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1	BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY DIRECTOR
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3	IN RE: Brook Mining Company, LLC
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5	WIDEOCONEEDENCE INCODMAL CONCEDENCE DROCEEDINGS
6	VIDEOCONFERENCE INFORMAL CONFERENCE PROCEEDINGS
7	9:00 a.m., Wednesday May 13, 2020
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9	PURSUANT TO NOTICE duly given to all
10	parties in interest, this matter came on for
11	videoconference informal conference on the 13th day of
12	May, 2020, at 200 West 17th Street, Cheyenne, Wyoming and
13	various locations in Wyoming, before DEQ Director Todd
14	Parfitt; Deputy Director Alan Edwards; Keith Guille; and
15	Matthew VanWormer, Wyoming Attorney General's Office.
16	Also present in Cheyenne was Mr. Craig Hults;
17	present in Sheridan were Mr. Mark Rogaczewski and
18	Mr. Bj Kristiansen.
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1	PROCEEDINGS
2	(Informal conference proceedings
3	commenced 9:00 a.m., May 13, 2020.)
4	DIRECTOR PARFITT: We're going to go ahead
5	and get started. So good morning and thank you for your
6	patience as we work through the technology here.
7	My name is Todd Parfitt. I'm the director of the
8	DEQ.
9	We're here today for an informal conference
10	regarding concerns and objections to the Brook Mine coal
11	permit application. This is an informal conference under
12	the Environmental Quality Act and the Rules of Practice and
13	Procedure Chapter 9 regarding objections to the Brook Mine
14	coal permit application. Proposed Brook Mine would be
15	located approximately 8 miles northwest of Sheridan.
16	There were 2 commenters that requested an
17	informal conference. There were 13 others that requested
18	other forms of meetings, such as informal hearing, informal
19	meeting, and public hearing. Those that requested other
20	forms of meetings were considered to be a request for an
21	informal conference under the Environmental Quality Act.
22	Therefore, it is considered that 15 of the 89 commenters
23	requested this informal conference. Those comments
24	commenters requesting the informal conference are James and
25	Bonnie Aksamit, Christine Anderson, Shannon Anderson on

- 1 behalf of the Powder River Basin Resource Council, John and
- 2 Shelley Barbula, Bill Bensel, Jordan Sweeney of Big Horn
- 3 Coal Company, Anton Bocek, Mary Brezik-Fisher, Louisa
- 4 Crosby, E. Heyward, Pam Marks, Gillian Malone, John
- 5 Vallatich, Rod McCoy, and Joan Tellez.
- For the record, the time is 9:00 a.m. on May 13,
- 7 2020. For public safety during this COVID-19 pandemic,
- 8 this meeting is being conducted virtually through
- 9 GoToWebinar both by video and audio. For public safety
- during this COVID-19 pandemic, this meeting is being
- 11 conducted virtually through go to web on both by video and
- 12 audio --
- MR. GILBERTZ: Hold on. There we go.
- 14 Sorry.
- 15 DIRECTOR PARFITT: Okay. Sorry about that
- 16 technical glitch there.
- But, again, for public safety during this
- 18 COVID-19 pandemic, this meeting is being conducted
- 19 virtually through GoToWebinar both by video and audio and
- 20 is also be streamed live on DEQ's YouTube channel.
- 21 Public notice of this informal conference was
- 22 published in the Sheridan Press on April 29, 2020 and
- 23 May 6, 2020.
- Now I'm going to turn it over to Keith Guille
- 25 with DEQ to provide some information at this time about how

- 1 the GoToWebinar will work for this informal conference.
- 2 So Keith.
- MR. GUILLE: Thank you, Todd.
- 4 Good morning, everyone. My name is Keith Guille.
- 5 I'm the public information officer for the Wyoming
- 6 Department of Environmental Quality. As you know, we're
- 7 here today for an informal conference that was requested by
- 8 several parties. And, again -- once again, for the public
- 9 safety during the COVID-19 pandemic, the meeting is
- 10 available virtually through GoToWebinar and on the Wyoming
- 11 DEQ YouTube channel. You can actually locate that feed on
- 12 our main DEQ website at -- anyone that was watching, I want
- 13 to apologize if that feed was down just briefly. It is now
- 14 live.
- The process of the informal conference will go as
- 16 follows: Director Todd Parfitt will provide additional
- 17 comments. After Director Parfitt's comments, we will begin
- 18 the comment period from the identified parties.
- 19 The list of parties that will be making
- 20 additional comments is located in the bottom right section
- 21 on your -- on your page on GoToWebinar. It's under the
- 22 Attachments. You should be able to -- or Handouts it's
- 23 called. There should be 1 of 5. And the name of the
- 24 document is List of Parties and Agenda. This list -- the
- 25 previous list was also emailed last night to all public

- members that registered on the GoToWebinar system.
- 2 Currently, all public members signed into the
- 3 GoToWebinar are automatically on mute. When it is time for
- 4 a party to provide comments, Director Parfitt will notify
- 5 the party on this system and then unmute their microphone.
- 6 We ask that you speak clearly. The Director will
- 7 then call on individuals who have registered to provide
- 8 oral statements. The commenters' system will be activated
- 9 so she will be able to provide their statement.
- 10 Additionally, when someone is called on to provide a
- 11 statement, the next individual or the person that is on the
- 12 list after them will be called on to speak -- will be
- 13 called on to speak after that previous person.
- If a party is attending the meeting at the
- 15 Sheridan field office, you will provide your statements
- 16 through the conference room system, as you are there with
- 17 Mark Rogaczewski.
- 18 All individuals registered to attend or
- 19 participate in the informal conference will also have the
- 20 ability to provide written statements for the record. That
- 21 written statement can be uploaded to the Smart Comment
- 22 System. And that Smart Comment System, where the link is,
- 23 it's the same link that you use to provide comments for the
- 24 public comment period during the Brook Mine draft permit.
- 25 And that is on our main website. It's on the banner to

- 1 view the Brook Mine comments. You can upload those now
- 2 between 9 and 4 p.m.
- 3 DIRECTOR PARFITT: All right. Thank you,
- 4 Keith.
- 5 And Keith will repeat some of that information
- 6 on how to provide a written statement when we reconvene at
- 7 the -- after the lunch hour today as well.
- 8 So this informal conference is being recorded and
- 9 will be available on the Department's website and YouTube
- 10 channel. This informal conference is also being recorded
- 11 through transcription as required. Transcription is being
- 12 done by Kathy Kendrick with Wyoming Reporting Services. As
- 13 we go through the informal conference, I would ask that
- 14 everybody make sure they speak loudly, clearly and slowly
- 15 so that we can get everything transcribed accurately.
- 16 Here with me in Cheyenne is Alan Edwards, the
- 17 deputy director; Matt VanWormer with the Office of Attorney
- 18 General; Craig Hults with the Land Quality Division; and
- 19 Keith Guille, DEQ's public information officer. Other Land
- 20 Quality Division staff with us in Sheridan are Mark
- 21 Rogaczewski and Bj Kristiansen.
- The purpose of the informal conference is for the
- 23 DEQ to receive more detail on comments received and
- 24 objections raised during the public comment period
- 25 regarding the Brook Mine coal permit application, and to

- 1 help me make a decision on whether to issue or deny the
- 2 permit application.
- This is an informal conference, so the rules of
- 4 the formal hearing process do not apply. Parties are free
- 5 to present information they believe I should consider in
- 6 making a decision on the application. However, there is no
- 7 testimony under oath, and there is no cross-examination.
- 8 All participants -- participation in this conference today
- 9 is voluntary.
- 10 Per the rules of practice and procedure, several
- 11 parties to the informal conference requested and were
- 12 granted access to the permit area relevant to the informal
- 13 conference. The access site tours were provided on May 6,
- 14 2020. I want to say thank you to Brook Mine and Jeff
- 15 Barron for making those arrangements.
- 16 The informal conference was scheduled to begin at
- 9 a.m., which we did. And we will conclude at 4 p.m. or
- 18 sooner, if we've gotten through all the oral statements.
- 19 We will take a break as close to noon as possible for a
- 20 one-hour lunch. The informal conference will be conducted
- 21 in an orderly fashion.
- We had 42 individuals registered for today's
- 23 informal conference, with 25 requesting the opportunity to
- 24 provide an oral statement. I recognize that some will be
- 25 combining their oral statements, in particular with the --

- the Powder River Basin Resource Council and with Brook
- 2 Mine.
- 3 For the record, the 25 public commenters and/or
- Applicant representatives that requested an opportunity to 4
- 5 provide an oral statements are as follows: Bill Bensel;
- 6 Art Hayes, Jr., with the Tongue River Water Users; Joanne
- 7 Westbrook; Mary Brezik-Fisher, James Aksamit; Gillian
- Malone; Joan Tellez; John Buyok; and Tom Bocek; Jordan
- Sweeney with Big Horn Coal; Keith Burron, representing Big 9
- Horn Coal; Priscilla Dillon; Jill Morrison; Mike Wireman; 10
- 11 Gennaro Marino; Robin Bailey -- or, sorry, Robin Bagley;
- 12 and Shannon Anderson.
- 13 The -- they were the five -- last five, Jill
- 14 Morrison, Mike Wireman, Gennaro Marino, Robin Bagley, and
- 15 Shannon Anderson are considered part of the PRBRC
- 16 contingent that will be providing a -- their oral statement
- 17 in the afternoon.
- With Brook Mine, we have Errol Lawrence, Jeff 18
- 19 Barron, Tom Vandergrift, Timothy Ross, Harry Specht, Tom
- 20 Sansonetti, Pat Day, and Joanne Dewald. And they too will
- 21 be considered as one oral statement, but be given
- 22 appropriate time.
- 23 So I will start in the order as was just listed.
- 24 Each registered party will have up to 15 minutes to provide
- 25 their oral statement. Then, because they represent several

- 1 commenters and requesters, I will provide Powder River
- 2 Basin Resource Council 60 minutes to make their oral
- 3 statement and provide supporting information regarding the
- 4 written comments previously submitted.
- 5 I'm assuming, Shannon Anderson, that you will be
- 6 taking the lead for PRBRC, and then if you have -- or as
- 7 you have others that will be presenting, please let us know
- 8 and we can open up their mics for them when they're ready.
- 9 I will then provide the Applicant, Ramaco or
- 10 Brook Mine, 60 minutes to provide any information that they
- 11 would like to offer. The format will be the same as just
- 12 described, whoever the lead is -- and I understand that
- 13 it's Tom Sansonetti will be the lead. Just let us know
- 14 when others will be assisting with presentation and we'll
- 15 turn their mics on.
- 16 For all of those that are providing oral
- 17 statement, I may ask questions as you go along for clarity.
- 18 I will reserve some time upon conclusion of each statement
- 19 to ask any follow-up questions. You will be notified when
- 20 you are nearing the end of your allotted time. Try to give
- 21 you a five-minute warning before the end of your time.
- 22 Upon conclusion of the Brook Mine statement, I
- 23 will also -- I will assess how much time is still
- 24 available. If sufficient time is remaining, I will
- 25 consider asking if any party who provided an oral statement

- 1 would like additional time. If such request is made, I
- 2 will determine how much additional time to make available
- 3 for those parties.
- 4 Again, during the oral statements, I will ask
- 5 questions for clarity and will reserve time for final
- 6 follow-up questions.
- 7 So, finally, some parties who requested an
- 8 opportunity to make an oral statement asked that their
- 9 allotted time be made available for use by other parties.
- 10 We have built that into the allotted time. It is important
- 11 to give everyone who commented during the comment period
- 12 and also requested the opportunity for an oral statement to
- 13 have that opportunity to be heard. Someone who made a
- 14 request to speak elects not to provide an oral statement,
- 15 that time will be made available, if needed, later in the
- 16 informal conference.
- 17 Okay. So one final check.
- 18 Mark, you can hear us fine? And turn on your
- 19 mic.
- 20 MR. GUILLE: I'll have to turn it on.
- 21 DIRECTOR PARFITT: Okay. You're on.
- 22 MR. ROGACZEWSKI: Yeah. I've got head nods
- 23 saying, yes, we can.
- 24 DIRECTOR PARFITT: And, Craig, you can hear
- 25 us?

- 1 MR. HULTS: Yes, I can hear you good.
- 2 DIRECTOR PARFITT: Okay. So now we will
- 3 take the first presenter for oral statement, and that would
- 4 be Bill Bensel.
- 5 MR. GUILLE: Bill, can you hear us?
- 6 MR. BENSEL: I can hear you. How about on
- 7 the other end?
- MR. GUILLE: We can hear you as well, sir.
- 9 DIRECTOR PARFITT: We can hear you fine.
- MR. BENSEL: Okay. Very good. Success.
- My name is Bill Bensel. I live outside of
- 12 Ranchester, Wyoming.
- 13 Thank you, Director Parfitt, and your DEQ staff
- 14 for arranging this meeting. I know it's been difficult to
- 15 provide for due process for public input, especially under
- 16 the current conditions of the pandemic. I trust that the
- 17 neighbors and concerned parties will have their full
- 18 opportunity to speak on record to the impacts of this
- 19 controversial and questionable mine proposal located in the
- 20 Tongue River Valley.
- I live 2.6 miles to the south of the proposed
- 22 mine boundary. I am very concerned with the number of
- 23 issues, which I have expressed to you previously including
- 24 impacts on ground and surface water, blasting and air
- 25 quality, subsidence, and the more dire effects on

- 1 landowners who live directly adjacent to the mine site.
- 2 Deriving details for the mine have been vague at
- 3 best, thus your many DEQ revisions to the mine plan.
- 4 Attempting to nail down the truth and facts of the proposal
- 5 for mining and the directly associated Ramaco experimental
- 6 scheme has been frustrating with ever-changing plans and
- 7 statements.
- 8 As an irrigator, I am extremely concerned that
- 9 the mine proponents have avoided identification of water
- 10 rights required of the mine and processing. Postponing any
- 11 adjudication of water rights will have a negative ripple
- 12 effect on irrigation and municipal use up and down Tongue
- 13 River and has the potential to bring renewed legal
- 14 consequences under the Yellowstone compact.
- 15 That all said, I want to focus my comments this
- 16 morning on the impacts of the major coal mine development
- 17 on recreation and hunter use. Tongue River and Goose Creek
- 18 are major recreational areas accessible to the public for a
- 19 wide variety of recreational uses. The area provides for
- 20 walking, biking, skiing, fishing, boating and hunting.
- 21 Recreational use and public access is limited in the
- 22 Sheridan area, and this area adjacent and underlaying the
- 23 mine receives a lot of use in all seasons of the year.
- The proposed Brook Mine boundary overlaps and is
- 25 directly adjacent to these popular recreational areas.

