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

In order to be fair to everyone, we will limit your testimony to five minutes each. We will signal to you when you have one minute left to speak with a yellow triangle. And then when your five minutes is past, I will ask you to complete your testimony, and there will be a red stop sign.

Please try to be as succinct and on point as you can. If I find we are straying from the topic at hand, I will interrupt and ask that you please return to the issue before us. If we have time at the end and everyone has had the chance to speak and you have more to say than the five minutes you were given, then I will allow people to get back up and finish their comments.

After you finish your testimony, members of the panel may ask clarifying questions. I want to be clear that we are not here today to explain the basis for this proposal or to engage in back-and-forth discussion. The notice does that.

The purpose of the hearing is to receive your input. We will consider and then respond to all comments received during this hearing as

well as all written comments in the final permits and aquifer exemption determination. We will not be answering any questions during this hearing.

We are recording the hearing today, so be assured that your comments will be considered. The court reporter sitting to my left will be preparing a transcript of today's proceeding that will be available for anyone who wants to see it.

She is an independent contractor to the EPA and therefore may not be looking at you while you're giving your testimony. But be assured she is intently taking down every word.

The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it has considered in its action, including public comments.

The docket is available on the internet for review, or you can view a hard copy at EPA's Denver office. The transcript of this hearing will also be available in the docket.

If you have written copies of your testimony, please give a copy to our staff at

1 the registration table, or you can hand it to
2 us. This will be helpful as we prepare the
3 transcript.
4 If you have written comments or supporting
5 documentation, you may leave those with us as
6 well, and we will make sure they are entered
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
11 found at the registration table.
12 Once the final permits are issued and the
13 aquifer exemption determination has been made,
14 anyone who participated -- participated in the
15 hearings, either through oral testimony or
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.
24 Okay. So at this point, I will turn it over
25 to Ms. Shea, who will provide a little bit more

1 information on the project before we get
2 started.
3 MS. SHEA: Good afternoon. Can you hear me?
4 Good afternoon, everyone. Thank you for
5 coming. We really appreciate your attendance
6 here and providing comments.
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
13 Inyan Kara group aquifers. In association with
14 this permit, there's a proposed aquifer
15 exemption decision that's been documented in the
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
20 injection wells, and they are Class V because
21 they are injecting above the Madison aquifer.
22 But because it is a deep well and because the
23 Madison aquifer is just the next formation down,
24 the permit has the most stringent well
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

presented in the previous hearing, but we will have another question-and-answer session tomorrow in Edgemont.

So if you could get down to the St. James Parish Church at 1:00 tomorrow, we'd be happy to continue with our question-and-answering session, and I can talk about the monitoring requirements that I can't cover now.

So with that, I also want to let you know that your comment is important today and your time is important, so we really appreciate you taking the time to be here. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Okay. We'll get started. When I call your name, if you can please come to either podium, and we'll make sure we get the microphone to you.

Our first speaker is Dr. Peter Sotherland.

DR. PETER M. SOTHERLAND: I'm Dr. Peter Michael Sotherland. My primary concern with this project is the willful contamination of the pristine Minnelusa aquifer, which is the water source for me and most of my neighbors.

My secondary concern is the economic viability of fission, nuclear-powered electrical 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.
6 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
2 term, like the generic terms "dog," "flower," or
3 "bug." There are many and varied examples
4 within each category. The most commonly known
5 salt is table salt, sodium chloride, which was
6 illustrated previously.
7 In chemistry, a salt is the result of the
8 chemical reaction of an acid and a base. Thus,
9 salts are a combination of all sorts of elements
10 that have the opportunity to react under the
11 right conditions.
12 The process that is described by Powertech
13 is the injection of water, oxygen, and carbon
14 dioxide. This is really the injection of an
15 oxidizing agent and an acid, carbonic acid
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,
20 it will dissolve the concrete along with the
21 other minerals present.
22 What Powertech is after is uranium oxide,
23 yellowcake. After the uranium oxide is removed
24 from the solution that is pumped from
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
6 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,

1 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
6 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
2 through our little town of Edgemont when we
3 lived there, called the state, called the EPA,
4 and was told that, yeah, our state has rather
5 lax policies and environmental standards, and it
6 was kind of a drag, but that's how it was.
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
13 are violations that are usually caught by the
14 states and the people overseeing those. We will
15 not have that oversight, and we have no one to
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.
21 John Sides.
22 JOHN SIDES: My name is John Sides. I'm the
23 chairman of the board of directors for the Fall
24 River Conservation District. As a conservation
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

very much, Mr. Sides.

Christa Spillane.

KARA HAGEN: My name is Kara Hagen. Christa Spillane and I are here on behalf of the City of Hot Springs. We're both city council members. I'm representative in Ward 1; Christa is Ward 4.

On May 17 out of eight council members signed a resolution for the city of Hot Springs to protect our water. And this is Christa Spillane. She's going to read that resolution to you.

CHRISTA SPILLANE: I have to have a light so I can read. Sorry. I didn't bring my glasses.

Resolution from the -- as Kara said, this is for the City of Hot Springs, Common Council. Resolution 2017-10: A Resolution to Reaffirm a Citywide Commitment for Clean Water and Water Resource Protection.

Be it resolved by the Common Council of the City of Hot Springs, South Dakota, that we are committed to preserving and maintaining the amount and quality of the water for the citizens of Hot Springs and its surrounding environs, and;

Whereas, the City of Hot Springs was first

1 developed as a town in the late 1800s due to its
2 proximity to Fall River and the abundant natural
3 warm mineral springs within the valley, and;
4 Whereas, the City of Hot Springs has made a
5 long-term investment in storm water management,
6 potable water systems, and wastewater management
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
13 maintaining the quality of the water entering
14 in, held within, and removed from aquifers
15 serving as the City's water source, and;
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;
22 Whereas, the City of Hot Springs Common
23 Council finds that any pollution or
24 contamination, willful or not, of our water
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

1 dangerous.
2 Considering the complex subsurface geology
3 of the area and its close proximity to known
4 fault joints, the choice to use injection well
5 technology to both contain contaminated
6 wastewaters and mine subsurface uranium deposits
7 is both irresponsible and potentially
8 catastrophic.
9 I would like to comment on just as few of
10 the potential points. Page 23 of the Class V
11 sheet states the locations and conditions of
12 fault zones in relation to the project area.
13 And I quote: The Dewey structural zone consists
14 of steeply dipping to vertical faults that are
15 uplifted on the north side relative to the south
16 side of the zone, a total of 500 feet.
17 The Long Mountain structural zone is located
18 approximately 7 miles south of the project area.
19 This fault zone consists of small
20 northeast-trending normal faults observed in
21 outcrops of the Inyan Kara group and Sundance
22 formation within a zone measuring several miles
23 across.
24 The displacement across the faults measures
25 up to 40 feet, with folding of the strata

adjacent to the faults adding up to 60 feet of additional structural relief.

The faults in the Dewey project will occur northwest of the Dewey fault in the Dewey terrace area approximately one and a half miles northwest of the project area. A subsurface fault was identified by seismic methods about five and a half miles north of the project area. It is about one and a half miles long and 400 feet wide.

Three faults are shown in the northeast corner of the Burdock Geological Quadrangle. The reports states that these faults have a displacement of less than 10 feet and are located two and a half miles or more from the eastern edge of the project zone.

So -- end of quote. In short, there are at least a half dozen faults of differing size located within a mile and a half to five and a half miles from the project zone.

