculation, a common form of objection used in the court. Furthermore, the legal term "act of God" is used to protect corporations from events

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that are outside of human control, such as sudden natural disasters, for example earthquakes, for which no one can be held responsible.

I feel it is important to mention that a magnitude 3.5 earthquake did hit the Black Hills at 2:43 a.m. on December 12th, 2013, and the earthquake was reported by KOTA Territory News. It is on the internet.

My concerns relate to contaminant leaching and excursion, which is a term that basically describes the contaminants leaking out of the in-situ mining sites. My concerns are the following. And what I am going to do is I am going to read from the report. I am just going to give you the title the report and, then, read some excerpts.

It says, "An analysis of excursions at selected in-situ uranium mines in Wyoming and Texas". The publication date is July 1986. It was prepared by Staub, S-T-A-U-B, Hinkle, H-I-N-K-L-E, of Oak Ridge National Laboratory. And the other authors were Williams, W-I-L-L-I-A-M-S, Anastasi, A-N-A-S-T-A-S-I, and I can't pronounce the others, but they are from the University of Idaho. Anyway, it is from the Oak Ridge National Laboratory.

So, anyway, my concerns are the following:

"The in-situ process clumps injections and extraction wells together that breaks through the nonpermeable substrate." On the nonpermeable, we have already heard expert testimony that the aquifer is fractured or the permeable substrates of the aquifer are already fractured. But, typically, aquifers there have got some sort of nonpermeable cup holding it.

So, we've got a bowl there holding the aquifer.

So, anyway, "For example, four to twelve injection wells could surround one extraction well."

So, you know, twelve, thirteen, seven wells clumped together.

So, I am just going to read an excerpt.

"The good statistical correlation between the number of holes that penetrate the upper and lower aquifers and the number of excursions suggest the obvious" -- this is a scientific report -- "suggest the obvious that somehow vertical excursions are directly related to the intensity of drilling activity."

We have a mining process has dense drilling concentrations. We have got a scientific report that says this is obvious. This is from Oak Ridge, Tennessee. This isn't a podunk facility. So, basically, it says this in-situ process permeates the aquifer.

1 So, I will continue on. My concern No. 2: form of acid provides the pH necessary to 2 release the heavy metals and is diverted through metal 3 4 pipes." And then, we have got acids that dissolve 5 metals, and we are pumping those acids through metal pipes that compose the injection wells. 6 7 So, I am going to read another expert. 8 Now we have got acid-dissolving metals pumped through 9 metal pipes. And this is one case study example. But it said, "Three excursion wells were 10 confirmed casing failure incidents." So, they are 11 12 talking about these excursions and leakages. Basically, they are saying these casing fail. 13 14 Can someone tell me how we go underground 15 and fix permeated casings when they are broken? We 16 have got acids. We have got aqueous heavy metals. We have diffusion. 17 The third concern, this one directly 18 19 relates to the Migratory Bird Act. So, one of the things that Powertech is probably going to have to 20 pursue is some form of incidental take statement 21 because, if they are going to be putting wetlands with 22 contaminated water, they are going to have migratory 23 24 birds in it. To my knowledge, with a lot of the

wastewaters and treatments, especially with petroleum

products, the U.S. Fish and Wildlife Service is dealing some heavy-handed blows to Migratory Bird Act violations, and that is what this is setting up. You are basically making contaminated wetlands in the desert.

But I will keep reading. "Large volumes of wastewater and solid waste are brought to the surface, and they need to be stored for both short-term and long-term. The wastewaters are highly saline and toxic with heavy metals. These waters are often lethal to life."

And unfortunately, these surface ponds and stuff, they leach, they leach. We have the Act of God Policy, and it sounds like, just from the testimony I have heard here, Powertech is doing a really good job of trying to develop some form of monthly or yearly baseline flow data associated with precipitation and stuff. These ponds don't sound very big. We know they are going to attract wildlife. We know they are going to attract migratory birds.

And if anybody has a good contact with your Region 6 federal agent for the U.S. Fish and Wildlife Service, I would bake them a cake or something.

(Laughter.)

1	But my main concern is all these wells and
2	earthquakes and contaminated aquifer. So, I will say,
3	in my limited life, I have heard of earthquakes
4	dropping the water tables in Washington State. How
5	will this support structure of aquifers? How will our
6	future be affected by the geological activity with the
7	geologically-active Black Hills with all those holes
8	and the acid-eroded void underneath it? Sadly, such
9	an event would be considered an act of God.
10	We just had an earthquake happen a year
11	ago. This proposal is this Swiss cheese in an aquifer
12	creating voids, and we are in a high-earthquake-prone
13	area. Black Hills is a fault.
14	Sadly, the Institute of Mining has a term
15	for contaminants escaping to above aquifers. It is
16	called excursion, and the term exists because it
17	happens.
18	So, I am going to read these quotes:
19	"There is a serious concern for vertical
20	excursion for several reasons. First, shallow
21	aquifers are likely to be suitable for livestock and
22	domestic use. Second, existing technology does not
23	appear to be adequate for vertical excursion control."
24	Here is another one: "The in-situ mining
25	industry has yet to demonstrate an effective method

1	for controlling vertical excursions. Vertical
2	excursions in this study generally lasted from several
3	months to several years. A number of excursions that
4	appear to have been brought under control eventually
5	recurred."
6	When I go to church here in Hot Springs,
7	I discuss fishing with the people around here. And I
8	have repeatedly heard that they have concerns with
9	eating the fish from the Cheyenne River and Angostura
10	Lake.
11	I have not read a report on the current
12	heavy metal burdens the environment contains from the
13	previous uranium mine near Edgemont, South Dakota. In
14	Fall River County, water is a limiting factor that
15	affects growth. Will the water be safe and available
16	for future generations?
17	Thank you.
18	(Applause.)
19	CHAIRMAN FROEHLICH: Could we hear now
20	from Cindy Donnell?
21	MS. DONNELL: Hi. I just walked in and I
22	was hoping to see how this process went before I was
23	up. So, thank you to the people in the back for
24	getting me in so quickly.
25	I have only been in office for a little

over a month, but I just wanted to raise just three concerns that have come to my attention in this short time. I am not going to speak personally. I am going to just speak, I'll say, professionally.

The three items, the first one is public safety, especially in the transportation of the uranium. If it were to come through the City of Hot Springs, my understanding is that there would have to be additional training for our EMTs and first responders if there was an accident with a vehicle that was transporting uranium. So, that, of course, is a large public safety concern.

The other one -- and these are in no particular order of importance; it is just very quick notes that I took coming in here to speak to you professionally -- the other one is we had a gentleman come from the USGS requesting funding from the City of Hot Springs for computerized water-flow programs. As with any organization that comes to the city requesting funding, we ask a lot of questions.

And one of the questions I asked was it seems like this is something that should have been done before we even thought about using the water in this area for anything besides basic needs. And I said, "So, do we really have a good model to show what

would happen to our water table if all this water was 1 2 And I forget the numbers per minute, but I used?" know it is a very, very large number. "To do uranium 3 4 mining, what would happen to the water table here?" 5 And, you know, he, of course, hesitated in his response. And I said, "When is this report going 6 7 to be done?" 8 And he said, "Well, it's a five-year 9 program." 10 And said, "So, this program, computerized flow models are not in place for five 11 years?" 12 And he said, "Yes. You know, we are 13 14 seeking funding now." It is X number of dollars for 15 the next five years they are requesting from the City 16 of Hot Springs. 17 You know, it just raised a great concern that we are just now looking for the information to 18 19 really effectively understand the effect on our water table. And it actually went out into Wyoming, down 20 into Nebraska, and the whole Black Hills area. 21 I had lunch today with the Mayor at Rapid 22 City, and he said, "Be sure to ask them what it will 23 24 do to our water here." So, I just told him the story

that I just told you all, that I don't think they

57 really know, based on the USGS seeking funding for the 1 water-flow modeling. 2 3 So, I am very concerned about the data 4 that is being used to say, yes or no, whether this 5 will affect our water flow here. Clearly, the USGS doesn't think they have a good amount of data to 6 7 predict that. So, a major concern of mine as well. The other one is, you know, this is Hot 8 9 We are known for our water. And about a Springs. 10 year ago, the city purchased the Evans Plunge. is a major feature, I will say, in Hot Springs. It is 11 very dependent on our water flow. 12 And given the unknown of item 2 here, what is that going to do, even 13 14 if it drops it a foot or any amount, to one of our 15 most precious attractions here in Hot Springs? 16 So, I am only speaking to you as the Mayor 17 of Hot Springs, and these three concerns that I have that have been brought to my attention through 18 19 meetings and conversations and public safety meetings and funding requests, and just trying to keep, I'll 20 say, the Evans Plunge afloat. 21

> So, I appreciate your time. I really hope that we have good information before we adversely affect the community that is very dependent on its water.