- 1 Blasting, hauling, and high-intensity industrial activity
- 2 associated with the production coal mine will compromise
- 3 safety, reduce water quality, and degrade the high-quality
- 4 hunting, fishing, and other recreational experiences that
- 5 are so valued by the public.
- I have to mention there are also historic
- 7 cemetery locations within the proposed mine boundary that
- 8 should never be disturbed.
- 9 The proposed mine boundary overlays the Wyoming
- 10 Game & Fish Hunter Management Walk-in Areas Number 1 and 6.
- 11 High recreational demand in a county with very limited
- 12 access drove the access for these areas for public hunting
- 13 and fishing. This area is stocked with pheasants paid for
- 14 with hunter dollars through the Wyoming Game & Fish
- 15 Department. I see the highest hunter use levels of all
- 16 Sheridan County hunter access areas right here.
- 17 Also, nonprofit organizations including the
- 18 Sheridan County Land Trust and National Wild Turkey
- 19 Federation contributed their support to enhance public use
- 20 here. They've invested. These areas also provide hunting
- 21 opportunities for other species, including deer, turkey,
- 22 waterfowl, and predators. Recreational target shooting
- 23 occurs here as well.
- There are also additional upland birds, including
- 25 gray partridge and sage grouse. But Kleenburn Ponds

- 1 Recreation Area was also created due to the high
- 2 recreational demands of our Sheridan County population.
- 3 This area gets tremendous use for fishing, boating, hiking,
- 4 and other related uses.
- 5 Fish are stocked by the Wyoming Game & Fish
- 6 through our license fees. The proposed Brook Mine will rob
- 7 the citizens of this county of a special asset that they
- 8 value and enjoy. To avoid disturbance and loss of
- 9 recreational use, no coal mining should occur within one
- 10 and one-half miles from Walk-in and Hunter-Management Areas
- 11 1, 6 and 7 and the adjoining state and county lands that
- 12 are used for recreational purposes.
- That said, there is no need for a full mine
- 14 development here. The logic of this proposal is absent
- 15 whether it be to feed experimental common -- carbon
- 16 research facilities or supply to the thermal coal market.
- 17 That is the end of my statement.
- 18 DIRECTOR PARFITT: Thank you, Bill. I do
- 19 have one question for you. If you wouldn't mind just
- 20 speaking a little bit to the -- you made mention of -- in
- 21 your written comments that the Sheridan County
- 22 Comprehensive Plan Land Use document, can you speak a
- 23 little bit to that?
- MR. BENSEL: Yes, Todd. The comprehensive
- 25 plan that was recently updated does not include an

- 1 industrial site for this mine boundary area. It's
- 2 currently agricultural use. So there would have to be a
- 3 rezoning process going forward to jive with the
- 4 comprehensive plan and allow the development of the mine.
- 5 DIRECTOR PARFITT: Okay. Thank you. Thank
- 6 you. And thank you for your statement.
- 7 Okay. So next on the list we have Art Hayes with
- 8 the Tongue River Water Users.
- 9 DEPUTY DIRECTOR EDWARDS: Who was up next
- 10 after --
- 11 DIRECTOR PARFITT: Oh, yeah. And then
- 12 Joanne Westbrook will be up after this.
- 13 Art, are you there?
- 14 MR. HAYES: I think I'm muted. Can you
- 15 hear me?
- MR. GUILLE: We gotcha.
- MR. HAYES: Okay. I am Art Hayes, Jr.,
- 18 president of the Tongue River Water Users Association. I
- 19 am happy to be able to address this DEQ meeting today.
- 20 And I would like to address it in two things.
- 21 Both water availability and water quality. The Tongue
- 22 River is really the lifeblood of both Montana and Wyoming
- 23 agriculture. And like most rivers in the western United
- 24 States, Tongue River is overappropriated.
- 25 Under the Yellowstone Compacts, Montana can and

- 1 will make a call on Wyoming for water in dry years. United
- 2 States -- U.S. Supreme Court Case Number 137, Original,
- 3 Special Master Burton -- Burton Thompson has laid out much
- 4 of a plan for how we manage this river in the future.
- 5 It -- and it's my understanding that any water rights
- 6 obtained for this mine will be post-'50.
- 7 If Montana makes a call, those water rights will
- 8 be -- have to be shut down until the call is lifted or
- 9 replacement water found. Under the compacts, all Wyoming
- 10 water that is being stored in reservoirs and Montana makes
- 11 a call, that water will be measured. And if Tongue River
- 12 Reservoir does not fill, those pos-'50 waters will have to
- 13 be released downstream to Montana.
- 14 For groundwater I would like to quote from the
- 15 Special Master's findings, Report -- Final Report, page 92.
- 16 Quoting, I previously concluded that Wyoming must ensure
- 17 that post-1950 groundwater pumping does not interfere with
- 18 the continued enjoyment of the pre-'50s surface rights of
- 19 Montana. If Montana shows that groundwater pumping in
- 20 Wyoming has depleted the Stateline flow at a time when
- 21 water is needed for pre-'50 appropriations the rights in
- 22 Montana, Montana has established a violation of the
- 23 Compact.
- Granted, we have -- the special master has laid
- 25 out quidance, and Montana is trying to work -- is working

- 1 very closely with Wyoming now, after this case, to help
- 2 manage this river. But any pre-'50 water -- or post-'50
- 3 water right will be called on. I also can see that a
- 4 downstream user in Wyoming could make a call if this mine
- 5 is -- is taking water out of the alluvium for its operation
- 6 and decreasing the flow in the river and would affect a lot
- 7 of Wyoming water users, that Wyoming water users would
- 8 probably have to make a call.
- 9 As to the water quality, in the past water
- 10 quality in Tongue River is turning saline. The Montana
- 11 water users and others went to -- before the Montana Board
- 12 of Environmental Review and established water quality
- 13 standards for this river, and those were approved by the
- 14 EPA.
- 15 Wyoming challenged those Water Quality Standards
- 16 in federal court in Cheyenne. Judge Brimmer, after
- 17 planning a long time and several hearings, sent those water
- 18 qualities back to the EPA for further study. And the EPA,
- 19 after quite a while, approved those EPA Water Quality
- 20 Standards for Montana.
- 21 If you look at the Montana State mine gauge --
- 22 USGA -- USGS gauges, you will see that the water quality in
- 23 Tongue River at the state line when the gauge opened up
- 24 around March 28 -- or 25th -- was close to that 1,000 EC
- 25 standard of Montana. After -- it does not seem to drop

- 1 until after we start getting water out of the mountain. I
- 2 think if you look at the EC gauge at Miles City, we have
- 3 been running over the thousand EC standard for 60 days so
- 4 far this year. It's been running average of 1200. This is
- 5 harmful water. This is -- actually will poison our ground,
- 6 salt our ground, and it's hard on wildlife and new plants.
- 7 Young alfalfa cannot stand this high of EC water.
- 8 We -- we are very concerned. We must learn from
- 9 our past experiences with coal-bed methane. And where we
- 10 have -- it seems like when methane started, ECs in the
- 11 river started way up and they have not started dropping.
- 12 We're still going up. We're still experiencing the effect
- 13 of methane.
- 14 And I would like to quote Dr. Larry Mundt from
- 15 the University of Wyoming. He said any time when you bring
- 16 these salts up from these deep geological formations and
- 17 put them on the surface, you're going to have a negative
- 18 effect on irrigated agriculture.
- But I am also concerned that the DEQs from both
- 20 Wyoming and Montana failed to address this as a problem,
- 21 and we are the ones who are suffering. And we will
- 22 continue to fight for our clean water and for water, our
- 23 appropriated water from the compacts.
- I thank you for the opportunity to speak, and I
- 25 will attempt to answer any questions you have at this time.

- 1 DIRECTOR PARFITT: Okay. Thank you, Art.
- 2 I appreciate your -- your statement, and appreciate the
- 3 written comments that you've submitted. And we'll be
- 4 taking those into consideration.
- 5 Do we have any -- do you have any?
- DEPUTY DIRECTOR EDWARDS: No.
- 7 DIRECTOR PARFITT: So thank you, Art. We
- 8 don't have any follow-up questions for you at this time.
- 9 So next up is Joanne Westbrook, and then after
- 10 Joanne will be Mary Brezik-Fisher.
- 11 So Joanne.
- 12 MS. WESTBROOK: Yes. I'm Joanne Westbrook.
- 13 I'm a concerned citizen and a landowner in the area of
- 14 Ranchester. Our family uses one of -- the road up Slater
- 15 Creek that passes through the mine area, and would have to
- 16 be located at some point, they say, which is concerning
- 17 because there's nothing written out that's specified as to
- 18 what might happen with that road, who would pay for it,
- 19 anything about the conditions of the road, or anything of
- 20 that sort.
- 21 The other main concerns I have about this mine
- 22 are the water quality and the quantity, to the proximity of
- 23 Slater Creek and runoff into Slater Creek. That Slater
- 24 Creek goes right next to the mine, the proposed -- the
- 25 first part of the proposed mine. And any runoff is going

- 1 to go right from and right into the Tongue River.
- 2 And the proposed water usage of the mine, around
- 3 300,000 gals a day, is not specified where they're going to
- 4 get that water, how it's going to be provided is not
- 5 specified in that permit. It's -- it's very important
- 6 that -- that usage not be allowed to affect the stock water
- 7 or the wells in the area or the quality of the water in the
- 8 Tongue River.
- 9 And I'm concerned about the recreation areas, how
- 10 would they be replaced if they're affected. Would they be
- 11 replaced? Would we just lose those?
- 12 I think the struggle over the mine is in the way
- 13 of an example of the struggle in Sheridan County and lots
- 14 of counties about what course is the County going to take?
- 15 How are the residents going to be treated? How is the land
- 16 going to be treated? How is the wildlife going to be
- 17 treated? Is that process going to be fair and open and
- 18 transparent? And is it going to be spelled out in a
- 19 rigorous way or just kind of left to chance? And we -- we
- 20 really need to see it spelled out in a way that's decent
- 21 for the environment and decent for the people and fair.
- 22 And I appreciate the opportunity to make these
- 23 comments. Thank you.
- 24 DIRECTOR PARFITT: Okay. Thank you,
- 25 Joanne. Appreciate your comments. I don't think we have

- 1 any further questions at this time.
- MS. WESTBROOK: Okay. 2
- 3 DIRECTOR PARFITT: Thank you for commenting
- and providing your oral statement. 4
- 5 MS. WESTBROOK: Thank you.
- DIRECTOR PARFITT: Okay. Next up is Mary 6
- 7 Brezik-Fisher, followed by Gillian Malone.
- So Mary. 8
- 9 MS. BREZIK-FISHER: Yes, I am here. Can
- 10 you hear me?
- DIRECTOR PARFITT: Yeah. We can hear you 11
- 12 quite well.
- 13 MS. BREZIK-FISHER: Okay. Great. This is
- 14 Mary Brezik-Fisher.
- 15 Thank you, Mr. Parfitt, for the opportunity to
- make a statement on the record. And also thanks to Keith 16
- 17 and Craig and the other DEQ folks who made the arrangements
- 18 to facilitate this informal conference. As you know, my
- 19 husband and I are landowners within a half mile of the
- 20 planned coal mine, and were parties to the previous
- 21 contested case hearing conducted by the Environmental
- Quality Council. 2.2
- 23 We are still parties to litigation currently
- 24 pending with the Wyoming Supreme Court based on Ramaco's
- 25 appeal of the EQC's 29-page ruling outlining serious

- 1 deficiencies with the proposed mine plan.
- 2 On April 23, 2020, the Fishers submitted an
- 3 objection letter to your office regarding the current
- 4 permit application. And I understand that that objection
- 5 letter is part of the record in this proceeding. We
- 6 incorporate those comments with the following
- 7 supplementation: Good decisions are based on a solid
- 8 understanding of both sides of an issue. Ramaco has done a
- 9 masterful job of drowning out landowners' concerns with its
- 10 slick media campaign and promises of an economic windfall
- 11 for our community.
- 12 Unfortunately, they have made a concerted effort
- 13 to thwart any attempts made by landowners to question their
- 14 proposed plan. Instead of having a meeting in which
- 15 questions and concerns could be expressed, the landowners
- 16 were forced into a litigious contested case proceeding,
- 17 during which time Ramaco's attorneys filed motion after
- 18 motion to dismiss and strike the landowners' participation
- 19 and testimony in that process.
- Thankfully, the EQC took a reasoned and
- 21 scientific approach to this matter. They listened. And
- 22 they decided after hearing both sides of the argument.
- 23 Mr. Parfitt, I implore you to do the same.
- 24 There were a number of comments submitted to the
- 25 DEQ, and I have reviewed those comments on your website.