On page 25 of the Class III draft sheet, this -- there's an even better picture drawn of the Dewey fault, and I quote: The Dewey fault, a northeast to southwest trending fault zone, lies approximately 1,500 feet northwest of the

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
2 adjust the flow around these breach zones and
3 continue to mine uranium? To think that you can
4 safely continue to apply injection well
5 technologies in an area of potentially breaching
6 fractures and faults, I find to be both
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
13 the injected fluid.
14 The entire project area relies upon a lower
15 and upper containment layer of Fuson shale that
16 underlies the whole region. But to quote from
17 page 22 of the Class III sheet: There may be
18 points where the Fuson confinement zone has been
19 compromised by improperly plugged exploration
20 drill holes or wells that penetrate the Fuson
21 confining zone. Evidence suggests at least one
22 breach in the Fuson confining zone is included
23 in the reports on the pump test.
24 It is clear from pages 15 and 17 of the
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

1 Powertech/Azarga to profit by their permits is
2 to make deep injection wells available to
3 outside sources of toxic waste. Powertech
4 denies the idea of outside sources of waste
5 saying they do not plan -- that's in quote --
6 they don't plan to take in outside toxic waste,
7 despite the fact that their permit allows it and
8 profit demands it.
9 And remember, Powertech cannot -- Powertech
10 cannot do any mining at all unless the laws
11 protecting the water and the land are put aside
12 and waivers issued allowing the contamination,
13 which is by law not allowed.
14 These new permits will allow Powertech to
15 pollute the Inyan Kara and the Minnelusa
16 aquifers directly, and the Deadwood and the
17 Madison aquifers by transmissivity. Once these
18 aquifers are contaminated, there will be no
19 remedy.
20 They say they only need one and a half
21 percent bleed, which is somewhere around 300
22 gallons a minute. So why ask for a 1000 gallons
23 a minute? If they will not take in outside
24 waste, why allow for it?
25 They say the waste to be injected into the

1 aquifers is just saltwater when the laws of
2 chemistry refute that claim. The application to
3 the NRC by Powertech shows that the waste will
4 be impregnated with radium, cadmium, chromium,
5 and arsenic, among many others poisons. These
6 chemicals will absolutely be part of the
7 so-called lixiviant.
8 New boreholes for toxic waste disposal are
9 being requested because the original plan to
10 mine uranium in-situ is now irrelevant due to
11 the low value of the material and the lack of
12 demand worldwide. Also, alternative energy
13 sources, such as wind and solar, are now
14 employing more new workers than the oil and gas
15 industries combined.
16 Professional geologists and chemists from
17 South Dakota School of Mines, Chadron State, and
18 private practice have testified most effectively
19 as to the dangers of this plan for all the
20 residents in the area through the irreparable
21 damage done to the water supply.
22 The misuse or contamination of the aquifers
23 in the Black Hills flies in the face of good
24 judgment due to the increasing importance of
25 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 good water.
4 In the government -- is the government going
5 to send in contaminated bottled water for us?
6 Go to the Uranium Cowboy on YouTube to see a lot
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.
11 Dennis Yellow Thunder has filed a petition
12 for review of the Crow Butte's permits.
13 According to Linsey McLean, a known biochemist
14 and NRC expert witness, there have been one and
15 a half million chemicals introduced into the
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
22 materials into high -- under high pressures deep
23 underground causes earthquakes. This area is
24 already having numerous earthquakes as the whole
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.
2 ROBERT LAFFERTY: My name is Robert
3 Lafferty. I'm from Pine Ridge, South Dakota,
4 and I just have a couple concerns on who
5 actually owns Powertech. Is it Azarga, or is it
6 a Chinese investment fund from China? And so
7 they will be making the money, and after about
8 10, 20 years, they'll be gone, and the
9 contaminated water will still be here.
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
13 injected into these wells. And Powertech is
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
24 residents, thus no exemption to the Safe
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
2 occurrences of induced seismicity from injection
3 well operations, containment of hazardous
4 materials cannot be guaranteed.
5 Will the agency granting these exceptions be
6 responsible for mitigating any damages caused by
7 this permit? Will a bond be required sufficient
8 to provide water to all affected residents and
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?
13 I understand the concept of putting a few
14 rural residents at risk for the perceived
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,
3 South Dakota. I originally come from East
4 River, Madison which I served 2011-2012 in the
5 state legislature. At that time I did fight
6 against this project, and I continue to fight.
7 I continue to study and to research and to
8 learn more about uranium, about the ISL process.
9 And what I have discovered is there's a purpose
10 for uranium in the earth, and that purpose is it
11 has a huge effect in the magnetic flow of the
12 earth. It also has a huge effect in keeping the
13 earth warm.
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.
24 In fact, uranium mining and processing is both
25 water- and energy-intensive. By-products are

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

1 post-restoration aquifer.
2 Dr. Neupauer reported that her report is
3 consistent with that of experts of USGS and
4 other geological scientific communities.
5 Groundwater has never been restored at ISL
6 operations -- the NRC acknowledges that -- and
7 some 40 percent of measured constituents could
8 not be restored to the baseline conditions.
9 Now I'm going to speak on the term
10 "baseline." It is actually a misnomer in that
11 it does not refer to the real pre-mining
12 baseline condition of the groundwater or the
13 entirety of the aquifer.
14 Instead, a selected baseline from the
15 immediate baseline production area of the
16 ore-bearing portion of the aquifer is
17 established. Thus, aquifers and groundwater are
18 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
22 number of short-term jobs will be provided with
23 this project with an inherent environmental
24 risk. Thank you.
25 REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

1 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
6 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

1 anybody fabulously wealthy, so we're not here
2 because we're going to get money to protect this
3 water. The ones that are going to receive the
4 benefits probably do not even live in
5 South Dakota, and we just can't let this happen.
6 It's our responsibility.
7 Having just come on board, I've only been
8 working on this for a week. I don't know a lot
9 of the information, so I thank a lot of you that
10 have done all the environmental -- I mean, I'm
11 learning a lot.
12 When this is done, for one thing, I'm
13 testing our water. It's costing us $750 to
14 prove that the Minnelusa water is pure. I will
15 see that you get a copy. Also, I'm trying to
16 get ahold of the state report that said we had
17 the best water in the county. I will see that
18 you get a report.
19 Because I just started, there's a lot of
20 things I don't know, and I'm going to talk to a
21 lot of people. I'm going to contact medical
22 professionals, see if I can get doctors and
23 nurses on board. They're the ones that are
24 going to have to take care of us if we get sick.
25 They need to know what they're dealing with if

1 this should pass.
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

a family since 1902. We know a great deal about this area, and we know a great deal about water.

It is my considered opinion, after having looked at this for a long time, that we cannot afford this project. This project will destroy the water in this area. When we do that, the cattle ranches will not be able to survive. 98 percent of us now use underground sources of water to augment our water supplies. Without steady water, we cannot run these ranches, period.

This area also has the Angostura Dam, which is the largest freshwater irrigation and recreation dam in western South Dakota. This dam is under siege. Because we have the Dewey-Burdock area, which now has over 200 open pit mines left from the 1950s and 1960s, this area is draining into Pass Creek and Beaver Creek and ultimately into the Cheyenne River, where it ultimately ends up in Angostura Dam, which then drains into the Missouri River.

This is a critical water source, and it's a critical water source as identified by the Environmental Protection Agency.

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

1 State of South Dakota.
2 I myself have an Inyan Kara well of
3 extremely good quality on my cattle ranch just
4 south of this project. Without that well, my
5 ranch would be basically worthless.
6 We have an opportunity to put a stop to
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
13 taking the arsenic out. There is no taking the
14 radiation out in sufficient quantities to make
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.
24 In other words, it's Swiss cheese. And what
25 we are going to do is move radioactive waste

1 into this Swiss cheese and then contaminate our
2 water.
3 We can't get this back. And we can't afford
4 the finances that will happen to us. Let's look
5 at what would happen. It will destroy ranching
6 and farming in this county, which is most of the
7 action. 60 percent of the taxes paid in Fall
8 River County come from those operations.
9 You will make a mess out of tourism because
10 you will lose water in key areas and word will
11 get around that people don't need to come here
12 anymore.
13 REGIONAL JUDICIAL OFFICER SUTIN:
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.
24 REGIONAL JUDICIAL OFFICER SUTIN: 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.
3 The problem is monitoring this procedure. The
4 mining industry cannot be trusted to
5 self-monitor, and the EPA has not done a good
6 job in the past. Mistakes and violations once
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
13 cave networks, such as Jewel and Wind Cave.
14 This area has already suffered at the hands
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
21 wells be denied.
22 REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
23 Rajni Lerman.
24 RAJNI LERMAN: My legal name is Caryn
25 Lerman.