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1	Thank you.
2	(Applause.)
3	CHAIRMAN FROEHLICH: Thank you, Mayor
4	Donnell.
5	At this point, let us please take a
6	10-minute break, and we will resume at 6:35 with the
7	remainder of the speakers who have registered who wish
8	to make comments to the Board.
9	Thank you.
10	(Whereupon, the foregoing matter went off
11	the record at 6:23 p.m. and went back on the record at
12	6:34 p.m.)
13	CHAIRMAN FROEHLICH: Please take your
14	seats. I would like to resume. Please take your
15	seats.
16	The next speaker is Sylvia Lambert,
17	followed by Don Kelley, followed by Mary Jo
18	Farrington, so we can line people up on deck.
19	I ask you please to keep your comments to
20	five minutes, so that we are able to hear from
21	everyone who wishes to speak. Thank you.
22	MS. LAMBERT: My name is Sylvia Lambert,
23	S-Y-L-V-I-A, Lambert, L-A-M, as in Mary, B-E-R-T. I
24	am originally from Pennsylvania, born and raised. I
25	welcome you folks from the East. I have been in the

West for a while, quite a while.

This is in regard to Contentions 3, 6, and 9. On January 9th this year, 300,000 people in West Virginia experienced toxic chemical poisoning in their drinking water. The company's data not only inaccurately stated the true potency of the chemical, 4-methylcyclohexane, but neglected to report the additional toxic mixture of glycol ethers until two weeks later.

The Community Right to Know Act of 1986 requires the public to have knowledge of hazardous and toxic chemicals at the individual facilities for use in the protection of not just the workers, but the public's health and the health of the environment.

This is a diagram of the Dewey-Burdock Project's central processing plant, showing storage of the various chemicals to be used. In Powertech's September 2012 application narrative, nine chemicals are specifically named. Barium chloride, No. 40 -- that is this one here -- is stored here. It is stored outside, this is outside here. It will be sulphuric acid and/or hydrochloric acid, hydrogen peroxide, and sodium hydroxide. Sodium hydroxide, which is No. 2 here, will be stored here, as precisely indicated in the key notes.

The project's application says, quote, "All chemical storage tanks will be clearly labeled to identify contents and will help ensure the safety of Powertech USA employees and members of the public with regard to the specific chemicals in the event of an accident." That is page 521 of the Dewey-Burdock permit.

Here's a closer look at the key notes.

No. 2 is clearly the symbol in English for sodium hydroxide, one of the 22 additional unduplicated chemicals listed in the key notes. None of these chemicals are labeled with standard English formulas, though 1, 3, and 4, to my unpracticed eye look part Chinese.

Not listed in the key notes are seven and described chemicals that are made application, although they may be on the key notes list with non-English labels. What precisely are these 22 chemicals? What is the precise composition of the various chemicals and chemical mixtures that will be used in the proposed uranium mining and ore What dangers do they pose? processing? Have these chemicals and chemical mixtures been tested for human If the company is so sure of the safety of their mining processes, why have they requested an

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exemption from the Safe Drinking Water Act?

Full disclosure will help local and state first responders and healthcare professionals fully prepare and train for accidents and potentially-dangerous contamination incidents. Emergency response plans must be made before, not after, an incident.

We are concerned not only about radiological hazards. We have a right to know all the chemicals that will impact our water during extraction and process, as well as the chemical makeup of the waste disposal into the deep disposal wells.

What will be the impact on the ecosystem of the surrounding area from the proposed land application system? The excess waste will be spread on the land for many harmful toxins to seep into the ground and groundwater and, from there, absorbed by plants, animals, and eventually humans.

We don't want the formulas, the concentrations, and amounts, but the public has the right to know the character of the chemicals used and the toxic effects of any which are hazardous.

When looking at No. 9, I saw the word "gulped," and I did just that. It is alarming to see so many mysteriously-labeled chemicals with no

1 explanation from the mining company. These are the strange chemicals Powertech will use to contaminate 2 3 our water. South Dakota doesn't need a West Virginia 4 catastrophe or any of the other types of toxic events 5 so recently multiplying throughout this country. With these failures in Powertech's FSEIS, 6 7 Contention 3, "Potential Impacts to Groundwater;" Contention 6, "Mitigation Measures," and Contention 9, 8 9 "Connected Actions," a license for this uranium 10 recovery facility is not in the best interest of the people and should be denied. 11 I hope some of you can read some of those 12 things. 13 14 Thank you. 15 (Applause.) 16 CHAIRMAN FROEHLICH: Don Kelley. 17 MR. KELLEY: That would be me. (referring to microphone)? Is this on 18 19 There we go. My name is Don Kelly. And that's D-O-N. 20 The last name, K-E-L-L-E-Y. I'm a retired pathologist 21 who has lived in the Black Hills since 1972. 22 I want to thank you for this opportunity 23 24 to speak about Contention No. 3. And I want to apologize beforehand for the fact that we have a 25

little artifact on these slides that the best minds in computer technology locally have not been able to solve.

But, at any rate, I am going to limit my remarks to the effects of increasing radioactivity in the environment. So, are there acceptable health risks associated with ISL mining of uranium?

In 2006, there was an attempt to look at the effects of past uranium mining in the State. The South Dakota Department of Health simply tallied the rates of cancer cases by counties and found this situation, where the rate of cancer diagnoses in Fall River County was higher than in the State as a whole or in the nation. Although this could make you suspicious that there was a relation between radiation exposure and cancer, we really don't have the kind of information we need to draw such a conclusion. There could be too many other causal factors.

In order to draw any firm conclusions, we would need a much more detailed study where every cancer case in the region was checked for such things as the intensity of the radiation source and its distance from the subject, how the radiation made it into the body, the length of exposure, and so forth.

We definitely need this type of study to

be done, but since it hasn't been, we have no way of saying that radiation levels in this area in the past have been safe or unsafe for the people living and working here.

Related to this is the issue of whether we can determine a safe level of radiation exposure. Some people, particularly those in the nuclear industry, would say, yes, and they base this on statistical probability, such as we see illustrated in this graph showing the increase in cancer and other radiation damage related to radiation dose.

In fact, they would say there are a couple thresholds below which you should feel pretty secure. The lower threshold, the one to the left, is for pregnant women and children. And another one 10 times higher is for people with occupational exposure. The lower one considers the fact that rapidly-dividing fetus or cells. like in a child. а are susceptible to radiation damage, but also considering that radiation damage is cumulative over a person's lifetime, and the fetus or child has a longer lifetime in which to accumulate damage.

Notice that, at this low-dose tail-end of the graph, the number of cases is not zero, even though this is the region where we find such things as

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diagnostic x-rays or the kind of exposure you might get from drinking water from a source containing mildly-increased amounts of radioactivity.

So, what can we say about this low-dose tail region of the graph? Considering those people who do develop cancer or other problems, have we shown that low-dose radiation can't be the cause? No. It has been calculated in fact that in the United States there are approximately 5700 excess cases of cancer developing every year which are caused by diagnostic x-rays. And of those people exposed to low doses without showing effects in their lifetimes, do we know that they and their families have escaped radiation damage?

Again, the answer is, no, there can be a form of damage that affects only the dividing cells that produce sperm and eggs. Although the person receiving the radiation shows no effects, later generations can, then, inherit mutations as a result.

Just to provide a picture of how radiation can affect cells, here we see a photon -- in the next slide; sorry about that; there we go -- a photon of radiation hitting the genetic material or DNA of a cell. This can, then, result in a variety of mutations or faults in genes that can, then, result in

cancer and other diseases in that individual. Or, if the DNA is that of a sperm or egg, it can pass a mutation along to later generations.

As an example, here is a family tree with which I am very familiar in which one of these germ line mutations occurred in one of the grandparents in either the sperm or the egg cell line. The grandparents died without showing any inherited type But, of their three kids, one son and one daughter died of familial cancer of the pancreas. Genetic testing showed that there was a well-known form of mutation present, one that causes not only pancreatic familial cancer, but also melanoma of the skin.

So far, two granddaughters have turned up with malignant melanomas -- that's in the bottom row -- and will have to be monitored for pancreatic cancer for the rest of their lives. If these daughters were to have children, they could pass the mutation on to another generation. Of course, we don't know that stray radiation caused the original mutation, but we do know that radiation is quite capable of doing this.

Some people in the nuclear industry would not only say that low-dose radiation is of negligible risk, but that it is actually beneficial, providing a

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protective effect. They base this on some laboratory studies of certain animals where unexpectedly-low cancer rates were found with radiation exposure. This is the theory of hormesis.

On this slide you see listed the organizations which are the ones who work directly on health issues related to radiation. And I have had these things to say about this hormesis theory:

One, that it hasn't been shown to be true in humans, and that there is no threshold -- that is no threshold -- level of radiation exposure that can be considered safe.

So, knowing what we know about the potential risks of low-dose radiation, why would someone choose to be exposed? We hope that any such decision would be on the basis of well-informed consent, weighing benefits against risks.