- 1 There were a host of supporters of the proposed mine who
- 2 made comments touting the promised economic benefits.
- 3 While reviewing those comments, please note the obvious
- 4 distinction between those folks and the voices of the
- 5 landowners who reside within close proximity of the mine
- 6 operation, and who will be subjected to blasting, dust,
- 7 noise, sirens, diminished air quality, heavy road traffic
- and other significant impacts seven days a week. 8
- 9 I venture to guess that most, if not all, of the
- 10 local proponents of Ramaco's plan, including local and
- 11 state government officials, none of whom live within half a
- 12 mile of the proposed mine, none of them -- or not many of
- 13 them have reviewed even one page of the ever-changing mine
- 14 plan. And they have made little effort, in my estimation,
- 15 to obtain the critical facts from landowners or other
- 16 sources.
- My husband and I do live there. We have studied 17
- and researched the mine plans for these last several years. 18
- 19 We've researched the subsidence in hydrology issues and
- 20 other important aspects of the proposed coal mine, as have
- 21 our neighbors, and I urge you to take that into
- 22 consideration during this hearing.
- 23 As described in detail in our recent letter of
- 24 objection, the situation at hand is quite unique, given the
- 25 location of this proposed coal mine in the middle of the

- 1 verdant Tongue River Valley. These are the facts. There
- 2 are over 100 landowners within a half mile of the mine.
- 3 There are over 350 domestic and stock water wells which
- could be impacted. There is testimony in the record at 4
- the EQC hearing that drawdown of wells could be as much as 5
- 6 25 feet. And that includes our well.
- 7 Hundreds of irrigators in Montana and Wyoming
- utilize this area for their agricultural operations. And 8
- 9 countless members of the public, including a significant
- 10 tourist trade, participate in the many recreational
- 11 opportunities this fertile valley offers.
- 12 This is unlike any other coal mine operation in
- 13 Wyoming, such as the mines in Gillette's "industrial
- 14 valley." Careful consideration of these deniable facts has
- 15 to be undertaken to ensure that impacts will be minimized
- 16 and landowners' properties, water wells, and very
- livelihood will be protected, as well as the Tongue River 17
- 18 and Wyoming's natural resources -- natural resources.
- 19 Following the contested case hearing, Brook has
- 20 modified its original mine plan, and some improvements have
- 21 been made. However, in our estimation, it is not yet
- 22 accurate and complete. Experts who have reviewed this
- 23 revised plan still have grave concerns about subsidence,
- 24 hydrology, and alluvial valley floor issues, as expressed
- 25 in their reports and in testimony on -- I understand that

- 1 they will be providing in this informal conference.
- 2 There are still many unanswered questions about
- 3 the viability of a new coal mine in the face of the
- tremendous decline of the coal industry. There is still 4
- work to be done on the mine plan to ensure greater 5
- 6 protection to the area, properties, wells, and quality of
- 7 life, given this unique location and the number of
- landowners who will be impacted. 8
- 9 Serious questions remain on the risks posed by
- 10 this mine. The comments by Dr. Marino and Mr. Wireman
- 11 highlight that Brook Mine has not yet done the
- 12 comprehensive studies the EQC says should be done to
- 13 support this mine permit application under a scientific and
- not political standard. Therefore, this permit application 14
- 15 should be denied.
- 16 In Wyoming we often hear the phrase "trust but
- 17 verify." If Brook is just granted a permit for the TR-1
- 18 area, the first phase of the operation, then it is given
- 19 the opportunity to verify the claims and assurances it has
- 20 made, and it can easily apply to modify its plan to include
- 21 new areas in future phases. The coal mines in Gillette
- 22 have done this for decades.
- 23 On the other hand, if Dr. Marino and Mike
- 24 Wireman's concerns prove to be true, Brook would not have
- 25 the advantage of snarling the DEQ up in illegal maneuvers

- 1 to allow it to keep mining. If Brook is as confident as it
- 2 says it is about not causing environmental damage, it
- 3 should welcome this opportunity to verify its claims, not
- 4 find excuses to resist it. Wyoming and its citizens
- 5 deserve for the DEQ to take this cautious approach in the
- 6 face of serious concerns raised.
- 7 If the director ultimately deems this mine plan
- 8 complete and approves the current plan, my husband and I
- 9 will have to disagree with that decision. Having said
- 10 that, however, we would be naive to think the director will
- 11 deny the permit application on this round given the notable
- 12 political pressure that he and the DEQ are under.
- 13 Therefore, in an effort to ensure greater safety and
- 14 protection for the over 100 landowners, 350 water wells,
- 15 and the Tongue River Valley as a whole, and for the trust
- 16 and verify reasons stated above, if the director approves
- 17 the current mine plan, we request that the director
- 18 consider approval of only phase 1, the first five years,
- 19 with the following conditions and restrictions, many of
- 20 which were discussed and approved in the 2017 contested
- 21 case hearing.
- 22 Blasting. Instead of sunrise to one hour before
- 23 sunset seven days per week, as stated in the current mine
- 24 plan, blasting should be limited to five days per week,
- 25 Monday through Friday, from approximately 8 a.m. to

- 1 approximately 6 p.m., and excluding holidays. Testimony at
- 2 the EQC from both DEQ and Brook Mine indicated that this
- 3 would be a reasonable compromise to help mitigate safety
- 4 and damage concerns.
- 5 An April 14, 2020 memorandum prepared by DEQ
- 6 blasting program manager, Reo Barney, sent to landowners
- 7 notes that due to the number of historic stone structures,
- 8 some dating over 100 years, located within close proximity
- 9 to blasting operations, the -- excuse me -- the DEQ can
- 10 reduce the maximum allowable ground vibration to ensure
- 11 greater damage protection. We request that the ground
- 12 vibration be reduced to 0.5 inches per second as referenced
- 13 in Mr. Barney's memorandum.
- 14 Blasting should be limited or restricted during
- 15 inversions or high wind or weather events. There is no
- 16 provision for this in the current mine plan, but it is a
- 17 common condition in the Gillette mines, as testified to in
- 18 the EOC hearing.
- 19 A pre-blast survey and/or a downhole review of
- 20 their water well by request of any landowner within a half
- 21 mile of the mine should be conducted. And if a well
- 22 becomes impaired after mining operations commence, Ramaco/
- 23 Brook Mine should be obligated to supply replacement water
- 24 until such time as it can be determined what the cause of
- 25 the impairment is, and indefinitely if Brook operators are

- 1 the cause.
- 2 As agreed to by DEQ and Brook Mine in the EQC
- 3 hearing, landowners who request seismograph monitoring of
- 4 their property prior to blasting should be accommodated.
- 5 As agreed to by DEQ and Brook Mine in the EQC hearing,
- 6 "adjudicated" and "registered" wells should be included in
- 7 the mine plan.
- 8 As agreed to by DEQ and Brook Mine in the EQC
- 9 hearing, monitors should be placed upstream and downstream
- 10 in the Tongue River.
- 11 Additional scientific studies and data collection
- 12 needs to be completed and characterizing current baseline
- 13 conditions. And I expect that Dr. Marino and Mike Wireman
- 14 will further expand on that issue.
- And, finally, the 29-page order from the EQC
- 16 following a contested case hearing should be carefully
- 17 analyzed by DEQ and conditions or restrictions should be
- 18 imposed on the current mine plan which reflect
- 19 implementation of the provisions of that order.
- I just have a few more what I consider
- 21 significant unanswered questions. Some of these were
- 22 addressed in our April 23rd letter. The current mine plan
- 23 states that Brook Mine will be using approximately 304,000
- 24 gallons of water per day. That is 304,000 gallons of water
- 25 per day. And that 87 percent of the water will come from

- 1 surface rights, which Brook Mine has not yet secured.
- 2 I understand also that recently a comment was
- 3 made that Brook Mine may need to purchase water from the
- 4 town of Ranchester. How feasible is that? How is it that
- 5 a permit can be approved utilizing that significant amount
- 6 of water when they have not identified their source of
- 7 water? Obviously, those of us who live in that area and
- who utilize that area are concerned that our groundwater
- 9 will be further impacted as a result.
- 10 Traffic control plan. The mine plan acknowledges
- 11 that the blasting operations can potentially affect public
- 12 roads and could result in road blockages and closures.
- 13 This can cause a major disruption in travel along the
- 14 frontage road and potentially even Interstate 90. What
- 15 steps will be taken to minimize those impacts? Road damage
- 16 and safety issues. Who will be responsible for maintenance
- 17 and repairs to county roads utilized by mine operation? If
- 18 coal is to be transported on the frontage road with heavy
- 19 truck traffic, what measures or restrictions are in place
- 20 to ensure the safety of others traveling on that road such
- 21 as slow-moving ag machinery, bicyclists, runners, local
- 22 folks, and recreationists?
- 23 MR. GUILLE: Mary, this Keith Guille.
- 24 MS. BREZIK-FISHER: Yes.
- 25 MR. GUILLE: I just want to let you know

- 1 you have a couple minutes left. I just want to --
- 2 MS. BREZIK-FISHER: I just -- okay. Great.
- 3 Thank you. I'm almost finished.
- 4 It's my understanding that if the mine plan is
- 5 approved for the entire life of the plan, approximately 39
- 6 years, if Brook Mining Company or Ramaco sell to another
- 7 company or foreign entity, that can create some serious
- 8 consequences.
- 9 Thank you for providing a format to voice our
- 10 concerns.
- 11 DIRECTOR PARFITT: Thanks, Mary.
- 12 Just a couple of things. First, I wanted to let
- 13 you know, yes, indeed, we do have your seven-page letter
- 14 that was dated April 23rd, and that is part of the
- 15 administrative record. Just --
- 16 MS. BREZIK-FISHER: Thank you.
- 17 DIRECTOR PARFITT: Yeah. And then -- and
- 18 this is just for the record. You had mentioned about
- 19 monitors upstream and downstream on the Tonque River. Can
- 20 you elaborate on that in terms of what -- what would you
- 21 like to see monitored for? And --
- 22 MS. BREZIK-FISHER: Well --
- 23 DIRECTOR PARFITT: -- if you don't know,
- 2.4 that's fine.
- 25 MS. BREZIK-FISHER: I think I'd prefer to

- 1 defer that. I'm not a hydrologist, and I think Mike
- 2 Wireman can fully answer your question.
- 3 DIRECTOR PARFITT: Okay. That's fine.
- 4 Thank you for that, and your well-organized comments and
- 5 your oral statement.
- 6 MS. BREZIK-FISHER: Thank you.
- 7 DIRECTOR PARFITT: Okay. Next up is
- 8 Gillian Malone, which will be followed by Joan Tellez.
- 9 But, Gillian, do you want to share your video?
- MS. MALONE: Yes. Can you hear me?
- 11 DIRECTOR PARFITT: Yeah. We can hear you
- 12 just fine.
- MS. MALONE: Okay. Can you see me?
- 14 DIRECTOR PARFITT: I cannot yet.
- MS. MALONE: Okay. I was just wondering,
- 16 because I haven't been able to see anybody presenting
- 17 remotely, so I was just curious if you could see me.
- 18 MR. GUILLE: So I did, Gillian -- this is
- 19 Keith. I did send you a webcam request. Let me know if
- 20 you receive it.
- MS. MALONE: Okay. It says share my
- 22 webcam. Is that what you mean?
- MR. GUILLE: That's what I mean, yes.
- 24 Thank you.
- MS. MALONE: And click on that?

- 1 MR. GUILLE: Yes, please.
- 2 MS. MALONE: It's not working.
- 3 MR. GUILLE: Not working, huh?
- 4 MS. MALONE: It's just my computer doesn't
- want to do it. 5
- 6 MR. GUILLE: Okay. Well, we'll --
- 7 MS. MALONE: So, anyway, as long as you can
- 8 hear me, that's fine.
- 9 MR. GUILLE: We can.
- 10 MS. MALONE: I can see myself now, but I
- just -- some of this technology eludes me. 11
- 12 MR. GUILLE: I understand that. I'm in the
- 13 same boat, so...
- 14 MS. MALONE: Okay. So I'll proceed.
- 15 Thank you for taking my comments. These are in
- 16 addition to my written comments, and partly in response to
- 17 a mine site tour that I was able to attend last week, for
- 18 which I am grateful.
- 19 I first became involved with this proposal -- or
- 20 a series of proposals since Ramaco entered our community
- 21 as a recreationist. I love to hike, boat, and watch birds,
- 22 and the Tongue River corridor provides ample opportunity
- 23 for all of these, largely due to the walk-in areas provided
- 24 by Game & Fish, in partnership with private landowners, the
- 25 State and Sheridan County, through parks and rec.

- 1 The fact that historically it was a mine and
- 2 industrialized doesn't take away from the experience. In
- 3 fact, it adds a layer of interest when you encounter an
- 4 artifact from bygone days. As a teenager, I was friends
- 5 with a family in Acme, where small houses with giant
- 6 cottonwoods overhead were home to employees of the Acme
- 7 Power Plant. This area is now frequented by pheasant
- 8 hunters in the fall. And in the spring and summer boaters
- 9 put into the Tongue River here.
- I have never been to these recreation sites
- 11 without seeing people. Kleenburn Pond, fishermen and
- 12 women, families picnicking, pushing strollers, and the
- 13 walk-in areas that extend for miles in the hills behind
- 14 Monarch and above Acme, north of the Tongue.
- This area in particular is very close to Ramaco's
- 16 planned staging and equipment storage area. And not far
- 17 from here, as the crow flies, is the first mine site, the
- 18 strip mine, on land owned by Taylor Quarry.
- 19 In fact, Game & Fish's hunter management walk-in
- 20 area abuts the mine site. And yet Ramaco claims recreation
- 21 will be unaffected by mining activity. I disagree. In
- 22 fact, I anticipate this area will be closed due to the
- 23 potential hazards of blasting, which the Company insists
- 24 must be allowed to occur 24/7 to accommodate their
- 25 schedule, even though they admit they will blast a maximum

- 1 of once every two weeks.
- 2 Also close to the mine site are historic homes
- 3 and farming operations of Tongue River Valley families who
- 4 will be disproportionately affected by blasting. At a
- 5 minimum, blasting shall be limited to predesignated days of
- 6 the month, which would allow hunters and recreationists and
- 7 local residents to go about their lives in an informed
- 8 manner.
- 9 On our tour of the mine sites, we realized that
- 10 moving equipment from the laydown or equipment storage area
- 11 to the mine site, in spite of its close proximity as the
- 12 crow flies, would have to occur on public access roads,
- 13 because Brook Mine will not be allowed to go through Big
- 14 Horn Coal property at that point.
- 15 These haul roads will actually be the county
- 16 roads and highways the taxpayers maintain and support. But
- 17 one -- none of this has been spelled out by the Company.
- 18 Other questions. Where will they get water for
- 19 dust control? Where will they get the 300,000 gallons plus
- 20 of surface water they need for their operating without --
- 21 for their operations per day without any water rights?
- 22 There are still too many unanswered questions, and this
- 23 permit application is still incomplete.
- 24 My educational background is in environmental
- 25 sociology. And I worked doing social impact assessment for

- projects not unlike this one, except for some crucial
- 2 differences. My work took place on federal ground and
- 3 therefore, fell under the guidelines of NEPA, the National
- Environmental Policy Act. Meaning the proponents of a 4
- 5 project were required to take into account the impacts
- 6 their proposal would likely have on people's lives.
- 7 The most successful projects tended to be the
- 8 result of the proponent actually engaging the community in
- 9 a dialogue so that residents were not left in the dark as
- 10 to what impacts were likely to occur and what effects they
- 11 would have on people's lives and livelihoods.
- 12 Ramaco owns the land they claim will serve as a
- 13 research center for coal to carbon fiber manufacturing, and
- 14 they are, therefore, immune from having to abide by federal
- 15 regulations. But it doesn't mean they aren't accountable
- 16 to this community, yet they have made themselves completely
- 17 unavailable to the Tongue River Valley residents who simply
- 18 want their questions answered. I know it's been a long
- 19 process, and we all want it to be over, but you, the DEQ,
- 20 Todd Parfitt, are charged with making the right decision,
- 21 not the decision that makes the most political sense. I
- 22 commend you for persevering so far round after round after
- 23 round, but now it is time to do the right thing, based on
- 24 the facts you have before you and the testimony you've
- 25 already received today and will receive later on, and deny

- 1 this permit for still being incomplete and for the fact
- 2 that the Tongue River, the alluvial valley, and the
- 3 residents' well-being and quality of life are at stake. If
- you feel you cannot deny the permit, then at the very least 4
- 5 the term should be vastly reduced to the first phase of the
- 6 project so that the mining operation can be stringently
- 7 monitored.
- 8 We now know that Ramaco is much more dependent on
- 9 outside funding, specifically federal funding, than they
- 10 would have had us believe. Case in point, is the iCAM
- 11 building, which started out at 10,000 square feet, was
- 12 scaled back to 6,000 square feet for lack of funding, and
- 13 now is back to 10,000 square feet as a result of federal
- 14 grant coming through. Considering that much of the public
- 15 support for this project rested on the perceived lack of
- 16 need for public financing, this turn of events warrants
- considerable scrutiny. 17
- 18 And when it comes to the mine, adequate bonding
- becomes the issue. There is nothing about this project 19
- 20 that inspires confidence in its success. Coal mines are on
- 21 the way out. There are competing mines supplying domestic
- coal, and carbon fiber technology is yet unproven. 22
- 23 All of this screams for proceeding with utmost
- 24 caution, and the last thing we need right now is another
- 25 failed coal mine in Wyoming.