1 I'm here to strongly urge you to deny both
2 the UIC Class III area permit for injection
3 wells for the ISR of uranium and the UIC Class V
4 area permit for deep injection wells that will
5 be used to dispose of ISR process waste fluids
6 in the Minnelusa formation.
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.
13 I am deeply concerned about the prospect of
14 our final residence being degraded and devalued
15 by the potential contamination of our water
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
24 choose. Any additional structures we may build
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.
3 The proposed permit in particular for deep
4 injection wells that would be used to dispose of
5 the ISR process waste fluids into the Minnelusa
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
13 aquifers; number three, uranium is known to
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
24 advocate, and the director of the new
25 Hot Springs Farmers Market, I spend a

1 considerable amount of my time and money to
2 educate myself and others how to live a long and
3 healthy life.
4 Pumping our aquifer with the fluids
5 containing uranium puts me, my family, and our
6 community at substantial health risks. Is the
7 EPA going to pay for our long-term health care
8 bills due to uranium exposure? Are you going to
9 provide me, my family, and our community with
10 clean drinking water for the rest of our lives?
11 Is the EPA going to reimburse our city for
12 possible losses to our main economic resource if
13 Fall River was to dry up as a result of the
14 proposed mining activities? I doubt it.
15 But it is your main responsibility to
16 protect the public's access to clean water, per
17 the Safe Drinking Water Act. No exemptions of
18 this law should be made nor any permit be issued
19 to mine uranium or dump toxic chemicals into our
20 critical aquifers which are necessary to sustain
21 life. Please use your conscience and your legal
22 obligation to the American public and deny these
23 permits.
24 REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
25 Ms. Lerman.

1 John Davis.
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
6 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.

She's an environmental microbiologist, biochemist, well-known, and she reports on the effects of heavy metal -- heavy metal poisoning and the ill effects that it produces.

This water is essential to all living organisms. We are in a symbiotic relationship with everything on this planet. And someone mentioned the law of karma. That's the law of cause and effect. What you sow, so shall you reap.

And other people have said you're not even in this town, so the people who are going to be making the money, they'll make the money and leave. So where does that leave us? And someone said we have to clean up the mess.

You can't -- you can't really say what the underground topography is. You don't know. We don't know. There's no instruments to tell you. So why not bet on the sure thing, don't deposit the nuclear waste and the heavy metals, and leave it alone and let nature take care of it.

You know, this concerns me because we were going to sell our place several times, but I said, No, we've got -- this is the greatest 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
2 water.
3 And so I would encourage everyone here to
4 try and express what's happening and hopefully
5 get more and more people on board to expressing
6 to the EPA during these types of open comment
7 periods to oppose the permits and the aquifer
8 exemption.
9 And big companies like Powertech come in,
10 they do what they want to do, they say what they
11 want to say to get the -- whatever they want to
12 do -- go in, they pollute our beautiful land and
13 water, and then they leave. I worked on a
14 Superfund site, and I didn't know it. And it
15 was in the District 9.
16 Is that your district?
17 REGIONAL JUDICIAL OFFICER SUTIN: 8.
18 APRIL SMITH: 8. Okay. But through Denver;
19 is that correct? Salt Lake, is that --
20 REGIONAL JUDICIAL OFFICER SUTIN: We're in
21 Denver.
22 APRIL SMITH: But you cover Salt Lake?
23 REGIONAL JUDICIAL OFFICER SUTIN: Yep.
24 APRIL SMITH: And so, you know, there was a
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

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
3 body. I am in the 97.5 percentile for vanadium.
4 In the 1970s, one of my many geology classes
5 I took -- I took in college, we went on a field
6 trip. I was in paleontology. We took a field
7 trip to the old limestone quarry right across
8 the highway from Rocky Flats.
9 We were digging in the radioactive limestone
10 for marine fossils. People believed that this
11 was safe. I carry uranium in my body today. I
12 am in the 95th percentile for uranium.
13 In the 1960s and '70s, the public was not
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.
24 The radioactivity released -- the
25 radioactivity released making all those bombs

still contaminates the earth and many who live there.

I have been an organizer for a group of citizens in the Southern Hills working to educate the people of Fall River and Custer County about radioactivity, uranium, and the in-situ leach mining.

I am handing in documentary and hydrology testimony from the NRC hearing, and I'm also submitting you my tests, my hair tests, that show all the heavy metals and radioactive element levels.

I ask you, please protect us. Protect me and all the people here. I don't want any more uranium or radioactivity or heavy metals in my body. I have enough. And I don't want to have to move. This is my home. And I moved here because of the spring water. It's beautiful, beautiful water.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Peterson.

We're going to take a ten-minute break, so we will start up again at about 3:37 -- 3:47. Sorry.

(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.

Martin Bates. We need you to come up. Thanks.

MARTIN BATES: Hello. My name is Martin Bates. I'm a veteran of 20 years in the United States Air Force. I'm not a resident of this area. I'm just learning about this area. My wife and I are residents of Madison, South Dakota, but we are really residents of a motor home, and we travel around. We appreciated the South Dakota welcome several years ago as residents, and we can do that.

I'm also -- I had 20 years in the Air Force. And when I got out of the Air Force, I joined an organization called Veterans for Peace, and we stand up for equal rights, human rights, smart decisions. And having spent my whole life trying to walk lightly on Earth, I've noticed that there's a lot of people that don't walk lightly on Earth.

And I don't know, it seems like they do it because they disregard other humans and they disregard water, air, trees, animals, et cetera, and usually because of ignorance, greed, convenience, or just pure meanness.

If you'll think about that for a moment,

you'll see what I mean. There are people that just -- they see that I do something for Earth, and they immediately go behind me and throw trash on the ground because they want to counter what I did.

Now, I can see a lot of dumb things happening, not that I'm all that bright, but I did listen to my mom and dad. And as I read about this thing, I have a few points. My folks taught me to clean up the mess after I did a project and before starting a new project.

And as we travel around the U.S., we go to national parks and we go to state parks and we go to places where other indigenous groups are fighting pipelines or whatever it is.

And everywhere we go, we see messes. We see messes that industries like this industry is doing -- I can't say the last name -- but what this industry is going to do and what they've done already, we see messes everywhere. They won't clean up the mess.

And, you know, that's a simple thing that we learn in kindergarten, is clean up one mess -- when you get done with a project, clean it all up, and then come and do the next project. So

they ought to do that.

This in-situ mining is an experiment. We've been reading about this ever since we've been following this. We've been traveling all the way through California and other places, and we've learned about this. So we've been looking forward to coming here, my wife and I. And so we've been learning about this a little bit.

And it really is an experiment. They don't know that that water is going to be safe. They don't know that it's going to stay where it's supposed to stay. We've had a lot of evidence that it's not going to stay there.

So I don't think they should play with these people's lives out here for an experiment. There's scientific ways of doing experiments, and it's controlled. And this is not controlled at all.

I will say, with all due respect, the EPA has got a terrible track record when it comes to overseeing cleanup. Again, I mentioned the cleanup, and we've been places where there's messes. The fracking around Chaco Canyon, you could not believe it, and the EPA is supposedly watching that.

1 In fact, any of these public hearings I've
2 ever been to related like this, it's more of an
3 opportunity for the EPA to make a check in a box
4 on a checklist than it is to listen to your
5 comments. So I encourage you to make your
6 comments and make them strong. Thank you.
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.
11 And chemical attack was the enemy.
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,
21 and I also could see what radiation could do to
22 people when it's ingested. Most of this
23 radiation you're talking about here is if it's
24 ingested or breathed. Other radiation, if you
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.
2 According to the World Nuclear Organization,
3 the USA legislation requires that the water
4 quality in the affected aquifer be restored so
5 as to enable its pre-mining use. Usually this
6 is potable water or stock water, usually less
7 than 500 parts per million total dissolved
8 solids.
9 And while not all chemical characteristics
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,
13 giving rise to a problem in disposing of the
14 concentrated brine stream from this.
15 After termination of an in-situ leaching
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
22 remain unsolved. Contaminants that are mobile
23 under chemically reducing conditions, such as
24 radium, cannot be contained, controlled.
25 If chemically reducing conditions are later

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.