Many people would say that diagnostic x-rays and radiotherapy are justified risks. Other people choose occupations where they are exposed to radiation. Some of them believe that nuclear energy is necessary for electricity generation, even though increasing numbers of scientists believe that we can provide for our needs with a combination of energy conservation and renewables without relying on

1	unsustainable extractive sources of energy. And then,
2	there are those who believe that maintenance of the
3	world's nuclear weapon arsenal is important.
4	In view of the risks, particularly those
5	risks to aquifers posed by ISL mining, state medical
6	societies have indicated their opposition to uranium
7	mining, including Colorado and, more recently, South
8	Dakota.
9	So, with the public health in mind, it
10	seems like common sense to eliminate as many
11	unnecessary environmental risk factors as possible and
12	to keep our water supplies as uncontaminated as
13	possible.
	-
14	Thanks for your time.
	Thanks for your time. (Applause.)
14	
14 15	(Applause.)
14 15 16	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr.
14 15 16 17	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley.
14 15 16 17	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington.
14 15 16 17 18	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington. MS. FARRINGTON: And may I have a little
14 15 16 17 18 19	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington. MS. FARRINGTON: And may I have a little more light now, please? Okay, I will use this here.
14 15 16 17 18 19 20 21	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington. MS. FARRINGTON: And may I have a little more light now, please? Okay, I will use this here. Good afternoon.
14 15 16 17 18 19 20 21 22	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington. MS. FARRINGTON: And may I have a little more light now, please? Okay, I will use this here. Good afternoon. My name is Mary Jo Farrington, and my last
14 15 16 17 18 19 20 21 22 23	(Applause.) CHAIRMAN FROEHLICH: Thank you, Dr. Kelley. We hear next from Mary Jo Farrington. MS. FARRINGTON: And may I have a little more light now, please? Okay, I will use this here. Good afternoon. My name is Mary Jo Farrington, and my last name is spelled F-A-R-R-I-N-G-T-O-N.

1 have all had to listen a lot. And so, I appreciate 2 that. I have spent a lot of time trying to think 3 4 about what is it that I could say today that might 5 make a difference. And four words keep coming up in my head, and these words are: it doesn't make sense. 6 Earlier this year, 7 the NRC announced recommending approval for the proposed Dewey-Burdock 8 9 In-Situ Leach Mining. The report concludes, quote, 10 no environmental impacts that preclude licensing the facility." 11 Wait a minute. Public hearings are just 12 now happening many months later, and I think that this 13 14 was putting the cart before the horse. Now it must be legal for the NRC to do 15 such a thing, but I feel it is very unethical, and it 16 undermines the credibility towards our federal public 17 I think we needed to have the hearings 18 servants. 19 before any kind of licensing. Two, this project doesn't make sense 20 because it is of no value to the United States. 21 country does not need uranium. 22 We have a 200-year So, that is not an issue. 23 supply. 24 Three, it does not make sense to allow a foreign country to mine for uranium in South Dakota 25

1 and sell it to the highest bidder for who knows what. 2 Bombs? More Fukushimas? We don't want that. 3 Four, it does not make sense to allow our 4 area to be in harm's way. With the yellow cake on the 5 ground and being processed and/or in transport, we are targets for terrorists and natural environmental 6 7 disasters like earthquakes. And I am glad the man 8 mentioned that we do have earthquakes. So, what 9 happens if this stuff is being stored, getting ready 10 for transport, and there is an earthquake? It does make sense to just leave things 11 12 the way they are. Don't tamper with it. It does not make sense to give away huge 13 14 amounts of water or, for that matter, sell it. With 15 climate change, we want to preserve our water, all of 16 our water. 17 It does not make sense to me that the federal government can try to make us accept this 18 19 project by giving a permit, against the wishes of the majority of the citizens here in our area. 20 The Treaty of 1868 created the great Sioux 21 Reservation, which encompassed all of western South 22 including the Black Hills. 23 Dakota, The U.S. 24 Government further agreed that no persons, with a few exceptions, shall ever be permitted to pass over, 25

settle upon, or reside in the territory. "Forever" lasted six years when gold was found. These lands have been lived on for thousands of years by indigenous people, and they are many sacred burial sites, many that we don't know.

The last thing that we want to do is to poison our land, air, and water for all of us living here. We, as a government, as a national government, as a local government, have got to stop betraying people.

I also think there needs to be more investigation of the site that Dewey-Burdock is proposing, not only because of the TVA report, which has finally come to light, but also its close proximity to the Army Depot, which had weapons of mass destruction. And we have reports, and I am sure you have that report, of both arterial and chemical massive amounts of weapons.

Now I don't know if they are still being stored there, but I do know that people that have lived in the area have seen military convoys going to that site. So, I am wondering, do we want a foreign company drilling around that Army Depot? Has that been at all looked into?

In conclusion, people who have the money

to hire lawyers and workers can bring you any kind of science you want. Citizens who oppose this project are primarily volunteers. I think the NRC obligation is to help sift through all of this and provide the funding necessary for those of us who have research that we want to do. There are many local groups with many valid projects, but we don't have the money. Powertech and Azarga will spend millions of dollars to make billions of dollars.

So, we would like to ask the NRC to give us some funds to do the research before any decisions are made, because we feel we have some valid research. Because this is just too important of a decision, unless all the data comes in, so that you in your wisdom have more correct information.

I just want to conclude with this one thing. Every week we get articles in the paper about the mistakes that have been made. And this one was dated in June, that \$4.5 billion is earmarked for cleaning up thousands of sites around the country contaminated by creosote and uranium debris.

So, we don't want to have this happen.

And I know you are going to be listening to all the people these next few days, and I hope that you will give them the support, if they need more research,

because we have the time to make the correct decisions 1 2 This is our home, and I think you have an 3 obligation to prevent another environmental disaster. 4 Thank you very much. (Applause.) 5 CHAIRMAN FROEHLICH: Jennifer Belitz. 6 7 MS. BELITZ: I'm going to have my lovely assistant help me with my technology here. 8 9 My name is Jennifer Belitz. It's spelled 10 J-E-N-N-I-F-E-R B, as in boy, E-L-I-T-Z. Thank you for your time to hear our 11 12 concerns. became a resident of beautiful Hot 13 14 Springs in 2003. I used argue that my original home 15 in North Dakota was God's country, but since the Bakken oil boom, I am easily contradicted. 16 On the bright side, all the chaos up there 17 turns out to be good for our northern hills real 18 19 estate since people don't want their families living among the semi traffic, the newfound pollution, and 20 recent church robberies not too far from my home. 21 Here I must clarify a previous testimony 22 given by Southern Hills Economic Development Council 23 24 Representative Cindy Turner when she said that Shed Co. presented a public event here concerning the mine 25

in Hot Springs. She stated that there were no opposition statements made. And I did speak to her afterwards, and, together, we confirmed that no public comment was allowed to be spoken outloud that night. So, we could only come forward after the meeting.

I also informed her of the conversation that I had had subsequently submitted to Benjamin Snow and the Hot Springs Star concerning the higher oilfield wages being associated with higher quality of life, which Benjamin was trying to present.

She indicated that none of the invited professionals voiced any concern. And I said that I thought the USGS and the other government agencies were only there to present data and not opinions. The mine, however, was allowed to present opinions, and I feel that that clarification of facts to this Board might be appreciated by the others who did express concern that night.

This does lead me to my contentions with the FSEIS, which mostly relate to 3 and 4 about water. In Chapter 1.7, it notes that you, the NRC, met with various coordinating agencies; 1.7.3.3, the USFS noted a concern about the cumulative groundwater effect of the project on USFS-managed Keith Cascade Springs Recreational Area, as it is quoted, where Cascade

Springs is located.

And 1.7.3.4, coordination with the U.S. Geological Survey, the NRC staff met with them on December 1, 2009. USGS staff expressed concern that contaminated groundwater may travel from the project area and discharge into Beaver Creek with the proposed project area and south of the proposed project area.

Nowhere in the reference list of this chapter do I see any details or where to find details about these meetings or if their concerns were satisfied. I share their concerns. So, I referred to Chapter 4, "Environmental Impacts of Operations," et cetera.

I recently learned that the TVA documents similarly are saying the Inyan Kara is a leaky aquifer have not been released by Powertech yet. So, I feel Chapter 4 needs to be entirely rewritten.

But, if it is leaky and we introduce a lixiviant to suspend many toxic compounds, including uranium, how will Powertech contain the plumes and how will I be protected or notified if an accident occurs? I live 45 river miles downstream of the proposed Dewey-Burdock site. Does that sounds too far to have an issue? Let's put it this way: with a 1-mile-per-hour velocity, it would take slightly less

1 than two days for toxins to make their way downstream 2 to my land. With a 3-mile-an-hour linear flow rate, which I believe is somewhat conservative, velocity in 3 4 heaving flooding conditions, the pollutants would only 5 take 15 hours to reach my land via Pass Creek and the Cheyenne River. 6 7 And Gena Parkhurst asked, "Who uses the 8 Cheyenne for recreation?" I do. My children do. Various health-related research articles 9 10 would, however, attest that toxins are absorbed at a higher rate in young, growing children. So, that is 11 15 hours to reach my kids playing in the river. 12 Ιt will already have affected the catfish in the river 13 14 and possibly come into contact with the wild horses, the cattle, and the deer. 15 highlighting 16 Chapter 7, 17 monitoring programs, it indicates they do have only one sampling site downstream on Beaver Creek and one 18 19 downstream on the Cheyenne. 20 7.2.2 indicates soil monitoring only annually. 7.2.4 indicates surface water monitoring 21 And 7.2.5 indicates groundwater 22 only quarterly. monitoring only quarterly. 7.3.1.2 indicates 23 excursion monitoring on monitoring wells at two-week 24

intervals.