- 1 Thank you so much for taking my comments.
- 2 MR. GUILLE: Sorry. You were on mute.
- 3 DIRECTOR PARFITT: Oh, okay. Sorry. I'll
- start that over. 4
- 5 So thank you, Gillian, for your comments.
- 6 Appreciate those. And also appreciate the written
- 7 statement -- comments that you provided as well.
- 8 One thing I've noticed here is that I skipped
- 9 over James Aksamit, but we'll go to Joan, as scheduled
- 10 next, and then James.
- 11 MR. GUILLE: Just a second. Let me get to
- 12 them. All right. We're ready to go on.
- 13 DIRECTOR PARFITT: You ready?
- 14 MR. GUILLE: One second.
- 15 MS. TELLEZ: Good morning. I'm
- 16 Joan Tellez, and I'd like to thank you very much for
- 17 allowing this informal hearing to happen. I know it's
- 18 been tough for you to get it together, but we appreciate
- 19 your ears.
- 20 Okay? A little bit about myself. I just want to
- 21 let you know I'm a partner in our family farm, which is
- 22 located at 25 Monarch Road, which is catty-corner across
- 23 the interstate from the proposed starting of this strip
- 2.4 mine:
- 25 We do have a lot of -- I have a lot of concerns

- 1 about the changing plans always of the Brook Mine.
- 2 Information written in the permit may not be what actually
- 3 will happen, because Ramaco's plan keeps changing, and
- 4 that's been part of their behavior and their past history.
- You know, a few years ago Ramaco had a big ad in 5
- 6 the newspaper that they were going to hire between 3,000
- 7 and 3500 employees to work in the mine and to work in their
- 8 research center. The Company has not been transparent at
- 9 all with their plans or with the landowners. So, anyway,
- 10 we -- we've tried to ask questions. We've tried to get
- 11 meetings, and they refuse to meet with us.
- 12 So I'm just going to go on a little bit with --
- 13 that's just kind of a little bit of the background. I just
- 14 want you to keep my letter on file. It is dated April 8th
- 15 of 2020. I'd like that in the permanent record, please.
- 16 But I have a question for you. What is the
- 17 purpose of the DEQ? And does the DEQ protect everyone
- 18 equally, or is it more prone to protecting industry?
- 19 Because in our -- in our workings here, and everything, it
- 20 seems like the landowners have not been listened to. We're
- 21 worried about our air, water, and land, but it seems like
- 22 that's all just kind of shoved under the carpet. And, you
- 23 know, the industry kind of gets -- gets the upper hand.
- 24 But who will protect our air, water, and lands if this
- 25 permit goes through?

- Okay. I don't know if you've heard or not, but 1
- 2 this week Decker Coal laid off 98 employees. That pretty
- 3 much shut their mine down. And that's been a big mine for
- how many years? Probably 40 years? 4
- 5 Spring Creek Coal just laid off 75 employees a
- 6 couple weeks ago. With these two big established mines
- 7 slowing their production and laying off employees, I am
- 8 curious how Ramaco plans to start an open pit mine without
- 9 being certain of who will do the work, and yet they have no
- 10 customers.
- 11 Who will the contractors be? Will they bring
- 12 somebody in from Kentucky? Because they're not saying
- 13 anything about the local hiring like they originally
- advertised, especially in that 3,000 to 3500 employees. 14
- 15 With this being contracted, the employees will
- 16 not necessarily receive benefits. They won't from Ramaco
- 17 unless their contractor provides benefits for them. Again,
- 18 the jobs advertised will not be what the public was
- promised. And at that time, when they promised all of 19
- 20 those jobs, Sheridan County was -- they were just ecstatic
- 21 because look at all these jobs this company is bringing in.
- 22 To this date, it has not shown it's brought that many jobs
- 23 in.
- 24 Okay. Anyway -- anyway, my thing is the
- 25 speculation of jobs and economic boost to Sheridan and

- 1 Wyoming by Ramaco was well publicized. However, how many
- 2 employees do they have besides their lawyers and the people
- 3 who have worked on the permit and their office manager?
- 4 They've also got a little building with some 3D printers.
- 5 They have a few employees there. But it's not what they've
- 6 been publicizing.
- 7 All along their plan, we have been hearing, was
- 8 for highwall mining, but now all of a sudden they're
- 9 starting with an open pit. We were told the open pit is
- 10 going to be 150 feet wide by a thousand feet long. Think
- 11 about that. How big is a football field? Is this very
- 12 much bigger than a football field? By the time they take
- 13 the overburden off and get in there, there's going to be a
- 14 lot of contamination. I don't care what they say that
- 15 they're going to block it, it's going to run downhill,
- 16 because that's where it is. It's on top of a hill and it
- 17 runs down to Slater Creek.
- 18 Okay. So ever since we heard about this mine in
- 19 2015, it seems the plans have continually changed. That's
- 20 one plan for instance. You know, the plans of having all
- 21 those employees in Sheridan, all the employees in Wyoming,
- 22 all of this economic boost that's going to come to the
- 23 state of Wyoming, where is it coming from?
- 24 The landowners have requested meetings to ask
- 25 questions on what was being planned because they just

- 1 wanted to know what was happening. But we've been denied
- 2 that permission until the contested hearing in 2017. And
- 3 that's -- that's the first time at that time that we were
- 4 able to see -- just before the contested hearing, we were
- 5 able to see plans and something that they had, you know,
- 6 sketched up. They talked about building up the area down
- 7 at Kleenburn. They were going to have berms. They were
- 8 going to have beautiful buildings. It was going to look
- 9 like -- someone quoted to me it's going to be similar to
- 10 how the Powder Horn looks. Well, the Powder Horn is a golf
- 11 course. And, yes, it's beautiful, but I don't see the same
- 12 beauty down at Kleenburn.
- I have so many things I've got here that I wanted
- 14 to say, but so many people have said something ahead of
- 15 time, so I hate to keep repeating myself.
- Anyway, one thing I have a question about is how
- 17 difficult would it have been to get neighbors -- to let the
- 18 neighbors ask questions and get answers from a new neighbor
- 19 coming to town. I've lived in that Tongue River Valley all
- 20 of my life, until -- you know, until I grew up and left.
- 21 But during that time, we were a neighborhood. The
- 22 neighbors were good neighbors. If somebody had a problem,
- 23 the neighbors pitched in. They were right there. They
- 24 helped each other. I don't see that with Ramaco. Ramaco
- 25 is -- I don't trust them, because they've got a background

- 1 of distrust. And part of that background is not only
- 2 bankruptcy, but tax fraud and prison terms. You know, that
- stuff doesn't come out, but it's been in the paper -- in a 3
- 4 different paper in Wyoming recently.
- 5 I just wanted to say that pretty soon assumptions
- start happening. Randall Atkins made a statement in the 6
- Sheridan Press April 24, 2020. He stated, and I quote, The 7
- 8 organization PRBRC, which is Powder Resource Council and
- 9 its supporter simply don't like the industry. That's not
- 10 true. He has never met the landowners. He doesn't know
- 11 what our backgrounds are. I came from a coal mining
- 12 family. My grandfather, my father, my brother, they've all
- 13 been in the coal mines. Does that mean I'm against coal?
- 14 I don't think so. So he doesn't know what he's saying, and
- 15 don't put a statement out for me.
- 16 Ramaco has stated that their private funding --
- 17 they haven't taken any private funding. But like somebody
- 18 mentioned, yes, they've received millions of dollars from
- 19 federal funding for their project.
- 20 But what kind of taxes do you expect to receive
- 21 from this private land, private company, what kind of taxes
- 22 do you think are going to support the state -- or how's it
- 23 going to boost your economy?
- 24 Someone talked about the heavy equipment that's
- 25 going to be driving on the highways. And, yes, that's a

- 1 concern of mine too. We already have plenty of, you know,
- 2 semis on the highway, but if you're moving equipment from
- 3 over by Big Horn Coal and have to move it back and forth on
- 4 the road, it's -- that's not a good scenario.
- 5 Anyway, last year there was a presentation made
- 6 by Ramaco to the Minerals Committee at a legislative
- 7 session. And they talked about the iCAM project. And they
- 8 talked about this building that was going to be put up, and
- 9 it was going to be finished by the end of March of 2019.
- 10 That building was started -- they brought the red iron in
- 11 for it sometime last year. It was -- and then it flooded.
- 12 That area flooded down there because when the -- the runoff
- 13 came down the Tongue River from the mountains, it flooded
- 14 that area. We've got pictures of it.
- They started building their building probably
- 16 late fall, early winter, somewhere in there. The building
- 17 is still not finished. And I know Gillian mentioned it
- 18 went from 10,000 square feet to 6,000, and back up to
- 19 10,000 square feet. Why are all these changes? What
- 20 prompted the changes? Those are the kinds of questions we
- 21 would like to ask and get answers to. And we don't seem
- 22 to -- you know, we don't seem to be able to get very far
- 23 with it.
- 24 So how serious is Ramaco about this venture? Is
- 25 it a way that they're able to use federal funding and say,

- 1 hey, we started our building. We don't have it quite
- 2 finished. But when you listen to some of their reports,
- 3 they act like they're currently doing research down there.
- 4 They are not doing research.
- 5 And I heard some of the -- you know, seen some of
- 6 the articles that they've written, and they act like it's
- 7 a -- it's going. It's -- but it's not. You should go down
- 8 and take a check.
- 9 Anyway, I would like to say in closing it seems
- 10 like there is no sense, economically or logistically with
- 11 this company. You know, talk is cheap, but actions speak
- 12 louder.
- 13 So anyway, again, I would like to thank you for
- 14 the opportunity to get up here and say my piece, and thank
- 15 you very much. Do you have any questions?
- DIRECTOR PARFITT: No, I don't have any
- 17 questions right now. I do want to just point out, you had
- 18 mentioned you wanted your April 8 correspondence to be part
- 19 of the record, and it is. We do have that. So thank you
- 20 for that.
- MS. TELLEZ: Thank you.
- DIRECTOR PARFITT: And thank you for your
- 23 oral statements today. I appreciate that.
- MS. TELLEZ: Okay. Thank you.
- 25 DIRECTOR PARFITT: Okay. So -- let's see.

- 1 I wanted to just wrap back around and see if James Aksamit
- 2 was present and -- or I think there was some indication
- 3 that you were not going to be providing an oral statement.
- 4 And so in the remaining time -- or that period of time
- 5 would then be available at the end of the informal
- 6 conference. So just wanted to check if James is there?
- 7 MR. GUILLE: He's off. Doesn't look like
- 8 he is.
- 9 DIRECTOR PARFITT: Okay. So then we'll
- 10 have opportunity if James does show up.
- 11 So I'd move onto John Buyok, and then Anton Bocek
- 12 will be up after that.
- MR. BUYOK: I am just going to read my
- 14 comments today. And I have them written out. I'll give a
- 15 copy to Mark so that he can give it to the court reporter
- 16 to make it easier for her.
- 17 Thanks for the opportunity to speak to you today.
- 18 I'm not going to reiterate all my comments. And I've
- 19 commented three times before with no discernible effect,
- 20 but I do want to mention two things. In my comments I
- 21 mentioned house well. The well is located about 20 feet
- 22 outside the half-mile boundary outside the permit boundary
- 23 is Brook Mine. So the effects of the Brook Mine on the --
- 24 are apparently not relevant to anybody but us.
- There was a lot of discussion at the EQC hearing,

- 1 but all of that is apparently gone by the wayside, even
- 2 though the current drawdown map from the model before it
- 3 was edited to remove the 2-foot and 1-foot concur interval
- 4 showed that our well would be affected by mining.
- I still don't see any mention of the effects of
- 6 blasting on surrounding previously mined lands, which is
- 7 ours, or what would happen if blasting by Brook Mine
- 8 accelerated subsidence on those lands. This is
- 9 particularly a concern, since Ramaco won't allow the AML
- 10 program to use their subsidence mitigation methods that
- 11 prevent promulgation of the subsidence.
- 12 I've been told that Ramaco claims that they will
- 13 re-mine the mined out and collapsing seams. And they don't
- 14 want the AML contractors to put anything solid in those
- 15 seams that might damage their equipment.
- 16 As a result, we have a subsidence hole currently
- opening up about 20 to 25 feet away from one the AML
- 18 program filled in last summer. Maybe the State thinks it's
- 19 a good idea to spend money on the same holes over and over
- 20 in order to placate Ramaco in their obviously unworkable
- 21 plans, but it seems like a waste of resources to me.
- That's all I have today. Thank you.
- DIRECTOR PARFITT: Thank you, John. I do
- 24 have one question for you. At the beginning of your
- 25 statement you, I think, mentioned the distance between the

