1	PUBLIC HEARING FOR THE
2	DEWEY-BURDOCK UNDERGROUND
3	INJECTION CONTROL DRAFT PERMITS
4	AND PROPOSED AQUIFER EXEMPTION
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7	May 10, 2017
8	1:00 p.m. to 8:00 p.m.
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10	The Mueller Center
11	801 South Sixth Street
12	Hot Springs, SD 57747
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1 REGIONAL JUDICIAL OFFICER SUTIN: Good afternoon, everyone. Thank you for coming 2 today. My name is Elyana Sutin, and I am the 3 Regional Judicial Officer for the Environmental 4 Protection Agency in Denver, Colorado. Again, 5 thank you all for coming. 6 7 I will be chairing the hearing today. And 8 in addition to myself, there are other EPA staff 9 here to assist in this hearing to ensure 10 everyone who wants to speak has the opportunity 11 to do so. 12 I'd like to introduce these folks before we get started: Douglas Minter. Can't see 13 14 Douglas. Are you here? 15 AUDIENCE MEMBER: He stepped out for an interview. 16 17 REGIONAL JUDICIAL OFFICER SUTIN: Oh, he 18 did. Okay. We'll get to Douglas in a second. Valois Shea is to my right. Valois is in 19 20 the Underground Injection Unit in the Office of Water Protection at the EPA. 21 22 Lynne Newton is standing back at the 23 registration table. She's also in the Underground Injection Unit in the Office of 24 25 Water Protection.

1	Lisa Vanderpool-McClain, who is standing
2	back in the other corner, Lisa is our Public
3	Affairs Specialist in the Office of
4	Communication.
5	And Sisay Ashenafi I don't see he's
6	not here? Okay. So he is also will be
7	standing in the back of the room. He's our
8	Community Involvement Specialist, and we'll
9	introduce him later.
10	On March 6, 2017, EPA issued two draft
11	Underground Injection Control, or UIC, area
12	permits to Powertech USA, Inc., for injection
13	activities related to uranium recovery near
14	Edgemont, South Dakota.
15	The draft permits include a UIC Class III
16	area permit for injection wells for the in-situ
17	recovery of uranium, and a UIC Class V area
18	permit for deep injection wells for disposal of
19	treated in-situ recovery process waste fluids.
20	The EPA is also proposing an aquifer
21	exemption approval in connection with the draft
22	UIC Class III area permit. We are here today to
23	listen to your comment on these area permits and
24	aquifer exemption.
25	The public comment period is open until

1	May 19, 2017. In addition to this hearing,
2	there will be one more hearing tomorrow in
3	Edgemont, South Dakota at the St. James Catholic
4	Church.
5	We have held four other hearings, one in
6	Valentine, Nebraska, and two days of hearings in
7	Rapid City on Monday and Tuesday.
8	In a moment, Ms. Shea will explain in more
9	detail what was proposed in the notice. But
10	before I turn it over to her, I would like to
11	take a moment to explain a bit about how today's
12	hearing will work.
13	We will take testimony from 2:00 until 5:00
14	with a possibility of a short break we'll
15	see and then a break from 5:00 to 6:00,
16	returning to take testimony from 6:00 to 8:00.
17	I will call speakers to the microphone.
18	You have the choice of coming to this podium
19	up here to speak, or if you feel more
20	comfortable, you can use the podium down here
21	below, and we'll hand you the microphone. You
22	come to the microphone after I've called your
23	name from the registration card that you filled
24	out. When it is your turn to speak, please
25	state your name before you begin your testimony.

1 In order to be fair to everyone, we will limit your testimony to five minutes each. 2 We will signal to you when you have one minute left 3 to speak with a yellow triangle. And then when 4 your five minutes is past, I will ask you to 5 complete your testimony, and there will be a red 6 7 stop sign. 8 Please try to be as succinct and on point as 9 you can. If I find we are straying from the topic at hand, I will interrupt and ask that you 10 please return to the issue before us. If we 11 12 have time at the end and everyone has had the chance to speak and you have more to say than 13 14 the five minutes you were given, then I will allow people to get back up and finish their 15 16 comments. 17 After you finish your testimony, members of 18 the panel may ask clarifying questions. I want 19 to be clear that we are not here today to 20 explain the basis for this proposal or to engage in back-and-forth discussion. The notice does 21 22 that. 23 The purpose of the hearing is to receive your input. We will consider and then respond 24 25 to all comments received during this hearing as

1	well as all written comments in the final
2	permits and aquifer exemption determination. We
3	will not be answering any questions during this
4	hearing.
5	We are recording the hearing today, so be
б	assured that your comments will be considered.
7	The court reporter sitting to my left will be
8	preparing a transcript of today's proceeding
9	that will be available for anyone who wants to
10	see it.
11	She is an independent contractor to the EPA
12	and therefore may not be looking at you while
13	you're giving your testimony. But be assured
14	she is intently taking down every word.
15	The transcript is part of the record and
16	will be included in the docket for this matter.
17	The docket is where EPA collects materials it
18	has considered in its action, including public
19	comments.
20	The docket is available on the internet for
21	review, or you can view a hard copy at EPA's
22	Denver office. The transcript of this hearing
23	will also be available in the docket.
24	If you have written copies of your
25	testimony, please give a copy to our staff at

1 the registration table, or you can hand it to This will be helpful as we prepare the 2 us. 3 transcript. If you have written comments or supporting 4 documentation, you may leave those with us as 5 well, and we will make sure they are entered 6 7 into the docket for this proposed action. 8 You also may submit written comments 9 directly to the docket through May 19 10 Instructions for submitting comments can be found at the registration table. 11 12 Once the final permits are issued and the aquifer exemption determination has been made, 13 14 anyone who participated -- participated in the hearings, either through oral testimony or 15 16 written comment, has the right to appeal the 17 Agency's decision to the Environmental Appeals 18 Board. 19 Before I turn it over to Valois, I'll 20 introduce Douglas Minter, who is the manager of 21 our Underground Injection Unit in the Office of 22 Water Protection. 23 And did Sisay come into the room? No. Okay. So at this point, I will turn it over 24 25 to Ms. Shea, who will provide a little bit more

1 information on the project before we get 2 started. MS. SHEA: Good afternoon. Can you hear me? 3 Good afternoon, everyone. Thank you for 4 coming. We really appreciate your attendance 5 here and providing comments. 6 7 As Judge Sutin said, we have issued two 8 types of underground injection control permits 9 based on the type of injection and the purpose 10 for injection. 11 The Class III injection well permit is for 12 injection related to uranium ore recovery in the Inyan Kara group aquifers. In association with 13 14 this permit, there's a proposed aquifer exemption decision that's been documented in the 15 16 record of decision. We're also taking comments 17 on that, as well as the draft permit conditions 18 for the Class III injection wells. 19 The second permit is for the deep Class V injection wells, and they are Class V because 20 21 they are injecting above the Madison aquifer. But because it is a deep well and because the 22 23 Madison aquifer is just the next formation down, the permit has the most stringent well 24 25 construction requirements and monitoring

1	requirements under the UIC regulations.
2	So the well construction will be constructed
3	like a Class I well and will have continuous
4	monitoring like a Class I well.
5	We also generated three different types
6	of three additional types of documents. One
7	is an Environmental Justice Analysis that we
8	welcome your review and comment on. We received
9	some good comments from that yesterday and hope
10	to now that I've called your attention to
11	that document, hope you will have time to look
12	at it and provide some more comments.
13	We did a Cumulative Effects Analysis
14	document for the construction and operation of
15	the injection wells. And then our third
16	document talks about our tribal consultation
17	process that we began a couple years ago.
18	We have met with some tribes on
19	government-to-government consultation, but not
20	all of the ones that we hoped to meet with, and
21	that will be an on going process. We will not
22	issue any final permit decisions until our
23	tribal consultation process is completed.
24	I don't have my slides today, so I won't be
25	able to give you the information that I

1 presented in the previous hearing, but we will have another question-and-answer session 2 3 tomorrow in Edgemont. So if you could get down to the St. James 4 Parish Church at 1:00 tomorrow, we'd be happy to 5 continue with our question-and-answering 6 7 session, and I can talk about the monitoring 8 requirements that I can't cover now. 9 So with that, I also want to let you know 10 that your comment is important today and your 11 time is important, so we really appreciate you 12 taking the time to be here. Thank you. REGIONAL JUDICIAL OFFICER SUTIN: Okay. 13 14 We'll get started. When I call your name, if 15 you can please come to either podium, and we'll 16 make sure we get the microphone to you. 17 Our first speaker is Dr. Peter Sotherland. DR. PETER M. SOTHERLAND: I'm Dr. Peter 18 19 Michael Sotherland. My primary concern with 20 this project is the willful contamination of the 21 pristine Minnelusa aquifer, which is the water source for me and most of my neighbors. 22 23 My secondary concern is the economic viability of fission, nuclear-powered electrical 24 25 power generating's future, as has been

1	exemplified by the two General Electric power
2	plants under construction back east that have
3	been terminated, and the subsequent bankruptcy
4	of the parent company, Toshiba, due, to cost
5	overruns.
б	The unresolved nuclear waste problem and the
7	legacy of Three Mile Island, Chernobyl,
8	Fukushima, and now the Hanford Reservation
9	failure.
10	The price of renewable energy is dropping
11	precipitously, making it the energy of the
12	future. The shortfalls of transmission and
13	storage will be overcome by innovation and brute
14	force efforts. The price of yellowcake is well
15	below the breakeven point, and demand is
16	decreasing.
17	Back to my primary concern, the injection of
18	treated water into the Minnelusa aquifer.
19	Mr. Hollenbeck stated the solution injected as a
20	waste stream into the aquifer would be a
21	saltwater solution. Let's talk about this.
22	The Romans, after the conquest of Carthage
23	in North Africa, spread salt, sodium chloride,
24	into the fields of Carthage to kill the soil,
25	thus starving the population into subjugation.

1 But the term "salt" is a chemically generic term, like the generic terms "dog," "flower," or 2 "bug." There are many and varied examples 3 within each category. The most commonly known 4 salt is table salt, sodium chloride, which was 5 illustrated previously. 6 7 In chemistry, a salt is the result of the 8 chemical reaction of an acid and a base. Thus, salts are a combination of all sorts of elements 9 10 that have the opportunity to react under the 11 right conditions. 12 The process that is described by Powertech is the injection of water, oxygen, and carbon 13 14 dioxide. This is really the injection of an oxidizing agent and an acid, carbonic acid 15 16 Carbonic acid is made by adding carbon dioxide 17 to water under pressure. 18 Think Coca-Cola. Pour Coke on the sidewalk, 19 and it will fizz. With continued application, it will dissolve the concrete along with the 20 21 other minerals present. What Powertech is after is uranium oxide, 22 23 yellowcake. After the uranium oxide is removed from the solution that is pumped from 24 25 underground, the remaining mineral salts that

1	are not money-makers need to be disposed of.
2	These are the salts that are to be disposed
3	of in our drinking water. The chemical nature
4	of these waste salts has not been defined, and
5	considering the mineral complexity of the ore
б	body, I suspect there are mineral salts that are
7	not that are deleterious to life.
8	Mr. Hollenbeck stated that he would be
9	willing to drink this waste saltwater that's to
10	be injected into our aquifer, which reminds me
11	of a classmate of mine in school who worked at
12	the sewage treatment plant in the summer.
13	On a double-dog dare, he drank a glass of
14	effluent from the plant and was immediately
15	taken to the hospital to have his stomach pumped
16	and given every injection they could think of.
17	He did not die, but he did not receive any
18	awards for intelligence. I am not willing to
19	take a double-dog dare.
20	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
21	Mr. Sotherland.
22	Next if I can have Cathy Sotherland.
23	We're going to try to get the mic turned up,
24	but if you can speak very closely and loudly
25	into the mic so the court reporter can hear,

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that would be great.

2	CATHY SOTHERLAND: Thank you. Thank you for
3	coming. Thank you for taking the opportunity to
4	give us the opportunity to share our concerns.
5	We have many. And as my husband said, we have
б	our well in the Minnelusa. We I sent you
7	lists of all the wells in this area and all of
8	the different aquifers they are in.
9	We're just uncomfortable with it. We have
10	still got the remnants of the previous mines
11	when uranium was booming back in the '50s
12	through the '70s. They are not reclaimed yet,
13	and they are still jeopardizing our water
14	supply. The rivers, when we have floods, it's
15	still not reclaimed.
16	His concern Pete's concerned about the
17	uranium industry possibly becoming obsolete as
18	renewables take on more and more positive
19	ground. We don't need uranium. We don't need
20	more uranium on the planet. It really should be
21	left where it is. We have other resources that
22	we should be exploring and putting into effect.
23	My experience when we lived in Edgemont back
24	in the '80s was that our state is a poor state.
25	They do not oversee projects like this. I, at

1 that time watched, the tailings pile blowing through our little town of Edgemont when we 2 lived there, called the state, called the EPA, 3 and was told that, yeah, our state has rather 4 lax policies and environmental standards, and it 5 was kind of a drag, but that's how it was. 6 7 Not willing to do that again. Our water is 8 precious. You can not undo the violation that 9 will happen if there is a mistake. And it is a 10 matter of time. 11 As the EPA, you know, you have seen that 12 there are accidents. You have seen that there are violations that are usually caught by the 13 14 states and the people overseeing those. We will not have that oversight, and we have no one to 15 16 watch our backs, and we have got everything to 17 lose if we lose the water. I thank you for your 18 time. 19 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 20 Mrs. Sotherland. John Sides. 21 22 JOHN SIDES: My name is John Sides. I'm the 23 chairman of the board of directors for the Fall River Conservation District. As a conservation 24 25 organization, we are strongly opposed to the

1	proposed uranium mining and injection wells at
2	the site of Dewey-Burdock near Edgemont.
3	Conservation district boards are mandated to
4	protect the land, air, and water quality.
5	Because of this, the Fall River Conservation
6	District board of directors wrote a resolution
7	that went on to become the State of
8	South Dakota's House Concurrent Resolution
9	Number 1025.
10	This resolution reaffirms the value of
11	South Dakota groundwater resources and
12	recognizes the need for ongoing evaluation of
13	our groundwater management. This resolution in
14	its entirety is attached to this statement.
15	This uranium injection well project could
16	have devastating effects on the lives and the
17	economies of all the people in Fall River
18	County. There are too many unanswered questions
19	about this, about this project, such as possible
20	earthquakes, contamination of the Minnelusa and
21	Inyan Kara aquifers.
22	These two major aquifers supply water to at
23	least 125 private wells, providing essential
24	water to families and livestock. Chemical waste
25	contamination would prove devastating to the

1	many people who rely on the Minnelusa and Inyan
2	Kara aquifers.
3	In addition, the heavy truck traffic that is
4	essential for a mining operation would be very
5	damaging to the road systems of this county.
6	This cost this would cost the county and
7	taxpayers extra dollars that it simply does not
8	have for road repair and maintenance.
9	The population of this county cannot afford
10	mistakes that could come with this project. The
11	lack of clean, usable water could easily turn
12	our towns into ghost towns, productive rangeland
13	into wastelands. We need to protect our water
14	source for the well-being of all livestock,
15	wildlife, and human life. Thank you.
16	While I'm here, I'm also a private rancher,
17	so I'll give my presentation on that. We own a
18	cattle we own and operate a cattle ranch in
19	eastern South Dakota. We are against the
20	proposed mining injection wells in Dewey-Burdock
21	area. The water from our ranch comes from the
22	Madison aquifer by the way of pipeline. We
23	cannot afford to take chances on polluting the
24	water that sustains our livelihood. Thank you.
25	REGIONAL JUDICIAL OFFICER SUTIN: Thank you

1 very much, Mr. Sides. Christa Spillane. 2 3 KARA HAGEN: My name is Kara Hagen. Christa Spillane and I are here on behalf of the City of 4 Hot Springs. We're both city council members. 5 I'm representative in Ward 1; Christa is Ward 4. 6 On May 17 out of eight council members 7 8 signed a resolution for the city of Hot Springs to protect our water. And this is Christa 9 Spillane. She's going to read that resolution 10 11 to you. 12 CHRISTA SPILLANE: I have to have a light so I can read. Sorry. I didn't bring my glasses. 13 Resolution from the -- as Kara said, this is 14 15 for the City of Hot Springs, Common Council. Resolution 2017-10: A Resolution to Reaffirm a 16 17 Citywide Commitment for Clean Water and Water 18 Resource Protection. 19 Be it resolved by the Common Council of the 20 City of Hot Springs, South Dakota, that we are 21 committed to preserving and maintaining the amount and quality of the water for the citizens 22 23 of Hot Springs and its surrounding environs, 24 and; 25 Whereas, the City of Hot Springs was first

1 developed as a town in the late 1800s due to its proximity to Fall River and the abundant natural 2 warm mineral springs within the valley, and; 3 Whereas, the City of Hot Springs has made a 4 long-term investment in storm water management, 5 potable water systems, and wastewater management 6 7 programs and infrastructure to reduce nutrients 8 and pollutants in our waters and to protect our 9 vital water resources, and; 10 Whereas, the Common Council is obligated to 11 preserve and protect the public health, safety, 12 and welfare by preventing the pollution of, and maintaining the quality of the water entering 13 14 in, held within, and removed from aquifers serving as the City's water source, and; 15 16 Whereas, the City of Hot Springs has stated 17 in its water ordinance that our mission is to 18 provide the City's water customers with a safe 19 drinking water supply, supply water for fire 20 protection, and an adequate supply of water for 21 our essential daily needs, and; Whereas, the City of Hot Springs Common 22 23 Council finds that any pollution or contamination, willful or not, of our water 24 25 supply to be a direct threat to our community

1	and its health, safety, and welfare, and;
2	Therefore, be it resolved that the City of
3	Hot Springs will take necessary action to ensure
4	the perpetual purity and quality of the waters
5	available for use of the citizens of Hot Springs
6	and the City's and those the City distributes
7	water to, and;
8	Therefore, commit to support any action from
9	the county, state, and federal governments aimed
10	to protecting the waters of South Dakota, both
11	surface water and underground aquifers, as a
12	critical natural resource necessary for life.
13	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
14	Ms. Spillane.
15	Paul Wheeler.
16	PAUL WHEELER: My name is Paul Wheeler.
17	I've been a rock hound of sorts, a minor geology
18	buff for many years. I've traveled into the
19	Black Hills for over 30 years and recently
20	purchased a house here in Hot Springs.
21	After reading the Class III and Class V
22	permit fact sheets provided by the EPA in
23	regards to the proposed project, it is evident
24	to me that this project is, at the very least,
25	impractical and, at the very worst, extremely

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dangerous.

Considering the complex subsurface geology of the area and its close proximity to known fault joints, the choice to use injection well technology to both contain contaminated wastewaters and mine subsurface uranium deposits is both irresponsible and potentially catastrophic.

I would like to comment on just as few of the potential points. Page 23 of the Class V sheet states the locations and conditions of fault zones in relation to the project area. And I quote: The Dewey structural zone consists of steeply dipping to vertical faults that are uplifted on the north side relative to the south side of the zone, a total of 500 feet.

17The Long Mountain structural zone is located18approximately 7 miles south of the project area.19This fault zone consists of small20northeast-trending normal faults observed in21outcrops of the Inyan Kara group and Sundance22formation within a zone measuring several miles23across.