Considering I am only 15 to 48 hours downstream, I find these sample intervals inadequate. 2 So, I have great concerns for your containment ponds, subsurface injections, and deep-well injections into 5 the Minnelusa. Let's revisit North Dakota where, although 6 different industry, similar technologies are used,

where a weld failed, and then, saltwater leaked, putting acres of my neighbor's land out of use. leak also happened in a crude pipeline next to my great-grandfather's land, amounting to nine acres of his neighbor's farmland covered with 20,600 barrels of crude, becoming the largest oil spill on U.S. soil.

Who noticed it first? Not the high-tech electronic monitors that are supposed to detect pressure variances and give immediate warnings, but it a neighbor who arrived that morning on combine.

The oil companies in North Dakota are using the most advanced technologies, but incidents are still happening. In the future of this mine, I believe that they will happen.

I realize you don't like us to compare Powertech to other energy companies, but after being told how safe and well-monitored the industry is in

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1	North Dakota, and then, watching their containment
2	pits become inundated with spring floodwaters in 2011,
3	and learn of the subsequent State-issued fines, my
4	confidence is obviously and forgivably low.
5	My confidence that the mine is concerned
6	more for my safety than their economic gain is zero.
7	Therefore, the FSEIS indication of self-reporting by
8	Powertech/Azarga appalls me.
9	I recommend that the NRC choose to
10	Alternative 2, no action, which is so briefly and
11	non-descriptively summarized in FSEIS. That contains
12	the only guarantee that our water will not be affected
13	by Powertech uranium, a China-based company.
14	Thank you.
15	(Applause.)
16	CHAIRMAN FROEHLICH: Thank you.
17	Kathleen Jarvis.
18	MS. JARVIS: Good evening.
19	My name is Kathleen Jarvis,
20	K-A-T-H-L-E-E-N J-A-R-V, as Victor, I-S, as Sam.
21	Just by brief introduction, I am the
22	former Controller of Custer State Park in Custer
23	County. And currently, I am the Business Manager for
24	Delcam Oil.
25	I want to give you just a little bit of

79 history. I am the daughter of Brigadier General John 1 R. Jarvis, born on a tiny island off the coast of 2 3 Hiroshima just after we dropped the bomb. In addition, just a brief history with my 4 He was with the U.S. Army Chemical Corps up 5 dad. 6 until the time Congress disbanded that unit.

My comment: my concerns regarding the Dewey-Burdock Project are centered around the problems of artesian flow and interactions with the remediation of buried chemical warfare materiel located at Black Hills Army Depot, less than 10 miles to the south.

Furthermore, Powertech's experts seem to be unaware that their proposed land application areas are on river terraces that will transmit the applied waste directly into the Beaver Creek Watershed within the Upper Cheyenne River Watershed into the Cheyenne River, to flow eastward throughout the State of South Dakota. Please refer to Exhibits INT-010B, Map, Beaver Creek Watershed, and INT-010P, Beaver Creek final fecal coliform.

The problem of artesian flow. Artesian flow occurs when there is a hydrologic connection through faults are highly-permeable strata between groundwater sources high on the landscape and the land surface lower down. Please refer to Exhibit INT-013,

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testimony of Dr. Hannan LaGarry.

The weight of water in overlying strata exerts pressure downward into water within the uranium-bearing strata, which can, then, be released as artesian water flow, like a fountain, where the topographically-lower uranium-bearing strata is exposed at the surface or where it is punctured by drilling.

Artesian flow was observed or predicted by Powertech in their Dewey-Burdock Powertech Project proposal, and was observed directly at the Black Hills Army Depot, less than 10 miles to the south, U.S. Army Corps of Engineers, 1992.

In order for artesian flow to occur at the Black Hills Army Depot, the water must originate topographically higher in the Black Hills and pass through the Dewey-Burdock Project area. Were this to happen with oxidant-charged lixiviant, contaminated groundwater would rust any metal-contained ordnance and release its contents into the environment.

Concluding remarks: it is very likely that the oxidants used to free the uranium will also cause the destruction of underground storage containers on the buried chemical warfare materiel located at the Black Hills Army Depot, less than 10

1 miles to the south of the Dewey-Burdock Project area, 2 and release their contents into the area's ground and 3 surface waters. 4 This huge munitions depot handled 5 thousands of tons of chemical warfare agents such as 6 sarin, soman, tabun, GE, and VX, plus mustard, 7 phosgene, and lewisite. 8 Just briefly, the references: 9 Army Corps of Engineers, U.S. 10 "Preliminary Assessment of Ordinance Contamination at the Former Black Hills Army Depot, South Dakota". 11 Final Archives Search Report, again, U.S. 12 Army Corps of Engineers, "Final Work Plan for Black 13 14 Hills Army Depot, Remedial Investigation and Feasibility Study at Fall River County, South Dakota," 15 16 2012. Final Archives Search Report, "Preliminary 17 Assessment of Ordnance Contamination at the Former 18 19 Black Hills Army Depot, South Dakota, " 1992. LaGarry, H.E.C. Belisle and H. Gaddy, 20 "Revised Lithostratigraphic Correlation of the 21 Northwestern Nebraska 22 Arikaree Group from Southwestern South Dakota, "Proceedings of the 122nd 23 24 Annual Meeting of the Nebraska Academy of Sciences. Office of the Federal and State Materials 25

1	and Environmental Management Program, 2014,
2	Environmental Impact Statement for the Dewey-Burdock
3	Project in Custer and Fall River Counties, South
4	Dakota. Supplement to the Generic Environmental
5	Impact Statement for In-Situ Leach Uranium Mining
6	Facilities, Supplement 4, Volume I.
7	Thank you.
8	(Applause.)
9	CHAIRMAN FROEHLICH: Theodore Ebert,
10	please. Theodore Ebert.
11	MR. EBERT: My name is Theodore Adolph
12	Phillip Ebert, Echo Bravo Echo Tango Romeo or Romeo
13	Tango. Excuse me. E-B-E-R-T.
14	I should be used to this by now. I've
15	done this a few times.
16	It's, Your Honor, Your Honor, Your Honor,
17	I can't tell you, as a soldier of this great nation
18	that's faced combat, how proud I am to be here. I
19	can't tell you how grateful I am that there's been
20	experts come up here and speak to you. I feel they
21	have done a lot on my own behalf without me even
22	asking.
23	I say that because I have been in this
24	from the very beginning. I started it along with a
25	few other gentlemen. My goodness, I see it has grown

and grown.

When I fought for this country, I fought for democracy, for democracy of we, the people, of the people, by the people. I didn't fight for a country that is we, the corporation, of the corporation, by the corporation. I didn't watch good men die beside me to see the corporate entity decide the fate of the people.

I have sat here, and I bring you my new testimony. I have seen two people come up here, marginally, one of them sure said, yes, he wants to drill holes out there; he's for it. I haven't heard anyone else say, "Yeah, let's do this."

As a representative of the people, your choice is clear. The people have chosen. They have said no. I guess I'm just asking you to do what the people have elected you to do, say no.

I am so grateful for all these experts that have come. You are an answer to my prayer. I have prayed over this. I have asked for consulate help. I have sat in the sweat lodge. I have given flesh offerings for this. And I can't tell you how proud I am to stand here today with these great people.

Gentlemen, I have said prayers for you,

1	too, to help you on this most difficult journey that
2	you have to take. I ask God to help you. I can't do
3	it, but I know He can. He's helped me this far.
4	When I started this journey, I stood
5	before you almost alone. And now, look. This, to me,
6	is true Americanism. This is what I fought for right
7	here.
8	So, anyway, I can't tell you how grateful
9	I am to all of you. Thank you for showing us all here
10	that democracy still stands.
11	(Speaks briefly in Native tongue.)
12	(Applause.)
13	CHAIRMAN FROEHLICH: Adam McLain. Adam
14	McLain, please.
15	MR. McLAIN: You may have to forgive me.
16	I'm a little under the weather. My throat isn't in
17	the best condition.
18	But my name is Adam McLain, and I'm a
19	Black Hills resident.
20	My contentions with this issue are
21	primarily with No. 3. The NRC has requirements for
22	permitting, and one of them is that a minimum of three
23	excursion, as defined in NRC's documentation, NUREG
24	document 1910, 1-9-1-0, it states that there is a
25	minimum of three excursion indicators that must be

selected and upper control limits have to be defined. And those upper control limits are regarding the specific strata that the mining is going to be taking place in. This is all about determining where an excursion, identifying an excursion when it takes place.

And what's important here is that the NRC believes that a minimum of three excursion indicators are necessary to be able to provide relatively-adequate control measures on the public safety and on the environmental impact.

But what really gets me is, when you look at the Safety Evaluation Report for the Dewey-Burdock Project, on page 119, it lists the excursion indicators, and there are only two possible excursion indicators listed, one of them being chlorides and the other one being electrical conductivity, which is more a measurement of total dissolved solids. But there isn't a third one listed.

So, this particular mining company has somehow achieved a permit from the NRC while not meeting the NRC's very own requirements for the permitting process. And that bothers me.

You know, this kind of mining has been banned almost everywhere throughout the entire EU.

Once you put the lixiviant down in there and you start these compounding chemical reactions, you can't just turn it off. It is almost like a nuclear reactor in that regard. You can't just turn it off. You can stop putting the lixiviants down there, but these compounding chemical reactions just keep taking place.