- 1 proposed permit boundary and your well. Can you tell me
- 2 what that distance would be?
- MR. BUYOK: Well, we're just 20 feet
- 4 outside the half-mile boundary, outside the permit
- 5 boundary. So we're half mile plus 20 feet outside the
- 6 permit boundary, and so we don't fall in the area where,
- 7 under rules and regulations Ramaco has to provide pre-blast
- 8 surveys or any other information to us.
- 9 DIRECTOR PARFITT: And you also mentioned
- 10 is that the Abandoned Mine Program did some reclamation of
- 11 a subsidence near your home?
- MR. BUYOK: Yes. Uh-huh.
- DIRECTOR PARFITT: Okay. And in that --
- 14 that -- is that project done for that particular event?
- 15 MR. BUYOK: Pardon me? I didn't hear that.
- 16 DIRECTOR PARFITT: I'm sorry. Does the AML
- 17 project to reclaim that subsidence area near your home, has
- 18 that been completed?
- 19 MR. BUYOK: It's -- it's been ongoing.
- 20 That particular hole has been filled in, but there's others
- 21 that have opened up. And as I mentioned, there's one that
- 22 is currently opening up just, you know, a few feet away
- 23 from the one that they worked on last summer.
- DIRECTOR PARFITT: Yeah. Okay. All right.
- 25 So thank you, John. Appreciate the oral statement. And we

- 1 do have your written statement.
- 2 All right. I'm going to just ask -- before we go
- 3 to Anton, I want to ask Kathy Kendrick if she needs a break
- 4 or good for going -- continuing on.
- 5 That's a thumbs up. Okay. So we'll hold off on
- 6 taking a break, then. Just wanted to be mindful of that.
- 7 Okay. So next up, then, is Anton Bocek, and then
- 8 that would be followed by Jordan Sweeney.
- 9 MR. BOCEK: Good morning. I'm Anton Bocek.
- 10 And thanks again for taking time to let us voice our
- 11 opinions.
- 12 I live at Slater -- 11 Slater Creek Lane, is
- 13 where my home is. I'm also a member of a family farm at
- 14 25 Monarch Road in Ranchester. Both are within the half
- 15 mile of the first phase of the proposed Brook Mine.
- 16 My property is .17 miles of the mine, and the
- 17 family farm is .3 miles. This close proximity to the mine
- 18 with this proposed blasting is a great concern to me and my
- 19 family. Both properties have water wells used daily for
- 20 domestic use, and should the blasting cause turbidity or
- 21 loss of water, I would need a written guarantee that I
- 22 would have water delivered immediately and the wells
- 23 redrilled at Ramaco's expense.
- 24 My 500-foot well has been used without incident
- 25 for 42 years. I don't need any arguments or lengthy court

- 1 proceedings in order to have water in my home should my
- 2 well become unusable because of mine activities.
- 3
 I've asked for pre-blast survey for both
- 4 properties, and have qualified for such a survey, but I
- 5 would remind your office of this request. The family farm
- 6 has a 100-year-old rock barn and cellar, both of which are
- 7 in use that need included in that survey. And I would
- 8 request reduced ground vibration on blasting.
- 9 After taking a mine tour of the proposed strip
- 10 mine and highwall mine, I have questions and concerns about
- 11 both. The proposed strip mine at Taylor Quarry, all the
- 12 drainages are running downhill to Slater Creek. Is there
- 13 a -- a sufficient plan to keep the sediment from draining
- 14 into this creek? I don't believe that fresh berms of dirt
- and silt fence would be enough, especially if we have
- 16 another spring like we did in 2019. Any contaminants would
- 17 end up in Tonque River.
- I would ask that blasting be limited to Monday
- 19 through Friday. There's no need to blast on weekends for
- 20 such a small mine that has, at this time, no customers
- 21 except the iCAM research facility, which will only take a
- 22 small amount of coal.
- 23 Does Ramaco know where the old underground mines
- 24 are in this area? There are sinkholes from these mines
- 25 along the road past the scale house of Taylor Quarry. More

- 1 of these were used on top of the hill near the strip mine
- 2 in years past for dumping grounds. If the coal is moved by
- 3 trucks, what sort of safety precautions will be used on the
- 4 two-lane highway, Highway 345, which is also used by
- 5 slow-moving farm equipment, as this area all the way to
- 6 Ranchester is agriculture land?
- 7 Where will the water come from for dust control?
- 8 Water is a precious commodity in this area.
- 9 Concerning the highwall mine at Hidden Water, I
- 10 worked at Big Horn Coal for 14 years, and Big Horn Coal's
- 11 Pit 5 mining dumped overburden in a ravine north of the
- 12 proposed mine. This ravine was a literal fire pit from the
- 13 old underground mines. What quarantees us there is no
- 14 fumes or fires from this proposed mine that are still
- 15 burning?
- 16 I have my -- my statement or my letter that I
- 17 sent to you in April. I'd like to have that on -- make
- 18 sure you have that on record as well. And just in closing,
- 19 I'd like to ask you and any of the members of Ramaco,
- 20 wouldn't you be concerned if you were living where I live
- 21 and ask these questions and want everything -- our air and
- our our quality of life not change by their mining 22
- 23 operations? I don't plan on moving, so I'd like to keep
- 24 everything the way it is. Thank you.
- 25 DIRECTOR PARFITT: All right. Thanks,

- 1 Anton. And we, indeed, do have your written comments dated
- 2 April 5th, I believe.
- 3 MR. BOCEK: Okay.
- 4 DIRECTOR PARFITT: Yeah, and they're part
- 5 of the record. So thank you for that.
- MR. BOCEK: Okay. Thanks.
- 7 DIRECTOR PARFITT: Okay. Next up is Jordan
- 8 Sweeney with Big Horn Coal.
- 9 MR. SWEENEY: Good morning. Can everybody
- 10 hear me?
- MR. GUILLE: We can, Jordan. And, Jordan,
- 12 did you want to share your video or anything like that?
- MR. SWEENEY: Do you have the additional
- 14 slides that I sent through, Keith?
- 15 MR. GUILLE: I do. And if you want me to
- 16 share that, I will share that as our screen. And hopefully
- 17 we'll have it. Just bear with me for just a sec. Okay?
- MR. SWEENEY: Yeah.
- 19 Thank you, Director Parfitt, and Deputy Director
- 20 Edwards for giving us this opportunity to have this
- 21 informal conference. I would just like to go through a
- 22 couple of objections that Big Horn had after review of the
- 23 Ramaco or Brook Mine application post-round 12 comments
- 24 with the DEQ.
- 25 Additionally, we have Keith Burron representing

- 1 Big Horn Coal as well on the line. He is muted, but if he
- 2 could raise his hand if he would like to comment or further
- 3 comment on anything that I may say throughout this
- 4 presentation, that would be great.
- 5 We also have Dean Brockman, general counsel for
- 6 Lighthouse Resources, our parent company of Big Horn Coal.
- 7 He is also on the line, but plans to stay muted at this
- 8 time.
- 9 If we can get started. During review of the
- 10 Brook Mine permit, I noted for Objection Number 1 of Big
- 11 Horn, you can see it on the slide here, is the surface
- 12 owner protection bond for Big Horn Coal. This was last
- 13 updated 2015, according to the Volume 1 Adjudication Binder
- 14 1 of 3.
- The exhibit or Figure 1 associated with that
- 16 surface owner protection bond shows the historic TR-1 area,
- 17 along with additional disturbance for sedimentation ponds
- 18 around the Big Horn shop facility that you can see in the
- 19 red square there.
- This area has been updated in the new mine plan
- 21 that has been proposed after round 12 comments, and these
- 22 pits and disturbances are no longer shown on the mine plan.
- 23 So my question to DEQ is is this surface owner
- 24 protection bond still valid? You can see that coal year
- 25 zero at the top of the left-hand side of the page, surface

- damage bond summary for Big Horn Coal for year zero. Year
- 2 zero does not occur in this area in the new mine plan? So
- 3 will this be updated is the question, and will there be a
- 4 surface owner protection bond for Big Horn Coal in years 6
- 5 through 10? Is that required to be posted now, or will
- 6 that be posted year 6 through 10 if that were to occur?
- 7 Let's go to the second slide, please. So
- 8 Appendix D-1, which is land use found inside the Brook Mine
- 9 permit. There's discrepancy shown within the Big Horn
- 10 surface area that it shows as dual land use upon Big Horn
- 11 surface as recreational and agricultural purposes. That
- 12 area is that cross-hatched with orange 45-degree angle is
- 13 not, to my knowledge, my look through records of Big Horn
- 14 Coal, recreational area. That is a misuse of -- mislabel
- 15 of recreation in that area.
- 16 Also, to further point out that inside the main
- 17 BNSF rail loop, there is an area called the Playcheck Pit,
- 18 and that is an historic AML project that was slated to
- 19 begin in 2011, 2012. That was a \$5 million AML project
- 20 that was not allowed to move -- go forward due to the
- 21 mineral owner, which is Ramaco coal. They did not allow
- 22 that project to continue. So still today, the highwall
- 23 that's left there from historic Big Horn mining prelaw is
- 24 deteriorating, as well as coal fires are continuing in the
- 25 highwall going to the south.

1 Additionally to this land use exhibit, the 2 present industrial commercial land use for Big Horn surface 3 was omitted. In 2018 Big Horn Coal received approval of 4 approximately 44 acres of industrial land use around a shop 5 area, as well as around its historic loadout facility area 6 located north and east of Tongue River Stone's guarry, as 7 you can see on this map. 8 Page 3. Thank you. 9 So associated with Big Horn Coal's Objection 10 Number 3, you can see the sections of the mine plan 11 identified here. The question that arises from Big Horn is 12 what is the need and purpose for 240-plus acres of surface 13 disturbance around the Big Horn shop and facility area, 14 historic loadout, and rail spur for years 6 through 10? To 15 us this seems unclear, given the previous mine plan that 16 did have an active pit shown as the historic TR-1 in this 17 area south of the Big Horn shop. There is no mining 18 contemplated at this time. So what is the need for this 19 surface disturbance for 300-plus acres? 240 plus acres? 20 After additional review, we have a facilities map 21 in the lower left-hand corner shows potential laydown areas 22 or staging areas south of the river and south of the 23 current proposed mining areas. I did a quick summary of 24 what the laydown area is for NARM and Black Thunder are, 2.5 and Black Thunder has approximately 32 acres associated

- 1 with their laydown areas, and the total of facilities
- 2 disturbance of 145 acres in reference to the shop, loadout,
- 3 and sewage lagoons, et cetera, parking areas, stuff like
- 4 that.
- 5 NARM has approximately 108 acres of facilities
- 6 disturbance for the shop, loadout, and associated parking
- 7 areas, and total disturbance of 45 acres for the laydown
- 8 area.
- 9 So I question what is the need for three -- 240-
- 10 plus acres of disturbance in relation to a 250,000 to a
- 11 400,000 annual tonnage output for the Brook Mine?
- 12 Additionally, as you can see in table -- for mine
- 13 Plan 1-1, the annual surface disturbance located under the
- 14 facilities description with a sub -- or superscript 1. So
- 15 facilities disturbance includes disturbing acreage caused
- 16 by buildings, roads, diversions, and stockpiles. So in
- 17 years 6 through 10, there's 284.8 acres for facilities
- 18 disturbance. However, there's no buildings, roads,
- 19 diversions that have been identified on the map-1 for
- 20 facilities in this area. Again, why is such disturbance --
- 21 potential disturbance needed in this area?
- 22 If you go to the same page, the top right-hand
- 23 corner, Table Mine Plan 4-1, Topsoil Volume Removed Over
- 24 Life of Mine, I snipped out topsoil-1 stockpile, which
- 25 would be located inside the current Big Horn industrial and

- commercial use area, as well as on top of the access road 1
- 2 that goes into the shop and operations for Big Horn. The
- 3 volume stockpile in this topsoil, TS-1, pile totals 532,000
- 4 yards.
- 5 So the area of 235 acres is going to -- you're
- 6 going to strip 532,000 yards. Topsoil removals stated in
- 7 superscript number 6, only required if disturbance is
- 8 planned in the area. So, again, I ask a question, what is
- 9 the plan for disturbance in this area? Is this whole 240
- acres going to be disturbed? And if so, what is it going 10
- 11 to be disturbed and utilized for?
- 12 Slide Number 4, please.
- 13 So Objection Number 4 went to some of the
- 14 previous statements made by commenters. There are active
- 15 subsidence and active fires currently on the Big Horn
- 16 surface, and particularly adjacent and on top of the
- 17 current TR-1 proposed pit north of Tongue River. You can
- 18 see the red areas are identified as underground fires that
- 19 are mapped from the Monarch mine, which is Acme Number 1,
- 20 which is north of Tonque River.
- 21 And, additionally, you can see the green polygon
- 22 on top of the red that was previously alluded to, that's
- 23 where Big Horn Coal piled the million-plus yards to attempt
- 24 to suppress the underground fires, as well as reduce the
- 25 subsidence in that area. You can see here that there are

- 1 couple of different shaded -- or lined polygons. The blue
- 2 line lines the proposed Ramaco permit area, and the purple
- 3 line that intersects where the red and green meet is the
- 4 current Big Horn Coal permits boundary.
- 5 Big Horn Coal still has a reclamation liability
- 6 for approximately \$700,000. It is a concern for Big Horn
- 7 that if this TR-1 area were to be mined, that highwall
- 8 mining in the Carney and Master seam below the Monarch
- 9 could potentially lead to additional subsidence and
- 10 re-ignition of coal fires from historic Acme Mine in the
- 11 Monarch seam.
- The question here is if there is additional
- 13 subsidence or off-site impacts upon Big Horn Coal's surface
- 14 as a result of the highwall mining and the trench mining of
- 15 TR-1, who is responsible? As I indicated earlier there's
- 16 current subsidence going on in Section 10, north of the
- 17 TR-1 proposed area, and it will be difficult to
- 18 differentiate between current subsidence and potential
- 19 future subsidence from this highwall mining area, and who
- 20 would be responsible for bonding that and/or reclaiming
- 21 that on Big Horn surface.
- 22 Let's go to the last slide, Big Horn Objection
- Number 5.
- 24 Again, this alludes to the surface mining
- 25 activities near underground mine Section MP-15, Addendum