The displacement across the faults measures up to 40 feet, with folding of the strata

1 adjacent to the faults adding up to 60 feet of additional structural relief. 2 The faults in the Dewey project will occur 3 northwest of the Dewey fault in the Dewey 4 terrace area approximately one and a half miles 5 northwest of the project area. A subsurface 6 7 fault was identified by seismic methods about 8 five and a half miles north of the project area. 9 It is about one and a half miles long and 400 10 feet wide. Three faults are shown in the northeast 11 12 corner of the Burdock Geological Quadrangle. The reports states that these faults have a 13 displacement of less than 10 feet and are 14 located two and a half miles or more from the 15 16 eastern edge of the project zone. 17 So -- end of quote. In short, there are at 18 least a half dozen faults of differing size 19 located within a mile and a half to five and a 20 half miles from the project zone. 21 On page 25 of the Class III draft sheet, 22 this -- there's an even better picture drawn of 23 the Dewey fault, and I quote: The Dewey fault, a northeast to southwest trending fault zone, 24 lies approximately 1,500 feet northwest of the 25

1	Dewey-Burdock permit boundary.
2	So again, we have a steeply dipping fault
3	line lying less than a half mile away from the
4	project zone.
5	Related to those facts, page 26 of the same
6	sheet states, and I quote: Many other faults
7	are probably present, but not discernable
8	because of poor exposures.
9	Let me repeat that: Many other faults are
10	probably present but not discernable because of
11	poor exposures.
12	In response, it is stated, quote: If there
13	are any faults and fractures occurring within a
14	well field area that cause a breach in a
15	confining zone, they will be detected during the
16	well field drill and pumping testing.
17	If found, the placement of injection and
18	production wells can be modified from the
19	regular pattern to control flow around the
20	fractures or faults to keep it flowing through
21	the uranium ore bodies rather than along these
22	paths of lower hydraulic resistance, end of
23	quote.
24	So if additional fractures and faults are
25	found in the projected area and there are

1 already many, Powertech will simply and safely adjust the flow around these breach zones and 2 continue to mine uranium? To think that you can 3 safely continue to apply injection well 4 technologies in an area of potentially breaching 5 fractures and faults, I find to be both 6 7 ridiculous and irresponsible. 8 If the information showing the close 9 proximity of numerous fault zones to this 10 injection well area is not enough to disallow 11 this project, you must also consider the 12 confining layers that will be used to contain the injected fluid. 13 The entire project area relies upon a lower 14 and upper containment layer of Fuson shale that 15 16 underlies the whole region. But to quote from 17 page 22 of the Class III sheet: There may be points where the Fuson confinement zone has been 18 19 compromised by improperly plugged exploration 20 drill holes or wells that penetrate the Fuson 21 confining zone. Evidence suggests at least one breach in the Fuson confining zone is included 22 23 in the reports on the pump test. It is clear from pages 15 and 17 of the 24 25 Class V sheet that the porous nature of the

1	Minnelusa sandstone as an upper containing layer
2	is a concern.
3	REGIONAL JUDICIAL OFFICER SUTIN:
4	Mr. Wheeler, your time is up, so I'll need you
5	to wrap up, please.
6	PAUL WHEELER: Oh, okay. Well so, in its
7	own outlines, the United States two
8	paragraphs. The United States Geological Survey
9	lists specific factors necessary for injection
10	wells to induce earthquakes. Those factors
11	include the presence of faults that are large
12	enough to produce earthquakes, stresses that are
13	large enough to produce earthquakes, and the
14	presence of pathways for the fluid pressure to
15	travel.
16	It is obvious that those same factors are in
17	severe question in relation to this project. I
18	think what I would like to say is that geology
19	is an imperfect science. I'm sure the Powertech
20	geologists would agree. What cannot be seen
21	below ground cannot be anticipated or contained.
22	In my opinion, considering the toxic nature
23	of these injection fluids, and the obvious
24	dangers of both questionable confining layers
25	and their close proximity to known and unknown

1	fault and fracture lines, the idea that this
2	project can be done safely and with no ill
3	effects to our water supply or to local geologic
4	integrity is foolhardy and defenseless.
5	The massive public and environmental loss
6	that could very well occur far outweighs the
7	singular and unnecessary private gain that is
8	being sought.
9	Thank you.
10	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
11	Mr. Wheeler.
12	Next if we can have Gardner Gray.
13	GARDNER GRAY: My name is Gardner Gray.
14	There are many reasons why the EPA should deny
15	Azarga any permit to mine uranium and/or inject
16	toxic fluids into currently used aquifers in the
17	Dewey-Burdock area of South Dakota, including
18	the Inyan Kara, the Minnelusa, Deadwood, and the
19	Madison.
20	There is no market for yellowcake. There's
21	no profit to be made by mining uranium.
22	Therefore, there's no reason for Powertech to
23	drill deep injection wells for toxic fluid that
24	they will not be creating.
25	It would appear that the only way for

Powertech/Azarga to profit by their permits is to make deep injection wells available to outside sources of toxic waste. Powertech denies the idea of outside sources of waste saying they do not plan -- that's in quote -they don't plan to take in outside toxic waste, despite the fact that their permit allows it and profit demands it.

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And remember, Powertech cannot -- Powertech cannot do any mining at all unless the laws protecting the water and the land are put aside and waivers issued allowing the contamination, which is by law not allowed.

These new permits will allow Powertech to pollute the Inyan Kara and the Minnelusa aquifers directly, and the Deadwood and the Madison aquifers by transmissivity. Once these aquifers are contaminated, there will be no remedy.

20 They say they only need one and a half percent bleed, which is somewhere around 300 21 22 gallons a minute. So why ask for a 1000 gallons 23 a minute? If they will not take in outside waste, why allow for it? 24 25

They say the waste to be injected into the

605,721,2600 BLACK HILLS REPORTING

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aquifers is just saltwater when the laws of chemistry refute that claim. The application to the NRC by Powertech shows that the waste will be impregnated with radium, cadmium, chromium, and arsenic, among many others poisons. These chemicals will absolutely be part of the so-called lixiviant.

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New boreholes for toxic waste disposal are being requested because the original plan to mine uranium in-situ is now irrelevant due to the low value of the material and the lack of demand worldwide. Also, alternative energy sources, such as wind and solar, are now employing more new workers than the oil and gas industries combined.

Professional geologists and chemists from South Dakota School of Mines, Chadron State, and private practice have testified most effectively as to the dangers of this plan for all the residents in the area through the irreparable damage done to the water supply.

The misuse or contamination of the aquifers in the Black Hills flies in the face of good judgment due to the increasing importance of usable water, not just in drought-affected

1	South Dakota, but the nation as well.
2	We are depleting our water supplies by
3	allowing the very kinds of destruction
4	envisioned by Azarga and the EPA. With the
5	demand for water ever increasing due to
6	continued world population increases, it's
7	imperative that the protection and careful usage
8	of our water supplies be our guiding light. To
9	actually embrace the opposite behavior is to
10	violate the EPA stated purpose where am I?
11	It is no longer possible to deny the threats
12	to our remaining water supplies driven by
13	in-situ mining and ruination. It is the EPA's
14	responsibility to make sure the water and
15	environment remain safe.
16	The Black Hills Hydrology Study of 1990 and
17	subsequent, available from the USGS, is a fine
18	and revealing scientific paper available for
19	your review about this transmissivity and the
20	dangers involved. It's about a 400-page report,
21	and you don't have to get to even page 50 before
22	it's obvious that this is a bad deal.
23	The fact the Platinum Partners, which is
24	Azarga's largest shareholder, is being charged
25	with a variety of misdeeds which, if convicted,

1	could provide prison terms for the guilty,
2	should be a wake-up call to the EPA as to the
3	kind of ethics embraced by Azarga.
4	With the company based in China, overseeing
5	a Canadian company with offices in Colorado, one
6	can easily guess how Azarga feels about the
7	long-term health of the citizens in this area
8	when compared to the drive for profit at all
9	costs.
10	How am I to explain to my granddaughter that
11	her government decided that it was safe and
12	reasonable to exchange her healthy drinking
13	water for a few pieces of silver in the pockets
14	of a few profiteers? Thank you.
15	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
16	Mr. Gardner.
17	Mary Helen Pederson.
18	MARY HELEN PEDERSON: My name is Mary Helen
19	Pederson. I live here in Hot Springs.
20	When I was in the ninth grade, which we
21	called freshman at that time, I went to school
22	in Edgemont, South Dakota. I was there for only
23	one semester, but even at that age, I could tell
24	that there was something wrong in the
25	atmosphere. So I paid attention to the uranium

1	from then on and learned everything I could
2	about them.
3	We need to protect our water, our economy,
4	health, and way of life. Let's stop this bad
5	idea right here. This is a very dry area of the
6	country, even of western South Dakota. We can't
7	lose 8,000 gallons of water per minute for the
8	next ten years.
9	It would not only affect the Inyan Kara
10	aquifer, but the Minnelusa and the Madison
11	aquifers. These are all used in this area. We
12	can't afford to lose that much water or have
13	them polluted in any in any of these
14	aquifers. These aquifers are known to
15	communicate.
16	If there are permits if these permits are
17	given to Powertech/Azarga, then there is ten
18	more companies that will fly will file for
19	the same permits all around the Black Hills,
20	also the companies that are encroaching from the
21	plains for deep hole disposable wells. Are we
22	trying to make South Dakota the next uranium
23	dumping area?
24	This kind of stuff would also disturb
25	cultural and historic sites, wildlife, and our

1	ranching and tourism economy. Handling uranium
2	in any form produces radioactive and toxic waste
3	that threaten people's health and our food
4	chains.
5	Hannan LaGarry is a geologic geologist
6	I can't even talk that had worked this area
7	and knows that this whole area has many faults.
8	That's what happened to Chadron Creek in 2007.
9	It just disappeared one day into a fault in the
10	earth. And that was their total water supply
11	for the town of Chadron, Nebraska.
12	He and some helpers went over 10,000 pages
13	of the permit. He looked at the drillers' notes
14	and found artesian wells popping out some of the
15	holes, which shows faults in the aquifers. And
16	all the holes dug over there have not been
17	plugged like the NRC told them to.
18	Some of the holes went into the caves. Like
19	Wind Cave? Lots of things he found in the
20	drillers' notes were things like, Don't tell the
21	landowners and don't report the Indian relics.
22	This was just all about the 760 well holes that
23	aren't plugged from the TVA.
24	Hannan LaGarry also mapped the aquifers.
25	They are flowing from the west to the east.

1 That joint -- the most jobs that would be at the 2 startup is 80 versus 350,000 people losing their 3 qood water. In the government -- is the government going 4 to send in contaminated bottled water for us? 5 Go to the Uranium Cowboy on YouTube to see a lot 6 7 of information on this subject. Crawford, 8 Nebraska is the only area that now has a high 9 rate of pancreatic cancer in Nebraska and United 10 States. Dennis Yellow Thunder has filed a petition 11 12 for review of the Crow Butte's permits. According to Linsey McLean, a known biochemist 13 14 and NRC expert witness, there have been one and a half million chemicals introduced into the 15 16 body since World War II. 17 Also, the Tennessee Valley Authority, after 18 ten years of looking for uranium to mine in the 19 Dewey-Burdock area, left because they found too 20 much gypsum and cave lines in the area. 21 It has already been proved that injecting materials into high -- under high pressures deep 22 23 underground causes earthquakes. This area is already having numerous earthquakes as the whole 24 25 Black Hills is in uplift stage. More and harder

1	earthquakes are apt to break those deadly gasses
2	stored over there under Igloo. It could kill
3	every living thing in the area.
4	These permits would allow the company to
5	pollute our underground water, which we all rely
6	on. Just across the western border in Wyoming,
7	Cameco Resources has been hit with nine apparent
8	violations on how they are shipping uranium
9	products.
10	REGIONAL JUDICIAL OFFICER SUTIN:
11	Ms. Pederson, your time is up, so I need you to
12	wrap up, please.
13	MARY HELEN PEDERSON: Okay.
14	New information in yesterday, all those
15	wells north of Hot Springs are in the Minnelusa
16	aquifer. According to Ken Buhler of the
17	South Dakota Department of Environmental and
18	Natural Resources, or the DENR, said that there
19	are hundreds to thousands of domestic wells
20	using water from the Minnelusa aquifer. 196
21	appropriated water rights permits in the
22	Minnelusa, which include municipal, commercial,
23	and industrial use.
24	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
25	Ms. Pederson.

1 Robert Lafferty. ROBERT LAFFERTY: My name is Robert 2 Lafferty. I'm from Pine Ridge, South Dakota, 3 and I just have a couple concerns on who 4 actually owns Powertech. Is it Azarga, or is it 5 a Chinese investment fund from China? And so 6 7 they will be making the money, and after about 8 10, 20 years, they'll be gone, and the contaminated water will still be here. 9 10 And my other concern is about the sulfate, 11 radium, and iron that's going to be injected --12 supposedly supposed to be clean water being injected into these wells. And Powertech is 13 14 getting free water and not paying for it? I 15 don't agree with that. That's it. 16 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 17 Mr. Lafferty. 18 Ed Harvey. 19 REGIONAL JUDICIAL OFFICER SUTIN: Go ahead. 20 ED HARVEY: Good afternoon. My name is Ed 21 Harvey. I'm a resident of Hot Springs. 22 All the aquifers in this proposal are 23 presently being used for potable water by local residents, thus no exemption to the Safe 24 25 Drinking Water Act of 1974 should be allowed.

1	Both domestic and agriculture wells are in use.
2	The NRC has prohibited the in-situ mining
3	operation in this area until the 7600-plus
4	abandoned boreholes are properly sealed.
5	Geologically this is part of the Black Hills
6	uplift area, which is still rising, causing the
7	rock to be highly fractured and constantly
8	changing.
9	Both of these conditions allow flow between
10	all area aquifers. This will make containment
11	of mining waste and waste fluids impractical or
12	improbable. Aquifer flow data is presented
13	as presented is inconsistent.
14	In the mining application, the flow rate of
15	feet per year is cited; yet in the very next
16	paragraph, a pump test showed a drop in a test
17	well 1500 feet away in less than five minutes.
18	Pressurized injection would certainly move
19	faster than pump suction head values.
20	USGS aquifer data shows tritium levels,
21	which would infer high flow rates from the known
22	recharge sources. This was assumed to be caused
23	by an unknown recharged source.
24	TVA driller notes, initially suppressed by
25	Powertech, show that at least one borehole went

1	into an underground cave. This could be due to
2	the Jewel Cave and/or Wind Cave structures
3	extending under this area.
4	USGS aquifer data also concludes that flow
5	rates through such structures is similar to
6	surface flows in the area. This could easily
7	explain the deviation between well data and
8	tritium data without the need to identify an
9	inferred new recharge zone.
10	I am concerned that this project has a high
11	probability for rendering my water unusable
12	forever in the next few years. I do not
13	understand how radioactive waste is acceptable
14	for injection into an actively used aquifer
15	which sits above another aquifer which is also
16	actively used.
17	Present ion exchange technology will not
18	remove organified heavy metals, including
19	uranium. Disposal of this waste fluid should
20	require permitting for a Class I well, not a
21	Class V well, and continuous independent
22	monitoring of the waste should be required.
23	Since no mining operations are occurring, no
24	need is shown for disposal wells at this time.
25	This area is also seismically active, with known

1 faults in close proximity. Given the known occurrences of induced seismicity from injection 2 well operations, containment of hazardous 3 materials cannot be guaranteed. 4 Will the agency granting these exceptions be 5 responsible for mitigating any damages caused by 6 this permit? Will a bond be required sufficient 7 to provide water to all affected residents and 8 9 to cover any damages, like those seen in 10 Oklahoma? Who will be responsible for the cost 11 of testing present domestic wells, to obtain a 12 true water quality baseline? I understand the concept of putting a few 13 rural residents at risk for the perceived 14 15 benefit of a larger population base. However, 16 you must accept that agricultural products grown 17 on soil that you allowed to be contaminated, 18 with water you allowed to be polluted, will end 19 up in your grocery market shelves. It's called 20 karma. 21 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 22 Mr. Harvey. 23 Patricia Shiery. Sorry. If I'm not saying 24 that right. 25 PATRICIA SHIERY: You are.

1 Good afternoon. My name is Patricia Shiery. 2 I am currently a resident of Hot Springs, South Dakota. I originally come from East 3 River, Madison which I served 2011-2012 in the 4 state legislature. At that time I did fight 5 against this project, and I continue to fight. 6 7 I continue to study and to research and to 8 learn more about uranium, about the ISL process. And what I have discovered is there's a purpose 9 for uranium in the earth, and that purpose is it 10 11 has a huge effect in the magnetic flow of the 12 earth. It also has a huge effect in keeping the earth warm. 13 14 If we keep removing the uranium from the 15 earth, it's going to affect the polar -- it's 16 going to -- how our earth axis sits, and it's 17 going to affect our weather patterns. 18 I want to now speak on a comment that 19 Mr. Hollenbeck did -- had made: Uranium mining 20 has already been proven safe in other areas. 21 I'm not exactly sure what other areas 22 Mr. Hollenbeck has been referring to, but in my 23 research, it has not at all been proven safe.

In fact, uranium mining and processing is both water- and energy-intensive. By-products are

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1	considered hazardous and highly radioactive.
2	Although uranium is natural if left in the
3	ground, when mined, it no longer remains in its
4	natural state. As toxic radioactive material is
5	mobilized, once removed from the ground, humans
6	and wildlife face a greater likelihood of
7	exposure to uranium and its by-products by
8	inhaling contaminated dust in the air or by
9	ingesting contaminated water and food.
10	The product from uranium mining is a powder
11	that, when stored in drums, emits radiation as
12	the uranium breaks down. Waste products left
13	behind remain hazardous and radioactive for
14	100,000 years. Substances and tailings include
15	thorium-234, radium, radon, lead, bismuth,
16	polonium.
17	For every ton of radioactivity that is
18	stored in tailings, there are additional tons of
19	toxic chemicals. These toxic chemicals are
20	dangerous to the human health and increase the
21	risk of cancer and genetic defects. This has
22	been proven by the National Academy of Science
23	of the United States.
24	They further state that it has not been
25	proven that uranium mining is safe and that the

1	unknown risks are just too great to compensate
2	for unknown anticipated rewards. Banning
3	uranium and mining and milling should be
4	enforced.
5	Now I want to speak about some studies done
6	by a hydrogeologist, Dr. Roseanna Neupauer from
7	the University of Colorado. She studied
8	groundwater flow at an ISL mine in Christensen
9	Ranch, Wyoming. And she found that
10	contaminated contaminants, excuse me, will
11	remain in the aquifer after all effects of
12	restoration and will migrate through the aquifer
13	into the future.
14	She noted that a comprehensive modeling
15	exercise was impossible because of insufficient
16	data of the spatial distribution of various
17	chemical perimeters or on the chemistry of the
18	injection solution used by the industry.
19	Dr. Neupauer noted that diffusion of
20	chemicals out of the immobile region can occur
21	over many years or decades. Thus, even if the
22	water in the mobile zone appears clean, it may
23	become contaminated over time by this diffusive
24	process. It would further increase the
25	concentration of lixiviant in the past in the

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post-restoration aquifer.

entirety of the aquifer.

Dr. Neupauer reported that her report is consistent with that of experts of USGS and other geological scientific communities. Groundwater has never been restored at ISL operations -- the NRC acknowledges that -- and some 40 percent of measured constituents could not be restored to the baseline conditions. Now I'm going to speak on the term "baseline." It is actually a misnomer in that it does not refer to the real pre-mining baseline condition of the groundwater or the

Instead, a selected baseline from the immediate baseline production area of the ore-bearing portion of the aquifer is established. Thus, aquifers and groundwater are left unstable.

19 ISL uranium mining is a poor choice to 20 contaminate scarce western groundwater and harm 21 the environment. Truthfully, only a small number of short-term jobs will be provided with 22 23 this project with an inherent environmental 24 risk. Thank you. 25

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

605,721,2600 BLACK HILLS REPORTING

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Marlene Akhtar.

2	MARLENE AKHTAR: My name is Marlene Akhtar,
3	and I'm also speaking for my husband, Dr. Hassan
4	Akhtar. We put in a well about 15 years ago,
5	and it was 640 feet down, but he said it was in
б	the Minnelusa foundation. And the State came
7	and tested it within a few weeks, came to our
8	door, and said, "You have the best water in the
9	county." This is our water. There's no salt in
10	it. I don't want salt in my water.
11	Also and thank you for coming, by the
12	way. We are a little blue marble in space.
13	This is a little blue marble in space. All the
14	water in the universe is within this blue water.
15	All the good air is within this beautiful little
16	blue marble.
17	If we contaminate it, it's gone. There's no
18	more water coming. It is our responsibility to
19	protect it, and it is your responsibility to
20	protect it, too. Our water must be protected at
21	all costs.
22	Those who are for the mining of uranium are
23	for the money. Those against it are for our
24	protection of water for now and future
25	generations. I look out here, I don't see

anybody fabulously wealthy, so we're not here because we're going to get money to protect this water. The ones that are going to receive the benefits probably do not even live in South Dakota, and we just can't let this happen. It's our responsibility.

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Having just come on board, I've only been working on this for a week. I don't know a lot of the information, so I thank a lot of you that have done all the environmental -- I mean, I'm learning a lot.

When this is done, for one thing, I'm testing our water. It's costing us \$750 to prove that the Minnelusa water is pure. I will see that you get a copy. Also, I'm trying to get ahold of the state report that said we had the best water in the county. I will see that you get a report.

Because I just started, there's a lot of things I don't know, and I'm going to talk to a lot of people. I'm going to contact medical professionals, see if I can get doctors and nurses on board. They're the ones that are going to have to take care of us if we get sick. They need to know what they're dealing with if this should pass.

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2	When I have completed all my information, I
3	will see that you get a copy. I will send a
4	copy to President Trump, to Vice President
5	Pence, to the Department of Environmental, to
6	Rick Perry, to all of our senators, to the
7	congressmen, to anyone I can think of. That
8	will be sent by e-mail and snail mail.
9	And let them all decide if they're going to
10	turn their heads and let this happen to us,
11	because it's our responsibility and they're
12	responsible for taking care of us.
13	And that's all I know because, like I said,
14	I'm just getting started. So thank you for
15	those that have all the information in your
16	heart, and you shared it. Thank you for coming
17	and giving us a chance, and you'll be hearing
18	from me. Okay. Thank you.
19	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
20	very much.
21	Susan Henderson.
22	SUSAN HENDERSON: Good afternoon. My name
23	is Susan Henderson. I am a cattle rancher. I
24	was born on the property that we now own south
25	of Edgemont. We have owned and operated that as

1 a family since 1902. We know a great deal about this area, and we know a great deal about water. 2 It is my considered opinion, after having 3 looked at this for a long time, that we cannot 4 afford this project. This project will destroy 5 the water in this area. When we do that, the 6 7 cattle ranches will not be able to survive. 98 8 percent of us now use underground sources of 9 water to augment our water supplies. Without 10 steady water, we cannot run these ranches, 11 period. 12 This area also has the Angostura Dam, which is the largest freshwater irrigation and 13 recreation dam in western South Dakota. 14 This 15 dam is under siege. Because we have the 16 Dewey-Burdock area, which now has over 200 open 17 pit mines left from the 1950s and 1960s, this 18 area is draining into Pass Creek and Beaver 19 Creek and ultimately into the Cheyenne River, 20 where it ultimately ends up in Angostura Dam, which then drains into the Missouri River. 21 This is a critical water source, and it's a 22 23 critical water source as identified by the Environmental Protection Agency. 24 25 This area has 7,650 boreholes that were

1	drilled there by the Tennessee Valley Authority
2	during a time after uranium mining was suspended
3	by the four companies that had gone broke and
4	abandoned the open pit mines in the
5	Dewey-Burdock area.
6	Four of those mines are at least a mile
7	across, and they had at least 90 feet of
8	extremely contaminated radioactive arsenic-laden
9	water. It kills every wildlife that approaches
10	it.
11	Now, the proposal before us is to have
12	another 4,000 wells drilled. And these can
13	ultimately be sold, the permit can be sold, and
14	we can use this for dumping oil and gas fracking
15	waste and radioactive sludge from the
16	operations of a uranium mining operation that
17	may or may not take place here, or ones that are
18	already taking place in other places.
19	This is a disaster waiting to happen. What
20	will happen here is that the already
21	fissure-laden structure underneath this area
22	will begin to move water toward the aquifers. I
23	submit to you that many, many, many wells exist
24	in Fall River and Custer Counties. I am aware
25	of at least 2500 that are registered with the

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State of South Dakota.