So, in much of Europe they have to close down these -- they have to keep the wells pumping to keep the lixiviant and keep these compounding chemicals from getting outside of the well system. Even after they have decommissioned the wells, they have to basically put up signs that say, "People stay away from here and don't drink this water." There's many, many countries that have outlawed this practice because it is so unsafe.

You know, we have also got a situation where at the end of June the Christensen Ranch in Wyoming, the company doing the mining there reported to the NRC that they have a break in the line that disposes of the deepwater, the toxic water that goes into the deep well, the deepwater well. But, since it is so corrosive, it is a relatively-young mine also, they are losing something like 26 percent of all of the toxic sludge that they are trying to push down into the deepest water they can possibly find.

And they don't even know where the break is. Call it high-tech. Call it whatever you want, but they are not even sure where this water is leaking. It could be going into clean water. It could be going into dirty water. It could be going into just groundwater, just any other ground. We just don't even know where it is going, but 26 percent of all of the wastewater is just being pushed out into unexpected places. And that is a recent finding.

So, one of the other things I find kind of interesting is that no ISL mining company would ever propose that we put one of these things near a populated area, particularly like a metropolitan area. And I think it is because everybody knows that this is guaranteed pollution, 100 percent guaranteed pollution. You know, it is proven all over the world.

And the one thing that we should focus on the most, though, that this particular Board should focus on the most, is how a third indicator should have been chosen.

It would save a mining company an awful lot of money if they just didn't have to report excursions when they happen. And if you guys have really lax rules on what is an excursion is, then in a lot of ways you are helping these mining companies

1	save a lot of money, at the public's and at the
2	environment's expense.
3	Based on your very own requirements for
4	the permitting process, in order to be consistent, I
5	think you need to deny this permit because it didn't
6	meet your requirements for the permitting process in
7	regards to upper control limits on excursion
8	indicators.
9	And I really appreciate your time. Thank
10	you.
11	(Applause.)
12	CHAIRMAN FROEHLICH: Thank you.
13	Nancy Hilding, please.
14	MS. HILDING: I got here late. Do I have
15	five minutes? All right.
16	I'm dropping all my stuff here.
17	I'm Nancy Hilding. I'm President of the
18	Prairie Hills Audubon Society, which is a West River
19	Chapter of the National Audubon Society.
20	I have a lot of attachments that are
21	exhibits, whatever you call them, that I am going to
22	leave with the lady upfront when I'm finished. And I
23	am going to reference these in my talk.
24	I am supposed to be talking about
25	mitigations, and it is going to be in terms of at-risk

1 species, wildlife species. 2 And can somebody tell me when I'm halfway 3 through my five minutes? 4 Okay. So, real quick, there's a Fish and 5 Wildlife Service report from September 2000 selenium from in-situ leach mining and wastewater 6 7 applications. I do hope in your mitigations that you figure out what went wrong there and make sure that 8 9 doesn't happen here, as it affects birds. 10 Okay. So, when you have holding ponds, that there be escape routes for little mammals and 11 birds to prevent them from drowning. 12 So, we are next moving on 13 Okay. 14 something that you probably may not know about. have some copies, three copies to give to each of you, 15 and it is going to be in here. 16 17 Your report came in January of 2014. In October of 2013 and September of 2013, the U.S. Fish 18 19 and Wildlife Service proposed to list the northern long-eared bat and the red knot. The red knot is 20 September; October for -- okay. 21 The bat is common in the Black Hills. 22 is being taken out by introduced wet nose disease, 23 24 which is currently closest in Missouri, but likely will eventually reach here. It will 25 likely

endangered in October. You guys should have known about this. It predated your decision. But it is not listed yet, and it likely will be.

It nests in trees in the summer and in caves in the winter. Of concern would be if you are cutting down any trees that they are into a cave which is in the southwest part of the Black Hills.

And I think Lindsey McQueen will get into this in the testimony in the future, a concern about your holding ponds becoming more toxic over time, and whether you are going to have lethal doses in that water for wildlife on a chronic or acute level or whether these contaminants will just hurt their immune system.

I am giving you the U.S. Fish and Wildlife Service proposed listing report. There is a section on contaminants in there. I suggest you read that. I suggest you will need a supplemental something, and you will need to figure out whether you have them in your area.

When you talk about bats, your people who did your research on the ground just sort of said bat species generally. It doesn't look like they found out whether it's on your property or not, not yours, Powertech's. Okay. So, you need to look into that

some more.

Okay. The red knot, it is basically mostly in the Atlantic, but it is in 40 states. So, you may need to worry about that, too.

New things. Okay. Now I am moving on to the -- so, I give you lots of stuff on, I am giving you a report on the Black Hills. This bat is on page 27 of that.

Okay. So, sage grouse, I'm moving onto that. It is a big concern for us. We don't want to see the sage grouse extirpated from southwest South Dakota. It is currently, the closest one that we know of is in Wyoming across the border about five or six miles away, down there in Redbird, in that area of old 85. The last known one it found not just wandering around, but breeding, and that was 2006 in South Dakota. There was one just across the border in Wyoming on old 85. The last known site of that activity was 2005.

Okay. So, you don't just need to worry about whether there's sage grouse on Dewey-Burdock property, but whether there is one with 5.3 miles. The national technical team -- and I have included their report. I am including two reports from Aldridge -- and what's the other guy's name? It's

escaping me. They're in the attachments.

You really should be worried about 5.3 miles or more for next to a wet. This is no surface occupancy next to a wet. Currently, there is none at that distance from Dewey-Burdock that I'm aware of, but there could be in the future.

So, your no surface occupancy recommendations need to be better, and two miles for a road. That's our suggested thing. We are unhappy with your recommendations for mitigations with respect to that.

We are unhappy from a NEPA standpoint when in your analysis saying we're just going to a 2005 Bob Hodder study for the area to the south; we're just assuming that is the same. That is unsupportable badness. You have trees. You have different grass heights. You have fire history. You have history of poisoning or chaining the sage. You cannot assume that what you have up there is the same as what is down there. You should have done your own canopy survey for grass and for the brush.

I included two studies from you, one from South Dakota and one from North Dakota, a 2005 thing antiquated, which is that when you get to the fringe area, which is here, the height of the grass becomes

more important. And it is substituted by the sage grouse for the canopy. So, the canopy closure stuff for the center range, it's different.

I included the articles there. I included an appeal of a Forest Service decision where we referenced these theses. These are the Kaczor and Herman-Brunson theses.

Okay. So, all right. So, another thing that you need to worry about is fences are bad for sage grouse, but you are probably going to need fences for bat and for other things. So, what do you do? Some species are going to need fences around holding tanks, and fences are bad for the sage grouse. You know, the polluted water is probably bad for the sage grouse.

And one thing that you could do as a mitigation is that, when you leave at the end when you have 2 percent disturbed soil, you could plant sagebrush in there to help recover sagebrush in South Dakota, which has been lost to fire and chaining and poisoning.

All right. So, I'm moving on here. One species that you completely ignored is the sturgeon chub. I have included in the attachments the status review from 2001 from the U.S. Fish and Wildlife

In the late 20th century it was petitioned 1 Service. to be listed. They decided, you know, we found more 2 sturgeon chub than we thought we had. Prairie Hills 3 4 Audubon believes that should be repetitioned and 5 relisted. There was in Idaho, in 1997 or 1998, like 6 27 findings of sturgeon chub in the Cheyenne River; in 7 8 2006-2007, only two. Cheyenne River is not 9 attainment for various parameters further downstream. 10 So, the relevance with respect to the sturgeon chub is bypassed events, you know, 11 you have long-term accumulation from all your wastewater application to 12 the ground of contaminants. Whether that is going to 13 14 end in the Cheyenne River -- at which point in the 15 future we get the sturgeon chub listed, which we believe it should be. 16 17 Have I used up my five minutes? CHAIRMAN FROEHLICH: You're well over. 18 19 MS. HILDING: Sorry. CHAIRMAN FROEHLICH: Would you be willing 20 to include your studies in the materials that you are 21 leaving? 22 No, I have this huge 23 MS. HILDING: Yes. 24 stack. CHAIRMAN FROEHLICH: We will include it in 25

1	the record of the proceedings and move on to the next
2	
3	MS. HILDING: I mean, I was worried that
4	there was all this new stuff. There is something else
5	in here that is new, a 2013 report on vegetation
6	transients done in Fall River County. And there is a
7	biological assessment from September 2013 for the area
8	to the south that you are tiering to.
9	So, there is this new stuff that you
10	probably don't have.
11	CHAIRMAN FROEHLICH: If you would be kind
12	enough to leave some copies with Twana Ellis at the
13	desk
14	MS. HILDING: Yes.
	MS. HILDING: Yes. CHAIRMAN FROEHLICH: we will make sure
14	
14 15	CHAIRMAN FROEHLICH: we will make sure
14 15 16	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited
14 15 16	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements.
14 15 16 17	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks.
14 15 16 17 18	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks. CHAIRMAN FROEHLICH: Thank you.
14 15 16 17 18 19	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks. CHAIRMAN FROEHLICH: Thank you. MS. HILDING: Thanks a lot.
14 15 16 17 18 19 20	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks. CHAIRMAN FROEHLICH: Thank you. MS. HILDING: Thanks a lot. (Applause.)
14 15 16 17 18 19 20 21	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks. CHAIRMAN FROEHLICH: Thank you. MS. HILDING: Thanks a lot. (Applause.) CHAIRMAN FROEHLICH: Linda Tidball.
14 15 16 17 18 19 20 21 22	CHAIRMAN FROEHLICH: we will make sure that it is copied into the record of the Limited Appearance Statements. MS. HILDING: All right. Thanks. CHAIRMAN FROEHLICH: Thank you. MS. HILDING: Thanks a lot. (Applause.) CHAIRMAN FROEHLICH: Linda Tidball. MS. TIDBALL: My name is Linda Tidball,