- 1 MP-6. Addendum MP-6 is subsidence control plan.
- I found an error in addendum MP-6, page MP-6-9,
- 3 the last paragraph there regarding material damages to
- 4 surface owners. It ends right there in the last sentence
- 5 of -- well, regardless of its right to mine, to subside the
- 6 surface, the operator acknowledges that if subsidence due
- 7 to its mining operation causes material damage or reduces
- 8 the value of reasonable foreseeable use of surface lands,
- 9 the land -- and then it goes into the next section
- 10 directly, MP-6-5 references on the next page, MP-6-10.
- 11 So to the right you can see additional --
- 12 additional maps in the Brook Mine permit historic Acme
- 13 Mine. Number 1, which is to the north, and covered in the
- 14 blue highwall mine trench area, as well as Acme Mine Number
- 15 2 to the south. And then the green-hatched polygons are
- 16 the open pit Dietz Coal Mining of Big Horn Coal that
- 17 occurred in the past.
- You can see the proximity of the trench mine
- 19 being proposed in the highwall mining panels being proposed
- 20 to both Acme mines. Again, the question is how subsidence
- 21 and surface disturbance outside of Ramaco's permit -- or
- 22 inside Ramaco's permit upon Big Horn surface will be
- 23 addressed during mining and into the future.
- The last point I'd like to bring up is the
- 25 current order in lieu applicability. The Brook Mine

- 1 received an order in lieu because Big Horn has not agreed
- 2 to the overlapping permit issue. It also contests the
- 3 validity of a 1954 deed. So Big Horn and Brook went to the
- 4 EQC, and Big Horn -- or Brook was granted an order in lieu.
- 5 That order in lieu was over regarding the previous mine
- 6 plan that was submitted back in 2012. The question for Big
- 7 Horn right now is does that order in lieu apply to the
- 8 previous mine plan, as well as the future mine plan?
- 9 Because the previous mine plan, again, going back to my
- 10 first page, has a proposed pit south of the Big Horn shop
- 11 with additional disturbance in that area.
- 12 And if Keith doesn't have anything else, that is
- 13 the end of my comments.
- DIRECTOR PARFITT: All right. Thank you --
- 15 thanks, Jordan. I just wanted to point out that we will
- 16 make those slides that you provided available to the
- 17 public.
- So they'll probably, Keith, I think go up on our
- 19 website. Would that be correct?
- MR. GUILLE: Yes.
- Do we want to ask Keith Burron if he has any
- 22 statements?
- 23 Keith, I do have you live. Do you have any
- 24 additional comments.
- MR. BURRON: Thank you, Keith. Can you

- 1 guys hear me all right?
- DIRECTOR PARFITT: We hear you fine.
- MR. BURRON: Great. No, I don't have
- 4 anything to add at this point. Would just reiterate in
- 5 addition to what Mr. Sweeney presented today, you should
- 6 also have Big Horn's written comments received earlier
- 7 during the public comment period. And then we're obviously
- 8 very interested to hear the rest of the presentations today
- 9 and would hope that we have an opportunity, you know,
- 10 towards the end if we need to, to come back and say
- 11 something, if that's appropriate.
- 12 DIRECTOR PARFITT: Okay. Thanks, Keith.
- 13 And, yeah, we'll see how much -- how we're doing on time
- 14 when we get to the end of the day here. And then, just to
- 15 confirm, we do have the April 23rd comment from Big Horn
- 16 Coal.
- So all right. So it's -- it's 10:43. Is
- 18 Priscilla Dillon -- are you -- are you on the system yet?
- 19 MR. GUILLE: Yep. She sure is. She is
- 20 unmuted now.
- 21 DIRECTOR PARFITT: Okay. Priscilla, if
- 22 it's okay with you, I'd like to turn it over to you for
- 23 your oral statement, and I think that will take us pretty
- 24 close to 11:00.
- MR. GUILLE: Priscilla, did you want to

- 1 share a video at all?
- MS. DILLON: No. Oh. I mean, I -- I --
- 3 you can -- do you want to see my face, is that --
- 4 MR. GUILLE: It's up to you. We certainly
- 5 don't want to make you.
- 6 MS. DILLON: I think it has more power. I
- 7 definitely could not -- I'm in virus mode at home, so I'm
- 8 not dressed up the way you guys are. But I'd be happy to
- 9 do that. I'm not quite sure what to do to do that.
- 10 MR. GUILLE: Okay. Just bear with me. I'm
- 11 going to try to make you a different level here so we can
- 12 have you share your video camera. Okay?
- 13 MS. DILLON: All right. Share my webcam.
- 14 Oh, there I am. Just a minute. Can you see me now?
- MR. GUILLE: We can. Thank you.
- DIRECTOR PARFITT: Go ahead.
- MS. DILLON: Okay. Keith, thank you.
- 18 You're the one that I've been in touch with. And thank you
- 19 to the others. I was not on first thing this morning. I
- 20 don't know who all the participants are, and I don't need
- 21 to. I do see some Tongue River folks that I'm familiar
- 22 with and know.
- 23 I really appreciate the opportunity to be able to
- 24 speak. I am not a native, but I've lived in this community
- 25 for 50 years, and I appreciate it. Sheridan's not perfect,

- 1 but it's pretty cool, and there are a lot of factors that
- 2 contribute to that positive environment and community.
- One point I want to share. I was a teacher for
- 4 decades. And it was mostly at the high school level. And
- 5 as a teacher, you run into all sorts of personalities, and
- 6 you have the very serious students who take their
- 7 assignments seriously and -- from the beginning, and they
- 8 do it well. And you love those students, because they're
- 9 honoring what you're doing. You're trying to make them
- 10 capable of moving to the next level, which is basically
- 11 asking for permission to move to the next level, a little
- 12 bit similar to DEQ's process of permitting.
- 13 There were students who ran -- you know, who got
- 14 by with as little as possible. And within that group
- 15 there -- and in between there would be kids who were gaming
- 16 the system. And we all know people like this. You know,
- 17 who -- who do we know who could do what they should and
- 18 they could do a really good job, but they just don't, for
- 19 whatever reason. They might butter up the teacher or try
- 20 to butter up the teacher. Usually they'll get enough done
- 21 to pass the class and be able to get that credit.
- 22 I think businesses are very similar, because
- 23 businesses are made up of individuals. And there are
- 24 businesses -- and we have a lot in Sheridan -- who are very
- 25 serious about honoring the community, taking any permitting

- 1 process very seriously and doing those permits, going --
- 2 going through the hoops, whether it be in the city or the
- 3 county, with integrity and with the intention of honoring
- 4 what the community has decided is best for them.
- 5 There are also businesses -- and we've seen some
- 6 come and go -- that kind of want to just get by. And some
- 7 of those businesses also try to -- you know, an anal --
- 8 having an analogy of buttering up the teacher, they butter
- 9 up local individuals who may be perceived to have some
- 10 influence within the community.
- 11 As I followed Ramaco's process over the last
- 12 several years, I feel like Ramaco seems to be one of those
- 13 "others." There's been a lack of intention from the
- 14 beginning of honoring this permit process, honoring the
- 15 neighbors. It's been slipshod. The first permit could
- 16 have been done completely and adequately, and it was not.
- 17 Neighbors could have been honored. You know, if
- 18 you move into a new neighborhood, especially one with
- 19 environmental issues that affect your livelihood and
- 20 your -- you know, the underground mines that have been
- 21 there -- I mean, just listening to a couple of the
- 22 neighbors in the Tongue River Valley speak, and also
- 23 listening to the Big Horn Mine, I am astounded and
- 24 horrified at the number of questions that are still
- 25 unanswered.

- I'm happy to have new business in Sheridan.
- 2 There are many who would like Sheridan to stay stuck in the
- 3 past, and we can't. We're not going to be able to. But I
- 4 want businesses that have integrity, that honor their
- 5 neighbors, and that care about the community of Sheridan,
- 6 that are not just -- maybe Ramaco is -- is not a
- 7 fly-by-night, but I tell you what, I don't get that
- 8 feeling.
- 9 And, yeah, I guess -- I guess that pretty much
- 10 completes. I was kind of working on my -- how I was going
- 11 to say this, and I came up in the process a little bit
- 12 earlier than I anticipated. And if anybody -- I don't know
- 13 whether you want to ask me questions or whether that's part
- of the process. But I guess I'm horrified. I don't look
- 15 forward to having Ramaco as part of my community. I know
- 16 the people who know some of the higher ups, and it seems to
- 17 me that there's playing the system going on. Let's make
- 18 friends with these people in the community who are
- 19 important so that I can get -- move forward in the process.
- 20 If they plan to do so with the intention of doing
- 21 it right and with integrity, why not do it right the first
- 22 time? Why not answer all those questions that Big Horn
- 23 Coal have and that the neighbors have? So I -- I --
- 24 that's -- I'll stop there.
- 25 DIRECTOR PARFITT: Thank you, Priscilla. I

- 1 appreciate that. I can appreciate. My wife's a teacher,
- 2 so I understand. I hear about the -- her dealings all the
- 3 time with students.
- Anyway, so I appreciate you taking the time. I
- 5 appreciate your oral statement. So thank you.
- 6 MS. DILLON: All right. Thank you very
- 7 much.
- B DIRECTOR PARFITT: Okay. So it is a little
- 9 bit before 11:00. What I would suggest that we do is take
- 10 a 10-minute break, just to give Kathy a bit of a breather
- 11 here on the transcribing, and we can all take a quick
- 12 break.
- 13 And then what I'd like to do is, when we come
- 14 back, is start with Shannon Anderson with the Powder River
- 15 Basin Resource Council. And then if we run a little bit
- 16 long past the noon hour, I think that would be fine. But
- 17 that way we'll have plenty of time in the afternoon to hear
- 18 from Brook, and then any additional opportunities if
- 19 there's any follow-up statements that need to be made.
- So let's take a break. We'll plan on coming back
- 21 right at 11:00 and starting up with Shannon. Okay.
- MR. GUILLE: Okay.
- 23 (Informal conference proceedings
- 24 recessed 10:52 a.m. to 11:00 a.m.)
- DIRECTOR PARFITT: Okay. So we're back.

- 1 And what I'd like to do now is turn it over to Shannon
- 2 Anderson with PRBRC.
- 3 Shannon, are you on?
- 4 MS. ANDERSON: Yeah. Hi, Todd. I am here.
- 5 MR. GUILLE: Shannon, this is Keith. Did
- 6 you want to share your video camera?
- 7 MS. ANDERSON: Yeah, if that's possible.
- 8 MR. GUILLE: It should be. Just give me a
- 9 few seconds here.
- MS. ANDERSON: Okay. Hi, good morning.
- MR. GUILLE: Good morning.
- 12 DIRECTOR PARFITT: Good morning. Shannon,
- 13 just to let you know, if we run a little bit after the noon
- 14 hour, that's fine. And then if there's a need to continue
- 15 after the lunch hour, consider that too.
- 16 MS. ANDERSON: Okay. Great. Here's how
- 17 our Powder River Basin Resource Council presentation will
- 18 go. I'm going to give some overview remarks of our
- 19 objections, and then I'm going to turn it over to our two
- 20 subject matter technical experts, Dr. Marino and Mr.
- 21 Wireman, who hopefully will be able to at least speak, if
- 22 not have video for them as well. And then Ms. Morrison,
- 23 who is in the room at DEQ, may provide some final comments.
- I hope DEQ gives us some latitude in our
- 25 presentation, as we did not have the benefit of being in

- the same room to prepare, so things may be a little bit
- 2 more haphazard than they normally would be in our
- 3 presentation. So thanks for the flexibility, and I hope
- 4 this all works out.
- 5 As you've heard this morning from the landowners
- 6 in the area, this is a tremendously important area for
- 7 Sheridan County, for the state of Wyoming, and, arguably,
- 8 the nation.
- 9 We have tremendous member interest in that area,
- 10 both -- you know, we have members who live out there. We
- 11 have members who ranch and do ag work out there. And we
- 12 have a lot of members who recreate out in the area. And
- 13 with that, we have chosen to invest organizational
- 14 resources to protect the quality of life of our members who
- 15 live, ranch, and recreate in the Tongue River Valley. And
- 16 like many of our members, I personally really enjoy that
- 17 area. My entire life here in Sheridan County I have
- 18 traveled along the Tongue River. I've hiked in that area.
- 19 You know, go out for a peaceful Saturday afternoon in
- 20 Kleenburn. You enjoy the beauty of the river, of the
- 21 wildlife, the scenery, the mountain vistas. It's such an
- 22 important area for our county, and I just wanted to make
- 23 sure that is expressed by myself and our organization this
- 24 morning.
- 25 It's also an important area with a lot of

- history, including a history of mining, as you've heard 1
- 2. this morning. And as Dr. Marino will soon explain, what we
- 3 don't want is for the history of subsidence and mine
- collapse to become the area's future. 4
- 5 Our organization submitted written comments. And
- 6 our comments today are intended to supplement and clarify
- 7 our written submission. We also submitted written
- objections in January 2017. And as, you know, we have been 8
- 9 involved in a lengthy appeals process ever since, which
- 10 still continues today before the Wyoming Supreme Court.
- 11 And that brings me to our first objection, that
- 12 DEQ violated the Environmental Quality Act by not requiring
- 13 Brook to resubmit its permit application under Section
- 14 406(f) of the Environmental Quality Act. So Section 406(p)
- 15 of the Environmental Quality Act dictates that once a
- 16 hearing is held and the EQC issues its order, the mining
- 17 permit should be issued or denied 15 days after the order.
- Following the EQC's decision, the original Brook 18
- 19 Mine permit application was denied under 406(p). And the
- EQC's order and DEQ's denial of the application was not a 20
- 21 "deficiency notice" under Section 406(h). It was a denial
- 22 under Section 406(p).
- 23 And the Environmental Quality Act speaks directly
- 24 to the case at hand in subsection 406(f), when a company
- 25 resubmits an application. This is exactly what the EQC

- 1 order told the Company to do, "revise" and "resubmit."
- 2 Therefore, DEQ should have followed the process under
- 3 subsection 406(f), which requires the 60-day completeness
- 4 review period of the resubmitted application, similar to
- 5 subsection 406(e) for new permits. And after the
- 6 completeness review, the process is the same as new
- 7 applications, but the requirements of subsections 406(g)
- 8 through (p).
- 9 DEQ did not follow this process. Instead it
- 10 treated the EQC order as round 7 of technical review under
- 11 subsection 406(h). As we discussed in our written
- 12 objections, unfortunately, proceeding with a process that
- 13 is outside the scope of the Environmental Quality Act
- 14 rendered any subsequent permit decisions illegal. And
- 15 agency actions taken without legal authority are subject to
- 16 vacatur, which is what should happen here.
- 17 Additionally, we have ongoing concerns that since
- 18 Brook is still challenging the EQC order before the Wyoming
- 19 Supreme Court, the authority of that order, as it applies
- 20 to the permit application before the agency, remains in
- 21 question. And we ask DEQ to clarify the agency and the
- 22 applicant's positions on the validity of the EQC order in
- 23 the decision on the permit application.
- I would note also today that today's comments
- 25 really underscore why this procedural deficiency matters.