2 I myself have an Inyan Kara well of extremely good quality on my cattle ranch just 3 south of this project. Without that well, my 4 ranch would be basically worthless. 5 We have an opportunity to put a stop to 6 7 this. We need to put a stop to this. We need 8 to do whatever it is going to take to put a stop 9 to this because our livelihood depends on this. 10 We will not get another chance. 11 Once these aquifers are polluted, there is 12 no going back. There is no fixing. There is no taking the arsenic out. There is no taking the 13 radiation out in sufficient quantities to make 14 15 it okay to use. 16 In the area of the Dewey-Burdock, the 17 Madison, the Minnelusa, and the Inyan Kara 18 aquifers are in close proximity. They are also 19 broken up by the 4,000 -- I mean the 7,650 20 boreholes that are already there, the Wind Cave 21 structure that's underneath it, the various 22 things that were done during the mining 23 activities. In other words, it's Swiss cheese. And what 24 25 we are going to do is move radioactive waste

1 into this Swiss cheese and then contaminate our 2 water. We can't get this back. And we can't afford 3 the finances that will happen to us. Let's look 4 at what would happen. It will destroy ranching 5 and farming in this county, which is most of the 6 7 action. 60 percent of the taxes paid in Fall 8 River County come from those operations. You will make a mess out of tourism because 9 10 you will lose water in key areas and word will 11 get around that people don't need to come here 12 anymore. REGIONAL JUDICIAL OFFICER SUTIN: 13 14 Ms. Henderson, your time is up, so I need you to 15 wrap up, please. 16 SUSAN HENDERSON: Now, I would say to you 17 that we can find Washington. I can find 18 Washington. I will find Washington. By this 19 presentation, I wish to preserve my right to 20 object to these -- to whatever decision you make 21 that allows this project. So be on notice that 22 this is something that we should all band 23 together to stop. Thank you. REGIONAL JUDICIAL OFFICER SUTIN: 24 Thank you 25 very much, Ms. Henderson.

1	Next if we can have Uriah Luallin.
2	URIAH LUALLIN: Good afternoon. Sure
3	appreciate what everybody has said at this
4	point. I'll keep mine short.
5	In regards to the in-situ uranium mining in
6	the Dewey-Burdock area of Fall River County and
7	Custer County, South Dakota, I have grave
8	concerns for giving an aquifer exemption for the
9	Minnelusa to deposit waste in Class V deep
10	injection wells or Class III wells and the
11	in-situ mining of uranium.
12	My well is in the Minnelusa aquifer, and
13	waste with any radioactive or other chemical
14	allowed in the drinking water on purpose or by
15	accident would possibly contaminate my well.
16	While we know a lot about what happens
17	underground, we certainly do not know the extent
18	and variables in the geological forms below the
19	surface to guarantee how water moves or will
20	move.
21	Compounding this is the presence of numerous
22	exploratory wells that have been drilled in the
23	past. These wells have not been filled, cased,
24	or capped.
25	The Class V wells, according to the EPA

1 site, are for waste that has been cleaned and 2 will not contaminate the U.S. drinking water. The problem is monitoring this procedure. 3 The mining industry cannot be trusted to 4 self-monitor, and the EPA has not done a good 5 job in the past. Mistakes and violations once 6 7 made cannot be remedied. 8 It has been discovered that pumping 9 high-pressure fluids into faults and cracks in 10 the rock can and do cause increased earthquake 11 activity and strain. The area in question is of 12 this nature and has connections with immense cave networks, such as Jewel and Wind Cave. 13 This area has already suffered at the hands 14 15 of the uranium mining industry. These foreign 16 corporations basically exploited the area and 17 left the cleanup to the taxpayers. The medical 18 and physical harm is still evident today. 19 I'm asking this application for uranium 20 mining and high-pressure deep injection waste wells be denied. 21 22 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 23 Rajni Lerman. RAJNI LERMAN: My legal name is Caryn 24 25 Lerman.

1 I'm here to strongly urge you to deny both the UIC Class III area permit for injection 2 wells for the ISR of uranium and the UIC Class V 3 area permit for deep injection wells that will 4 be used to dispose of ISR process waste fluids 5 in the Minnelusa formation. 6 7 My husband and I have recently purchased 8 property here in Hot Springs and relocated here 9 for the natural beauty, peace, and clean air and 10 water afforded to this less-populated part of 11 the country. This is intended to be our place 12 of retirement. I am deeply concerned about the prospect of 13 14 our final residence being degraded and devalued by the potential contamination of our water 15 16 supply. Our property located at 2244 Minnekahta 17 Avenue has a well in the Minnelusa aquifer. 18 The water is pure and clean, and currently 19 we use it extensively to grow organic 20 vegetables, feed our animals, as well as many 21 other uses that we need outdoors. 22 Since our property is 2 acres, it is large 23 enough to subdivide in the future if we so choose. Any additional structures we may build 24 25 on our property could actually tap into our well

1 for potential household use. That is, of 2 course, unless you approve of these permits. The proposed permit in particular for deep 3 injection wells that would be used to dispose of 4 the ISR process waste fluids into the Minnelusa 5 6 formation is a real threat to my family, home, 7 and community for numerous reasons, including, 8 one, the mining industry's recurrent inability 9 to properly manage these materials safely; 10 number two, the Black Hills's geology is not 11 static, and the sheer movement of the earth 12 allows for the material to flow into our aquifers; number three, uranium is known to 13 14 cause harm to human health; and number four, the 15 potential of increased seismic activity could 16 result in our town losing its greatest resource, 17 our water. 18 In my letter here that I'll be submitting 19 today, I have researched and noted specific 20 scientific articles showing evidence to support 21 each of the reasons I just listed, and that is 22 why I'm asking you to deny these permits. 23 As a yoga instructor, a health and wellness advocate, and the director of the new 24 25 Hot Springs Farmers Market, I spend a

considerable amount of my time and money to educate myself and others how to live a long and healthy life.

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Pumping our aquifer with the fluids containing uranium puts me, my family, and our community at substantial health risks. Is the EPA going to pay for our long-term health care bills due to uranium exposure? Are you going to provide me, my family, and our community with clean drinking water for the rest of our lives?

Is the EPA going to reimburse our city for possible losses to our main economic resource if Fall River was to dry up as a result of the proposed mining activities? I doubt it.

But it is your main responsibility to protect the public's access to clean water, per the Safe Drinking Water Act. No exemptions of this law should be made nor any permit be issued to mine uranium or dump toxic chemicals into our critical aquifers which are necessary to sustain life. Please use your conscience and your legal obligation to the American public and deny these permits.

24 REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
25 Ms. Lerman.

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2	JOHN DAVIS: Thank you for being here today
3	and giving me an opportunity to speak. My name
4	is John Davis. I hold a degree in a
5	bachelor's of science degree from Black Hills
б	State University, and I've used that to
7	understand heavy metal poisoning.
8	Your reported claims that there's no potable
9	water in the Minnelusa aquifer is untrue. What
10	our well-driller told us about 20 years ago here
11	on the outskirts of Hot Springs was our water
12	from Minnelusa aquifer was the best in the
13	county. Of course, you heard that from my mom.
14	She was here.
15	You know, I don't hearing everyone's
16	testimony today, I can't see why this would even
17	be a question as to whether or not to do it or
18	not, to dump this water in there, because it's
19	toxic and you're going into an aquifer.
20	Usually you go underneath it, right, from
21	what I'm understanding. It just doesn't make
22	sense. I mean, there's something else here.
23	There's no uranium there to be mined that's
24	profitable. So what are you not telling us?
25	I read some reports from Linsey McLean.

1	She's an environmental microbiologist,
2	biochemist, well-known, and she reports on the
3	effects of heavy metal heavy metal poisoning
4	and the ill effects that it produces.
5	This water is essential to all living
6	organisms. We are in a symbiotic relationship
7	with everything on this planet. And someone
8	mentioned the law of karma. That's the law of
9	cause and effect. What you sow, so shall you
10	reap.
11	And other people have said you're not even
12	in this town, so the people who are going to be
13	making the money, they'll make the money and
14	leave. So where does that leave us? And
15	someone said we have to clean up the mess.
16	You can't you can't really say what the
17	underground topography is. You don't know. We
18	don't know. There's no instruments to tell you.
19	So why not bet on the sure thing, don't deposit
20	the nuclear waste and the heavy metals, and
21	leave it alone and let nature take care of it.
22	You know, this concerns me because we were
23	going to sell our place several times, but I
24	said, No, we've got this is the greatest
25	water here. And it supports life. If you

1	damage it, you can't take that back.
2	4500000000.00 years is the half-life of uranium.
3	That's a long time. And the law of karma is
4	exacting.
5	So I guess I would just leave you with a
6	question. I know you're not answering
7	questions, but when you joined the EPA or
8	what gave you the right to make decisions that
9	affect our lives? What gives you that right?
10	And you just think about that, because I love
11	this place.
12	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
13	Mr. Davis.
14	April Smith.
15	APRIL SMITH: That came up so fast. I want
16	to thank Mr. Davis because I have this, like,
17	concise thing I was going to say and not be
18	emotional, and I really appreciate that he went
19	there. So thank you.
20	I think that companies like Powertech come
21	into places like South Dakota because the
22	population is so small and people here, they
23	work hard every day and they just try to get by.
24	And they don't have time to come to things like
25	this, and they can't educate themselves about

1 what's really happening to the land and the water. 2 3 And so I would encourage everyone here to try and express what's happening and hopefully 4 get more and more people on board to expressing 5 to the EPA during these types of open comment 6 7 periods to oppose the permits and the aquifer 8 exemption. 9 And big companies like Powertech come in, they do what they want to do, they say what they 10 want to say to get the -- whatever they want to 11 12 do -- go in, they pollute our beautiful land and water, and then they leave. I worked on a 13 14 Superfund site, and I didn't know it. And it was in the District 9. 15 16 Is that your district? 17 REGIONAL JUDICIAL OFFICER SUTIN: 8. 18 APRIL SMITH: 8. Okay. But through Denver; is that correct? Salt Lake, is that --19 20 REGIONAL JUDICIAL OFFICER SUTIN: We're in 21 Denver. 22 APRIL SMITH: But you cover Salt Lake? 23 REGIONAL JUDICIAL OFFICER SUTIN: Yep. APRIL SMITH: And so, you know, there was a 24 25 lot of educated people that I worked with, and

1	they didn't know that they worked on a Superfund
2	site. So, you know, the idea that, you know,
3	having open, you know, conversations and, you
4	know, people educating each other happens. It
5	takes a lot of work, even when it just blows
6	my mind.
7	So please, please don't allow these permits
8	because it makes people sick. It's our water.
9	We can't get it back. Thank you.
10	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
11	Ms. Smith.
12	Sarah Peterson.
13	SARAH PETERSON: My name is Sarah Peterson.
14	I moved to Hot Springs in 2002 because of the
15	abundant clean, pure spring water here. I moved
16	from Colorado after spending my childhood in
17	Breckenridge, Colorado, and I moved
18	Breckenridge, Colorado. I moved to Golden,
19	Colorado, and then to Boulder.
20	In the 1970s I became involved with the
21	Rocky Flats Truth Force, a group of people who
22	wanted the truth about the Rocky Flats nuclear
23	weapons plant to be exposed. I watched friends
24	who got high-paying jobs at Rocky Flats right
25	out of school, they turned yellow, then they

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1	turned green, then they turned gray, and then
2	they died.
3	The whole time, the information coming out
4	of Rocky Flats was the levels of radioactivity
5	were safe and below normal ranges.
6	In 1983, I took my 18-month-old daughter to
7	a protest on the grounds above the plant. A few
8	years later when the plant was closed due to
9	radioactive contamination, the EPA came to clean
10	up the underground plant and the plans on the
11	ground above was for an open space.
12	The EPA found the levels of radioactivity
13	were so high, the ground was not even safe for
14	day use, and it stands empty and fenced off to
15	this day.
16	I drove from Golden to Boulder when I was
17	attending CU. I went right by Rocky Flats. I
18	always thought as I was passing I would just
19	hold my breath. While attending CU, I was an
20	art major with a focus on pottery.
21	In the glaze room, where I formulated glazes
22	from mineral powders, there was a large jar with
23	a skull and crossbones on it and a sign,
24	vanadium oxide.
25	It was a beautiful yellow, and I

1 experimented with it. Today I know that 2 vanadium is radioactive, and I carry that in my body. I am in the 97.5 percentile for vanadium. 3 In the 1970s, one of my many geology classes 4 I took -- I took in college, we went on a field 5 trip. I was in paleontology. We took a field 6 7 trip to the old limestone quarry right across 8 the highway from Rocky Flats. 9 We were digging in the radioactive limestone for marine fossils. People believed that this 10 11 was safe. I carry uranium in my body today. I 12 am in the 95th percentile for uranium. In the 1960s and '70s, the public was not 13 14 educated about radioactivity and believe the 15 propaganda the mining, power, and weapons 16 industry fed us. Today it is different, and we 17 know the dangers of radioactivity. 18 It's ironic that the picket signs I used 19 to -- the picket signs for Rocky Flats nuclear 20 power plant I used to paint were, "Don't kill me 21 before the enemy." None of those nuclear bombs 22 made at Rocky Flats have ever been used against 23 any enemy. The radioactivity released -- the 24 25 radioactivity released making all those bombs

1 still contaminates the earth and many who live 2 there. I have been an organizer for a group of 3 citizens in the Southern Hills working to 4 educate the people of Fall River and Custer 5 County about radioactivity, uranium, and the 6 7 in-situ leach mining. 8 I am handing in documentary and hydrology 9 testimony from the NRC hearing, and I'm also submitting you my tests, my hair tests, that 10 show all the heavy metals and radioactive 11 12 element levels. 13 I ask you, please protect us. Protect me 14 and all the people here. I don't want any more uranium or radioactivity or heavy metals in my 15 16 body. I have enough. And I don't want to have 17 to move. This is my home. And I moved here 18 because of the spring water. It's beautiful, 19 beautiful water. 20 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 21 Ms. Peterson. 22 We're going to take a ten-minute break, so 23 we will start up again at about 3:37 -- 3:47. 24 Sorry. 25 (A recess was taken from

1	3:27 p.m. to 3:47 p.m.)
2	REGIONAL JUDICIAL OFFICER SUTIN: Okay.
3	We're going to get started again. A couple
4	things that we're going to one thing we're
5	going to change.
6	It's very difficult for the court reporter
7	to hear and see what you're saying from the
8	podium down below, so we need to ask everyone to
9	come up to this podium to speak.
10	And if you are speaking from a written
11	document, please try and read it slowly and
12	clearly so that we can hear and understand.
13	Okay. We'll get back to taking testimony.
14	Our next speaker is Deborah Tobacco.
15	DEBORAH TOBACCO: (Speaking in indigenous
16	language.)
17	My name is Deborah Tobacco, and I live in
18	Pine Ridge. I'm a member of the Oglala Lakota
19	Nation. And my main purpose in being here today
20	is to, like all of you, have a say in the
21	preservation and protection of our clean
22	drinking water. And for me as an Oglala Lakota,
23	it's simple. When there's a lack of clean
24	drinking water, there's no peace or justice.
25	Short-term profits for the sake of

1	short-term gratification is asinine. It's
2	ecocide and genocide. People will have to move
3	out of that area due to no drinking water. It
4	will cause diaspora. Diaspora to the indigenous
5	is genocide.
6	It's good to see all the people here that
7	share the same ideals as clean drinking water as
8	I do. I really appreciate that. For a long
9	time as a Native person, an Oglala Lakota, we
10	talk about and actually have to fight for clean
11	drinking water, and I don't think that's the way
12	it should be.
13	I think if we all stop and take a look at
14	the impact it will have on our families, our
15	future generations, the impact is great. And I
16	think we need to look at it from the perspective
17	that we are all in connection with one another,
18	and we are all indigenous to this planet, and
19	it's all of our responsibility to ensure that
20	not only our lifespan, but the lifespan of our
21	children, our great-grandchildren are always
22	looked after and always put first and foremost.
23	Thank you.
24	(Speaking in indigenous language.)
25	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

1 Martin Bates. We need you to come up. 2 Thanks. MARTIN BATES: Hello. My name is Martin 3 I'm a veteran of 20 years in the United 4 Bates. States Air Force. I'm not a resident of this 5 6 area. I'm just learning about this area. My 7 wife and I are residents of Madison, 8 South Dakota, but we are really residents of a 9 motor home, and we travel around. We appreciated the South Dakota welcome several 10 11 years ago as residents, and we can do that. 12 I'm also -- I had 20 years in the Air Force. And when I got out of the Air Force, I joined an 13 14 organization called Veterans for Peace, and we stand up for equal rights, human rights, smart 15 16 decisions. And having spent my whole life 17 trying to walk lightly on Earth, I've noticed 18 that there's a lot of people that don't walk 19 lightly on Earth. And I don't know, it seems like they do it 20 21 because they disregard other humans and they disregard water, air, trees, animals, et cetera, 22 23 and usually because of ignorance, greed, convenience, or just pure meanness. 24 25 If you'll think about that for a moment,

1	you'll see what I mean. There are people that
2	just they see that I do something for Earth,
3	and they immediately go behind me and throw
4	trash on the ground because they want to counter
5	what I did.
6	Now, I can see a lot of dumb things
7	happening, not that I'm all that bright, but I
8	did listen to my mom and dad. And as I read
9	about this thing, I have a few points. My folks
10	taught me to clean up the mess after I did a
11	project and before starting a new project.
12	And as we travel around the U.S., we go to
13	national parks and we go to state parks and we
14	go to places where other indigenous groups are
15	fighting pipelines or whatever it is.
16	And everywhere we go, we see messes. We see
17	messes that industries like this industry is
18	doing I can't say the last name but what
19	this industry is going to do and what they've
20	done already, we see messes everywhere. They
21	won't clean up the mess.
22	And, you know, that's a simple thing that we
23	learn in kindergarten, is clean up one mess
24	when you get done with a project, clean it all
25	up, and then come and do the next project. So

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they ought to do that.

This in-situ mining is an experiment. 2 We've been reading about this ever since we've been 3 following this. We've been traveling all the 4 way through California and other places, and 5 we've learned about this. So we've been looking 6 7 forward to coming here, my wife and I. And so 8 we've been learning about this a little bit. 9 And it really is an experiment. They don't 10 know that that water is going to be safe. They don't know that it's going to stay where it's 11 12 supposed to stay. We've had a lot of evidence that it's not going to stay there. 13 So I don't think they should play with these 14 people's lives out here for an experiment. 15 There's scientific ways of doing experiments, 16 17 and it's controlled. And this is not controlled 18 at all. 19 I will say, with all due respect, the EPA 20 has got a terrible track record when it comes to 21 overseeing cleanup. Again, I mentioned the 22 cleanup, and we've been places where there's 23 messes. The fracking around Chaco Canyon, you could not believe it, and the EPA is supposedly 24 25 watching that.