1 Town of Dewey, and now I reside in the Town of 2 And I have taught at the school district 3 there for 23 years. My husband and I 4 businesses in Edgemont, and I am the mother of three 5 children. I am not here today just speaking on my 6 7 I have a petition in support of Powertech's Dewey-Burdock Project signed by 22 members of the 8 9 Edgemont School staff. I would like to present this list to you and ask that it become part of the record 10 of this hearing. 11 I heard that you didn't feel there were 12 very many people in favor of this. Many people are 13 14 working, and they are home with their families, and 15 they are allowing the experts to do their job. That is why they are not here. 16 17 We are concerned about our future energy We are sitting on uranium deposits that will needs. 18 19 be a tremendous addition to our current energy supply. 20 Also, our school and community would benefit greatly from related economic development. We 21 believe Powertech, for the past seven-plus years, has 22 gone above and beyond requirements to ensure this 23 24 project is safe and viable.

Thank you for your time.

1	CHAIRMAN FROEHLICH: Thank you.
2	(Applause.)
3	Mary Hollenbeck. Mary Hollenbeck, please.
4	MS. HOLLENBECK: Thank you for the
5	opportunity to speak today.
6	I am Mary Hollenbeck. That's
7	H-O-L-E-N-B-E-C-K.
8	I lived and raised my family in Dewey for
9	53 years. I have seven children. I have seen my
10	children, grandchildren, and now great-grandchildren
11	enjoy the lifestyle and wholesome environment of our
12	ranch.
13	Our ranch is across the fence from the
14	Dewey-Burdock Project. We don't own any mineral
15	rights on our ranch and we will not benefit
16	financially from this project.
17	I fully support the Dewey-Burdock Project
18	and I totally support my neighbors' property rights to
19	develop minerals on their ranches.
20	We have marked our calves in Crawford,
21	also a host community for an in-situ project, for
22	about 20 years. So, we have met many people from that
23	area. Early on, we noted the ranchers in that area
24	were very supportive of the in-situ mine in Crawford,
25	regardless if they had the financial interest or not.

1	The science will be borne out here this
2	week that this project can be done safely and
3	completely within the laws of the State of South
4	Dakota as well as the United States. I have
5	confidence that this professional Board will see
6	through the hype and hysteria and look at the facts
7	and grant a permit, so we can get on living our lives
8	and allowing our children and grandchildren an
9	opportunity to make a living here and raise their
10	families.
11	Thank you for your time and your service
12	on this Board.
13	CHAIRMAN FROEHLICH: Thank you for your
14	comments.
15	Mike Galanda. Mike Galanda.
16	MR. GALANDA: That will be Galanda,
17	G-A-L-A-N-D-A.
18	As in evidence listed past/prior, I just
19	ask I'm not a professional economist or anything.
20	I do videos. And one thing I have noticed in my
21	studies is that we have a very vibrant community. And
22	I am very, very concerned about how it could be
23	damaged.
24	Such references is to a town that is
25	called Picher, Oklahoma. She no longer exists. Due

1 to improper mining, her aquifer was destroyed; her town is gone. She has nobody. FEMA will not support 2 3 She is now a Superfund. 4 We have so many aquifers around here. 5 don't say I support it or fight it. I just say I ask that you look carefully, so no town or no city such as 6 7 my own of Rapid City, South Dakota, has to drill or no town in the Black Hills becomes a Picher, Oklahoma. 8 9 (Applause.) 10 CHAIRMAN FROEHLICH: Thank you. Cindy Brunson. 11 12 MS. BRUNSON: Hello. My name is Cindy The last name, B-R-U-N-S-O-N. 13 14 I have a couple of documents here that I will share back when I leave. 15 What I am is an egg producer. 16 17 husband, and son, we have approximately 15,000 acres in this County. And it is supplied by water from the 18 19 Inyan Kara and the Madison aguifer. live at Igloo, that 20 Where Ι is the townsite of the Black Hills Ordnance Depot. 21 the testimony has come forward about ordnance and 22 things that is out there, I would only like to testify 23 24 on this fact: that, as a landowner there, I have seen

the Corps of Engineers, how they have done their

cleanup and stuff.

And what they do is that they find the spot that they think is contaminated, and they put monitoring wells around the perimeter. And then, they come back from time to time and they check these to see if anything has migrated.

But nothing has been hauled away except some chromium that was a paint byproduct. The chemical area, we have where they showered and cleaned up, but the chemical area was actually out on the buffer zone, as we refer to it. Now it is the Buffalo Gap National Grasslands. And there is a very vast pit out there, and they have monitoring wells on the outside of that. And they have no intention of hauling that away.

One report that I seen, that there was some mustard gas that had migrated. There is a creek there. Alum Creek goes into Cottonwood, goes in Cheyenne, goes into Angostura. That is the water flow there.

And since you have your Dewey-Burdock deal that is going to feed into the same channel, I can really see these people, you know, wanting you to examine that closely. Through personal experience, we had unexplained livestock deaths. Just dropped over

1 dead. We had two veterinarians come out, do inspections. And anyway, numerous tests were done on 2 the livestock. 3 Finally, the veterinarian told me, 4 "You do not have enough money to do all the required 5 testing that you would ever isolate what killed that livestock." 6 7 So, I'm just saying this because public is not going to have enough money against this 8 9 foreign company if there is contamination, and we 10 don't know that. That is going to be something that is down the road. But it is something that you really 11 should look at. 12 This that I see is all visual. 13 14 going to happen is going to be underground, and you 15 are not going to be able to see what is happening two 16 years down the road. 17 When I came to the Edgemont area in 1987, they were in the process of doing cleanup. And when 18 19 they were doing that cleanup, when I would drive into town to get my mail, they would have people all over 20 the Town of Edgemont in hazmat suits and Geiger 21 So, they were trying to clean up what was 22 counters. on top of the ground. 23 24 And as supplier to my ranch, the Inyan

Kara and the Madison aquifer, if that would go by the

wayside and that water was not there -- and we have experienced severe drought. We have lived through six or seven years with no adequate water, where there was no dams that were full or anything. The only thing that we had was what was the reserve under the ground. So, we are very, very dependent on this water.

And agriculture in the State of South Dakota, that is our No. 1 industry. And you take my 15,000 acres out of production -- and more of it is coming to South Dakota because California and these other populated areas, you can't have the food production and stuff in those areas because of regulations and other various things that prohibits it. And our food supply is very, very important, along with our water supply. Those our two of our basic needs.

The economic benefits, they all say, just like the school teachers and stuff like that, what it is going to do to the City of Edgemont, or whatever. I went to Powertech when they opened the office here in Hot Springs. And anyway, so my son does pipeline stuff, and he is certified. He works over in the oilfields in Wyoming. So, he's fully insured. So, it is not an issue; he was just some little farm boy, you know, wanting to work.

That means

They might

That's the

They told me at the Powertech office that all the work would be done in-house. That doesn't 2 mean development for the local economy. that they are going to bring their men in. do some basic construction, but that's it.

economic benefit.

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But we have tourism and agriculture right here in our County. And our Governor, Governor Rounds, he had the 2010 initiative, and that was to develop our tourism. And now, you've got it here, and I guarantee you people read a newspaper. And if there's any bad stuff about the uranium mining, that's going to be an economic disaster for our tourism industry.

And I wanted to tell you I was the past President of the American Legion Auxiliary, District II, that served most of western South Dakota. And I am so proud that man came up here and told you, because I have talked to vets numerous times, and they cannot understand why you would want to develop something that is for power.

Just look at the Middle East. If vou've got uranium, you've got power. And why would you want to ship anything out of our State to a foreign nation? And who knows where it could be?

1	Furthermore I'm running out of time
2	but I grew up on the Rosebud Indian Reservation. I
3	grew up with the Sioux Indians. And anyway, I have
4	attended meetings of both sides, and I want to tell
5	you that the Sioux Indians, this is their burial side.
6	And one slide that always stayed with me was the fact
7	they showed our National Cemetery and showed all these
8	uranium mines on our National Cemetery. And let me
9	tell you, that was a real eyeopener for me.
LO	So, I hope with your vast knowledge and
l1	all the testimony, that you will make the right
L2	decision.
L3	Thank you.
L4	(Applause.)
L5	CHAIRMAN FROEHLICH: Thomas Cook. Thomas
L6	Cook. Mr. Cook?
L7	DR. COOK: Yes.
L8	CHAIRMAN FROEHLICH: Okay, please.
L9	DR. COOK: My name is Thomas Cook, and
20	it's spelled T-H-O-M-A-S C-O-O-K, and I have a PhD in
21	chemistry and three years of postdoctoral work at
22	Oregon State University, Wyoming, and Northwestern
23	University. I taught 20 years in university and 40
24	years working in hot-dip galvanizing. I've got a
25	ranch on the Cheyenne River closeby here.