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 than 20 times the pore volume of the leaching zone had to be pumped and still several parameters did not reach background areas. So relaxed groundwater restoration standards have been granted at these and other sites since the restoration criteria could not be met.

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

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

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

at least have a translator here. So in the future, I suggest that happen.

Thank you for allowing us this time to speak. I'm a water-protector. I heard it said that you also are a water-protector. I can't think of a higher honor, at least for me. But it goes beyond water. It's all life. I don't get paid financially to be who I am. I am who I am because I was created to be this, and I'm grateful.

I had the opportunity not long ago up in Standing Rock to stand with some of the finest men, women, and children that I've had the honor of knowing, to stand up against great atrocities, much like many that have happened well over 500 years and many that happened that were far worse than what we're going through.

It shames me to know that these beautiful people from here have to continue to fight the same battle over and over and over and over simply so they can remain here on the lands that they were born on and their ancestors held in great regard and cared for and tended to, to have to protect them so that their children no 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,
6 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

1 language.)
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

1 what I call them.
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,
6 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
6 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.
4 (Speaking in indigenous language.)
5 My name is Miengun Pamp. I'm from Lansing,
6 Michigan. My clan is Wolf. I just figured if
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
15 holes in. Probably shouldn't do that anyways.
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.
22 I don't know how many people heard about it
23 or saw pictures of it, but you could see it when
24 that ground was, you know, pulled up. There
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

this and they see no benefit from it. Just, you know, I was told to so it's okay. I'll just let it go. It's just part of the job, you know.

Make a stand. Do something with what you're supposed to, you know. It's your job to protect these lands and protect all this. Like, otherwise we have to. That's when we have to come out here and do that. We have to come make a stand.

And you know, if the government agencies that were overseeing this stuff did what they were supposed to do, we wouldn't have to do that at all. It's completely ridiculous.

And like it was said earlier, this is Native land, and it is illegal to be here. And it's just -- just frustrating, you know. But at least do your jobs correctly. At least, you know, see things the way they should be seen instead of overlooking these things, just putting them under the rug, whatever, you know. It's just -- it's not my family, it's not my people.

These people have to live here. This is lasting effects. I don't want my kids to have to avoid South Dakota because their life will be

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

1 all kinds.
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
2 different compounds with totally different
3 chemical and biochemical personalities and
4 activities. If they bond with inorganic
5 substances, such as phosphate, oxide, sulfate,
6 carbonate, et cetera, they will form inorganic
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
13 bioavailability in the living body and much more
14 ability to travel to and target different organs
15 and tissues of the body, interfering at the
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
22 there when they're supposed to be extracting
23 uranium? Well, let me explain.
24 Organified metals, including uranium, are
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
6 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.

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.

Our county has no zoning.

Please take note of this, Fall River residents. The EPA doesn't have enough funding, and neither does the Nuclear Regulatory -- Regulatory Commission -- there you go -- have the ability to take care of us. We are a small county, and we need help. Your permits probably will not cover that.

The bonding permits that will be given, if given to the holders, cannot save the fall -- the Water Drinking Act of 1974. We will continue to drink our water. We will not know if it is safe or not, I'm sure, because it will be monitored probably by hydrologists that are hired by the company.

And the EPA, I know. I feel for you. I know exactly how everything goes as far as funding, but I doubt it will be able to take care of us.

The first time I reminded the EPA at the EPA hearing that we live in a fault area with -- from Yellowstone National Park, and it is part of my biggest concern. But I do think those of you that did bring that up, the first time, none 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

here and, as well, taking testimony.

My name is Mark Hollenbeck. I ranch with my four small children and my wife north of Edgemont near the Dewey-Burdock project. We operate an organic ranch. We do grass-fed organic beef.

We use a grazing system that mimics the movement of the buffalo so we can improve our soils instead of degrade our soils. I believe over the years we have degraded our soils with modern ranching methods, so we have to return and look at new ways of doing that.

I also have a degree in chemical engineering from the School of Mines. And so what is the connection between organic beef production and nuclear power? In a word: Footprint. Organic grass ranching is the smallest food-raising footprint that I think I can make on the land in this environment.

When all forms of electric generations are evaluated, you'll find none of them are perfect. So which one are we going to use? Are we going to use coal or use hydro? Hydro is a very clean way of producing electricity, but we have to dam 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

waste storage for nuclear power, and that has not been solved, although I think that's more political than science. We need to have recycling in nuclear power so that we can reuse the fuel instead of getting more new fuel.

But as we talk about the greenhouse effect, the last two days I've heard lots of people complaining that we weren't doing anything about the greenhouse effect. Nuclear power is the only large-scale method of generating electricity that can greatly reduce our carbon footprint.

There is no perfect solution. So when I started studying this -- I live there, and I went and visited ISR mines throughout the United States, and I have found that to be, by far, the smallest footprint of any generation facility that we have. I think it is very protective of the environment, and there are several misconceptions that I think I need to address.

One that was mentioned several times was that it will be fracking. We do not frack. If you fracked, you'd ruin the whole ore body, and it would be useless. Sulfuric acid would be used. Sulfuric acid is not going to be used.

1 Oxygen and carbon dioxide is what we're going to
2 use.
3 There's also been some wide exaggerations on
4 the water use. We're going to recycle 8,000
5 gallons a minute through the formation. We're
6 not going to pump 8,000 gallons a minute out of
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
11 Minnelusa well, we get saltwater and oil and
12 usually not enough oil to recover.
13 And so that's one of the problems with
14 communicating this, is that the formation is
15 called the Minnelusa. Occasionally it's an
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
2 stop in at any time, and I'll be happy to
3 discuss any issues that you have. And by the
4 way, I agree with the Hot Springs Resolution.
5 REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
6 Mr. Hollenbeck.
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
13 located near Edgemont, South Dakota, under the
14 authority of the Safe Drinking Water Act and UIC
15 program regulations in connection with Class III
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
22 massive environmental contamination, the legacy
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
2 historically been used for a source of drinking
3 water, are currently used for a source of
4 drinking water, and can be a future source of
5 drinking water.
6 EPA's own current Title 40 146.4 declares,
7 quote: The proposed aquifer exemption must not
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
13 ignores the existing original EPA aquifer
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
20 disposal wells, and uranium and other ISR mining
21 activities that utilize UIC recovery disposal
22 well activities, and any other in-situ solution
23 mining.
24 The evidence of the convoluted joint efforts
25 between the EPA and Azarga/Powertech to set this

1 precedence to change their own laws is spelled
2 out in EPA's 11/17/16 Aquifer Exemption
3 Technical Memorandum done by Valois Shea.
4 As recorded in that 11/17/16 memorandum, EPA
5 and Powertech worked cooperatively to manipulate
6 the status of the current drinking water use
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
10 146.4 criteria.
11 And then they intend to eliminate the "or
12 future source of drinking water" protection of
13 an aquifer simply by considering -- simply by
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 aquifers -- clean water
19 aquifers, that protection of that status will be
20 eliminated by this precedent-setting aquifer
21 exemption.
22 Currently -- based on the 11/17 EPA
23 memorandum, currently there are multiple wells.
24 This is permanent well -- wells that were used
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.
2 KATHLEEN BAILEY: Okay.
3 What the EPA also has not disclosed is that
4 residents -- is that once approved, the Class
5 III underground injection disposal wells have
6 been approved by the NRC for uranium mining
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
13 successful mitigation of the contamination
14 resulting from uranium in-situ recovery mining.
15 REGIONAL JUDICIAL OFFICER SUTIN:
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
24 Buffalo, please.
25 BEN GOOD BUFFALO: (Speaking in indigenous

1 language.)
2 A treaty is a contract between two or more
3 sovereign nations. That is as binding today on
4 the governments that signed it as when agreed to
5 more than 100 years ago.
6 (Speaking in indigenous language.)
7 You violated all these treaties, our
8 treaties. At the very beginning -- yesterday I
9 was at Rapid City, two days of that comments,
10 talking, and I kind of felt bad. I felt bad
11 because what these two ladies are going through.
12 And all these people in our council, in our
13 traditional ways, the men discuss what's best
14 for the tribe. And they always consider the
15 women the backbone of that nation. So there's a
16 different government, different structure.
17 (Speaking in indigenous language.)
18 I can't see those at all. I said I heard a
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.
24 And we are a very spiritual nation. We are
25 a warrior nation, but spiritually. In our

language, there is no cuss words. There is nothing bad. It's all humor. When something bad happens to somebody and I should get mad, they make it into -- they all start laughing.