1 In fact, any of these public hearings I've ever been to related like this, it's more of an 2 opportunity for the EPA to make a check in a box 3 on a checklist than it is to listen to your 4 comments. So I encourage you to make your 5 comments and make them strong. Thank you. 6 7 And in the Air Force, I was trained in 8 shelter management. I was trained how to use a 9 Geiger counter, how to put on a chem suit, how 10 to clean somebody else off if they got chemical. And chemical attack was the enemy. 11 12 I want to mention, too, by the way, that I 13 swore -- I see other veterans here, too, and 14 you'll correct me if I'm wrong. But we swore an 15 oath to protect this country and the people of 16 this country against all enemies, foreign and 17 domestic. And I see domestic enemies in places 18 like this. So -- I'm sorry. I'm getting 19 excited here. 20 But I learned how to use a Geiger counter, and I also could see what radiation could do to 21 22 people when it's ingested. Most of this 23 radiation you're talking about here is if it's ingested or breathed. Other radiation, if you 24 25 touch it, get close to your skin, it affects

1	you. I've learned how to decontaminate.
2	And I've been hearing about these geological
3	faults in the area. Good evidence we just
4	heard. And I just wonder, if the D-B is
5	allowed which I wouldn't be surprised at all,
6	even though I've heard this wonderful
7	testimony if they go ahead and get their
8	permits granted, if they're allowed, are they
9	going to issue Geiger counters and teach people
10	how to use them? Are they going to issue
11	chemical suits so people can put them on? Are
12	they going to teach them how to how to
13	sorry.
14	REGIONAL JUDICIAL OFFICER SUTIN:
15	Mr. Martin I'm sorry, Mr. Bates. I
16	apologize. Your time is up, so I need you to
17	wrap up, please.
18	MR. BATES: Okay. I hope they also teach
19	them how to decontaminate their neighbors and
20	their family. Thank you for your time.
21	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
22	Sophia Black Cloud.
23	Those who just came in, we're having
24	everyone speak at the podium up here because
25	it's very hard for the court reporter to see

1	you, because of the lights down below, to make
2	sure she's getting every word.
3	So, go ahead.
4	SOPHIA BLACK CLOUD: Thank you again. My
5	name is Sophia Mahpiya Sapa and Hunkpapa Lakota,
6	the Great Sioux Nation.
7	I spoke at yesterday's hearing, and I was
8	unable to speak on certain matters due to my
9	nerves and emotions. They are rooted in these
10	Black Hills. But I'm here again to speak
11	regarding protecting our waters and the oath
12	that you took to protect my children and uphold
13	my entire family's treaty rights.
14	The problem we have here today is that
15	uranium contaminates water with nuclear waste
16	and poses a direct threat to our drinking water.
17	Uranium mining only profits private companies'
18	pockets, disregarding human life, our resources,
19	and the health of the people who oppose uranium
20	mining in the Black Hills of South Dakota.
21	Water is the main source of life for all
22	living things, and we cannot afford the risk of
23	contamination. Do the right thing. And in your
24	hearts, clear your mind, smudge yourselves, and
25	look into my daughter's eyes, my three-year-old

1	daughter I have four daughters and one son.
2	Look into their eyes and please, please for
3	their future and your children's and their
4	children's future, stand up for what is right
5	and protect our water, protect our children, and
6	stop uranium mining, period.
7	And don't mine in the Black Hills. And
8	clean up the existing mines that are currently
9	left unattended and uncared for and were not
10	disposed of properly before you even think of
11	mining again anywhere else.
12	And so with that being said, I just want to
13	quote my our great head, Sitting Bull, by
14	just reading a few of his quotes: Let us put
15	our minds together and see what life we can make
16	for our children.
17	And another one: The white man knows how to
18	make everything, but he does not know how to
19	distribute it. Thank you.
20	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
21	Ms. Black Cloud.
22	Tonia Stands. Tonia or Tonia Stands?
23	AUDIENCE MEMBER: She stepped out.
24	Janie Stein.
25	JANIE STEIN: So my name is Janie Stein.

1	I'm a legal resident of South Dakota, and I vote
2	in Lake County. I value the rights of the
3	Lakota people who never ceded the Black Hills.
4	I value the land and the ecosystems around
5	the area that are risked and in all probability
6	irreversibly damaged in preparation for mining,
7	during mining, and after the mining, and
8	especially the uranium mining.
9	As we know, everything is connected, and
10	uranium mining in this area would affect lots of
11	other areas, especially at the level of the
12	aquifers. No permit should be granted, no
13	permit should be discussed until all previous
14	mines are completely cleaned up.
15	Genuine tribal consultation should occur.
16	Tribal-approved cultural and archaeological
17	surveys should occur. Lakota translators are
18	needed at these hearings. Do we have some?
19	If this water will be so safe after
20	treatment, why is the EPA planning to exempt the
21	Inyan Kara aquifer from the Safe Drinking Act?
22	This seems to me like another example of a
23	private, for-profit, and in this instance,
24	global corporation ramming their resource
25	extraction and environment-destroying project

1 down the throats of the caretakers of the land. According to the World Nuclear Organization, 2 the USA legislation requires that the water 3 quality in the affected aquifer be restored so 4 as to enable its pre-mining use. Usually this 5 is potable water or stock water, usually less 6 than 500 parts per million total dissolved 7 8 solids. And while not all chemical characteristics 9 10 can be returned to those pre-mining, the water 11 be usable for the same purposes as before. 12 Often it needs to be treated by reverse osmosis, giving rise to a problem in disposing of the 13 concentrated brine stream from this. 14 After termination of an in-situ leaching 15 16 operation, the waste slurries produced must be 17 safely disposed and the aquifer contaminated 18 from the leaching activities must be restored. 19 Groundwater restoration is a very tedious 20 process. It is not yet fully understood. Even 21 after considerable processes, various problems remain unsolved. Contaminants that are mobile 22 23 under chemically reducing conditions, such as radium, cannot be contained, controlled. 24 If chemically reducing conditions are later 25

disturbed for any reason, the precipitable contaminants are remobilized. The restoration process takes very long periods of time. Not all parameters can be lowered appropriately.

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The restoration scheme applied in some of these situations that the document is talking about was applied as the first two steps mentioned should be done.

It turned out that the water volume of more 10 than 20 times the pore volume of the leaching 11 zone had to be pumped and still several 12 parameters did not reach background areas. So relaxed groundwater restoration standards have 13 been granted at these and other sites since the 14 restoration criteria could not be met. 15

16 Until the abandoned mines are cleaned up, 17 there should be no consideration of new mining. 18 The track record of uranium mining is not good. 19 The tribal sovereignty and cultural issues have 20 not been genuinely addressed. Our relaxed 21 standard for contaminated water is not proper stewardship of our natural resources and turns 22 23 the EPA into an oxymoron.

> We all know that water is the basis of life. Please do the right thing and deny this project

> > 605,721,2600 BLACK HILLS REPORTING

1	as the risks are not worth it. Thank you.
2	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
3	Ms. Stein.
4	Endonnis Moreno.
5	ENDONNIS MORENO: Hello. I would like to
6	introduce myself in my traditional language.
7	(Speaking in indigenous language.)
8	Hello, my relatives. I would like to give
9	you a warm, a heartfelt handshake. My name is
10	Endonnis, and I am a young woman. I am 12 years
11	old. I was born in Pine Ridge Reservation, and
12	I live in Rapid City, South Dakota.
13	I was taught by my Auntie Tonia Stands that
14	spiritually is stronger than scientifically. So
15	I would so I know for a fact that according
16	to the Fort Laramie treaty of 1851, this is
17	Indian land, and what would the government do if
18	we broke a treaty? Thank you.
19	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
20	Mountain Man Scott.
21	MOUNTAIN MAN SCOTT: (Speaking in indigenous
22	language.)
23	I ask forgiveness in advance of the elders
24	and the people of this land. I do not know your
25	language well, and out of respect, I should or

1	at least have a translator here. So in the
2	future, I suggest that happen.
3	Thank you for allowing us this time to
4	speak. I'm a water-protector. I heard it said
5	that you also are a water-protector. I can't
6	think of a higher honor, at least for me. But
7	it goes beyond water. It's all life. I don't
8	get paid financially to be who I am. I am who I
9	am because I was created to be this, and I'm
10	grateful.
11	I had the opportunity not long ago up in
12	Standing Rock to stand with some of the finest
13	men, women, and children that I've had the honor
14	of knowing, to stand up against great
15	atrocities, much like many that have happened
16	well over 500 years and many that happened that
17	were far worse than what we're going through.
18	It shames me to know that these beautiful
19	people from here have to continue to fight the
20	same battle over and over and over and over
21	simply so they can remain here on the lands that
22	they were born on and their ancestors held in
23	great regard and cared for and tended to, to
24	have to protect them so that their children no
25	longer have to be poisoned.

1	This is wrong. Every bit of it is wrong.
2	It disgusts me, and I have no understanding how
3	it could not disgust you. I hope it does.
4	When you go home, please, look in your
5	children's eyes, look in your mother's eyes,
б	look in your grandmother's eyes, look in your
7	dog's eyes, in your cat's eyes, would you like
8	them to be poisoned? Do you think that's fair
9	and proper?
10	Technically you don't even have a right to
11	be on this land doing the things you're doing.
12	The things that you've done in the past, you
13	haven't cleaned up or cared for. These things
14	continue to poison these lands and these people.
15	And then beyond that, we have ranchers here
16	who raise beef to send out on the market that
17	your families across this country are going to
18	consume. Please consider these things.
19	Have a good day.
20	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
21	Jeremiah Moreno.
22	JEREMIAH MORENO: He wasn't Jeremiah.
23	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
24	for clarifying.
25	JEREMIAH MORENO: (Speaking in indigenous

language.)

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2	I just introduced myself in my sovereign
3	nation's traditional language. My name is
4	Jeremiah. My grandmother's name is Margaret Red
5	Shirt. My dad's name is Francisco Moreno. My
6	mom's name is Gracie Red Shirt, and my daughter,
7	who was just up here a little while ago,
8	Endonnis. And we all have Lakota names. And I
9	introduced myself to all of you and to you up
10	here in our traditional way. That makes us
11	relatives now.
12	So a lot of just wanted to express some
13	stuff. My students I brought some of my
14	students with me. I work in Rapid City,
15	South Dakota, and I work with the youth. And I
16	work in West Middle School and Southwest Middle
17	School, and we have an after-school program
18	called Ateyapi.
19	And there, you know, we have a good time,
20	and my students, you know, I express a lot of
21	knowledge to my students, and they express a lot
22	to me. One of the things that they expressed to
23	me is that they wanted to be here today, so I
24	brought them. And they are not my students,
25	really. They are my nieces and nephews. That's

what I call them.

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2	I wanted to tell you a little bit about what
3	they did today. On their own, they walked down
4	to the little arbor, and they got some water.
5	They tasted it, and they put some in a bottle,
б	and they started drinking it on their walk over
7	here from over there.
8	And it warmed my heart up to see that, to
9	see them sitting over here wanting to get up and
10	do something and make a stand for what they
11	believe in.
12	I just wanted to let you guys know that
13	you're sitting here on Indian land, and I would
14	like to deny this uranium mine. It is going to
15	affect our water, and we heard that from the
16	testimonies from today. Just let me remind you,
17	the 1851 Fort Laramie Treaty, that this is all
18	illegal anyway. So (speaking in indigenous
19	language).
20	Thank you for listening and have a good day.
21	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
22	Angelina Rojas.
23	ANGELINA ROJAS: (Speaking in indigenous
24	language.)
25	Hi. My name is Angelina Rojas. I am 15,

1	and I am a young woman. I live in Rapid City,
2	South Dakota. And I'm from Pierre,
3	South Dakota. I was born in Pierre.
4	And I have a quote from Evo Morales, he was
5	a man, part of a movement for a social-political
б	sovereignty people. And he said, "Sooner or
7	later, we will have to recognize that the Earth
8	has rights, too, to live without pollution.
9	What mankind must know is that human beings
10	cannot live without Mother Earth, but the planet
11	can live without humans."
12	My people are here spiritually. Our
13	ancestors watch over us. If you heard the
14	creation story, you will learn. We need to
15	respect our Mother Earth. To think that the
16	future generation and our children will have to
17	grow up in a world where we cannot respect our
18	Mother Earth and only think of theirselves and
19	their profits.
20	To my point, would you like your children,
21	your grandchildren, the future generation to
22	live in an environment that could have been
23	protected if nothing at this point is done?
24	Thank you.
25	(Speaking in indigenous language.)

1 REGIONAL JUDICIAL OFFICER SUTIN: Miengun 2 Pamp. 3 MIENGUN PAMP: Hi. Bonjour. (Speaking in indigenous language.) 4 My name is Miengun Pamp. I'm from Lansing, 5 Michigan. My clan is Wolf. I just figured if 6 7 everybody is introducing themselves in the 8 proper way, I probably should. 9 The thing that I missed last time was, I 10 wanted to say that what I saw at Standing Rock 11 was nobody -- nobody looked over on the lands. 12 Nobody respected what was there, you know. 13 I want proper geographic surveys of the land 14 that you guys are going to be putting whatever holes in. Probably shouldn't do that anyways. 15 16 I'd say no to that, just for the record. 17 But I mean, like one of the most horrible 18 things I've ever seen is when, you know, these 19 people were allowed to make this pipeline path 20 or whatever, people watched bones being pushed 21 up out of the ground. I don't know how many people heard about it 22 23 or saw pictures of it, but you could see it when that ground was, you know, pulled up. There 24 25 were bones sticking out of it. That was

1	people's ancestors, family members,
2	grandparents, mother, fathers, children. It's a
3	horrible thing, you know, that was allowed to
4	happen.
5	So you know, it has to be voiced that that
6	should be, you know, looked at, and it should
7	definitely be looked at while under supervision
8	of tribal members or something. Because from
9	the sounds of it, from earlier testimonies, even
10	if there are, you know, things found, Oh, let's
11	just sweep it under the rug and pretend it
12	wasn't there, you know. Oh, it's just
13	meaningless.
14	It's like, Well, on religious grounds, you
15	know, this is that's illegal, you know. Just
16	on that alone, you can't you can't build
17	there, you can't do whatever, you know wipe
18	out the people living in this area because you
19	want money or whatever.
20	It's disgusting that anybody would do that,
21	like, let people do that, let people suffer for
22	money, for things you won't even see, you know.
23	It should be denied on the grounds of, you
24	know, just common decency, you know. It's
25	horrible that, you know, someone who will allow

1 this and they see no benefit from it. Just, you know, I was told to so it's okay. I'll just let 2 it go. It's just part of the job, you know. 3 Make a stand. Do something with what you're 4 supposed to, you know. It's your job to protect 5 these lands and protect all this. Like, 6 7 otherwise we have to. That's when we have to 8 come out here and do that. We have to come make 9 a stand. And you know, if the government agencies 10 11 that were overseeing this stuff did what they 12 were supposed to do, we wouldn't have to do that at all. It's completely ridiculous. 13 And like it was said earlier, this is Native 14 land, and it is illegal to be here. And it's 15 16 just -- just frustrating, you know. But at 17 least do your jobs correctly. At least, you 18 know, see things the way they should be seen 19 instead of overlooking these things, just putting them under the rug, whatever, you know. 20 21 It's just -- it's not my family, it's not my 22 people. 23 These people have to live here. This is lasting effects. I don't want my kids to have 24 to avoid South Dakota because their life will be 25

1	shortened by 20 years by drinking a bottle of
2	water from here.
3	It's ugly, you know. These people tell
4	stories of, you know, Oh, my mother brought me
5	out here, you know, I drink from these waters, I
6	learn things, lessons, cultural lessons,
7	religious lessons, you know.
8	Who we are as a people is defined by these
9	lands, and to destroy them is just spitting on
10	us, who we are, who we will be, who are our kids
11	are going to be. Leave something for them to,
12	you know, learn from. Leave something for them
13	to, you know, see. That's, you know, begrudged
14	for time.
15	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
16	Tim O'Connor. Tim O'Connor.
17	Linsey McLean.
18	LINSEY MCLEAN: My name is Linsey McLean,
19	and I am an environmental biochemist in
20	toxicology for the last 40 years. I was born
21	and raised in Flint, Michigan, and lived there
22	for the first 55 years of my life with over 450
23	Class VII industrial dump sites in each of the
24	counties in southwest Michigan, so I am well
25	acquainted with environmental contamination of

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2	In fact, this is the reason that I actually
3	sought my course of study and pursued a career
4	in the effects of environmental pollution on the
5	living body of both humans and animals. I am
6	also a federally approved expert witness.
7	I am submitting testimony on why it is
8	necessary to include uranium in the metals
9	tested for the MCL, for the maximum contaminant
10	levels. Currently, uranium is not one of the
11	monitored metals in wastewater for uranium
12	mining sites, but should be.
13	Even if the other metals are under the MCLs,
14	uranium can be nearly off the chart, as has been
15	found to be in the old ISL sites that are
16	attempting restoration. This has already been
17	shown for several mines in Wyoming and Nebraska.
18	In Dewey-Burdock, waste injection wells will
19	be sending plumes into the Minnelusa water as it
20	flows south and east through Igloo, the Black
21	Hills Army Depot, through Buffalo Gap, Oelrichs,
22	and elsewhere and onto the Indian reservations
23	that are already suffering contamination from
24	the old pits near Edgemont, South Dakota.
25	Metals can bond with many different

1 molecules which can then become completely different compounds with totally different 2 chemical and biochemical personalities and 3 activities. If they bond with inorganic 4 substances, such as phosphate, oxide, sulfate, 5 carbonate, et cetera, they will form inorganic 6 7 compounds. 8 However, if they bond with carbon-containing 9 compounds, they become organified and will then 10 have different toxicities and different 11 biochemical activity in the living body. 12 Organified metals have a significantly higher bioavailability in the living body and much more 13 ability to travel to and target different organs 14 and tissues of the body, interfering at the 15 16 highest rate with normal healthy biochemical 17 pathways than inorganic metals. 18 Organic metals are the substances of life 19 itself. High levels of organified uranium have 20 been studied and measured recently by the DOE, 21 recent in old uranium mines. How did it get there when they're supposed to be extracting 22 23 uranium? Well, let me explain. Organified metals, including uranium, are 24 25 known not to be recoverable by ion exchange

1	method of ISL recovery, which is commonly used,
2	since it's already bound organically and will
3	not bind to the organic synthetic resins.
4	So the levels will build up as the mining
5	waters are recycled over and over in the ISL
б	mining process until the water has become too
7	saturated and are disposed as waste.
8	Organically bound metal under the
9	circumstance will continue to increase in the
10	wastewater of the ISL mine, adding to the metal
11	burden of the wastewater and also the toxicity
12	of such beyond what it would be if the metals
13	remained in an inorganic and ionic form.
14	There should be very elevated levels of
15	organified uranium and other metals in the Inyan
16	Kara because of the contamination of the aquifer
17	with microorganisms from open boreholes and
18	decaying fence posts placed in the old boreholes
19	so that and I emphasize this little
20	recoverable uranium is there.
21	There should be minimum levels of actual
22	mining uranium shown for the permit speciated
23	and inorganic.
24	Organic forms of any heavy metal are able to
25	penetrate the lining of the digestive tract much

1	easier than ionic and inorganic salts that are
2	blocked by their electrical charges.
3	Organic metals act as a chelate, something
4	that the health industry does to essential
5	minerals to significantly improve absorption and
6	also make them much more able to enter into
7	direct biochemical reactions in the living body.
8	Selenium is another metal known to have
9	wonderful health effects preventing cancer and
10	enhancing thyroid hormone, but inorganic
11	selenium, the form generated in ISL mining is
12	known to cause birth defects of the highest
13	severity.
14	Higher-evolved animals above microorganisms
15	are not able to convert the quantities of the
16	inorganic forms of minerals to detoxify, even
17	the essential ones like selenium, into a
18	biocompatible organic form. Plants and
19	microorganisms do that in rivers and soils and
20	can make heavy toxic metals even more toxic as
21	they organify them.
22	The incongruency between actual toxicities
23	of some chemical forms of metals and the actual
24	regulatory levels is huge. Most toxicity levels
25	fail charts fail to take into consideration

1	the chemical forms of the metals, which is
2	absolutely critical in assessing any toxicity
3	status, and currently are not being tested for.
4	My recommendation to EPA is to upgrade your
5	testing of MCLs by including the speciation of
6	inorganic forms of metals and testing for
7	organified forms, including uranium, and then
8	compare the LD50 levels of each chemical form,
9	which are often orders of magnitude in
10	difference.
11	REGIONAL JUDICIAL OFFICER SUTIN:
12	Ms. McLean
13	LINSEY MCLEAN: Only then can the true
14	toxicity of the wastewater you are testing be
15	assessed.
16	REGIONAL JUDICIAL OFFICER SUTIN:
17	Ms. McLean, your time is up, so I need you to
18	please wrap up.
19	LINSEY MCLEAN: Using only a quantitative
20	analysis of the metals tells you nothing about
21	the toxicity you are actually looking for.
22	Thank you.
23	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
24	Georgia Holmes.
25	GEORGIA HOLMES: Thanks for coming. My name

is Georgia Holmes, and I am president of the City Council of Hot Springs in Ward 1. And I have a degree in medical technology, so I have a chemistry degree and a biology degree, and I want to make a statement, a very impressive one that was given to me recently that I'd like everyone in this whole place to take note of: Bad things happen when good people do nothing. I have spoken two other times against issuing these permits at your hearings, and they were on my own personal items. My father was a mining engineer, so I know about the EPA, the bonding, the permits, and how they work. Now again, I'm speaking to reconfirm the resolution by the City of Hot Springs. I've been on city council for five years, and it's taken us a while. But that was read earlier, and I do confirm everything that was said in that. It's impractical and extremely dangerous to deposit waste into the Minnelusa formation.

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Our water wells for our own city here come from springs and Hot Brook Canyon, and I welcome you to come and look at them. It's a miracle, let me tell you. We have 117 wells in our city, and they are springs. Many of them are capped.

1 Our county has no zoning. Please take note of this, Fall River 2 The EPA doesn't have enough funding, 3 residents. and neither does the Nuclear Regulatory --4 Regulatory Commission -- there you go -- have 5 the ability to take care of us. We are a small 6 7 county, and we need help. Your permits probably 8 will not cover that. 9 The bonding permits that will be given, if 10 given to the holders, cannot save the fall -the Water Drinking Act of 1974. We will 11 12 continue to drink our water. We will not know if it is safe or not, I'm sure, because it will 13 14 be monitored probably by hydrologists that are 15 hired by the company. 16 And the EPA, I know. I feel for you. Ι 17 know exactly how everything goes as far as 18 funding, but I doubt it will be able to take 19 care of us. 20 The first time I reminded the EPA at the EPA 21 hearing that we live in a fault area with --22 from Yellowstone National Park, and it is part 23 of my biggest concern. But I do think those of you that did bring that up, the first time, none 24 25 of it was brought up.