1 | 2 | ho 3 | we

And I put a poll in the newspaper to see how many people were opposed to and how many people were in favor of the uranium mining, and it was approximately 95 percent opposed, about 5 percent in favor.

And I questioned the methodology of getting the uranium out of the ground. In this instance, the apparent use of what's called oxygenated water, which is hydrogen peroxide, and carbonated water, which is carbonic acid, which dissolves the aquifer. And the waste products would be going into the aquifer, and I'm presuming that they would be dumping the major part of the waste into the Madison aquifer.

And one of Powertech's experts indicated that that waste would go southward and westward, which, of course, would cross the Wyoming border and go into that area. And I am wondering if the federal people allow wastewater, radioactive water, going from one state into another state. So, that is one issue that I wanted to bring up.

I have a few more notes here somewhere.

But I do have a ranch on the Cheyenne River. I am concerned about tailings and wastewater going into the Cheyenne.

1	And I am also interested to know about how
2	many trainloads of sodium chloride, ordinary table
3	salt, would be going in as wastewater because of the
4	ion exchange resin, which I presume would be
5	regenerated with sodium chloride.
6	Anyway, I am in opposition. And I
7	appreciate your time, and it has been a long day.
8	Anyway, that's what I have.
9	CHAIRMAN FROEHLICH: Thank you, Mr. Cook.
LO	(Applause.)
L1	DR. COOK: Thank you.
L2	CHAIRMAN FROEHLICH: Matt Lanz, L-A-N-Z.
L3	MR. MATT LANZ: Matt Lanz.
L4	Okay, I'm going to turn this way.
L5	I was here a little bit this afternoon.
L6	My heart is just going boom, boom
L7	because I am just very passionate, you know, as a lot
L8	of people are.
L9	And I was here a little bit this
20	afternoon, and I was appalled and ashamed and
21	completely dumbfounded and pissed off and angry, and
22	just right now I've got a lump in my throat because I
23	heard a lot of good things from a lot of good people.
24	And the idiots that open their mouth and
25	think that this is a good thing, okay? I don't know,

it's just like wow. And what really blew me away was the ranchers, okay? These people are supposed to be the stewards and the caretakers of this land. I don't care how they got it. I don't care how they obtained it. And it doesn't belong to them. It doesn't belong to any of us.

We are all here (claps his hands together)
like that, and we're gone. It's just like a breath
coming out of a buffalo's nostrils in the wintertime.
Okay? It's just gone. And that's where we're here;
we're like that. Okay?

And we are here to take care of this land. And to even jeopardize just a small part of it and the water, I mean, it is like we're you guys watching these commercials in the seventies that I would watch about taking care of this country and pollution and stuff. It's like you got kicked around in the sandbox too hard because you lost common sense. And you don't have it.

And I taught my kids -- I have been away from my kids for four days. And I have seen the guy on the far end closest to me smirk a lot when people up here are talking. Okay? I raised my kids, 17, 15, and 12. I've been away from them for four days. I don't care how many degrees you've got on your walls,

1 how much money you make. If you don't have common sense, that is something you cannot go to college for 2 3 it. You can't buy it. It can't be given to you. 4 just have it, and you obviously don't have it. You 5 just don't. My kids have it. I wish kids could run 6 7 this place because it is obvious to them that they 8 would not want this, period. It's just a no-brainer. 9 Okay? 10 It just irritates a guy like me and a lot of people. It's like I'm just up here winging it, and 11 so did everybody else in 1776. Okay? They winged it. 12 And we've got people coming in our country 13 14 and coming in that don't even belong here from China 15 and Canada and telling us what we're going to do and how we're going to do it, and dah-dah-dah-dah. 16 17 And enough's enough. I've had it. In fact, I've had it out so much. 18 19 the United States Forest Service on August 26th to come to my house for a meeting at my house because of 20 the bullshit. They're putting up fences and telling 21 me I cannot go and take my kids, the U.S. Forest 22 Service. 23 24 I asked them on the phone, "What's the Can you go wherever? What's this and this 25 first law?

1 and that?" You can go anywhere in the United States Forest Service you want. You only can have a fire in 2 3 the fire pits. Fine. So now, they're putting up 4 fences, telling me and my kids I cannot go there? 5 So, they liked what I had to say, and I 6 talked to them. And I talked to many people just to 7 get where I got. And they're coming down to my place, 8 in my own house. How many times does that happen? 9 Not very often. 10 I live just a few miles away from that water that is going to come up. And one of these days 11 I'm going to have one of our stupid biohazard signs 12 right there. 13 14 I talked to one -- I don't know who it was 15 -- a year ago on the phone for about an hour. He said 16 this is so safe, we are so terribly safe, that even if 17 one drop gets into the Cheyenne River, we're shut If you're so safe, and one drop of water gets 18 19 into the Cheyenne River, why are you shut down if one drop gets dropped in there? 20 And who's going to blow the whistle? One 21 of your employees certainly isn't. It is really like 22 you guys are like getting back at the people who were 23 24 mean to you in the sandbox. You know, it is like

what; you've been in the steel and glass and concrete

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1 for so long, you don't even know anything anymore. You don't. 2 You live right there. 3 You move your 4 family there and live there, and you risk your family 5 all this hazard that everybody is talking about. 6 Okay? You do that. 7 And I'm telling you I'm that one guy -say it in front of all kinds of 8 9 enforcement -- I would take my gun and I would stand 10 there and I would. How many people are going to be behind? No, I need to know that so many people, like 11 they did back in the days, because back, then, we were 12 all called -- hang on. 13 14 You've got the worst job in the world, 15 man. (Laughter.) 16 17 You guys called them a long time rebels, renegades, outlaws. You know what our history books 18 19 call them now: artists and painters and they call them patriots. We wouldn't be sitting here right now 20 if it wasn't for quys like me. Okay? 21 And then, you're going to take that. 22 many places in this country are left with pure, 23 24 frickin' water that's pure clean? It's so beautiful; let's ruin it, because I don't have it. 25 That's what

it's like.

And I've got one last thing to say. The love of possession is a disease with them. They take tithes from the poor and weak to support the rich who rule. They claim this Mother Earth of theirs, ours. It's ours; the earth is for us, for their own to fence in their neighbors and to keep them away.

If North America had been twice the size it is, there still would not have been enough. The Indian still would be dispossessed of their land. If this country was three times its size, you guys would find a way to muck it up big time.

And it's like if I had a bunch of six- and seven-year-olds that know right from wrong, would they want that? No, they want to swim and play and enjoy it and be able to drink good, clean water and eat their snacks.

But here, you're telling us we are not going to be able to do that anymore, but it's going to be safe; don't worry. Just like everybody, it's like BP, "It's all safe," right? It's safe.

And I appreciate it. I saw you many times talking to -- these people are so passionate.

Otherwise, we wouldn't be here sitting in a hot, stuffy room. And you guys have got to go through with

it. Okay?

I've been on a few dates, right? And you know when you're not wanted, you just don't keep pursuing it and go on back and go on back, okay? That's going relentless. You know when to leave and be done.

You guys should leave and be done and go somewhere else, okay? This is not going to benefit you, maybe you. I don't know how much money you make off it. But you know what? All the oil in Iraq and all the water in the world, I would rather have clean water. I would rather have clean water to drink.

I don't know, all the bull, all the riches, that is the richest thing ever, to be able to live and breathe and just to live. And I'm not living in some fantasyland. It can still be there. So, why would you want to ruin what we have left? Why even take that chance? Okay?

And that's it, and thanks for your time.

CHAIRMAN FROEHLICH: Thank you, Mr. Lanz.

MR. MATT LANZ: And I wasn't planning on coming here today. I missed an appointment, and I woke up like that. I had to come into town to run some errands. And I come back this way, and I was like, what's going on? What's going on? Let's stop

1	in and just hear what they have to say. So, I have
2	nothing better to do today than to come back here.
3	I even tried to work. I'm an artist,
4	self-employed. I can't. I couldn't even work. I was
5	beyond it. I couldn't even.
6	I met a good man over there, Earl Tall.
7	He came to the springs today where I was. I got to
8	work. That's where I'm fortunate and blessed enough
9	to work right there at the springs, at Key Springs.
LO	I get to work outside there. I take my kids there.
11	A new friend of mine, Earl Tall, comes up, and he's
L2	looking at what's going on. And it's just like that.
L3	And so, I bring my kids here today, 17 and
L4	15, and they right behind me to speak to you. I don't
L5	know what they are going to say. We don't have
L6	anything planned.
L7	But I didn't see any other children here.
L8	And this belongs to them. It doesn't belong to you
L9	guys. It belongs to everybody.
20	CHAIRMAN FROEHLICH: Mr. Lanz, thank you
21	for your comments.
22	MR. MATT LANZ: Sorry.
23	(Applause.)
24	CHAIRMAN FROEHLICH: We have two remaining
25	individuals who wish to speak. We're coming up on

eight o'clock, which is the end of the time that we 1 had allotted for this. 2 I would like to call next Leaf Lanz, but 3 ask, please, that he stay within his five minutes, 4 5 followed by Jared Lanz. And if there is anyone else who wishes to 6 7 speak to the Board this evening, please get your name to Twana Ellis, so that we could finish not too much 8 9 after eight o'clock. 10 Thank you. Leaf Lanz, please. 11 12 MR. LEAF LANZ: Hi. My name is Leaf Lanz. 13 CHAIRMAN FROEHLICH: Speak into 14 microphone, please. 15 MR. LEAF LANZ: It's spelled L-E-A-F 16 L-A-N-Z. 17 And I didn't bring any papers or anything. I am speaking right here from my heart. I don't know 18 19 where to start. I'll just start off with saying that I'm 20 in opposition of the uranium mining. And down at the 21 springs, Keith Springs down there, that water is so 22 crystal clear and you can see right to the bottom of 23 24 the pond and you can drink right out of it. And if like any uranium got leaked, you couldn't do that 25

anymore.