A lot of what I heard here is not compromising. It's all power. Somebody wants this done. And I know -- it cannot be done because of what it represents.

(Speaking in indigenous language.)

When something like this is taking place when life are concerned, think about it. Think about it. (Speaking in indigenous language.) The people, we think about it.

And I was thinking about this treaty here. And I think sometimes this treaty belongs, this EPA, this should be on the reservation. I don't see them there. I don't even see them there at all. That's where the people are. The people are there to -- like him, Hollenbeck, they want to talk to him, like you. And they want to know what's the best direction, but there's none of that.

And I personally can say this: Mni Wiconi. This word means a lot. Mni Wiconi. Life. 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.

PAUL NABHOLZ: I'm Paul Nabholz. I live just north of Battle Mountain here in Fall River. In the late '70s, I worked at Los Alamos in modeling fracture flow hydraulics at the Fenton Hill Geothermal project, so that was some of the early fracking.

I was a drilling engineer on a National Science Foundation drill ship doing geologic research worldwide in the late 1980s. And as a South Dakota professional engineer, I've attended about ten years' worth of the hydraulic -- western hydrology conferences up at Rapid.

And I've been very impressed with the look of the in-situ mining. It's such a low-impact mining compared to the old open pit mines.

And then, I guess here about six or seven years ago, I drilled my own personal water well into the Inyan Kara that's 580 feet deep, and I've really enjoyed the water and don't expect it to change much.

I've been off-grid for more than a dozen years. I've been on solar electric power, and I installed solar hot water heating in the last three years.

1 Given that, I support the injection of
2 wastewater into the Minnelusa because it's a
3 cleaner solution than surface application via
4 center pivots. And so I think that's a good way
5 to handle the in-situ mining waste.
6 And I've been disappointed in most of the
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
13 formations within 100 feet of the mining zones,
14 so it keeps it out of the rest of the water.
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
24 comments. If you would like to get up and speak
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

state, 750,000 people. We're a cheap date. You can come in here with a few thousands dollars, buy a few folks, and you can do whatever you want. But, you know, there's no regulatory authority looking over in the state. There's no water -- they changed the laws.

So you guys are the only people who can help us here. So help us, you know. You're here to listen to us, and we're telling you water is life out here. We need water to drink. We're all water drinkers in here, except for a couple of guys. Well, I don't know what they drink.

But, you know, we all need water. And we're not -- you know, this is -- you know, we've had a lot of different things that have come up here today. But what we haven't talked about is white supremacy, and white supremacy allows that for 500 years us, as tribal people, kept saying no, and it doesn't matter.

We said no to the project up in Standing Rock. And what did you guys do? They brought up guns and tanks. So we can say no. We've been saying no. Your consultation process is rigged for the industry, and all of this is really rigged for the industry.

1 But we the people, right here, are telling
2 you we don't want it. 98 percent of the people
3 in Rapid City said we don't want it. We don't
4 want it. Listen to us. Hear us. Thank you.
5 REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
6 Ms. Jewett.
7 We are pretty close to 5:00, so I think that
8 at this point we will take the break, and we
9 will be back here again at 6:00.
10 So we will temporarily go off the record.
11 Thank you.
12 (A recess was taken from
13 4:58 p.m. to 6:00 p.m.)
14 REGIONAL JUDICIAL OFFICER SUTIN: Good
15 evening, Everyone. My name is Elyana Sutin, and
16 I am the Regional Judicial Officer from the
17 Environmental Protection Agency in Denver,
18 Colorado. Thank you all for coming today. I
19 will be chairing this hearing.
20 In addition to myself, we have several other
21 staff from EPA here to help assist, make sure
22 everyone who wants to speak has the opportunity
23 to do so. And I would like to introduce them to
24 you. Douglas Minter is manager of the
25 Underground Injection Unit in the Office of

1 Water Protection in Denver.
2 To my right is Valois Shea. She works with
3 Douglas in the Underground Injection Unit.
4 Lynne Newton is in the back at the
5 registration table. She also works with Douglas
6 and Valois in the Underground Injection Unit.
7 And then we have Lisa McClain-Vanderpool,
8 who is our public affairs specialist.
9 Sisay Ashenafi, who is also standing in the
10 back by the registration table. So if you have
11 any questions, please find one of those folks.
12 On March 7, 2017 -- excuse me. On March 6,
13 2017, EPA issued two draft Underground Injection
14 Control, or UIC, area permits to Powertech USA,
15 Inc., for injection activities related to
16 uranium recovery near Edgemont, South Dakota.
17 Draft permits include a UIC Class III area
18 permit for injection wells for the in-situ
19 recovery of uranium and a UIC Class V area
20 permit for deep injection wells for disposal of
21 treated in-situ recovery process waste fluids.
22 The EPA is also proposing an aquifer
23 exemption approval in connection with the draft
24 UIC Class III area permit.
25 We are here today to listen to your comments

on these area permits and aquifer exemption. The public comment period is open until May 19th, 2017. In addition to this hearing, we will hold another hearing tomorrow in Edgemont, at the St. James Catholic Church. We have also held four other hearings, one in Valentine, Nebraska, and two in -- yesterday and Monday in Rapid City.

In a moment, Ms. Shea will explain in more detail what was proposed in the notice. But before I turn it over to her, I'd like to explain a little bit about how the hearing will work today.

We will take testimony from 6:00 to 8:00, and I will call speakers to the microphone up here on the podium if you have filled out a card at the registration table. When it is your turn to speak, please come up to the podium, and state your name before you begin your testimony.

In order to be fair to everyone, we are limiting testimony to five minutes each, and I please ask that everyone respect that time so that everyone has the opportunity to speak who wants to, especially if they haven't had the chance or the opportunity yet.

When five minutes has passed, I will ask you to complete your testimony. Please try to be as succinct and on point as you can. If I find that you're straying from the topic at hand, I will interrupt and ask you please to return to the issue before us.

If we have time at the end and you haven't been able to complete your testimony, I will allow people to get back up and finish their comments.

After you finish your testimony, members of the panel may ask clarifying questions. We are not here to explain the basis of the proposal -- the notice does that -- nor can we engage in a back-and-forth discussion of the proposal or respond to your comments during this hearing. The purpose of this hearing is to receive your input.

We will consider and then respond to all comments received during this hearing as well as all written comment in the final permits and aquifer exemption determination. As I said, we will not be answering any questions during the hearing.

We are recording the hearing tonight, so be

assured your comments will be considered. The court reporter sitting to my left will be preparing a transcript of tonight's proceeding that will be available for anyone who wants to see it.

The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it has considered in its action, including public comments. The docket is available on the internet for your review, or you can view a hard copy at the EPA's Denver office. The transcript of this hearing will also be available on the docket.

If you have written copies of your testimony, please give a copy to our staff at the registration table, or you can hand it to one of us. This will be helpful as we prepare the transcript.