1	The continuous uprising of our Black Hills
2	will continue to move, and those faults will
3	continue to move. What does that say about
4	putting waste in our Minnelusa formation? It is
5	not safe.
6	The second time I spoke to you, I also
7	stated that these faults will affect our water
8	aquifers, and as no secure process is available,
9	we cannot guarantee it. And I spoke with you,
10	and I believe you are sincere. It is not for
11	you to necessarily be able to control all of
12	that.
13	We have seismographic testing going on over
14	at Provo. I do not feel that's safe either.
15	What is that going to do to these faults? I do
16	not know.
17	So I'm asking that both the Class III and
18	the Class V permits be denied. And I speak for
19	myself personally and also for the City of
20	Hot Springs. Thank you.
21	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
22	Ms. Holmes.
23	Mark Hollenbeck.
24	MARK HOLLENBECK: Good afternoon, and
25	welcome to our area. We're glad to have you

1	here and, as well, taking testimony.
2	My name is Mark Hollenbeck. I ranch with my
3	four small children and my wife north of
4	Edgemont near the Dewey-Burdock project. We
5	operate an organic ranch. We do grass-fed
6	organic beef.
7	We use a grazing system that mimics the
8	movement of the buffalo so we can improve our
9	soils instead of degrade our soils. I believe
10	over the years we have degraded our soils with
11	modern ranching methods, so we have to return
12	and look at new ways of doing that.
13	I also have a degree in chemical engineering
14	from the School of Mines. And so what is the
15	connection between organic beef production and
16	nuclear power? In a word: Footprint. Organic
17	grass ranching is the smallest food-raising
18	footprint that I think I can make on the land in
19	this environment.
20	When all forms of electric generations are
21	evaluated, you'll find none of them are perfect.
22	So which one are we going to use? Are we going
23	to use coal or use hydro? Hydro is a very clean
24	way of producing electricity, but we have to dam
25	up our rivers, and we have to ruin all the

1	riparian areas. And there's not a lot of rivers
2	left to be dammed.
3	We can use solar. Solar is very clean.
4	It's also a very expensive electricity. We have
5	to have rare earth mineral mines in order to
6	make solar panels. And solar power must be
7	backed up by fossil fuels because it is not
8	produced 24 hours a day.
9	We could use wind power. Personally, I find
10	the blight of wind power on the landscape very
11	ugly. And when I realize the massive numbers of
12	birds that the wind power kills, the bats, the
13	eagles, and it also must be backed up by fossil
14	fuels because it does not operate 24/7.
15	Or we can do what most of use is coal. We
16	can have large strip mines. We can have lots of
17	transportation, by far the largest CO2 emitter
18	of all of our methods, and we also produce huge
19	amounts of ash waste with coal.
20	Nuclear is the only carbon-free method of
21	producing large-scale, 24/7 electricity. It has
22	the smallest footprint. And when you look at
23	the amount of gigawatts it does generate, it's
24	the safest method of making electricity as well.
25	Nuclear has its problems. We have to have

1 waste storage for nuclear power, and that has 2 not been solved, although I think that's more political than science. We need to have 3 recycling in nuclear power so that we can reuse 4 the fuel instead of getting more new fuel. 5 But as we talk about the greenhouse effect, 6 7 the last two days I've heard lots of people 8 complaining that we weren't doing anything about 9 the greenhouse effect. Nuclear power is the 10 only large-scale method of generating 11 electricity that can greatly reduce our carbon 12 footprint. There is no perfect solution. So when I 13 14 started studying this -- I live there, and I went and visited ISR mines throughout the United 15 16 States, and I have found that to be, by far, the 17 smallest footprint of any generation facility that we have. I think it is very protective of 18 the environment, and there are several 19 20 misconceptions that I think I need to address. 21 One that was mentioned several times was 22 that it will be fracking. We do not frack. Ιf 23 you fracked, you'd ruin the whole ore body, and it would be useless. Sulfuric acid would be 24 25 Sulfuric acid is not going to be used. used.

1 Oxygen and carbon dioxide is what we're going to 2 use. There's also been some wide exaggerations on 3 the water use. We're going to recycle 8,000 4 gallons a minute through the formation. We're 5 not going to pump 8,000 gallons a minute out of 6 7 the formation. 8 The water quality, I envy you people on this 9 side of the county that can drill a Minnelusa 10 well and get nice water. When we drill a Minnelusa well, we get saltwater and oil and 11 12 usually not enough oil to recover. And so that's one of the problems with 13 14 communicating this, is that the formation is called the Minnelusa. Occasionally it's an 15 16 aquifer, but not always. 17 But we refer to all the Minnelusa, and it 18 sounds like it's an aquifer. Over here it's an 19 aquifer. Over there, it's a saltwater and oil 20 formation on the other side of the Black Hills. 21 And so if you were having communication, you 22 wouldn't have your pure water, you would have 23 saltwater and oil in there right now. 24 And I know I'm out of time. I would just 25 say that I've had my office on Main Street of

1 Edgemont for ten years. Anybody is welcome to stop in at any time, and I'll be happy to 2 discuss any issues that you have. And by the 3 way, I agree with the Hot Springs Resolution. 4 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 5 Mr. Hollenbeck. 6 7 Kathleen Bailey. 8 KATHLEEN BAILEY: I, Kathleen Bailey from 9 Englewood, Colorado, stand here before you again 10 to repeat loudly and clearly: I oppose the 11 proposed aquifer exemption decision for the 12 Dewey-Burdock uranium in-situ recovery site located near Edgemont, South Dakota, under the 13 14 authority of the Safe Drinking Water Act and UIC program regulations in connection with Class III 15 16 area permit to exempt uranium-bearing portions 17 of the Inyan Kara aquifers. 18 The EPA has proven itself to have devolved 19 into nothing more than an \$8 billion agency 20 dedicated to supporting and promoting exemptions 21 for the very industries that continue to cause massive environmental contamination, the legacy 22 23 of which is left to the local residents for 24 generations. 25 At issue, the portions of the Inyan Kara

1 group aquifers the EPA proposes to exempt, have historically been used for a source of drinking 2 water, are currently used for a source of 3 drinking water, and can be a future source of 4 drinking water. 5 EPA's own current Title 40 146.4 declares, 6 7 The proposed aquifer exemption must not quote: 8 be a current or future source of drinking water 9 using the criteria at 40 C.F.R. 146.4. 10 This latest grotesque and alarming action by 11 the EPA to propose exemption of these portions 12 of the Inyan Kara group aquifers blatantly ignores the existing original EPA aquifer 13 14 exemption criteria found in Title 40 146.4 and 15 sets a disastrous new precedence for opening up 16 our ever more scarce and precious 17 life-sustaining clean water aquifers that can be 18 used as a source of drinking water to permanent 19 contamination from oil and gas, UIC recovery and disposal wells, and uranium and other ISR mining 20 21 activities that utilize UIC recovery disposal well activities, and any other in-situ solution 22 23 mining. The evidence of the convoluted joint efforts 24

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between the EPA and Azarga/Powertech to set this

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1 precedence to change their own laws is spelled out in EPA's 11/17/16 Aquifer Exemption 2 Technical Memorandum done by Valois Shea. 3 As recorded in that 11/17/16 memorandum, EPA 4 and Powertech worked cooperatively to manipulate 5 the status of the current drinking water use 6 7 from these targeted portions of the Inyan Kara 8 group in order to eliminate the current use 9 protection from exemption under the current 40 146.4 criteria. 10 And then they intend to eliminate the "or 11 12 future source of drinking water" protection of an aquifer simply by considering -- simply by 13 14 not including future-source drinking water in 15 their aquifer exemption proposal. 16 If this proposed aquifer exemption were to 17 be allowed, the future source of drinking water 18 that now protects aguifers -- clean water 19 aquifers, that protection of that status will be 20 eliminated by this precedent-setting aquifer 21 exemption. Currently -- based on the 11/17 EPA 22 23 memorandum, currently there are multiple wells. This is permanent well -- wells that were used 24 25 and some are currently used as well water for

1	human consumption and livestock consumption.
2	There are multiple wells drawn from the targeted
3	portions of the Inyan Kara aquifers that were
4	historically and currently used for both human
5	and livestock consumption.
6	Many of these residences are simply
7	currently abandoned, and therefore, the EPA and
8	Azarga/Powertech can say for those residents
9	they are there is no one currently using this
10	water from the Inyan Kara group for drinking
11	water.
12	But at least one resident continues to use
13	the water, Well 16, from this targeted portion
14	of the aquifer.
15	In order to create a no-current-use status
16	from which the EPA and Azarga/Powertech are
17	trying to base this particular aquifer exemption
18	proposal, Powertech promised to permanently
19	provide the resident with bottled water for
20	drinking if they agreed to let Powertech sever
21	and seal off the house the well to the house,
22	the well to the home. The resident did agree,
23	and the waterline from the well to the house was
24	severed and sealed.
25	However, Well 16 continues to be used for

1	livestock for this resident. And at that
2	time
3	REGIONAL JUDICIAL OFFICER SUTIN:
4	Ms. Bailey, your time is up, so I need you to
5	wrap up.
6	KATHLEEN BAILEY: Okay. And I will continue
7	in minutes after?
8	REGIONAL JUDICIAL OFFICER SUTIN: If there's
9	time, yes.
10	KATHLEEN BAILEY: Sure.
11	But at that time, this was sufficient for
12	the EPA in this memorandum to conclude, based on
13	the CZA calculations, the EPA has concluded that
14	the portions of the Inyan Kara aquifers proposed
15	for exemption do not currently serve as a source
16	of drinking water.
17	And the last meeting I attended, Valois
18	Valois informed me that after this November 17
19	memorandum in 2016, a March 6, 2017 memorandum
20	was created in which two of the mining wells
21	were simply pulled out of those UIC mining
22	well injection wells from that group because
23	they somehow devised that those two sites were
24	what fed that Well 16. However
25	REGIONAL JUDICIAL OFFICER SUTIN:

1 Ms. Bailey, I really need you to wrap up. KATHLEEN BAILEY: Okay. 2 What the EPA also has not disclosed is that 3 residents -- is that once approved, the Class 4 III underground injection disposal wells have 5 been approved by the NRC for uranium mining 6 7 wastewater disposal to be made available for 8 injection disposal of other radioactive waste 9 fluids from other sources, such as a municipal 10 water treatment plant, well past when uranium 11 mining activities has stopped. 12 And per the USGS to date, there has been no successful mitigation of the contamination 13 14 resulting from uranium in-situ recovery mining. REGIONAL JUDICIAL OFFICER SUTIN: 15 16 Ms. Bailey --17 KATHLEEN BAILEY: So your current status of 18 future source of drinking water will be 19 permanently lost if this exemption is approved. 20 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 21 Please stop. 22 KATHLEEN BAILEY: Thank you. 23 REGIONAL JUDICIAL OFFICER SUTIN: Ben Good Buffalo, please. 24 25 BEN GOOD BUFFALO: (Speaking in indigenous

language.)

A treaty is a contract between two or more sovereign nations. That is as binding today on the governments that signed it as when agreed to more than 100 years ago.

(Speaking in indigenous language.) You violated all these treaties, our treaties. At the very beginning -- yesterday I was at Rapid City, two days of that comments, talking, and I kind of felt bad. I felt bad because what these two ladies are going through.

And all these people in our council, in our traditional ways, the men discuss what's best for the tribe. And they always consider the women the backbone of that nation. So there's a different government, different structure.

(Speaking in indigenous language.)

I can't see those at all. I said I heard a 18 19 lot of what the women went through, and I felt 20 bad. But (speaking in indigenous language) 21 that's how you -- the White America is. It's 22 always been that way that. A lot of our 23 ancestors have told us about how it has been. And we are a very spiritual nation. We are 24 25 a warrior nation, but spiritually. In our

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1	language, there is no cuss words. There is
2	nothing bad. It's all humor. When something
3	bad happens to somebody and I should get mad,
4	they make it into they all start laughing.
5	A lot of what I heard here is not
6	compromising. It's all power. Somebody wants
7	this done. And I know it cannot be done
8	because of what it represents.
9	(Speaking in indigenous language.)
10	When something like this is taking place
11	when life are concerned, think about it. Think
12	about it. (Speaking in indigenous language.)
13	The people, we think about it.
14	And I was thinking about this treaty here.
15	And I think sometimes this treaty belongs, this
16	EPA, this should be on the reservation. I don't
17	see them there. I don't even see them there at
18	all. That's where the people are. The people
19	are there to like him, Hollenbeck, they want
20	to talk to him, like you. And they want to know
21	what's the best direction, but there's none of
22	that.
23	And I personally can say this: Mni Wiconi.
24	This word means a lot. Mni Wiconi. Life.
25	Water is life. There's four elements that we

1	use in our spiritual ceremonies water, air,
2	fire, and Grandmother Earth. Grandmother Earth
3	makes an altar for us. It's universal. The
4	whole world is the altar.
5	Why would somebody come and start poisoning
6	the water? It's not good. Not good for our
7	coming generation, the seventh generation. The
8	seventh generation is a very important
9	generation for us.
10	REGIONAL JUDICIAL OFFICER SUTIN: Mr. Good
11	Buffalo, your time is up.
12	BEN GOOD BUFFALO: And today it's not going
13	to be I see it's not going to be dealt with.
14	(Speaking in indigenous language.)
15	I hope you study this treaty. I'm going to
16	pass it on to you other people. I hope you have
17	a job tomorrow.
18	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
19	very much.
20	Did Tonia Stands come into the room?
21	AUDIENCE MEMBER: She went to prepare a
22	meal.
23	REGIONAL JUDICIAL OFFICER SUTIN: How about
24	Tim O'Connor?
25	Okay. Next we can have Paul Nabholz.

1 PAUL NABHOLZ: I'm Paul Nabholz. T live 2 just north of Battle Mountain here in Fall In the late '70s, I worked at Los Alamos 3 River. in modeling fracture flow hydraulics at the 4 Fenton Hill Geothermal project, so that was some 5 of the early fracking. 6 7 I was a drilling engineer on a National 8 Science Foundation drill ship doing geologic research worldwide in the late 1980s. And as a 9 10 South Dakota professional engineer, I've 11 attended about ten years' worth of the 12 hydraulic -- western hydrology conferences up at 13 Rapid. 14 And I've been very impressed with the look of the in-situ mining. It's such a low-impact 15 16 mining compared to the old open pit mines. 17 And then, I guess here about six or seven 18 years ago, I drilled my own personal water well 19 into the Inyan Kara that's 580 feet deep, and 20 I've really enjoyed the water and don't expect 21 it to change much. I've been off-grid for more than a dozen 22 23 years. I've been on solar electric power, and I

installed solar hot water heating in the last three years.

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1 Given that, I support the injection of wastewater into the Minnelusa because it's a 2 cleaner solution than surface application via 3 center pivots. And so I think that's a good way 4 to handle the in-situ mining waste. 5 And I've been disappointed in most of the 6 7 opponents that have not taken the time to study 8 the mining issue with the Inyan Kara formation. 9 At the most recent Western South Dakota 10 Hydrology conference, Professor James Stone's 11 research showed that the majority of the freed 12 uranium after mining is trapped in the formations within 100 feet of the mining zones, 13 so it keeps it out of the rest of the water. 14 15 It's not going to contaminate the entire 16 aquifers by any means. 17 And finally, I think that the Powertech 18 project makes a lot of sense and will provide 19 needed jobs. 20 AUDIENCE MEMBER: 80 needed jobs. 80. As 21 opposed to 35,000 people who need their water. 22 REGIONAL JUDICIAL OFFICER SUTIN: Excuse me, 23 sir. We're not commenting on other people's comments. If you would like to get up and speak 24 25 on your own, you can do that. Okay?

1	AUDIENCE MEMBER: Okay.
2	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
3	Mr. Nabholz.
4	REGIONAL JUDICIAL OFFICER SUTIN: Next if we
5	can have Chas Jewett.
6	CHAS JEWETT: Hello. Hi. My name is Chas
7	Jewett. I'm a member of the Cheyenne River
8	Sioux Tribe. I'm a resident of hey.
9	I'm a resident of Rapid City, and I grew up
10	in on the Cheyenne River Indian Reservation
11	along the Moreau River. And the Moreau River is
12	in northwest South Dakota, and we had 103
13	abandoned uranium mines up there.
14	We can't drink the water up there well,
15	we can, just not the women and the pregnant
16	women and the children. Everyone else, go
17	ahead.
18	So that's what you guys are looking forward
19	to down here in the southwest because that's
20	what these companies do. These companies aren't
21	even from here. They come in here, they buy a
22	few politicians, have some really well-spoken
23	lobbyists that work for them. They say
24	"organic," and I want to throw up in my mouth.
25	But, you know, I think that we are a small

1 state, 750,000 people. We're a cheap date. You can come in here with a few thousands dollars, 2 buy a few folks, and you can do whatever you 3 want. But, you know, there's no regulatory 4 authority looking over in the state. There's no 5 water -- they changed the laws. 6 7 So you guys are the only people who can help 8 us here. So help us, you know. You're here to 9 listen to us, and we're telling you water is life out here. We need water to drink. 10 We're 11 all water drinkers in here, except for a couple 12 of guys. Well, I don't know what they drink. But, you know, we all need water. And we're 13 14 not -- you know, this is -- you know, we've had 15 a lot of different things that have come up here 16 today. But what we haven't talked about is 17 white supremacy, and white supremacy allows that 18 for 500 years us, as tribal people, kept saying 19 no, and it doesn't matter. 20 We said no to the project up in Standing 21 Rock. And what did you guys do? They brought 22 up guns and tanks. So we can say no. We've 23 been saying no. Your consultation process is rigged for the industry, and all of this is 24

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really rigged for the industry.

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But we the people, right here, are telling
you we don't want it. 98 percent of the people
in Rapid City said we don't want it. We don't
want it. Listen to us. Hear us. Thank you.
REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
Ms. Jewett.
We are pretty close to 5:00, so I think that
at this point we will take the break, and we
will be back here again at 6:00.
So we will temporarily go off the record.
Thank you.
(A recess was taken from
4:58 p.m. to 6:00 p.m.)
REGIONAL JUDICIAL OFFICER SUTIN: Good
evening, Everyone. My name is Elyana Sutin, and
I am the Regional Judicial Officer from the
Environmental Protection Agency in Denver,
Colorado. Thank you all for coming today. I
will be chairing this hearing.
In addition to myself, we have several other
staff from EPA here to help assist, make sure
everyone who wants to speak has the opportunity
to do so. And I would like to introduce them to
you. Douglas Minter is manager of the
Underground Injection Unit in the Office of

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Water Protection in Denver.

To my right is Valois Shea. She works with Douglas in the Underground Injection Unit.

Lynne Newton is in the back at the registration table. She also works with Douglas and Valois in the Underground Injection Unit.

And then we have Lisa McClain-Vanderpool, who is our public affairs specialist.

Sisay Ashenafi, who is also standing in the back by the registration table. So if you have any questions, please find one of those folks.

On March 7, 2017 -- excuse me. On March 6, 2017, EPA issued two draft Underground Injection Control, or UIC, area permits to Powertech USA, Inc., for injection activities related to uranium recovery near Edgemont, South Dakota.

Draft permits include a UIC Class III area permit for injection wells for the in-situ recovery of uranium and a UIC Class V area permit for deep injection wells for disposal of treated in-situ recovery process waste fluids.

The EPA is also proposing an aquifer
exemption approval in connection with the draft
UIC Class III area permit.

We are here today to listen to your comments

1 on these area permits and aquifer exemption. The public comment period is open until 2 May 19th, 2017. In addition to this hearing, we 3 will hold another hearing tomorrow in Edgemont, 4 at the St. James Catholic Church. We have also 5 held four other hearings, one in Valentine, 6 7 Nebraska, and two in -- yesterday and Monday in 8 Rapid City. 9 In a moment, Ms. Shea will explain in more 10 detail what was proposed in the notice. But before I turn it over to her, I'd like to 11 12 explain a little bit about how the hearing will work today. 13 We will take testimony from 6:00 to 8:00, 14 15 and I will call speakers to the microphone up 16 here on the podium if you have filled out a card 17 at the registration table. When it is your turn 18 to speak, please come up to the podium, and 19 state your name before you begin your testimony. 20 In order to be fair to everyone, we are 21 limiting testimony to five minutes each, and I 22 please ask that everyone respect that time so 23 that everyone has the opportunity to speak who wants to, especially if they haven't had the 24 25 chance or the opportunity yet.