- The DEQ started its review from round 7 and didn't go back
- 2 and take a big picture look at the entire permit
- 3 application, as it would have been from round 1. And that
- matters for everything from the adjudication binder going 4
- 5 forward through the 12 volumes of the permit application.
- Coal seam fires, surface access, and issues with the 6
- 7 overlapping permit with Kleenburn coal, traffic, and other
- 8 issues were not considered in rounds 8 through 12 of DEQ's
- 9 review because they were not a part of the EQC decision.
- 10 So, again, this procedural deficiency had real-
- world consequences. And the only way that DEQ is going to 11
- 12 remedy this, unfortunately, is to go back and have Brook do
- 13 what it should have been, which is resubmit its permit
- application following the EQC order. 14
- 15 And as we wrote in our written comments, we put
- DEQ on notice of this at the very beginning after the EQC 16
- 17 decision, and no one can claim ignorance of this procedural
- 18 flaw.
- 19 The next objection that we have is the permit
- 20 application's failure to disclose coal mine operators. It
- 21 was confirmed on last week's mine tour by Jeff Barron that
- 22 Brook has been speaking with several potential contractors
- 23 to carry out the mining operations. However, at this time,
- 24 the Company does not actually have a contractor selected.
- 25 We believe the permit application cannot be approved until

- 1 it is known and disclosed what company will actually be
- 2 doing the mining and until the owners and controllers of
- 3 that company are ran through the applicant violator system.
- 4 As we discussed in our written objections and in
- 5 previous correspondence to DEQ, Chapter 2 of the coal
- 6 regulations require complete indemnification of the names,
- 7 addresses and telephone numbers of any operators if
- 8 different from the applicant. This is a requirement of the
- 9 permit application, not something that can be filled in
- 10 later. And the permit application is deficient until this
- 11 information is provided.
- 12 Next we raise an objection about the permit
- 13 application not being complete because it fails to include
- 14 all coal hauling, processing, and upgrading facilities. As
- 15 you know, the Environmental Quality Act defines surface
- 16 coal mining operation to mean surface lands where surface
- 17 coal mining activities take place, and or surface lands
- 18 incident to underground coal mining activities. It also
- 19 defines surface coal mining operations to include any
- 20 adjacent land, the use of which is incidental to any of
- 21 these activities. All lands affected by the construction
- 22 of new roads or the improvement or use of existing roads to
- 23 gain access to the site of these activities and for
- 24 haulage, processing areas, shipping areas, and other areas
- 25 upon which are sited structures, facilities, or property or

- 1 materials on the surface resulting from or incident to
- 2 these activities.
- 3 In the case of the Brook Mine, there's a good
- 4 portion of roads and facilities that are adjacent and
- 5 incidental to the coal mining pits and highwall mining
- 6 areas that are not included in the permit application. For
- 7 instance, it was confirmed last week on the mine tour by
- 8 Jeff Barron that the primary haul road from the first
- 9 mining area to the company's processing facilities will be
- 10 the state highway, that Highway 345, which was mentioned
- 11 earlier by Mr. Bocek.
- 12 The Company will also use county roads for
- 13 hauling and coal mining related transportation to and from
- 14 the proposed iCAM and iPark facilities. As explained in
- our written objections, these roads and facilities are part
- 16 of the proposed surface coal mining operation and must be
- 17 included in the permit application for review by the DEQ
- 18 and the public.
- A permit boundary isn't supposed to be an
- 20 arbitrary drawn line. It's supposed to be a line drawn
- 21 around all coal mining operations, especially haul roads,
- 22 facilities and anything directly related to or caused by
- 23 the mining operations. Here it is being used to
- 24 arbitrarily exclude coal mining operations that, by
- 25 definition, must receive state SMCRA permits. This is

- 1 important for regulatory enforcement purposes, but it is
- 2 also important for DEQ to be able to review the proposed
- 3 transportation and facility plan to ensure proper setbacks
- 4 such as the hundred-feet setback from a public right-of-way
- 5 and the 300-foot setback from homes and other buildings.
- 6 How can using a public right-of-way for coal mining
- 7 activities comply with this required buffer? How has DEQ
- 8 evaluated the use of these public roads?
- 9 And, again, this kind of goes back to the issue
- 10 of not starting with round 1, but starting with round 7,
- and that has been a real problem for all of these other
- 12 issues that were not a part of the EQC order.
- 13 Relatedly, information in the permit application
- 14 regarding the traffic plan remains sorely deficient. The
- 15 mine plan does not estimate truck traffic, disclose any
- 16 impacts to public or private roads used by the public, and
- 17 does not include a traffic plan or any agreements with
- 18 Sheridan County or the Wyoming Department of Transportation
- 19 on road use repair and compensation.
- Our next objection is the mine plan in the permit
- 21 application is not actually a plan, but rather a plan to
- 22 make a plan. It is not right sized for the demand for the
- 23 coal, which, as we understand it, is only a small amount of
- 24 coal for the proposed processing facilities. Without an
- 25 accurate mine plan DEQ will be unable to enforce, the

- 1 Company won't be able to implement it, and the public won't
- 2 be able to understand what is happening or what should
- 3 happen at the mine site. A more accurate mine plan, right
- 4 sized for the amount of coal production that will actually
- 5 occur, will result in the company being a better neighbor.
- 6 As we discussed in our written comments, Ramaco's
- 7 facilities are highly dependent on government funding,
- technology breakthroughs and other unknowns that make them
- 9 speculative. The Company has not provided any
- 10 justification for its 39-year proposed mine life, and/or
- 11 the amount of coal it proposes to mine. At the very least,
- only the initial period of the mine should be permitted,
- 13 which will limit the speculation contained within the
- 14 permit.
- 15 Our next objection centers around impacts to the
- 16 area's very important recreation areas, including walk-in
- 17 areas and conservation easements. I refer DEQ to Exhibit
- 18 D1.1-1, which Mr. Jordan Sweeney actually earlier
- 19 displayed. It's in the permit application, and it's a map
- 20 of the permit area overlaid with recreation areas. The map
- 21 shows that approximately half of the permit area has
- 22 important recreation areas. While the permit application
- 23 discloses that these two walk-in areas for hunting and
- 24 recreation are within the permit boundary, it does not
- 25 discuss how the use of these areas will be impacted by

- 1 mining operations, nor does it establish a plan to mitigate
- 2 any impacts.
- 3 Additionally, the proposed mine and associated
- 4 industrial park and iCAM is located within eyesight of the
- 5 Kleenburn recreation area, an area frequently used for
- 6 recreation activities, including fishing, picnicking, and
- 7 hiking. Again, the permit application fails to mitigate
- 8 any impacts to recreation use in the area.
- 9 We echo the comments received by you from Game &
- 10 Fish to ask that the DEQ right-size the permit boundary to
- 11 limit impacts to recreation areas. A solution could lead
- 12 to limit mining to that first five-year term of the permit,
- 13 and then only that area would need to be fenced or
- 14 otherwise cut off from public use through the initial
- 15 permit term.
- 16 After that, if the Company wants to come back and
- 17 amend its permit to include other areas, then it could do
- 18 that with a permit modification. This would allow
- 19 additional public notice and comment on areas that would be
- 20 cut off from public use at that time.
- 21 The solution is also consistent with the solution
- 22 for the deficiencies and subsidence in hydrology that
- 23 Dr. Marino and Mr. Wireman will speak to in a moment.
- 24 Because of the widely used recreation areas in
- 25 close proximity within permit boundary, we also ask DEQ to

- 1 prevent blasting on the weekends. We think that is
- 2 entirely reasonable, and could be an effective permit
- 3 condition.
- 4 On water rights and use of the Tongue River, we
- 5 echo the comments/concern raised by the Tonque River Water
- 6 Users Association. Again, the mine plan must be more than
- 7 a plan to make a plan when it comes to water rights. As we
- 8 discussed in our written objections, this is particularly
- important because if the mine is unable to acquire surface 9
- 10 water rights, which may be very likely because of the
- 11 complex issues you heard today from Mr. Hayes, it will be
- 12 forced to use more groundwater, putting additional stress
- 13 on the aquifer systems and potentially impacting nearby
- 14 water wells. None of these hydrologic impacts are
- 15 disclosed or analyzed in the permit application or the
- 16 Department's CHIA.
- 17 In the interest of time, I won't go through the
- 18 rest of our written objections, but we ask DEQ to respond
- 19 to all of our written and oral comments as part of its
- 20 decision on the application. And I'm happy to answer
- 21 questions on either our written or oral comments today.
- 22 And, additionally, one area that was not in our
- 23 written comments that we discovered was missing from the
- 24 permit application through public records request, is the
- 25 required financial assurance instruments to guarantee the

- 1 reclamation bond. It is our understanding that the
- 2 financial assurance instruments, such as letter of credit
- 3 or third-party surety agreement have not yet been submitted
- 4 to the DEQ. This is a problem because it deprives the
- 5 public of ability to comment on the validity and
- 6 sufficiency of the financial assurance instruments, and, in
- 7 turn, the validity and sufficiency of the reclamation bond
- 8 itself.
- 9 And at this time, we reserve our rights and
- 10 ability to comment on the financial assurance instruments,
- 11 as they are provided to DEQ, and ask to be notified when
- 12 they are submitted so we can submit supplemental objections
- 13 as necessary. This is particularly important if there's
- 14 collateral bonding proposed, or, you know, some other
- 15 alternative bonding mechanism that is yet to be defined by
- 16 the permit applicants. So we, again, reserve the right to
- 17 submit supplemental comments and objections as needed.
- And we also want to be on the record now to
- 19 object to any use of Indemnity National as a surety
- 20 provider, given concerns about Indemnity's solvency and the
- 21 ability to adequately back coal mine reclamation bonds
- 22 because of significant orphaned and idle mine liability in
- 23 Appalachia.
- 24 And then I'm noting for the record that I have
- 25 arranged with DEQ to provide some additional documents as

- 1 part of our presentation today, and to be included in the
- 2 record for the informal conference. I'm providing a
- 3 document with information about the job claims made by the
- 4 applicant to respond to some of the public comments
- 5 received.
- And I'm also providing some photos for Mr. John
- 7 Buyok of subsidence in the area. If you need more
- 8 authentication or information about those photos, Mr. Buyok
- 9 will be able to provide that. And I'm also providing an
- 10 email that was an exhibit during the EQC proceeding showing
- 11 DEQ has been aware of the proposed coal processing
- 12 facilities associated with the mines since at least
- 13 October 2015. And has, therefore, had ample opportunity to
- 14 ask the current applicant to include those facilities in
- 15 this application for review.
- And, finally, I'm including some emails that were
- 17 also exhibits at the EQC proceeding that discuss the
- 18 problem the Company has with its proposal to mine under a
- 19 county road without providing a proper buffer or a plan to
- 20 relocate that road as part of this permit application. I
- 21 am not providing all the AML reports that were exhibits in
- 22 the EQC proceeding, as the agency is already the owner of
- 23 those reports and has access to them, and fully knows that
- 24 they show a long history of mine subsidence in the area.
- 25 But I refer you to the EQC docket and all of the exhibits

- 1 that the objecting parties submitted during that process.
- 2 There was over 200 exhibits submitted to the EQC as part of
- 3 that hearing process.
- 4 So now hopefully I'm going to be able to turn
- 5 over to Dr. Gerry Marino, who will be providing comments on
- 6 his report. And then Dr. Marino after Dr. Marino, Mike
- 7 Wireman will provide comments on his report. And then at
- 8 the end, Ms. Morrison may provide some additional comments
- 9 from our organization.
- 10 So thank you so much for your time and attention
- 11 this morning, and I hope this works out.
- 12 DIRECTOR PARFITT: All right. Thanks,
- 13 Shannon. Appreciate the comments. And we, indeed, have
- 14 your written comments, and we look forward to receiving
- 15 through the Smart -- is it Smart Comment System -- the
- 16 additional information that you referenced.
- I would just point out that we are working on
- 18 getting connection with Mike Wireman. So we can proceed
- 19 right now with Dr. Marino, but we'll see where -- if we're
- 20 able to connect with Mike. If not, we might take a break
- 21 for lunch after Dr. Marino, and then pick up. That will
- 22 give us a little time to make sure we can get Mike onboard
- 23 here.
- MS. ANDERSON: Okay. That sounds great.
- And then, also, if you want to ask me any

- questions right now, I'm happy to, or you can wait until
- 2 the end, or whatever, if you have any.
- 3 DIRECTOR PARFITT: I don't have any right
- 4 now, but we may when we get to the end of it.
- 5 MS. ANDERSON: Okay. Great. Thank you so
- 6 much.
- 7 DIRECTOR PARFITT: So we'll turn it over to
- Dr. Marino. 8
- 9 MR. GUILLE: He's on.
- 10 DR. MARINO: Do you want to see my pretty
- 11 face, or --
- 12 MR. GUILLE: Dr. Marino, if you'd like to,
- 13 we can actually do that for you.
- 14 DR. MARINO: Yeah, sure, if you can do
- 15 that.
- 16 MR. GUILLE: Yep. There you go. It looks
- 17 like it's live. There you are.
- 18 DR. MARINO: There I am.
- 19 First of all, I want to say thank you for
- 20 allowing me to have this time to speak about this
- application, Director Parfitt and the other DEQ members. 21
- 22 I have been approached and asked to by Powder
- 23 River Basin Resource Council to provide a subsidence
- engineering overview, and also those things of concern 24
- 25 related to the reclamation proposed in the Brook Mine.