If you have other written comments or supporting documentation that you would like to provide, you may leave that with us as well, and we will make sure that it is entered into the docket of this action.

You may also submit written comments

1 directly to the docket through May 19th. And
2 instructions for doing so can be found back at
3 the registration table.
4 Once the final permits are issued and the
5 aquifer exemption determination has been made,
6 anyone who participated in the hearings, either
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 --
13 a yellow triangle is one minute, and then when
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
22 you are here with us and providing comment and
23 listening to the comments of others.
24 As Judge Sutin said, we have -- the EPA has
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 *Emergency Care,*
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
3 our hydrations -- the hydration based on the
4 levels of activity. Inside our bodies, fluid is
5 distributed appropriately through a number of
6 factors.
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
11 membranes in the walls of capillary cells
12 determine how much water can be held and pushed
13 out of the cells and blood vessels. Each of
14 these factors help us regulate the amount of
15 distribution of fluid.
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
20 in the bo- -- in the body. This may cause, by
21 decreased fluid intake, a significant loss of
22 fluid from the body by one or more variety of
23 means.
24 Remember, however, that maintaining a
25 balance of water while in a healthy

1 gastrointestinal system, severe vomiting or
2 diarrhea can also become symptomatic. After the
3 amount of water in the body, fluid can be lost
4 as well as through rapid -- rapid breathing or a
5 respiratory distressed patient and profuse
6 sweating. Plasma protein in the body can be
7 lost without injuries, like burns.
8 Dehydration from losing more fluid than the
9 patient takes on is very common in hot weather,
10 when the patient sweats a great deal of -- does
11 not drink enough liquid to keep this fluid for
12 this heat exhaustion. This is from Brady
13 *Emergency Care, 12th Edition* from Daniel Limmer
14 and Michael F. O'Keefe.
15 If our water is contaminated, then our youth
16 will not be protected. Our citizens will not be
17 protected. Our future is at stake. We must
18 protect our youth and help our EMTs and first
19 responders by leaving the uranium in the ground.
20 As a candidate for city council, and if I
21 get elected, quote, I will fight to protect our
22 youth and citizens of Hot Springs.
23 So I'm asking you to stop the mining in the
24 wells to protect the American citizens. I don't
25 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
6 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

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

1 That's a long -- the Ogallala aquifer covers all
2 of that.
3 I'm sure you're all well aware of that. You
4 probably have wells in Colorado that are
5 connected. Mr. Hollenbeck is getting oil and
6 water from his well because of the fracking
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
13 faced with it every day.
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
20 you feel if your child, your grandchild was
21 affected in that way by the poisoning of the
22 water?
23 And that's just not my granddaughter.
24 There's seven different reservations going down
25 that way that water is going to flow through,

every one of those reservations, everyone has a granddaughter, a grandson, daughter, sons that are going to be affected by this.

You have to look at the big picture. That's who's going to be affected by it, along with everybody else in here that has granddaughters and grandchildren and children and the future generation.

Very honored to see the youth here today, expressing themselves from their heart. The contamination that they fear is going to happen.

But quickly, I want to mention a few things. We've met before, Valois, Mr. Minter. We've met here in Hot Springs, we've met in Bismarck, we've met again in Rapid City covering these same things. And there were some issues that came up then that date back several years.

Number one is we need to conduct independent cultural surveys on the Dewey-Burdock area. EPA should require borehole identification plugging. Fence posts and sloppy sealants ain't going to work.

EPA should require additional pump tests. Existing data is admittedly incomplete. The EPA 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
6 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.

And then imagine looking into those same eyes that come from you or your husband and having to explain why the way things are with the water, why and how things weren't always this way.

I know that a lot of the people that came here are proud to bring up their children as water-protectors, as people who value the earth. And so I guess what it comes down to is there might be different versions of reality at play here.

And I know it's kind of weird to say that there's more than one reality or something, but when there's -- the biggest question I have is, Why? Why are you doing this? And why -- why are you taking, coming here and -- sorry. Just a little bit nervous.

You guys have control. You're in control of how this goes, how this is set up, and what becomes of all these people coming up here and saying these things. The reason you're in control is because of 500 years of genocide. And that's something that you're going to continue if you approve this.

Right now, you have the chance to be

1 water-protectors, too. And I hope that you'll
2 realize where the power that is invested in your
3 Agency, it's -- what it came from.
4 And when there's so many people involved in
5 an agency and so many different decisions are
6 broken up into so many different parts, it might
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
24 against Powertech to stop this in federal court.
25 So I've been in this from the beginning. I

appreciate all of you being here. Even you, Mark. Good to see you again.

I say that because, Mitakuye Oyasin, I believe this, we are all related. We're all here on this planet, and we're all here for a reason. Tunkasila didn't put each other, all of us in each other's life for no reason. We're all here because this is where exactly we're meant to be right now. Everyone here is meant to be here, all right here.

We have to choose what we are going to do. I can't believe the pressures that you guys are under. You know, your director of the EPA just got terminated or he quit or whatever because of the pressures that were being put on him.

So I can understand that you guys are under those same pressures. But if you make the wrong decision and it's not politically correct, I won't be seeing you guys again.

And I would not want that on you. Because you have families. I respect that. I'm a soldier. I was a soldier. I fought for this country. I faced the enemy. I had bullets going by my head, men dying near me. I was lucky. I came through those things unscathed.

1 Those guys are all my heroes. They are all my
2 heroes.
3 There was a time that I lost sight of who I
4 was and why I was there. I lost sight. I
5 became just a machine. I no longer saw a
6 wounded man or cared. I no longer saw an enemy
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
13 sat there with me. And it took me a while, but
14 I realized that I regained who I was. I became
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
24 live on this great planet.
25 Now, this is about water here. This isn't

about uranium ore. It's about water. This corporation -- and you and I know both know, you're learned people. You've been doing this a while. You've seen the international community and how it works.

So you and I both know that if you give these people that water -- and it's not 8,000 gallons a minute. I understand that they just increased the request to 8 billion gallons a year; is this correct? If I'm wrong, tell me I'm wrong.

That equivocates closer to 15,000 gallons a minute. Now, this is a free gift. This is not anything that these people are going to be charged for. This is free to them. They do not even have to mine uranium there.

They can open up a water bottling plant out there, and they can sell that water to whomever they choose. Once they have this permit, that's all they have to do. They never have to mine uranium out there. The water is a gift to them, free. They can do with it what they want. So I'm definitely against this. I hope you can see that.

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,

1 Mr. Ebert.
2 Susan Sugzda -- Sugzda. I'm saying that
3 wrong.
4 SUSAN SUGZDA: Pretty close.
5 Good evening. I'm Susan Sugzda from the
6 western Custer County area. I've done a little
7 basic cost input analysis, and the costs of this
8 project would be thousands of gallons of free
9 water from aquifers in a drought-prone area.
10 Benefits: One would be lots of money, I
11 guess, to the companies, which I understand are
12 Canadian and Chinese, and in the future likely
13 others will want to also have the chance; and a
14 few local jobs, which I believe will turn out to
15 be fewer than we've been led to believe
16 probably, possibly.
17 So the result is that the benefits simply,
18 in my opinion, don't -- are not worth the
19 extensive cost. In the past around here,
20 companies that have done mining have simply gone
21 bankrupt and disappeared.
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
6 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.
3 Just like all addictions, they need -- they
4 need help, and I'm begging that the EPA help
5 this country. These companies are foreign. How
6 could you let foreign companies come into this
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
13 aqu- -- the water that you found underneath is
14 undrinkable. Yeah, maybe undrinkable to humans,
15 but it's not undrinkable to the earth. It's not
16 undrinkable to the soil. It's not undrinkable
17 to the plants or the rivers that it will be
18 flowing into. We need water.
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
22 stop. Please stop. We don't want to be sick
23 anymore. We don't want cancer rates
24 skyrocketing, diseases going unexplained.
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.

In 2014, I served as an expert witness on behalf of the Oglala Sioux Tribe and the consolidated interveners in opposition to Powertech's license renewal.