1 When five minutes has passed, I will ask you 2 to complete your testimony. Please try to be as succinct and on point as you can. If I find 3 that you're straying from the topic at hand, I 4 will interrupt and ask you please to return to 5 the issue before us. 6 7 If we have time at the end and you haven't 8 been able to complete your testimony, I will 9 allow people to get back up and finish their 10 comments. 11 After you finish your testimony, members of 12 the panel may ask clarifying questions. We are not here to explain the basis of the proposal --13 the notice does that -- nor can we engage in a 14 15 back-and-forth discussion of the proposal or 16 respond to your comments during this hearing. 17 The purpose of this hearing is to receive your 18 input. 19 We will consider and then respond to all 20 comments received during this hearing as well as 21 all written comment in the final permits and 22 aquifer exemption determination. As I said, we 23 will not be answering any questions during the 24 hearing. 25 We are recording the hearing tonight, so be

1	assured your comments will be considered. The
2	court reporter sitting to my left will be
3	preparing a transcript of tonight's proceeding
4	that will be available for anyone who wants to
5	see it.
6	The transcript is part of the record and
7	will be included in the docket for this matter.
8	The docket is where EPA collects materials it
9	has considered in its action, including public
10	comments. The docket is available on the
11	internet for your review, or you can view a hard
12	copy at the EPA's Denver office. The transcript
13	of this hearing will also be available on the
14	docket.
15	If you have written copies of your
16	testimony, please give a copy to our staff at
17	the registration table, or you can hand it to
18	one of us. This will be helpful as we prepare
19	the transcript.
20	If you have other written comments or
21	supporting documentation that you would like to
22	provide, you may leave that with us as well, and
23	we will make sure that it is entered into the
24	docket of this action.
25	You may also submit written comments

1 directly to the docket through May 19th. And instructions for doing so can be found back at 2 the registration table. 3 Once the final permits are issued and the 4 aquifer exemption determination has been made, 5 anyone who participated in the hearings, either 6 7 through oral testimony or written comment, has 8 the right to appeal the Agency's decision to the 9 Environmental Appeals Board. 10 So I will now ask -- or one other thing. 11 When you're giving your testimony, we will hold 12 up signs when you have one minute left. It's -a yellow triangle is one minute, and then when 13 14 your testimony is done, the red stop sign 15 indicates that your time is up. 16 So at this point, I will hand the microphone 17 over to Ms. Shea, and she will provide a little 18 bit more information about this project. 19 MS. SHEA: Good evening, everyone. Thank 20 you so much for coming back for our evening 21 session. And we really appreciate the fact that you are here with us and providing comment and 22 23 listening to the comments of others. As Judge Sutin said, we have -- the EPA has 24 25 issued two draft Underground Injection Control

1	permits. One is for the injection to recover
2	uranium from ore deposits in the Inyan Kara
3	group aquifers.
4	With that draft permit is also a proposed
5	aquifer exemption decision to exempt the uranium
6	deposit-bearing areas of the Inyan Kara aquifers
7	from protection under the Safe Drinking Water
8	Act so that uranium can be mobilized and removed
9	from the aquifer.
10	The second draft permit is for deep Class V
11	injection wells into the Minnelusa aquifer. In
12	addition to these documents, we have also issued
13	an Environmental Justice Document and a
14	Cumulative Effects Analysis document, and then
15	we have a document that discusses our tribal
16	consultation process to date.
17	We have received interest or intent of
18	consultation from a number of tribes, and we
19	have met with most of those, and we hope to
20	continue this process and meet with additional
21	tribes. We will not issue a final permit
22	decision until our tribal consultation process
23	has been completed.
24	So thanks again for being here. Your
25	comments are important to us. As Judge Sutin

1	said, we will consider each of them before
2	issuing a final permit decision. Thank you.
3	REGIONAL JUDICIAL OFFICER SUTIN: Okay.
4	We'll get started.
5	Our first speaker this evening, Chris
6	Pannill.
7	CHRIS PANNILL: Thank you guys for coming
8	all the way from Colorado. I love your guys'
9	state. I have family there. So my name is
10	Chris Pannill. I'm a candidate for Ward 4 city
11	councilman, and I'm also a licensed emergency
12	medical technician.
13	I just want to invite you guys, the EPA
14	needs to come visit the Evans Plunge here in
15	Hot Springs because that is part of the Madison
16	aquifer.
17	And a lot of people come there to use that
18	to swim, to soak, a lot of to heal and stuff.
19	Our veterans in our community use that water to
20	heal and stuff. So we need our aquifers to be
21	protected. So let me just start.
22	We drink water. If these water aquifers be
23	contaminated, then we will have no clean water
24	to drink. As a licensed EMT, we will see more
25	hospital visits. We will have more ambulance

1	rides here to Rapid City. This means severe
2	dehydration cases.
3	We must prevent these causes must prevent
4	these cases from happening so that the ambulance
5	EMTs and personnel can be used for serious
6	emergencies, like heart attacks and stroke
7	victims.
8	I will be quoting from the <i>Emergency Care</i> ,
9	12th Edition on how water is used in part of the
10	human body. About 60 percent of the of the
11	body is made up of water, and without it, this
12	fluid, the functions of the cells would cease.
13	Water is distributed throughout the body
14	both inside and outside the cells and balancing
15	the distribution is an important part of
16	maintaining normal cellular function.
17	Normally water is divided among the spaces
18	in the body, with the following percentages
19	representing averages. Intracellular, 70
20	percent is water that is inside the cells.
21	Intravascular is 5 percent; that is water that's
22	in the bloodstream. Interstitial is 25 percent;
23	this is water that can be found between the
24	cells and the blood vessels.
25	We regulate the levels of water in our body

1 by drinking fluids and making excretions like 2 uranium. This allows us to constantly adjust our hydrations -- the hydration based on the 3 levels of activity. Inside our bodies, fluid is 4 distributed appropriately through a number of 5 factors. 6 7 The brain and the kidneys regulate thirst 8 and eliminate excess fluids. Large proteins in 9 our blood plasma pull fluid into the 10 bloodstream. The permeability of both cell membranes in the walls of capillary cells 11 12 determine how much water can be held and pushed out of the cells and blood vessels. Each of 13 14 these factors help us regulate the amount of distribution of fluid. 15 16 If any of these factors were to be 17 interfered with, fluid levels and distribution 18 can become problematic. Dehydration is the 19 abnormal decrease in the total amount of water in the bo- -- in the body. This may cause, by 20 21 decreased fluid intake, a significant loss of fluid from the body by one or more variety of 22 23 means.

Remember, however, that maintaining a balance of water while in a healthy

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gastrointestinal system, severe vomiting or diarrhea can also become symptomatic. After the amount of water in the body, fluid can be lost as well as through rapid -- rapid breathing or a respiratory distressed patient and profuse sweating. Plasma protein in the body can be lost without injuries, like burns.

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Dehydration from losing more fluid than the patient takes on is very common in hot weather, when the patient sweats a great deal of -- does not drink enough liquid to keep this fluid for this heat exhaustion. This is from Brady *Emergency Care*, 12th Edition from Daniel Limmer and Michael F. O'Keefe.

If our water is contaminated, then our youth will not be protected. Our citizens will not be protected. Our future is at stake. We must protect our youth and help our EMTs and first responders by leaving the uranium in the ground.

As a candidate for city council, and if I get elected, quote, I will fight to protect our youth and citizens of Hot Springs.

So I'm asking you to stop the mining in the wells to protect the American citizens. I don't see -- I don't want to see the Black Hills

1	become a third world country. I just hope
2	the
3	REGIONAL JUDICIAL OFFICER SUTIN:
4	Mr. Pannill, your time is up.
5	CHRIS PANNILL: from water I'll finish
б	real quick for World Vision to bring clean
7	water to 22 kids and families overseas. So
8	let's not turn the Black Hills into a
9	third-world country.
10	As I stated before, as a candidate for city
11	council, if I'm elected, I will fight to protect
12	Hot Springs, Black Hills, and the reservations.
13	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
14	Dennis Yellow Thunder.
15	DENNIS YELLOW THUNDER: How's that? Okay?
16	Good evening, everyone. My name is Dennis
17	Yellow Thunder, and I'm a concerned member from
18	the Oglala Sioux Tribe. I'm here tonight to
19	make comment on the UIC draft permits that EPA
20	is issuing.
21	But before I do that, I want to give you
22	I want to have something for you. Is it okay if
23	I give you just a handout? Okay. This if
24	you look at this
25	If you look on this sheet here, this handout

that I gave you, it clearly states on there that
this and the story that I bought a bottle of
water from the Hotel Alex Johnson when we were
testifying there. I was at there was some
hearings going down there concerning the same
case. I bought a bottle of water there.
Happened to read the label. On the back of
that label, it clearly states the Hotel Alex
Johnson bottled water is drawn from deep in the
Madison formation at the base of the Bighorn
Mountains, Wyoming.
That clearly that's proof that that
water, those aquifers that we're attempting to
contaminate are all connected. The Madison, the
Arikaree, the Inyan Kara, the Minnelusian, the
Ogallala, White, all those formations are
interconnected. You contaminate one, the
Minnelusian, you contaminate all of them.
I say again, if you contaminate one, you
contaminate all of them. You pierce Mother
Earth one time into that ground, into her
system, and you inject this poison down there,
you're going to affect millions of people. Not
just this community here, not just the Black
Hills area, but all the way down to Texas.

1 That's a long -- the Ogallala aquifer covers all 2 of that. I'm sure you're all well aware of that. 3 You probably have wells in Colorado that are 4 connected. Mr. Hollenbeck is getting oil and 5 water from his well because of the fracking 6 7 that's going on in the Colorado Plateau. 8 There's no difference in that. 9 I just wanted to go on record stating that I 10 also have a personal stake in this battle, in 11 the destruction and the poisoning that can occur 12 to the human system. My daughter and I are faced with it every day. 13 14 When your child, when your granddaughter is 15 born without an anus, without a kidney, and a 16 heart on the other side, you have a personal 17 stake in this. It affects us every day. 18 Would you -- I know you can't answer, but 19 imagine, would you be -- would you -- how would you feel if your child, your grandchild was 20 21 affected in that way by the poisoning of the 22 water? 23 And that's just not my granddaughter. There's seven different reservations going down 24 25 that way that water is going to flow through,

every one of those reservations, everyone has a 1 2 granddaughter, a grandson, daughter, sons that are going to be affected by this. 3 You have to look at the big picture. That's 4 who's going to be affected by it, along with 5 everybody else in here that has granddaughters 6 7 and grandchildren and children and the future 8 generation. 9 Very honored to see the youth here today, 10 expressing themselves from their heart. The 11 contamination that they fear is going to happen. 12 But quickly, I want to mention a few things. We've met before, Valois, Mr. Minter. We've met 13 14 here in Hot Springs, we've met in Bismarck, 15 we've met again in Rapid City covering these 16 same things. And there were some issues that 17 came up then that date back several years. 18 Number one is we need to conduct independent 19 cultural surveys on the Dewey-Burdock area. EPA 20 should require borehole identification plugging. 21 Fence posts and sloppy sealants ain't going to 22 work. 23 EPA should require additional pump tests. Existing data is admittedly incomplete. The EPA 24 25 should also require, prior to permitting, no

1	staged process. And also very important, this
2	is EPA's first UIC permit. You've got to do it
3	right, got to be careful what you do.
4	And you're putting the cart before the horse
5	again by issuing a draft permit while all of
б	these safety regulations haven't been met. So
7	you're putting the cart before the horse. If
8	you remember, the ASLB required you to do
9	consultation again, do adequate consultation
10	with the tribes. And you'll find that all of
11	these tribes are opposed. I'll stop there.
12	Thank you very much for your time tonight.
13	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
14	Mr. Yellow Thunder.
15	Perry Holmes.
16	PERRY HOLMES: My name is Perry Holmes. I'm
17	a resident of Hot Springs. I've lived here for
18	over 30-some years and have been a resident of
19	the Black Hills longer than that.
20	I am opposed to the Dewey-Burdock Class III
21	injection wells and aquifer exemptions and Class
22	V disposal wells. The absolute main reason I'm
23	against this is I drink water. And I notice a
24	lot of you have plastic bottles up here, but
25	there's a water fountain out front. And I'm

1	wondering if this goes through, we'll all have
2	to carry plastic bottles around after a bit.
3	My wife's family have been miners in the
4	Hills, and I know that most of them probably
5	oppose using aquifers for getting rid of junk
6	from your mines and stuff like that. I have
7	children and grandchildren that I hope will be
8	able to use this water.
9	The information about this stuff that you're
10	dumping back into the wells proves basically it
11	is dangerous and poisonous, otherwise they
12	wouldn't be trying to get rid of it.
13	We have people coming to the Hills through
14	the tourist agencies and stuff like that. That
15	is a rather large business we have here. Will
16	those people all have to be bringing a lot of
17	bottled water with them to see Mount Rushmore
18	and Crazy Horse?
19	And will they also have to will we have
20	to close down Evans Plunge because of
21	contaminated water that's coming into our
22	system? This is something I know a lot of
23	people haven't talked about, but that is a big
24	business in our area, the recreation and
25	tourism.

1	I think most people in mining and stuff that
2	have been mining in this area even would agree
3	with me that this is probably not the brightest
4	idea of dumping waste material back into an
5	aquifer area.
6	I hope to be able to live here and even be
7	buried here with my children. And I hope it's
8	not because of the water that I have to be
9	buried.
10	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
11	Mr. Holmes.
12	I'm sorry if I got this wrong. Melody
13	Suchumek. Melody?
14	Will Leigh.
15	WILL LEIGH: (Speaking in indigenous
16	language.)
17	My name is Will Leigh, and I'm 21 years old.
18	I'm from Virginia. And I would like to ask
19	if you could imagine the laugh that your
20	grandchildren are going to have or whose laugh
21	they are going to have, whose eyes they are
22	going to have, or maybe your child's grandchild,
23	what little quirky saying they're going to keep
24	living on that came from you or your sister or
25	somebody that you love.

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1 And then imagine looking into those same 2 eyes that come from you or your husband and having to explain why the way things are with 3 the water, why and how things weren't always 4 this way. 5 I know that a lot of the people that came 6 7 here are proud to bring up their children as 8 water-protectors, as people who value the earth. 9 And so I guess what it comes down to is there 10 might be different versions of reality at play 11 here. 12 And I know it's kind of weird to say that there's more than one reality or something, but 13 14 when there's -- the biggest question I have is, 15 Why? Why are you doing this? And why -- why 16 are you taking, coming here and -- sorry. Just 17 a little bit nervous. 18 You guys have control. You're in control of 19 how this goes, how this is set up, and what becomes of all these people coming up here and 20 21 saying these things. The reason you're in control is because of 500 years of genocide. 22 23 And that's something that you're going to continue if you approve this. 24 25 Right now, you have the chance to be

water-protectors, too. And I hope that you'll 1 2 realize where the power that is invested in your 3 Agency, it's -- what it came from. And when there's so many people involved in 4 an agency and so many different decisions are 5 broken up into so many different parts, it might 6 7 be easy not to feel responsible, but you guys 8 have the power. You set this up, and you're 9 making this decision. So that means you have 10 the responsibility. 11 And that's something that I'm glad that I 12 can be able to look into my grandchild's eyes 13 and say that I took that responsibility, 14 whatever that I had, and I used it to protect 15 the water. 16 (Speaking in indigenous language.) 17 Thank you. 18 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 19 Theodore Ebert. 20 THEODORE EBERT: My name is Theodore Adolph 21 Philip Ebert. I've been going at this with 22 these deals for -- since the beginning. I'm one 23 of the original opponents that filed suit against Powertech to stop this in federal court. 24 25 So I've been in this from the beginning. Ι

1	appreciate all of you being here. Even you,
2	Mark. Good to see you again.
3	I say that because, Mitakuye Oyasin, I
4	believe this, we are all related. We're all
5	here on this planet, and we're all here for a
6	reason. Tunkasila didn't put each other, all of
7	us in each other's life for no reason. We're
8	all here because this is where exactly we're
9	meant to be right now. Everyone here is meant
10	to be here, all right here.
11	We have to choose what we are going to do.
12	I can't believe the pressures that you guys are
13	under. You know, your director of the EPA just
14	got terminated or he quit or whatever because of
15	the pressures that were being put on him.
16	So I can understand that you guys are under
17	those same pressures. But if you make the wrong
18	decision and it's not politically correct, I
19	won't be seeing you guys again.
20	And I would not want that on you. Because
21	you have families. I respect that. I'm a
22	soldier. I was a soldier. I fought for this
23	country. I faced the enemy. I had bullets
24	going by my head, men dying near me. I was
25	lucky. I came through those things unscathed.

1 Those guys are all my heroes. They are all my 2 heroes. There was a time that I lost sight of who I 3 was and why I was there. I lost sight. I 4 became just a machine. I no longer saw a 5 wounded man or cared. I no longer saw an enemy 6 7 before me, just an object, meant nothing to me. 8 My commander noticed that, and he sent me 9 home for a brief time. He said, Go see your 10 family. So I was at home. I sat there for a 11 long time. I said nothing to anyone. 12 One of my aunt's children came up to me and sat there with me. And it took me a while, but 13 I realized that I regained who I was. I became 14 15 okay with being a soldier again because I 16 realized why I was there. I wasn't there for 17 me. 18 I was there for everyone here in this room 19 that never would have to do what I had to do so 20 that they would not have to face those things. 21 I was there for my children, for your children, 22 for your grandchildren, for your 23 great-grandchildren, so they'd have a place to live on this great planet. 24 25 Now, this is about water here. This isn't

1	about uranium ore. It's about water. This
2	corporation and you and I know both know,
3	you're learned people. You've been doing this a
4	while. You've seen the international community
5	and how it works.
6	So you and I both know that if you give
7	these people that water and it's not 8,000
8	gallons a minute. I understand that they just
9	increased the request to 8 billion gallons a
10	year; is this correct? If I'm wrong, tell me
11	I'm wrong.
12	That equivocates closer to 15,000 gallons a
13	minute. Now, this is a free gift. This is not
14	anything that these people are going to be
15	charged for. This is free to them. They do not
16	even have to mine uranium there.
17	They can open up a water bottling plant out
18	there, and they can sell that water to whomever
19	they choose. Once they have this permit, that's
20	all they have to do. They never have to mine
21	uranium out there. The water is a gift to them,
22	free. They can do with it what they want. So
23	I'm definitely against this. I hope you can see
24	that.
25	I know Mark knows that. Him and I, we

1	sat we eat lunch together sometimes, so we
2	understand each other. We both have families.
3	He's got a family. I got a family. We respect
4	each other in this way.
5	So he knows, that man knows I'm not his
6	enemy. From my heart to his, he knows that. He
7	knows that as a member of this community, in the
8	event that all this falls through and he's on
9	the verge of losing everything he has.
10	He knows that us as a community will come
11	together to help him in any manner we can to see
12	to it that he makes it through that. We know
13	that, and he knows that. I told him that
14	before, too.
15	So anyway, you guys, I wish you the best in
16	your decision-making process, and I'm sure happy
17	that I'm not in your shoes. Sometimes you just
18	gotta do what's just because it has to be
19	done. I've lost many jobs. I've got
20	court-martialed a few times, and I paid the
21	price for things that I just refused to do and I
22	said this isn't going to happen, not on my
23	watch.
24	So bless you guys. Thank you.
25	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Mr. Ebert. Susan Sugzda -- Sugzda. I'm saying that wrong. SUSAN SUGZDA: Pretty close. Good evening. I'm Susan Sugzda from the western Custer County area. I've done a little basic cost input analysis, and the costs of this project would be thousands of gallons of free water from aquifers in a drought-prone area. Benefits: One would be lots of money, I guess, to the companies, which I understand are Canadian and Chinese, and in the future likely others will want to also have the chance; and a few local jobs, which I believe will turn out to be fewer than we've been led to believe probably, possibly. So the result is that the benefits simply, in my opinion, don't -- are not worth the extensive cost. In the past around here, companies that have done mining have simply gone bankrupt and disappeared. So are there bonds being expected from the

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22 So are there bonds being expected from the 23 company to pay for the desalination and the 24 decontamination of the free water to them that 25 then becomes kind of costly to the rest of us

1	left with the problem?
2	The EPA stands, obviously, for the
3	Environmental Protection Agency, and we ask that
4	you do what we pay we taxpayers pay you to
5	do, and that is to protect our water from
б	contamination. Thank you.
7	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
8	very much.
9	Tasina Sapa Win.
10	TASINA SAPA WIN: (Speaking in indigenous
11	language.)
12	My name is Black Shawl Woman. I am from the
13	Cheyenne River Sioux Tribe from a little
14	community called Swift Bird. I live right by
15	the Missouri River.
16	I'm also here to talk on behalf of the
17	International Indigenous Youth Council. And
18	what we are is a grassroots organization that
19	started in Standing Rock that empowers youth in
20	their comm or to become leaders in their
21	indigenous communities through activism that
22	primarily circulates around social and
23	environmental justice, treaty recognition, and
24	tribal sovereignty.
25	I'm I could come up here and give you a

1	huge speech. I could give you a bunch of
2	statistics. I could tell you pretty much
3	everything that you've already heard from these
4	fine people in this crowd.
5	But instead, I'd rather tell you exactly
6	what comes from my heart. And I'm looking at
7	you right now in your eyes, and I'm going to
8	plead with you to make the right decision here.
9	I'm also a young mother of a beautiful
10	five-year-old boy. He will be six here in a
11	couple weeks, and he changed my life at a young
12	age. And I made him a promise when he was born,
13	and that was to protect him at all costs.
14	And by protecting him, that's why I'm
15	standing up here, not just him, but for all
16	children of our future.
17	Where I come from, Cheyenne River deals with
18	a lot of addictions that are like alcoholism,
19	meth addiction, gambling. The list goes on.
20	Addiction has enablers. These companies and
21	this government are addicted to nonrenewable
22	energy.
23	And just like all addictions, they have
24	enablers. The EPA is being an enabler to
25	addicts. Addictions to what? The cruel profit

1 of indigenous resources -- money, power, and 2 greed. Just like all addictions, they need -- they 3 need help, and I'm begging that the EPA help 4 this country. These companies are foreign. 5 How could you let foreign companies come into this 6 7 country and drill toxic, lethal chemicals out of 8 the earth and then not clean up after 9 themselves? That jeopardizes our health, my 10 son's future, clean aquifers everywhere. 11 I saw your presentation yesterday, and I 12 seen a point that you made saying that the aqu- -- the water that you found underneath is 13 14 undrinkable. Yeah, maybe undrinkable to humans, but it's not undrinkable to the earth. It's not 15 undrinkable to the soil. It's not undrinkable 16 17 to the plants or the rivers that it will be flowing into. We need water. 18 19 I mean, Standing Rock and the indigenous 20 people of this land have shook the world, opened 21 the eyes of the public, and now we are saying to stop. Please stop. We don't want to be sick 22 23 anymore. We don't want cancer rates skyrocketing, diseases going unexplained. 24 25 Mni Wiconi. Let that stick with you,

1	please. Because it is life, not uranium,
2	nuclear power to fund I mean, they are going
3	to be using it for nuclear energy, foreign
4	companies, some of which are not even allied
5	with the United States.
6	So you're going to be helping companies that
7	are foreign that are not exactly allied with the
8	United States for nuclear power? That's scary.
9	And it should scare you, too.
10	So what I'm asking one last time, you know,
11	is please respect us. Honor our treaty of 1851,
12	1868. Honor our indigenous rights as people
13	not just as indigenous, but as human people.
14	This is not just as an indigenous problem.
15	This is a human problem, an all-life
16	problem, all of life the four-legged, the
17	wind, the water, the plants, the earth. And
18	it's a serious problem.
19	Please start respecting us, or you'll be
20	expecting more of us. Thank you.
21	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
22	Dr. Hannan LaGarry.
23	DR. HANNAN LAGARRY: My name is Dr. Hannan
24	LaGarry. I am a professor at Oglala Lakota
25	College on the Pine Ridge Reservation.