I just want to ask everybody one question: why? Why is Powertech doing this? And the answer is the all-powerful dollar. That is the whole reason behind this.

And it's stupid really. Wouldn't you rather have the pure, crystal-clear water source instead of money? Why? Why? It's stupid.

And I recently viewed a documentary about fracking and uranium mining and how it destroyed a whole neighborhood, and how they had to ship their water in and drink out of that, because their wells were contaminated with water. And it said that the concrete casings for the pipes, and whatever they do there, failed most of the time. They fail. They crack. They leak and everything else like that. It just doesn't work.

And I just today learned from a friend of mine who used to be a driller for a uranium company. He said that the polymer they use to do whatever with the mine, to grease it, or whatever, he says, if you use an electron microscope and zoom-in on it, it is little chains. The molecules are little chains that really, when mixed with any uranium, will never decay or will never go away ever.

1 So, it is just, why would anybody do that to a water source? People live here. People drink 2 3 water out of wells. 4 The Wild Horse Sanctuary down there, it 5 has the Cheyenne River running through it with springs that feed into it, and the horses drink out of that. 6 7 And Dayton O. Hyde worked so hard for that. 8 those horses are going to die or be diseased or 9 something and pass that down to generations of horses 10 and destroy them all. And insects, which the birds eat, plants 11 that grow with the water, and all of the animal life, 12 all that will be affected if it is contaminated. 13 14 people who like to hunt -- I don't -- but people who 15 like to hunt and eat deer meat and stuff, deer who 16 have eaten plants of that type, they will 17 contaminated, too. It is just never-ending. just bad. 18 19 And all the birds that travel here and, then, travel to other places, will pick that up and 20 bring it somewhere else. 21 I don't want my kids, if I have any, or if 22 I'm even alive then, to have that kind -- and if they 23 24 live here, or anybody else who has kids that come and

move here, if it's still accessible, to live here and

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1	be drinking that water that is contaminated.
2	You guys are doing, whatever it is, you're
3	doing a really, really bad thing.
4	So, that's all.
5	(Applause.)
6	CHAIRMAN FROEHLICH: Thank you.
7	Okay, Jared Lanz.
8	MR. JARED LANZ: Hello. My name is Jared
9	Lanz.
10	I don't know why this thing is so short,
11	but that's J-A-R-E-D L-A-N-Z.
12	But I just have a question. How many of
13	you wear golden rings or have gold teeth? How many of
14	you just wear gold rings, or whatever?
15	Okay. Now people value gold rings and
16	just gold in general. But what if someone valued it
17	so much that they would come up to you and say, "Oh,
18	this won't hurt," and cut off your ring or cut off
19	your finger just to get the ring, because they could
20	not pull of the ring off of your big, swollen knuckle?
21	Or to get the gold from your teeth, they
22	had to take a rock and hit you in the jaw to get that
23	gold. And they would guarantee you, "Oh, it's not
24	going to bleed. It's not going to hurt. It will grow
25	right back. Trust me."

1 See, that's just exactly what's going on with this no-good uranium. So, yeah, you just 2 quarantee, "Oh, it's totally safe. You don't got to 3 4 worry about a thing. It's fine, "you know. 5 But, like my little brother said, it is just for the money. It's been like that for years and 6 7 years. And I have a grandfather who lives up in 8 Rapid City. He has a big, huge gold ring on his 9 finger. He has had it for such a long time. 10 was a little kid about five years old, or whatever, I 11 would remember looking at that ring, and he would show 12 me all the different symbols on it and say what they 13 14 mean and stuff. But, yeah, that ring really has value, and he has been on this earth longer than I 15 He's like an old, ancient tree. 16 17 But you can't just go up to him and cut off the finger to take the ring and say, "Oh, that's 18 19 It's valuable. We need it. Your finger is going to be fine. It's not going to bleed." 20 And just like the uranium mine, it will 21 bleed into the waters, and it will be no good for 22 people. And I hope if it does go into the waters, the 23 24 no-good snakes who are sitting in this room will drink

that water and get sick somehow, because that is the

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1	only way that they're going to wake up.
2	(Speaks a few words in Native tongue.)
3	That's all.
4	CHAIRMAN FROEHLICH: Thank you.
5	(Applause.)
6	The last speaker we have who has signed in
7	is Earl Tall.
8	MR. TALL: (Speaks a few words in Native
9	tongue.)
10	This is my country we're talking about.
11	This land is our land.
12	I wasn't planning on speaking or anything.
13	I came to listen to what everyone had to say.
14	And there's a lot of things that this
15	federal government did. First of all, there's a COO,
16	country-of-origin labeling that they passed, and they
17	don't want to implement it. They need to implement
18	that.
19	I like eating now hamburgers, steaks, and
20	stuff. But I don't think I want to eat any beef from
21	the Edgemont area. No offense. I don't think it
22	would be very good.
23	This morning I was looking in the
24	newspaper, the news. On the news there was a lady
25	that was talking in there on uranium, uranium plants.

1 And one of the things that she talked about was this creating energy from waste products of uranium. 2 she said that it's possible this uranium plant will 3 4 heat this waste and still create energy. We've got tons and tons of waste. 5 relatives now in the Southwest, they are all dying of 6 7 cancer. They couldn't get rid of some of their waste. 8 And that's in Navajo country. 9 We have a lot of it up here, this waste 10 that can be heated and made into energy. I think that should be looked into before you go dig for more 11 uranium. 12 And this on CNN, I think it was. 13 14 think those are things that should be looked into, instead of creating more waste. 15 Our futures depend on this water. We call 16 17 it sacred, "wacon" (phonetic for an Native word he speaks). And there's no price on it. There's no 18 19 price on water. And so, I don't like giving a speech 20 already or anything. And I'm like most of these 21 people here that came to speak against this uranium 22 mining. They're all talking through their heart. 23 24 And it's time to listen to ourselves, not this money. When you die, you might be a billionaire. 25

1 You're not going to take that to heaven and spend it. Or you might bury it, but you can't take it with you. 2 3 And I think we're all going to talk to 4 The Lakota people, this land belongs to us. 5 never gave it up. The United States admitted to stealing it. We didn't accept that money for this 6 7 land. And I don't think we're going to allow 8 9 that uranium to happen, either. We're going to die a slow death or might as well give up my life now than 10 wait more than 20 years and die of cancer. 11 And there's a lot of people that think 12 I represent Wyachi, Kiopi, Kee, and 13 that same way. grandchildren, 14 Shoya. have over 100 30-40 15 great-grandchildren, and future generations that are And I want to care for our life. 16 17 And that's all I have to say today. These are some of my grandchildren that 18 19 spoke, too, just a little while ago, and they give me the courage to come up here and speak today. And like 20 I said, I was just here to listen to what people have 21 And it's clear that nobody here wants it. 22 to say. fought this uranium back in the 23 24 seventies, Tennessee Valley Authority, the Union Carbide. This place was designated a National 25

1	Sacrifice Area in the seventies. And I guess it's
2	time for us to sacrifice. So, I just wanted you guys
3	to know that I'm willing to sacrifice now. I want my
4	children to grow up. I want my
5	grandchildren/great-grandchildren to grow up healthy,
6	not mutilated, not with four arms or ten fingers on
7	one side. I want them to be healthy.
8	CHAIRMAN FROEHLICH: Thank you. Thank
9	you, Mr. Tall.
LO	MR. TALL: Uh-hum.
L1	(Applause.)
L2	CHAIRMAN FROEHLICH: That concludes the
L3	speakers who have signed up to address this Limited
L4	Appearance Statement section.
L5	With that, I will conclude on today's
L6	proceedings.
L7	If there are any slides or overheads or
L8	any studies that people made reference to, please
L9	leave them with our administrative assistant, Twana
20	Ellis, so that they can be included in the record of
21	the Limited Appearance Statements.
22	I thank everyone for their comments, for
23	coming out, for their thoughtful comment, and for
24	speaking to the Board this evening.
25	The evidentiary hearing will begin

1	tomorrow morning at 9:00 a.m. at the Hotel Alex
2	Johnson. The public is invited. However, I would let
3	them know in advance, although the public is invited
4	as well as the media, the proceedings are more of a
5	trial-like nature. And so, the questioning and the
6	proceedings will be conducted by the panel and the
7	counsel for the parties, as well as the sworn
8	witnesses with prepared testimony in that proceeding.
9	With that, I will conclude this session.
10	And I thank everyone for their attendance. We
11	appreciate it.
12	(Applause.)
13	(Whereupon, at 8:13 p.m., the proceedings
14	were adjourned.)
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