As part of that proceeding, I had the opportunity to review some belatedly disclosed data from Powertech after the hearing had concluded.

On November 12th, 14th, and 15th in 2004, myself and three student assistants reviewed drillers' notes and borehole logs prepared by the Tennessee Valley Authority that was disclosed by Powertech. This review was conducted at the Powertech offices in Edgemont.

We were able to review drillers' notes from 4,177 boreholes, 56 percent of the total of 7,515 that were available to us. In this data we found written records from drillers of 140 open, uncased holes; 16 previously cased, redrilled open holes; 4 records of artesian water; 13 records of holes plugged with wooden fence posts; 6 records of holes plugged with broken steel; 12 records of faults within or beside drilled holes; 7 notations, "Do not 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.
6 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.
6 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

ground. We come out of Wind Cave. You can go to Wind Cave, and there's a nice little sign that points at a hole in the ground, and it tells that story. And you can't take that away from us, and you can't deny that.

And we -- we -- they made this country on a religious freedom, you know. It's the constitutional right we have, religious freedom. And you know, it -- and I'm -- I'm -- I was born in 1978. And in that year, in 1978, as old as I am, that is as long as we've had religious freedom.

We can't go access these sacred sites because now they are in -- not on our property. All I can tell you is this is the mecca, this is the center of the universe. We have -- everything is a relative. We have a Lakota, Dakota, Nakota name for each element that science hasn't even caught up with.

We have cultures that are like polar opposites. And the reality is the President is the center of everything, but in our way of life, it's the inner circle. That -- that's who we -- that's who leads us -- our children, our elders, never, ever, ever a man.

1 And we're led -- and our people are led by
2 the women. We're natural multitaskers. We can
3 just have this all figured out and food on the
4 table, everything done, and smiling. So -- and
5 we honor that.
6 And you guys come from a culture that's,
7 again, the polar opposites. And you look at
8 that, and you don't even have -- you couldn't
9 even vote. You couldn't even vote. That's
10 how -- that's how in that little amount of time
11 that you've come, but yet we lived that since
12 the beginning of time.
13 So anyway, I come from Oglala, which is
14 about, you know, as the bird flies, right over
15 here. Well, through my family that comes from
16 there, our territorial homeland guardians, we go
17 south, my grandmas that raised me.
18 So they brought me into this area and, you
19 know what, I grew up off the land. I didn't
20 have running water, electricity. I lived in a
21 house that my grandpa built, my great-grandpa.
22 And my great-grandpa, we lived here, and we were
23 pushed back to a reservation, and we couldn't
24 come back out here without a pass.
25 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
6 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.
2 You see, where we moved from, our local
3 wells had become contaminated. Luckily, there
4 was another source of water. It was the
5 Cohansey aquifer. All of our relatively shallow
6 wells were mandatorily capped, and a municipal
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
13 to leave our home was the fact that we lived
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
22 measure the amount of radioactive strontium-90
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.

I'm the chairwoman of a Nevada nonprofit called the White Buffalo Nation. We are dedicated to mending the Sacred Hoop of Life. My youngest daughter was born in a barn in the straw in Wisconsin near where Miracle had been born in 1996.

And I came to South Dakota the end of February to help with the reestablishment of Oceti Sakowin traditional government. I do a radio program I've been doing since -- well, Standing with Standing Rock, Savage Sovereignty, and Water Protectors we've been doing since August because this is Lakota, Dakota, Nakota land.

Today as we -- as you consider permitting the request of Powertech/Azarga, the West Lake Landfill is on fire underground in Montana. The Hanford Nuclear Site in Washington state has seen a tunnel collapse. According to my friend Bob Nichols of *Veterans Today*, Your Radiation This Week, we are at evacuation levels for radiation pretty much across North America as it is.

In fact, Pierre -- Pierre, South Dakota is 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
2 happened is so high that it's not safe.
3 So I would ask the Environmental Protection
4 Agency to be matriotic, to love this land, and
5 to put your time and your energy and your money
6 into supporting alternatives, into supporting
7 healing the earth, instead of supporting a death
8 machine and a death culture.
9 There's no need, and it's time to tell
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
13 so much damage to boil water to make power.
14 REGIONAL JUDICIAL OFFICER SUTIN: Ms. Wolf,
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.
22 JOSEPH FARRELL: Hello. I am Joe Farrell.
23 I'm a licensed Wisconsin master plumber. I have
24 a plumbing contractor's license in this state.
25 I was a licensed well pump installer in the

state of Wisconsin.

So that people don't engage in ad hominem arguments, I have worked in nuclear power plants. They are one of the safest places you work because if you make a mistake, the results are catastrophic. So I have a lot of respect for how dangerous nuclear power is.

I'm not philosophically opposed. I just think there's got to be better alternatives, given the fact that they still haven't figured out what to do with the waste and because it's so dangerous, you have to work so carefully around it, so as not to really create another Chernobyl. But my concern is not based on that. It's -- I'm concerned about the 4,000 wells that are going to be drilled there.

Right before Hannan's presentation, I was going to say that on a very conservative estimate, a half a percent failure rate nobody is going to dispute. That means at least 20 of those wells are going to be open sources of contamination.

And what worries me and -- is the fact that they are using oxygenation. And in Wisconsin, we were weren't allowed to chlorinate wells

because it's an oxygenation process that releases arsenic, and we had a lot of arsenic over in some of the aquifers there.

And the hydrologists made some mistakes, and the arsenic was traveling places they didn't expect. The solution was they drilled wells into aquifers that were deeper and were safe.

They had some well drillers who got sloppy, had -- the annular's places were not sealed correctly, and they created an open source of contamination into the contaminated aquifer.

So I'm real concerned about those wells. And this may sound really callous to a lot of people in the audience, it's not humans and drinking water I'm worried about because there's a lot of plumbers and equipment installers, they'll sell you for a really expensive price, there's ways to get water safe to drink for humans. They'll make a lot of money doing it. I'm not going to be one of them because I'm not into that.

But my big concern is that if -- and most of the people who are proposing this are proponents of these wells. If they are wrong and their calculations -- because no one seems to be

disputing them.

If they are wrong in their calculations and they ruin the aquifers, I live over in Oral. All my neighbors are ranchers. Some of them I know are third generation, there's probably some fourth generation over there. You're not going to be able to save the beef in this state.

No matter how good your marketing campaign is, you know, "Eat South Dakota beef; it glows in the dark" is just not going to cut it. So you're going to destroy the beef industry.

I really wish there would be more ranchers that would show up at this. I understand it's -- for Native Americans, I understand the respect for the earth and stuff.

But the ranchers, they need to get on board opposing this. Because if the Powertech is wrong and their data is wrong and they ruin that aquifer, the face of South Dakota will change.

We'll no longer be a community where I live of ranchers. That's all going to go away. There's generations who have done that, and that's all going to go away. And so I have a real concern about those wells.