1	In 2014, I served as an expert witness on
2	behalf of the Oglala Sioux Tribe and the
3	consolidated interveners in opposition to
4	Powertech's license renewal.
5	As part of that proceeding, I had the
6	opportunity to review some belatedly disclosed
7	data from Powertech after the hearing had
8	concluded.
9	On November 12th, 14th, and 15th in 2004,
10	myself and three student assistants reviewed
11	drillers' notes and borehole logs prepared by
12	the Tennessee Valley Authority that was
13	disclosed by Powertech. This review was
14	conducted at the Powertech offices in Edgemont.
15	We were able to review drillers' notes from
16	4,177 boreholes, 56 percent of the total of
17	7,515 that were available to us. In this data
18	we found written records from drillers of 140
19	open, uncased holes; 16 previously cased,
20	redrilled open holes; 4 records of artesian
21	water; 13 records of holes plugged with wooden
22	fence posts; 6 records of holes plugged with
23	broken steel; 12 records of faults within or
24	beside drilled holes; 7 notations, "Do not
25	record this value on drill hole maps"; 2

1	notations, "Do not return this data to the
2	landowner"; and 63 redacted borehole logs.
3	Redacted borehole logs are those things you see
4	in top secret documents where they are blacked
5	out. So the TVA had some secrets to keep.
б	Many of these notes contained references to
7	water at various levels and poor, muddy, or
8	destroyed samples coming from the holes. We
9	also found that in the datasets we reviewed,
10	lots of records had been moved or were missing.
11	This data, Powertech attempted to suppress it,
12	but the Atomic Safety and Licensing Board
13	overruled them.
14	When it was time to make this testimony
15	public, Powertech objected, but the Atomic
16	Safety and Licensing Board overruled them. In
17	the final partial initial decision, this
18	testimony resulted in license conditions
19	requiring Powertech/Azarga to exhume all
20	7,500-plus borehole logs and examine them to
21	make sure that they were properly plugged. This
22	work has not been done.
23	Powertech appealed this decision and these
24	license conditions, but the Atomic Safety and
25	Licensing Board denied the appeal, and those

1	license conditions stand to the present time.
2	Thank you.
3	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
4	Dr. LaGarry.
5	Tonia Stands. Tonia Stands.
б	TONIA STANDS: Hello again. Hello again.
7	I'm Tonia Stands.
8	(Speaking in indigenous language.)
9	That's my Lakota name, first Lakota name.
10	So I hold that with all my heart because my
11	grandma gave that to me. I really honor that.
12	And the reason I'm going to tell you about
13	my grandma and my Lakota name is there's a huge
14	ancient connection through me that is, I guess,
15	intellectual property. I'm not a scientist.
16	I'm not I don't have no American degree.
17	But through me time has passed through
18	me, and I know things about this place and about
19	this water.
20	And you know, I look at you, and I think I
21	would love for you to understand what this place
22	means to them, the whole nation of people that
23	speak Lakota, Dakota, and Nakota language.
24	We're all one nation.
25	And we don't and we come out of the

1	ground. We come out of Wind Cave. You can go
2	to Wind Cave, and there's a nice little sign
3	that points at a hole in the ground, and it
4	tells that story. And you can't take that away
5	from us, and you can't deny that.
6	And we we they made this country on a
7	religious freedom, you know. It's the
8	constitutional right we have, religious freedom.
9	And you know, it and I'm I'm I was born
10	in 1978. And in that year, in 1978, as old as I
11	am, that is as long as we've had religious
12	freedom.
13	We can't go access these sacred sites
14	because now they are in not on our property.
15	All I can tell you is this is the mecca, this is
16	the center of the universe. We have
17	everything is a relative. We have a Lakota,
18	Dakota, Nakota name for each element that
19	science hasn't even caught up with.
20	We have cultures that are like polar
21	opposites. And the reality is the President is
22	the center of everything, but in our way of
23	life, it's the inner circle. That that's who
24	we that's who leads us our children, our
25	elders, never, ever, ever a man.

And we're led and our people are led by
the women. We're natural multitaskers. We can
just have this all figured out and food on the
table, everything done, and smiling. So and
we honor that.
And you guys come from a culture that's,
again, the polar opposites. And you look at
that, and you don't even have you couldn't
even vote. You couldn't even vote. That's
how that's how in that little amount of time
that you've come, but yet we lived that since
the beginning of time.
So anyway, I come from Oglala, which is
about, you know, as the bird flies, right over
here. Well, through my family that comes from
there, our territorial homeland guardians, we go
south, my grandmas that raised me.
So they brought me into this area and, you
know what, I grew up off the land. I didn't
have running water, electricity. I lived in a
house that my grandpa built, my great-grandpa.
And my great-grandpa, we lived here, and we were
pushed back to a reservation, and we couldn't

б

come back out here without a pass.

So my grandmas come through Hot Springs, and

1	they used to tell the story, and they used to
2	cry. We don't go through Main, we go right up
3	here. There was an old road through there.
4	And they told the story how when they would
5	come, everybody would come out of their houses
б	and stare at them and throw stuff at them, and
7	it was sad. They took that connection away.
8	REGIONAL JUDICIAL OFFICER SUTIN: I'm sorry,
9	Ms. Stands, but your time is up, so I need you
10	to wrap up, please.
11	TONIA STANDS: I'm going to come back,
12	though.
13	REGIONAL JUDICIAL OFFICER SUTIN: Please do.
14	Thank you.
15	Jackie Gericke.
16	JACKIE GERICKE: My name is Jackie Gericke.
17	I, my husband, and two small children moved
18	from Ocean County, New Jersey to Hot Springs,
19	South Dakota 25 years ago. Before we moved, we
20	didn't check the local business climate, we
21	didn't check out the schools, we didn't
22	seriously investigate the housing market.
23	Although I had a three-month temporary
24	position, we didn't even have permanent jobs.
25	We moved here for the beautiful night sky, for

1 the clean air, and especially the clean water. You see, where we moved from, our local 2 wells had become contaminated. Luckily, there 3 was another source of water. It was the 4 Cohansey aquifer. All of our relatively shallow 5 wells were mandatorily capped, and a municipal 6 7 water system was hurriedly installed. 8 Problem was, I felt that it was only a 9 matter of time before the aquifer itself was 10 contaminated, and there was only sand between 11 the wells and the new municipal water source. 12 Another environmental issue that caused us to leave our home was the fact that we lived 13 14 only a few miles from the Oyster Creek nuclear 15 power plant. It's been clearly shown that there 16 are much higher rates of cancers among people 17 who live and children who are born near nuclear 18 power plants. 19 While there, we were involved with what is 20 known as the Tooth Fairy Project, where 21 researchers collected children's baby teeth to measure the amount of radioactive strontium-90 22 23 that was contained within those baby teeth. 24 Strontium-90 is emitted by power plants, 25 nuclear weapons testing, fallout, and other

1	sources of radiation. Because it so resembles
2	calcium, the body is fooled into depositing it
3	into bones, in children's baby teeth where it
4	forever emits radiation.
5	The children in our county showed a
6	statistically significant higher amount of
7	radiation in their teeth than children in other
8	areas.
9	My health means more to me than money. Your
10	health means more to me than money. Clean water
11	is our most precious resource. We drink it. We
12	bathe in it. We cook it with it. We water our
13	pets and livestock with it. We water our
14	gardens. Water is life. And that single
15	resource, clean water, is worth more than any
16	amount of gold we receive from a short-lived,
17	short-sighted mining program.
18	There's not many places that can claim to
19	have the water resource we have. We are talking
20	pristine, untouched, unspoiled, nonrenewable
21	aquifer water which took thousands, if not
22	millions of years to form.
23	We shouldn't even consider any project that
24	could jeopardize this incredibly valuable
25	resource, especially when the consideration is

1	for the material wealth of a few.
2	I am here today to ask you to consider the
3	future, when clean water is even more rare than
4	it is today. I moved here for the water. I've
5	met others who have moved here for this clean
6	environment. There are people who live here for
7	this clean environment.
8	Extreme conservation must be used. I know
9	you'll take extreme care in making your
10	decision, and I pray that it's the right
11	decision.
12	I never in a million years expected to be
13	before the Environmental Protection Agency of
14	the United States and ask that you please not
15	allow our water to be poisoned. But that is
16	what I am doing here today. I am asking that
17	you not allow our water to be poisoned.
18	Thank you.
19	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
20	Debra Johnston. Debra Johnston?
21	Lisa Wolf.
22	LISA WOLF: Greetings. Thank you. I sent
23	in a written statement by e-mail, but I had to
24	speak when I heard comments about how safe
25	nuclear power and nuclear waste are.

1	I'm the chairwoman of a Nevada nonprofit
2	called the White Buffalo Nation. We are
3	dedicated to mending the Sacred Hoop of Life.
4	My youngest daughter was born in a barn in the
5	straw in Wisconsin near where Miracle had been
6	born in 1996.
7	And I came to South Dakota the end of
8	February to help with the reestablishment of
9	Oceti Sakowin traditional government. I do a
10	radio program I've been doing since well,
11	Standing with Standing Rock, Savage Sovereignty,
12	and Water Protectors we've been doing since
13	August because this is Lakota, Dakota, Nakota
14	land.
15	Today as we as you consider permitting
16	the request of Powertech/Azarga, the West Lake
17	Landfill is on fire underground in Montana. The
18	Hanford Nuclear Site in Washington state has
19	seen a tunnel collapse. According to my friend
20	Bob Nichols of Veterans Today, Your Radiation
21	This Week, we are at evacuation levels for
22	radiation pretty much across North America as it
23	is.
24	In fact, Pierre Pierre, South Dakota is
25	reading at 7,929 counts per minute, and I

1	believe safe levels break off at 100. This is
2	from EPA data, by the way.
3	So one of the things that we've been
4	focusing on on my radio program, which is titled
5	Utopian Realities: From Concept to Planetary
6	Restoration/S.L.O.P.E. Earth Aid Now, is
7	solutions to extinction-level threats. We
8	feature scientists, such as Professor John
9	Searl, Searl Effect Generator, reenergy,
10	radiation remediation. We feature people who
11	have products that bioremediate the body to drop
12	heavy metal toxicity.
13	And now I live in Hot Springs, and I've been
14	getting water I was getting water from
15	Cascade Springs. And then Susan Henderson told
16	me that, as far as she knew, it was radioactive.
17	So I spent the morning on the phone with the
18	USGS and found in fact that there are showing to
19	be high levels of strontium.
20	And then it was suggested to me that I reach
21	out to friends from Pine Ridge and Wounded Knee
22	and ask that there be a Standing Rock-style
23	encampment in Edgemont. And then I was told by
24	another person that that wasn't wise because the
25	airborne radiation there from those open

1 boreholes and the uranium mining that's already happened is so high that it's not safe. 2 So I would ask the Environmental Protection 3 Agency to be matriotic, to love this land, and 4 to put your time and your energy and your money 5 into supporting alternatives, into supporting 6 7 healing the earth, instead of supporting a death 8 machine and a death culture. There's no need, and it's time to tell 9 10 people what's really going on. My friends who 11 are scientists laugh at the thought of nuclear 12 power plants and how ridiculous it is to cause so much damage to boil water to make power. 13 REGIONAL JUDICIAL OFFICER SUTIN: Ms. Wolf, 14 15 your time is up. 16 LISA WOLF: When we all know that those 17 materials ultimately are for weapons of 18 destruction. Let's support life. Thank you. 19 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 20 Ms. Wolfe. 21 Joseph Farrell. JOSEPH FARRELL: Hello. I am Joe Farrell. 22 23 I'm a licensed Wisconsin master plumber. I have a plumbing contractor's license in this state. 24 25 I was a licensed well pump installer in the

1

state of Wisconsin.

2	So that people don't engage in ad hominem
3	arguments, I have worked in nuclear power
4	plants. They are one of the safest places you
5	work because if you make a mistake, the results
6	are catastrophic. So I have a lot of respect
7	for how dangerous nuclear power is.
8	I'm not philosophically opposed. I just
9	think there's got to be better alternatives,
10	given the fact that they still haven't figured
11	out what to do with the waste and because it's
12	so dangerous, you have to work so carefully
13	around it, so as not to really create another
14	Chernobyl. But my concern is not based on that.
15	It's I'm concerned about the 4,000 wells that
16	are going to be drilled there.
17	Right before Hannan's presentation, I was
18	going to say that on a very conservative
19	estimate, a half a percent failure rate nobody
20	is going to dispute. That means at least 20 of
21	those wells are going to be open sources of
22	contamination.
23	And what worries me and is the fact that
24	they are using oxygenation. And in Wisconsin,
25	we were weren't allowed to chlorinate wells

1 because it's an oxygenation process that releases arsenic, and we had a lot of arsenic 2 over in some of the aquifers there. 3 And the hydrologists made some mistakes, and 4 the arsenic was traveling places they didn't 5 expect. The solution was they drilled wells 6 7 into aquifers that were deeper and were safe. 8 They had some well drillers who got sloppy, 9 had -- the annular's places were not sealed 10 correctly, and they created an open source of contamination into the contaminated aquifer. 11 12 So I'm real concerned about those wells. And this may sound really callous to a lot of 13 14 people in the audience, it's not humans and 15 drinking water I'm worried about because there's 16 a lot of plumbers and equipment installers, 17 they'll sell you for a really expensive price, 18 there's ways to get water safe to drink for 19 humans. They'll make a lot of money doing it. 20 I'm not going to be one of them because I'm not 21 into that. 22 But my big concern is that if -- and most of 23 the people who are proposing this are proponents of these wells. If they are wrong and their 24 25 calculations -- because no one seems to be

1

disputing them.

2 If they are wrong in their calculations and they ruin the aquifers, I live over in Oral. 3 All my neighbors are ranchers. Some of them I 4 know are third generation, there's probably some 5 fourth generation over there. You're not going 6 7 to be able to save the beef in this state. 8 No matter how good your marketing campaign is, you know, "Eat South Dakota beef; it glows 9 in the dark" is just not going to cut it. So 10 11 you're going to destroy the beef industry. 12 I really wish there would be more ranchers that would show up at this. I understand 13 it's -- for Native Americans, I understand the 14 15 respect for the earth and stuff. 16 But the ranchers, they need to get on board 17 opposing this. Because if the Powertech is 18 wrong and their data is wrong and they ruin that 19 aquifer, the face of South Dakota will change. 20 We'll no longer be a community where I live 21 of ranchers. That's all going to go away. 22 There's generations who have done that, and 23 that's all going to go away. And so I have a real concern about those wells. 24 25 And I'm going to get in touch with

1	Dr. Hannan. Yeah, those guys are a lot sloppier
2	than I thought. Having worked in a nuclear
3	power plant, I thought they would be a lot more
4	careful. They are really sloppy in their well
5	drilling.
6	You need to really regulate them. You need
7	to have an NRC person on every well if they are
8	going to continue to do that because you need to
9	have some stern controls. They are not
10	controlling themselves, and probably because
11	they are an outside company.
12	And that's all I have to say. Thank you.
13	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
14	very much.
15	Roger Pfeifle. Roger Pfeifle. Sorry if I
16	pronounced your last name wrong.
17	ROGER PFEIFLE: My name is Roger Pfeifle.
18	I'll read here what I wrote.
19	I've been trained as a chiropractic doctor;
20	therefore, my concern is not just about the
21	water, which is an immense concern, but also
22	about the overall quality of life pertaining to
23	the human condition. For example, the health of
24	the humans and the environment in which we live.
25	It is therefore prudent to consider the

1 purpose of the uranium operation, which is 2 obvious: Feed the nuclear industry, which feeds the nuclear threat of water contamination. 3 That's what they're going to do with this 4 uranium. 5 Corporations have been proven to be 6 7 sociopathic. The power structure of the human 8 race has proven -- the power structure of the 9 human race has proven itself to be psychotic and 10 severely corrupt. 11 You who sit in regulatory positions are 12 playing a fool's game if you think you can be reasonable with these institutions. True human 13 14 beings do not want to live like this. If you 15 are making excuses for this industry, you are 16 losing your humanity. 17 This should concern you. It should also 18 concern you that there is an international 19 justice movement gaining traction on the planet, 20 and anyone involved in the degradation of and threatened -- and threats to human life is 21 22 going to be held accountable. 23 You are on this list if you allow this malicious insult to our beautiful homeland, our 24 beautiful Black Hills, our beautiful lives to 25

1 continue. We have heard all the promises and 2 assurances of the corporate hierarchy. You should know by now they cannot be trusted. 3 I pray for your well-being. I pray you -- I 4 pray you have the courage to handle the immense 5 pressure this question is asking. 6 7 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 8 Danielle Rose. 9 DANIELLE ROSE: My name is Danielle Rose. Ι 10 live in Hot Springs and Eagle Butte. 11 (Speaking in indigenous language.) 12 My Lakota greeting was I greet each of you from this side of the room all the way around to 13 here with a warm heart and a hearty handshake. 14 My Lakota name is First Cloud. I was named 15 16 after Chief White Swan's -- one of his three 17 daughters, First Cloud. I'm a tribal member of 18 Cheyenne River, and I grew up near Green Grass. 19 Today I want to express my disagreement with 20 the permits by using the medicine wheel. Most 21 of you know, that's divided into four quadrants with the colors yellow, white, black, and red. 22 23 Well, those colors represent the races. Yellow is for Asian or Oriental, and they're 24 25 responsible for spirituality. White is for

1 Caucasians, and they are responsible for the physical and introspection, going inside of 2 3 self. The black, of course, is African-Americans, 4 and they are responsible for the water. 5 And red, of course, is us Native Americans, and 6 we're responsible for the land, or Mother Earth. 7 8 I beg you to listen to the learned speakers 9 that have presented today. I'm -- I've learned 10 so much. And I'd like to ask that you in your 11 position -- and I know you have a lot of 12 responsibility, especially in this current administration. It must be very difficult. 13 14 But I ask you to look inside yourself, look 15 at your heart, and have the courage to do what's 16 right and protect the water and protect Mother 17 Earth. 18 (Speaking in indigenous language.) 19 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 20 Ms. Rose. Kathleen Jarvis. 21 22 KATHLEEN JARVIS: It's May 10th, 2017. 23 Uranium mining EPA hearings. Public information sessions and hearing for the proposed 24 25 Dewey-Burdock Project ISL mine near Edgemont.

1	The South Dakota Environmental Impact Statement,
2	the SEIS, fails to consider connected actions.
3	My name is Kathleen Jarvis. I am born on a
4	tiny island off the coast of Hiroshima just
5	after the bomb was dropped. Comment: My
6	concerns regarding the Dewey-Burdock Project are
7	centered around the problems of artesian flow
8	and interactions with the remediation of buried
9	chemical warfare material located at the Black
10	Hills Army Depot less than 10 miles to the
11	south.
12	Furthermore, Powertech's experts propose
13	land applications on river terraces and deep
14	well injection into aquifers within the project
15	boundaries under the sanction of EPA permits to
16	be exempted from the Safe Drinking Water Act,
17	SDWA 1977 and 1986.
18	Surface water flow in channels is ephemeral,
19	except for perennial Beaver Creek. U.S. Army
20	Corps of Engineers permits under Section 404 of
21	the Clean Water Act will be required before
22	conducting work in jurisdictional wetlands.
23	The Dewey-Burdock Project will transmit the
24	applied and/or injected waste directly into the
25	area of the Beaver Creek watershed within the

1	Upper Cheyenne River watershed of the Cheyenne
2	River to flow eastward through the state of
3	South Dakota and into the Missouri River,
4	affecting the entire Missouri River Basin.
5	Refer to Exhibits A through L.
6	I actually prepared overheads. Pictures are
7	worth a thousand words, if I might. Exhibit A
8	is the Dewey-Burdock location, within the
9	four-state Wyoming, South Dakota, Nebraska
10	area.
11	Exhibit B is the Dewey-Burdock project in
12	relationship to the national forests. Exhibit C
13	is the Missouri River Basin, and I wish to point
14	out Rapid City, South Dakota. This is the
15	Dewey-Burdock in relationship to the Cheyenne
16	River.
17	Exhibit D is the Beaver Creek watershed
18	within the Upper Cheyenne River watershed.
19	Within that context, this is the Cheyenne River.
20	This is the Upper Cheyenne River watershed.
21	This is the Beaver Creek watershed, the Beaver
22	Creek and the Pass Creek. This is
23	Dewey-Burdock.
24	Exhibit E, this is the actual boundaries of
25	the project, Dewey-Burdock Project, showing

1	the excuse me, Beaver Creek coming through
2	the Chilson wellfield and the open pit Burdock.
3	These are all the tributaries, et cetera.
4	In addition, I have for you Exhibit F, which
5	is a Google shot, a wide-angle shot of the
6	Beaver Creek. Please bear in mind the
7	relationship of these features with the Chilson
8	wellfield.
9	In addition, Exhibit G I apologize, I did
10	have this in overhead. We're technically
11	disabled right now. This is the drainage coming
12	off of the Black Hills across the Chilson
13	wellfield.
14	In addition, this is a closer shot in
15	relationship to the Beaver Creek and the Chilson
16	wellfield. Again, a closer shot of that with
17	the Beaver Creek and the Chilson.
18	Exhibit J is the close-up shot of the actual
19	Chilson wellfield. You can see the pock marks
20	with the fact that it is a drainage area for the
21	Black Hills themselves.
22	What I have given as Exhibit K is the
23	relationship between the Burdock open pit mines
24	and the Chilson wellfield
25	REGIONAL JUDICIAL OFFICER SUTIN:

1 Ms. Jarvis --2 KATHLEEN JARVIS: -- Burdock, et cetera. REGIONAL JUDICIAL OFFICER SUTIN: Your time 3 is up, so I need you to wrap up, please. 4 KATHLEEN JARVIS: If I might continue. 5 The Dewey-Burdock Project will transmit the 6 7 applied and/or injected waste directly into the 8 area of the Beaver Creek watershed. Within the 9 Upper Cheyenne River watershed of the Cheyenne 10 River to flow eastward throughout the state. 11 Water quality: Other areas are dealing with 12 primary and secondary water quality issues. See Southern Black Hills Water System Appraisal 13 14 Report. For example, the town of Edgemont has 15 16 quality concerns with primary drinking water 17 standards relative to some categories of 18 radionuclides, example, alpha particles that can 19 result in increased risk of cancer. Edgemont 20 has shown a test of 17 milligrams per liter on 21 alpha particles, and the U.S. Environmental Protection Agency limit is 15 milligrams per 22 23 liter. REGIONAL JUDICIAL OFFICER SUTIN: 24 I'm sorry, 25 Ms. Jarvis. If we have time, you can come back

1	up, but I need to make sure that everyone has
2	the opportunity to speak.
3	KATHLEEN JARVIS: Okay. That's fine.
4	The last was the relationship of the
5	wellfields with the Black Hills Army Depot.
6	That in and of itself has critical conditions to
7	this project.
8	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
9	very much.
10	Jennifer Belitz. Jennifer Belitz?
11	JENNIFER BELITZ: Jennifer Belitz. I've
12	been here for 17 years raising my two kids in
13	the southern Black Hills. I own property along
14	the Cheyenne River. I have animals that drink
15	from it. I have an Inyan Kara domestic well
16	that supplies household water and drinking water
17	for my livestock.
18	I haul my family's drinking water from a
19	Minnelusa well. I have well log data with me
20	from a neighbor's well that is in the same
21	formation as my family well. And on the
22	driller's notes it says: Note the flowing cave
23	formation at the water level, in the Ferguson
24	well, which is in the Minnelusa formation, which
25	is what we get our drinking water from.

1 I do understand the interest a mining company would have in ISL at the Dewey-Burdock 2 I do however feel that my water and 3 location. the water of my community could be irreversibly 4 harmed, besides the inadequate standards for the 5 settling pond waste that could potentially 6 7 contaminate the river, the Cheyenne River, and 8 the much-utilized Angostura Reservoir, which is 9 what the lady was -- before me was just talking 10 about. 11 Today we're talking about the aquifers, the 12 Inyan Kara and the Minnelusa. Both we utilize. For the Class III area permit for the Inyan 13 14 Kara, I believe that these proposed mining activities pose a risk to my Inyan Kara water by 15 16 undetected or late-detected excursion, as I am 17 downgradient from the mining activity. As far as the Class V area permit for 18 19 disposing the in-situ mining waste fluids into the Minnelusa formation, the Minnelusa aquifer 20 21 is a high-quality aquifer. It is well utilized in the southern Black Hills. 22 In addition to the domestic Minnelusa well 23 that we haul our drinking water from, this 24 aquifer sits approximately 1,000 feet below my 25

1 property, making it a potential drinking water source for my family and livestock for 2 3 generations to come. According to the atlas of the Black Hills, 4 the Minnelusa aquifer flows from the proposed 5 ISL site to my property. The contaminants 6 7 injected are likely to pollute this potential 8 drinking water source sometime in the future. 9 When I spoke with four hydrologists at the 10 USGS on March 29, 2017, I learned the following: Yes, the flow model in the Atlas of Water 11 12 Resources of the Black Hills does indicate that the Minnelusa flows from Dewey-Burdock to the 13 14 southeast, which is where I live. However, they 15 tell me that you can't judge just from the model 16 of the flow system in that figure. The water in 17 these aquifers can be really hard to track their 18 flow.

19In cave environments, such as the Minnelusa,20which our well log data did say that there was a21cave, the underground water almost flows like a22river. There are local and regional impacts on23some of the flow systems that are not indicated24in the figure, and some of them are unknown.25According to a national data -- national

1	water database, there are minimum a minimum
2	of 125 wells drilled into the Minnelusa aquifer
3	in Fall River County, and I believe that there
4	are more.
5	My own family's well was drilled
6	approximately 20 years ago, and there is no
7	record of it in the current state DENR well log
8	data site. Speaking with a DENR employee May 9,
9	2017, I was told that many well logs were not
10	submitted, especially those during or before the
11	1980s.
12	We know that the Minnelusa aquifer and the
13	Madison aquifer mix. In the Atlas of Water
14	Resources of the Black Hills, again it indicates
15	that Cascade Springs is mostly Madison water but
16	with dissolved Minnelusa minerals. The Cascade
17	is a utilized drinking water source.
18	The Cascade Falls is a highly visited
19	swimming area attraction, and the 1890
20	irrigation system from this water provides many
21	acres of hay, fruit, vegetable production,
22	livestock watering ponds for area landowners,
23	including my own pond, hayfields, and apple
24	orchard.
25	Another publication by the USGS indicates

1	the Minnelusa aquifer is hydrologically
2	separated by the underlying Madison aquifer by
3	shales. However, in many areas the Minnelusa is
4	in hydraulic connection with the Madison.
5	Some information from deep well injection
6	from North Dakota I found interesting because I
7	grew up there, and I have witnessed a lot of the
8	oil boom in that area. They are injecting waste
9	into the ground, and I thought that maybe
10	something we could compare to the Minnelusa
11	here.
12	And I found it's very incomparable because
13	they are injecting up to a mile down, well below
14	any drinking water, and one of the requirements
15	is that it has to be in a formation that is
16	confined in the upper and lower zones.
17	REGIONAL JUDICIAL OFFICER SUTIN:
18	Ms. Belitz, your time is up. I need you to wrap
19	up, please.
20	JENNIFER BELITZ: Okay. Just my summary up,
21	so because of the scientific data, I believe
22	that the EPA should not even consider permitting
23	that Class V permit in the deep for deep
24	injection into the Minnelusa. The Minnelusa is
25	too shallow, it's unconfined, and it is known to

1	mix with a very important aquifer, and it itself
2	is an important and currently used aquifer.
3	Thank you.
4	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
5	very much.
6	Mark Sperlich.
7	MARK SPERLICH: Thank you for coming, and
8	thank you for hearing us. My name is Mark
9	Sperlich. I used to farm, eastern part of
10	South Dakota. And I know of a guy who just
11	moved here from Iowa, and he just said here a
12	month or so ago that a town in Iowa about the
13	size of Hot Springs was just informed that their
14	drinking water has been contaminated by
15	nitrates, probably because of surface runoff
16	from all the hog confinement areas.
17	So I'm thinking, if surface water can
18	contaminate an aquifer in Iowa, the injection
19	into the into the ground certainly can
20	contaminate it.
21	And I am not an expert on any hydrolysis and
22	all that. But I found it interesting that in
23	the very first article in Hot Springs Star,
24	there was where they talked about Powertech,
25	there was also an article about a cleanup at a

1	uranium mine in Colorado, I believe.
2	But they were talking about firsthand
3	knowledge. The one guy said that the tools seem
4	to have just been dropped as they left, and he
5	could feel the heat through his gloves as he was
6	trying to clean them up.
7	And I'm thinking, I don't think they planned
8	on that. That was probably something they
9	hadn't planned on or noticed or realized or
10	something went wrong, and it took years for the
11	state or the government to come up with a Super
12	cleanup to clean that up, and it's unfortunate
13	that they just walked away because then the
14	taxpayer had to pay for it.
15	And with this being a foreign company, I
16	don't see how we're going to be able to get them
17	to clean it up, even if it were possible to
18	clean it up.
19	So I would say while you have the ability,
20	make sure that you get enough fund money from
21	them beforehand so that it takes the profit away
22	from them so that if they do it properly,
23	supposedly, that they get their money back.
24	Otherwise, they are just going to consider it a
25	point of what do you call it operating

1	expense to pay the fine. And then they'll just
2	leave, and we have to deal with it.
3	So please do not give this to them, and make
4	it high enough so that it's mandatory. As much
5	money as they plan on making, make them pay that
6	ahead of time. If that would deter them from
7	being sloppy, that would be money well spent.
8	Thank you.
9	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
10	Cindy Brunson.
11	CINDY BRUNSON: I'm a local rancher. I live
12	at the Black Hills Ordnance Depot at Igloo,
13	South Dakota. We arrived in this area in 1987.
14	When I came to Edgemont, they the Tennessee
15	Valley Authority, they had hazmat suits on and
16	Geiger counters Geiger counters going around
17	Edgemont, picking up uranium tailings from the
18	old site.
19	Unfortunately, we moved to a ranch
20	unbeknowing [sic] that there was uranium mining
21	done there, and there was holes after holes,
22	borings that were never plugged. They you
23	could drop a rock down them, and it sounded
24	seemed like it went endlessly, you know. I have
25	no idea what depth these were. But anyway,

1 nobody ever did anything to plug any of these 2 holes. So my concern is, there's a possibility of 3 cross-contamination because of these borings, 4 just like that man from the university over at 5 Pine Ridge said, that, you know, they haven't 6 7 expressed or told everybody about all the 8 borings that were never plugged. 9 As a rancher, you know, first I would like 10 the EPA to go back and have those areas cleaned 11 up from the old uranium mining that was never 12 ever cleaned up. And it's my understanding that the landowners won't let you back on because 13 14 they feel they might be liable for the cleanup now that all these companies are gone. 15 I want to talk about the water. We have 16 17 Inyan Kara; that's what waters our whole ranch. 18 And the master plumber is right, there should 19 have been more ranchers here because the beef 20 industry in this county would go by the wayside if there's no water. 21 22 The cultural resources that you were 23 wondering about and stuff like that, as a rancher, when I want to put a pipeline and I'm 24 25 several miles away from where you're going to

put this site, I have to do this study. And the reason why is because pre-historic Indians were in the area. Well, then you just follow the trail, and it goes up to Craven Canyon, where the petroglyphs are. And anyway, that's relatively close to where the mining is. So I'm quite sure all the

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Natives that have spoken here really know that, you know, this is a sacred ground to them.

The water, it might not be a high quality, but I guarantee you, without it, this ranchland would sit vacant, because there is no way you can run a ranch without water.

The ranchers that kind of got on board with this in the area, why, they offered them high-dollar leases. Ranching isn't profitable every year. You can go to the bank with this added income of this lease, and you can look a lot better on your balance sheet.

A lot of promises were made that, Oh, if we damage the water, we'll clean it up. And to my knowledge -- I have a veterinarian out of Crawford, Nebraska, where they have the uranium mining down there, and he said that his water is so bad that he cannot even stand to go down in the basement.

1

2	And he had a high quality, and they are
3	supposed to stay with the water standards down
4	there. So I hate to think what the Inyan Kara
5	is going to look like or taste like or be like
б	after you get done with this mining process.
7	My other concern, I am active with veterans.
8	I'm a life member of the VFW and American Legion
9	Auxiliary. And I'm concerned about our vets
10	because I don't really believe this uranium will
11	be used for a nuclear plant. I believe our men
12	or women are going to face it in a nuclear
13	attack or something like this. And so I'm not
14	interested in letting a foreign company take any
15	of our natural resources to use against us.
16	So thank you.
17	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
18	very much.
19	CINDY BRUNSON: Also, there was a lot of
20	reference to this, and I would strongly suggest
21	you get a copy of this because it would be very
22	helpful to explain a lot of these comments that
23	these people have been giving to you today.
24	REGIONAL JUDICIAL OFFICER SUTIN: Robert
25	White Mountain.

1	ROBERT WHITE MOUNTAIN: Feels like I'm
2	walking up on a talent show or something.
3	(Speaking in indigenous language.)
4	My name is Robert White Mountain. I'm a
5	Hunkpapa Lakota. On my mother's side, I come
б	from Sitting Bull, his tiyospaye. On my
7	father's side, I come from Rain in the Face.
8	And this lady that talked before me, I didn't
9	quite get her name, but she brought up a thing
10	that before I talk about that, I just want
11	you to I think everybody is going to raise
12	their hand if you're who drinks water? So
13	everybody who drinks water, raise your hand. I
14	think that's everybody.
15	So I had another question. Who all loves
16	water and would like to protect it?
17	All right. So my grandfather told me one
18	time, he said, "What is a Lakota?" And so he
19	told me what a Lakota is. Now, I'm a Hunkpapa
20	Lakota. That's what they call me. He said,
21	"What is a Lakota?"
22	A Lakota, he explained to me, is someone
23	that claims to be an ally to the spirit of all
24	that is. And water is part of all that is.
25	Water is part of all creation. So if we love

1 water, we want to protect water, we're all Lakota, and we're all related. We all breathe. 2 We all drink. We all sleep. We all have red 3 blood. We're all related. Even though we may 4 be different colors, whatever it is, but we're 5 all related. 6 7 And 36 years ago, I was a young man, and I 8 was at Craven Canyon, and they have some 9 petroglyphs there they were trying to destroy 10 for uranium mining. And these petroglyphs tell 11 history from the beginning to the end on how we 12 are all related, how we all come from the same place. But that's a long story. I won't get 13 14 into that. 15 But anyway, it just explains -- to me, just 16 told me, you know, that through these 17 petroglyphs -- we studied those for a long time. 18 We also were put under siege for being there 36 19 years ago. And three -- two years ago, I was 20 telling the story to some young kids around a fire over here in a cabin in the Black Hills 21 here. And I was telling about how we were 22 23 praying. All we did was pray for the water. We prayed for the land, and we got 24 25 completely surrounded by cops. We got

1	completely surrounded by vigilantes on
2	horseback. Had 250 cops and vigilantes
3	surrounding us because we wanted to pray for the
4	land.
5	End result was end result of that whole
б	thing was that I was able to stop the uranium
7	mining right there at Craven Canyon, and we have
8	saved that sacred site.
9	But now it's under fire again because of
10	what's going on here today, and I really I
11	really you know, I went up on the hill and I
12	fasted and I prayed several times, a couple
13	times. And I went up in the Badlands.
14	And after this last time I went up there and
15	I fasted and prayed for four days and four
16	nights, I come to realize, you know, though
17	that what that teacher was telling me that,
18	you know, some day throughout your spiritual
19	life or your life, you'll realize that someday
20	you are going to look at people and you're not
21	going to see the color, that you're going to see
22	that we're all related.
23	So after this last time I went up on the
24	hill, I fasted and prayed. After that, I came
25	down, and it was a whole different meaning for

1	me. So it was it was to a point where I
2	could not see color.
3	I can look at that guy not as a white guy or
4	black guy, I look at him because he's a human
5	being, and we all are human beings and we all
6	need water.
7	I'm sorry. You know, but the basic thing is
8	we all we have so much alternative things
9	that we can do besides destroy ourselves,
10	besides destroy man. You know, I heard a
11	gentleman talking, and he said, you know, the
12	wind wind is bad because it kills birds.
13	Solar is bad because you still have to use
14	natural materials to make the panels, costs too
15	much. But I never heard anything about
16	magnetic.
17	REGIONAL JUDICIAL OFFICER SUTIN: Mr. White
18	Mountain, your time is up. I think you need to
19	wrap up.
20	ROBERT WHITE MOUNTAIN: I never heard
21	anything about geothermal. Those are all
22	renewable energies. They don't stop, they are
23	not expensive, and they don't cost you know,
24	if you use and they are all renewable. We
25	don't have to kill ourselves over it.

1	So I just you know, to conclude here, you
2	know, that this land was all taken illegally.
3	That's all going to be settled eventually, but
4	that's not for us to say right now because it
5	was all taken illegally. We all know that.
6	But I won't talk about that here, so but
7	the thing is, what we're talking about right now
8	is that we're all human. We are all of the
9	human family. We all have to live, and we all
10	want to live together as one family. Thank you.
11	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
12	very much.
13	Jeff LaRive.
14	JEFFREY LARIVE: Show biz.
15	So my name is Jeffrey LaRive. I'm fourth
16	generation here in Hot Springs. I admire the
17	preparedness of the previous speakers. I am not
18	prepared. But I am here to say that once this
19	resource is extracted and the coffers have been
20	lined for Powertech, they will move on. They
21	are not concerned about your drinking water or
22	your children's drinking water or your quality
23	of life here in Hot Springs.
24	They will be living in a gated community in
25	Vail or an alpine lodge in Switzerland. So if

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1	you're mistaking this for energy independence or
2	caring about our community, you're kidding
3	yourselves. This is about using us and moving
4	on. And that's all I can see. Thank you.
5	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
6	We are close to the 8:00 hour. I know that
7	there were several folks that wanted to get back
8	up and speak. I would ask that if you have more
9	to say that you come tomorrow to Edgemont.
10	If there is someone who is not able to come
11	to Edgemont tomorrow, I will take one more
12	speaker, and we'll end there.
13	Have you spoken before, ma'am?
14	LINSEY MCLEAN: Yes.
15	REGIONAL JUDICIAL OFFICER SUTIN:
16	Ms. McLean, come on up.
17	LINSEY MCLEAN: I'll be brief.
18	My name is Linsey McLean. I know that the
19	EPA has, to date, approved all of the
20	applications that have come before you for Class
21	III and Class V UIC wells. And I know that all
22	of these wells have commonalities that are
23	requirements for this approval.
24	However, this Dewey-Burdock area has five
25	other factors that would preclude this permit

1	that other sites already permitted do not have
2	and that makes this site very different.
3	Number one, there's no concentrated
4	roll-front left to mine profitably. It's all
5	been mined out by the TVA a long time ago.
6	Number two, no ability to dewater the area,
7	and that was determined by the TVA also and why
8	they abandoned the site, so that there's no
9	ability to confine the communicating aquifers.
10	Number three, the old boreholes were
11	actually holes that they actually were going to
12	use as their wellfield that they abandoned, and
13	that makes this situation even worse.
14	Number four, the proximity of Igloo, which
15	is the most dangerous collection of unstable
16	nerve gasses and old, unstable munitions in the
17	world buried there. Igloo is downgradient of
18	Dewey-Burdock.
19	Moving wastewater will destabilize Igloo and
20	pick up even more toxins and move them and
21	likely cause an event of epic proportions.
22	And finally, number five, the open boreholes
23	and the fence posts and at least some of them
24	have allowed contamination to the aquifer of
25	microorganisms that are known to organify metals

1	and make them unrecoverable by ion exchange.
2	With the history of now high levels of
3	naturally occurring organic uranium in other
4	mine sites where they're finding this where
5	there was no contamination by microorganisms
6	like Dewey-Burdock, this situation is very
7	relevant.
8	And so with the low levels of uranium in the
9	proposed site, coupled with the high proportion
10	of unrecoverable uranium likely, this will not
11	be a profitable mining operation. And so if
12	there ever was a case for denying a permit, this
13	is one. Thank you.
14	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
15	I want to thank you, everyone, for coming to
16	testify today. We really do appreciate and want
17	all your comments.
18	Please come tomorrow, and we will be in
19	Edgemont, same format. 1:00 to 2:00 we will
20	have an information session. From 2:00 to 5:00
21	will be an open hearing, and we'll take
22	testimony. We'll take a break from 5:00 to
23	6:00, and then more testimony from 6:00 to 8:00.
24	So please come if you have more to say.
25	At this point, I will conclude this hearing.

1	And the hearing is now closed. Thank you again
2	for coming.
3	(Proceeding was concluded at 8:02 p.m.)
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1	CERTIFICATE
2	
3	STATE OF SOUTH DAKOTA }
4	} SS: COUNTY OF PENNINGTON }
5	
6	I, Jacqueline K. Perli, Registered Professional
7	Reporter, do hereby certify that said proceedings were taken by me stenographically and thereafter reduced to
8	typewriting under my supervision; that the foregoing is a true and accurate record of the proceeding to the best of my understanding and ability.
9	I further certify that I am neither counsel for,
10	related to, nor an employee of any of the parties to this case and have no interest, financial or
11	otherwise, in its outcome.
12	
13	Dated this 31st day of May, 2017.
14	/s/ Jacqueline K. Perli
15	Registered Professional Reporter Black Hills Reporting
16	1601 Mt. Rushmore Rd., Ste. 3280 Rapid City, SD 57701
17	605.721.2600
18	Notary Public My commission expires: May 9, 2019
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