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
3 the nuclear threat of water contamination.
4 That's what they're going to do with this
5 uranium.
6 Corporations have been proven to be
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
13 reasonable with these institutions. True human
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
21 threatened -- and threats to human life is
22 going to be held accountable.
23 You are on this list if you allow this
24 malicious insult to our beautiful homeland, our
25 beautiful Black Hills, our beautiful lives to

1 continue. We have heard all the promises and
2 assurances of the corporate hierarchy. You
3 should know by now they cannot be trusted.
4 I pray for your well-being. I pray you -- I
5 pray you have the courage to handle the immense
6 pressure this question is asking.
7 REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
8 Danielle Rose.
9 DANIELLE ROSE: My name is Danielle Rose. I
10 live in Hot Springs and Eagle Butte.
11 (Speaking in indigenous language.)
12 My Lakota greeting was I greet each of you
13 from this side of the room all the way around to
14 here with a warm heart and a hearty handshake.
15 My Lakota name is First Cloud. I was named
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
22 with the colors yellow, white, black, and red.
23 Well, those colors represent the races.
24 Yellow is for Asian or Oriental, and they're
25 responsible for spirituality. White is for

1 Caucasians, and they are responsible for the
2 physical and introspection, going inside of
3 self.
4 The black, of course, is African-Americans,
5 and they are responsible for the water. And
6 red, of course, is us Native Americans, and
7 we're responsible for the land, or Mother Earth.
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
13 administration. It must be very difficult.
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.
21 Kathleen Jarvis.
22 KATHLEEN JARVIS: It's May 10th, 2017.
23 Uranium mining EPA hearings. Public information
24 sessions and hearing for the proposed
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.
3 REGIONAL JUDICIAL OFFICER SUTIN: Your time
4 is up, so I need you to wrap up, please.
5 KATHLEEN JARVIS: If I might continue.
6 The Dewey-Burdock Project will transmit the
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
13 Southern Black Hills Water System Appraisal
14 Report.
15 For example, the town of Edgemont has
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
22 Protection Agency limit is 15 milligrams per
23 liter.
24 REGIONAL JUDICIAL OFFICER SUTIN: 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
2 company would have in ISL at the Dewey-Burdock
3 location. I do however feel that my water and
4 the water of my community could be irreversibly
5 harmed, besides the inadequate standards for the
6 settling pond waste that could potentially
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.
13 For the Class III area permit for the Inyan
14 Kara, I believe that these proposed mining
15 activities pose a risk to my Inyan Kara water by
16 undetected or late-detected excursion, as I am
17 downgradient from the mining activity.
18 As far as the Class V area permit for
19 disposing the in-situ mining waste fluids into
20 the Minnelusa formation, the Minnelusa aquifer
21 is a high-quality aquifer. It is well utilized
22 in the southern Black Hills.
23 In addition to the domestic Minnelusa well
24 that we haul our drinking water from, this
25 aquifer sits approximately 1,000 feet below my

1 property, making it a potential drinking water
2 source for my family and livestock for
3 generations to come.
4 According to the atlas of the Black Hills,
5 the Minnelusa aquifer flows from the proposed
6 ISL site to my property. The contaminants
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:
11 Yes, the flow model in the Atlas of Water
12 Resources of the Black Hills does indicate that
13 the Minnelusa flows from Dewey-Burdock to the
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.
19 In cave environments, such as the Minnelusa,
20 which our well log data did say that there was a
21 cave, the underground water almost flows like a
22 river. There are local and regional impacts on
23 some of the flow systems that are not indicated
24 in the figure, and some of them are unknown.
25 According 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,

nobody ever did anything to plug any of these holes.

So my concern is, there's a possibility of cross-contamination because of these borings, just like that man from the university over at Pine Ridge said, that, you know, they haven't expressed or told everybody about all the borings that were never plugged.

As a rancher, you know, first I would like the EPA to go back and have those areas cleaned up from the old uranium mining that was never ever cleaned up. And it's my understanding that the landowners won't let you back on because they feel they might be liable for the cleanup now that all these companies are gone.

I want to talk about the water. We have Inyan Kara; that's what waters our whole ranch. And the master plumber is right, there should have been more ranchers here because the beef industry in this county would go by the wayside if there's no water.

The cultural resources that you were wondering about and stuff like that, as a rancher, when I want to put a pipeline and I'm several miles away from where you're going to

1 put this site, I have to do this study. And the
2 reason why is because pre-historic Indians were
3 in the area.
4 Well, then you just follow the trail, and it
5 goes up to Craven Canyon, where the petroglyphs
6 are. And anyway, that's relatively close to
7 where the mining is. So I'm quite sure all the
8 Natives that have spoken here really know that,
9 you know, this is a sacred ground to them.
10 The water, it might not be a high quality,
11 but I guarantee you, without it, this ranchland
12 would sit vacant, because there is no way you
13 can run a ranch without water.
14 The ranchers that kind of got on board with
15 this in the area, why, they offered them
16 high-dollar leases. Ranching isn't profitable
17 every year. You can go to the bank with this
18 added income of this lease, and you can look a
19 lot better on your balance sheet.
20 A lot of promises were made that, Oh, if we
21 damage the water, we'll clean it up. And to my
22 knowledge -- I have a veterinarian out of
23 Crawford, Nebraska, where they have the uranium
24 mining down there, and he said that his water is
25 so bad that he cannot even stand to go down in

1 the basement.
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
6 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.

ROBERT WHITE MOUNTAIN: Feels like I'm walking up on a talent show or something.

(Speaking in indigenous language.)

My name is Robert White Mountain. I'm a Hunkpapa Lakota. On my mother's side, I come from Sitting Bull, his tiyospaye. On my father's side, I come from Rain in the Face. And this lady that talked before me, I didn't quite get her name, but she brought up a thing that -- before I talk about that, I just want you to -- I think everybody is going to raise their hand if you're -- who drinks water? So everybody who drinks water, raise your hand. I think that's everybody.

So I had another question. Who all loves water and would like to protect it?

All right. So my grandfather told me one time, he said, "What is a Lakota?" And so he told me what a Lakota is. Now, I'm a Hunkpapa Lakota. That's what they call me. He said, "What is a Lakota?"

A Lakota, he explained to me, is someone that claims to be an ally to the spirit of all that is. And water is part of all that is. Water is part of all creation. So if we love

water, we want to protect water, we're all Lakota, and we're all related. We all breathe. We all drink. We all sleep. We all have red blood. We're all related. Even though we may be different colors, whatever it is, but we're all related.

And 36 years ago, I was a young man, and I was at Craven Canyon, and they have some petroglyphs there they were trying to destroy for uranium mining. And these petroglyphs tell history from the beginning to the end on how we are all related, how we all come from the same place. But that's a long story. I won't get into that.

But anyway, it just explains -- to me, just told me, you know, that through these petroglyphs -- we studied those for a long time. We also were put under siege for being there 36 years ago. And three -- two years ago, I was telling the story to some young kids around a fire over here in a cabin in the Black Hills here. And I was telling about how we were praying. All we did was pray for the water.

We prayed for the land, and we got 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
6 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

me. So it was -- it was to a point where I could not see color.

I can look at that guy not as a white guy or black guy, I look at him because he's a human being, and we all are human beings and we all need water.

I'm sorry. You know, but the basic thing is we all -- we have so much alternative things that we can do besides destroy ourselves, besides destroy man. You know, I heard a gentleman talking, and he said, you know, the wind -- wind is bad because it kills birds. Solar is bad because you still have to use natural materials to make the panels, costs too much. But I never heard anything about magnetic.

REGIONAL JUDICIAL OFFICER SUTIN: Mr. White Mountain, your time is up. I think you need to wrap up.

ROBERT WHITE MOUNTAIN: I never heard anything about geothermal. Those are all renewable energies. They don't stop, they are not expensive, and they don't cost -- you know, if you use -- and they are all renewable. We 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

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

that other sites already permitted do not have and that makes this site very different.

Number one, there's no concentrated roll-front left to mine profitably. It's all been mined out by the TVA a long time ago.

Number two, no ability to dewater the area, and that was determined by the TVA also and why they abandoned the site, so that there's no ability to confine the communicating aquifers.

Number three, the old boreholes were actually holes that they actually were going to use as their wellfield that they abandoned, and that makes this situation even worse.

Number four, the proximity of Igloo, which is the most dangerous collection of unstable nerve gasses and old, unstable munitions in the world buried there. Igloo is downgradient of Dewey-Burdock.

Moving wastewater will destabilize Igloo and pick up even more toxins and move them and likely cause an event of epic proportions.

And finally, number five, the open boreholes and the fence posts and at least some of them have allowed contamination to the aquifer of 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 C E R T I F I C A T E

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3 STATE OF SOUTH DAKOTA }
} SS:
4 COUNTY OF PENNINGTON }

5

6 I, Jacqueline K. Perli, Registered Professional Reporter, do hereby certify that said proceedings were
7 taken by me stenographically and thereafter reduced to typewriting under my supervision; that the foregoing
8 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

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