- 1 Just for your background, Director, I have about
- 2 40 years of experience in mine subsidence engineering.
- 3 I've been doing it in numerous coalfields across the U.S.
- 4 So the first thing that I want to mention, just
- 5 to give a little background, is that when we look at
- subsidence on the ground surface, we look at all the 6
- 7 elements of the mine workings. You know, the entire
- 8 structure of the mine workings. So that includes not only
- 9 the pillars, which get a lot of focus in design, but also
- 10 the roof, as well as the floor of the mine. These are
- three elements that could fail that could cause mine 11
- 12 subsidence in the future.
- 13 We also look at not only the ground control
- 14 conditions -- ground control means -- it's a technical term
- 15 used to mean what happens in terms of stability in the mine
- 16 at the time of mining. We are concerned about also, for
- 17 mine subsidence, what happens in the long term. And that's
- 18 one of the areas that is significantly deficient in this --
- 19 in this application.
- 20 This -- this was presented at the -- my opinions
- 21 were presented back in 2017 to the Environmental Quality
- 22 Council, who, in their findings, agreed with me, were an
- 23 advocate of my suggestions. However, upon review of what I
- 24 found in the subsequent rounds, that those suggestions were
- essentially ignored by DEQ, as well as Ramaco. This is an 25

- area that has significant subsidence in history. Everyone 1
- 2 knows that. So this is not -- this is an area --
- definitely area of concern. 3
- 4 What Ramaco has done in their permit application
- 5 was they provided one token boring as a result of the --
- 6 the DEQ -- the Environmental Quality Council's findings.
- 7 The boring itself showed ground conditions, which were not
- 8 really consistent with all the other borings that were
- 9 done. So they were anomalous conditions that require a
- 10 different design, based on the ground conditions. That
- 11 there was not a subsequent hole done or any other holes
- 12 done to show whether or not those conditions were
- 13 continuous through even the TR-1 area, the 68-acre area.
- 14 The -- in the application, there's -- there's a
- 15 promise to do other holes, but it's not really -- it's
- 16 vague in what -- in where those holes will be and what they
- 17 will consist of. And that's -- even though that the
- 18 application is for over 1900 acres of highwall mining.
- 19 Some of the areas that were deficient, that ${\tt I}$
- 20 found in terms of my subsidence engineering, were mainly
- 21 related to the long-term conditions, like, for example,
- 22 what will these rocks look like after the mine is abandoned
- 23 let's say 70 years later. Like, for example, Mr. Buyok has
- mentioned to me about subsidence on his property 70 years 2.4
- 25 after mining.

- 1 These conditions, when you're doing a mine
- 2 subsidence investigation, are always looked at, because you
- 3 want to know what the risk of surface subsidence is after
- 4 mining, when you're looking at the surface. Some of these
- 5 things also that were not addressed were also the -- the
- 6 ways that a mine can fail -- not all the ways a mine can
- 7 fail.
- 8 Some of the areas that were addressed were
- 9 related mainly to the pillar stability. Normally, that's
- 10 not a concern for long-term conditions. But when you're
- 11 talking about weak rocks, quote unquote -- from their own
- 12 engineer's report -- weak rocks in the roof and floor,
- 13 these -- that becomes a concern.
- 14 Also, there's another area that was a concern for
- 15 me was the vague -- or incomplete plan for a subsidence
- 16 remediation, if subsidence were to occur. And I'll talk a
- 17 little bit more about that a little bit later.
- 18 One of the important things that we look at all
- 19 the time is the floor and the roof, how stable they are.
- 20 For example, the pillars are supported by the floor. All
- 21 that's given in the permit is that the floor is okay.
- 22 There's no analysis of it that's provided for -- for being
- 23 able to be reviewed. To me that alone is an incomplete
- 24 application.
- 25 One of the things one of the things that they

- 1 did provide were some testing of these rocks that were
- 2 above in the roof and in the floor of what their
- deterioration characteristics were. In other words, would 3
- 4 they break down with water over time. And the results
- 5 showed significant amount of deterioration. So this
- 6 concern was not addressed. You know, what would be the
- 7 strength of these rocks after the breakdown, right? That
- 8 was not addressed in the application.
- 9 Another thing that -- that I think is important
- 10 is that the application did not prove that subsidence would
- 11 not occur with this mine design. In fact, their own
- 12 prediction method shows that seven sinkholes will probably
- 13 occur in the TR-1 area alone. If you use this methodology
- 14 that is used in the Ramaco application, you come and extend
- 15 it over these over 1900 acres, you're talking about
- 16 thousands of sinkhole subsidence events.
- 17 That -- one of the things that is also mentioned
- 18 is that while we have -- we have narrower entries than what
- 19 would be -- that has shown subsidence in the past in the
- 20 area. And so we wouldn't expect to have as many
- 21 subsidences. Well, that's only the case if you have
- 22 competent roof above -- above the entries or the openings.
- 23 If you don't have competent roof above the entries or
- 24 openings, the narrower void space actually causes
- 25 significant more -- higher caving height. And the reason

- 1 for that is -- is that the amount of volume of spread of
- 2 the rubble that occurs extends out into the entry compared
- 3 to the volume that extends upwards.
- 4 You know, one of the examples of that smaller
- 5 type of subsidences that can occur is based -- just looking
- 6 at some of the photos that Shannon will be sending you
- 7 regarding Mr. Buyok's property, where he talks about
- 8 sinkholes that are of size of about 10 feet or so. So
- 9 those are smaller than the entry size, and shows that the
- 10 rock cannot span even 10 feet.
- 11 The other area of concern is the way discussion
- 12 related to how the sinkholes, when they do appear, are
- 13 going to be repaired. From my understanding the only ones
- 14 that will be prepared the way it's laid out in the
- 15 application is that when they are hazardous. And who
- 16 determines when they're hazardous? It appears from my
- 17 reading of the application, that would be Ramaco. Well,
- 18 also how it will be repaired is somewhat vague. The way
- 19 that the Abandoned Mine Lands standards are -- don't appear
- 20 to be being applied here.
- 21 Another thing that's not talked about is you can
- 22 also have -- and this is something that I've learned from
- 23 looking at publications that is part of the history of the
- 24 area, also talking to people in the area, is that you can
- 25 have a bowl-shaped depression of the land, the surface

- 1 land. So these depressions can cause interruption of
- 2 drainage or cause ponding of drainage.
- 3 And, lastly, the last thing I want to talk about,
- 4 is the plan that's proposed in the application. Where
- 5 Ramaco discusses the first five years of the plan only
- 6 being surface mine. And as others have discussed -- and
- 7 also is my suggestion -- is that the removal -- that only
- 8 the surface mining portion of the permit be looked at and
- 9 taken into consideration.
- This has a number of benefits to do it that way.
- 11 One -- and it is -- and it's somewhat in compliance with
- 12 Ramaco proposing every five years to have a renewal. But
- 13 having only done the surface mining, it allows -- allows
- 14 one to have additional knowledge of -- of the ground
- 15 conditions experienced from the mining that's done for
- 16 those five years.
- 17 Also, there's also the MSHA government agency
- 18 that will be involved in the surface mining, which will
- 19 require additional information to be provided. That
- 20 information would then be available for the second term, or
- 21 the == the second five years.
- 22 And only -- my recommendation is only the areas
- 23 that have provided sufficient area and sufficient design
- 24 analysis should be approved, not the entire permit area.
- 25 1900 or more acres, without -- without having sufficient

- 1 data and design.
- 2 Also, this allows -- this is something that was
- 3 in their -- their permit discussions, that they -- they
- 4 would do a reevaluation of the highwall mining design,
- depending on the mining conditions. So this would -- this 5
- 6 would allow some additional information to be collected in
- 7 that manner.
- 8 I think that -- that covers all my comments. I
- 9 appreciate the time and patience from DEQ. If you have any
- comments for me, I'd be glad to answer them. 10
- 11 DIRECTOR PARFITT: Thank you, Dr. Marino.
- 12 I do have a couple of questions for clarification.
- 13 You've made mention of concern about -- I think
- 14 the term you used was weak rocks. I was just hoping you
- 1.5 could elaborate on how do you define weak rocks, and are we
- 16 seeing that -- or are you seeing that in your review in
- 17 that area?
- 18 DR. MARINO: Yes. There are certain types
- 19 of rocks that -- in fact, even in their consultant's
- report, they talk about them being weak rocks. These rocks 20
- 21 are -- have a lot of clay in them. And the clay itself
- 22 absorbs water. So what happens is when they get exposed to
- moisture, they soften. They swell up or break, and they 23
- 24 fracture into small gravel pieces in some cases, but they
- 25 lose a significant amount of strength in the long term.

- 1 DIRECTOR PARFITT: Okay. And then just for
- 2 clarification, make sure I understood your recommendations
- 3 correctly, that if -- if we were to proceed -- or to
- 4 proceed and get the permit, you would suggest that it be
- 5 limited to the surface mining parts of the application at
- 6 this point in time?
- 7 DR. MARINO: Yes.
- 8 DIRECTOR PARFITT: Okay. All right. Well,
- 9 thank you. I appreciate the comments and your review. So
- 10 that's helpful.
- Okay. So now we do have Mike Wireman on, so
- 12 we're going to shift over to Mike.
- MR. GUILLE: Mike, can you hear us?
- 14 MR. WIREMAN: Yes, I'm here. Can you hear
- 15 me?
- MR. GUILLE: We sure can.
- DIRECTOR PARFITT: We can hear you well.
- MR. WIREMAN: Thank you.
- 19 DIRECTOR PARFITT: So Mike --
- MR. WIREMAN: No problem.
- 21 DIRECTOR PARFITT: Go ahead, Mike. The --
- 22 the floor is yours.
- MR. WIREMAN: Thank you. And thanks for
- 24 the opportunity here to discuss this most recent permit
- 25 application. I appreciate the time.

- 1 First thing I want to say, before I get into two
- or three areas of concern I have, is this permit 2
- 3 application really, for the most part, reflects a very
- outdated mine plan. There's a great deal of text in this 4
- application that doesn't apply anymore. And it really 5
- 6 makes this very difficult to read and review and understand
- 7 what's current and what's not.
- 8 Luckily, I've been engaged in this since 2016,
- 9 and have been through all of the many, many rounds of
- comments and responses. But for anyone who hasn't done 10
- 11 that, this would be a nightmare. I've reviewed many, many
- 12 mine permit applications over the years, and this one is
- 13 certainly up there in terms of poor quality.
- 14 Having said that, I have three areas I want to
- discuss with respect to hydrology. And all my comments are 15
- really concerning the hydrology, and particularly the 16
- 17 baseline assessment.
- 18 The characterization of the baseline hydrology
- 19 for this mine permit area and the adjacent areas is very
- 20 incomplete, and, as a result, is insufficient for assessing
- 21 any potential impacts to the Tongue River alluvial aquifer,
- 22 which is the most important aguifer in the whole region,
- 23 and subsequently to alluvial valley floors, which are
- hosted by this alluvial aguifer. 24
- 25 So the baseline hydrology really needed to

- 1 provide data that could then be evaluated to look at
- 2 potential impacts to those resources, and it simply doesn't
- 3 do that. The dataset is extremely sparse. Most of it is
- more than a decade old. Conditions change. Hydrology is 4
- 5 not a static system. It's a dynamic system, and things
- 6 change over time. So a lot of data here is very old and
- 7 really unknown how much it may or may not reflect current
- 8 conditions.
- 9 The hydrologic system here is very complex.
- People often think, well, there's not a lot of water. It's 10
- 11 simple. But that's not the case here. It's a very
- 12 complicated system.
- 13 And there are two hydrologic units, you might
- 14 call them, that are of importance here with respect to
- 15 understanding any potential impacts. The first is the
- 16 Tongue River member of the Fort Union formation, which
- 17 hosts the Carney coal. That is complex little groundwater
- 18 system or systems.
- 19 There are variably saturated flow conditions in
- 20 this member. It has sandstones in it. It has coals. It
- 21 has claystones, siltstones. It's fairly typical for Fort
- 22 Union type of lithologies. But it's very complicated
- 23 because of there's a lot of faulting. As I said, these
- 24 viably flow, variably saturated flow conditions, meaning
- 25 some spatially variable saturation, and temporally variable

- 1 saturation.
- 2 There's underground workings that may or may not
- 3 impact flow through that member. And, most importantly, is
- 4 this assessment of how much -- whether and how much
- groundwater from the Tongue River member of the Fort Union, 5
- 6 which may discharge into the Tongue River alluvium, or even
- 7 directly into the Tongue River, but more likely into the
- 8 Tonque River alluvium.
- 9 That assessment has not, simply, been done at
- all. And that's a concern, because the AVFs are important. 10
- The -- maintaining the water budget in the alluvial aquifer 11
- 12 is important. And understanding the connection between
- 13 that alluvial aquifer and the Tonque River is important.
- 14 And the water budgets that go along with the AVFs, which
- 15 are critical there.
- In this Tonque River member, the recharge to 16
- 17 that -- that aquifer, the flow and the discharge from it is
- 18 very poorly understood, mainly because there just isn't
- 19 enough data. It's just that simple. This is a very, very
- 20 sparse data set for a very large -- or for this particular
- 21 mine.
- For example -- there's a couples of examples 22
- 23 here. But Big Horn Coal, in their reports, they identified
- what they termed a significant sandstone above the Carney 24
- in the eastern part of the permit area. That sand produced 25

- 1 35 -- or 38 gallons per minute. That's productive.
- 2 Particularly for a domestic. No domestic -- very few
- 3 domestic wells up there can make that kind of water.
- 4 There's no assessment of that sand in there.
- 5 There's no discussion of where it might be saturated, how
- 6 it gets recharged, how it might connect to the Tongue River
- 7 alluvium. It's just not there.
- 8 So that -- understanding that is important,
- 9 because the question is is there significant water that
- 10 would discharge from this Tongue River member into the
- 11 alluvium along the Tongue River, and the highwall mining,
- 12 dewater that coal, probably dewater the sandstones that are
- 13 adjacent to it, and that may have an impact in terms of
- 14 reducing the amount of discharge from that geologic unit
- 15 into the Tonque River alluvium, which then, subsequently,
- 16 could affect water budgets of the AVFs. And there's just
- 17 no assessment of that, really, that is quantitative.
- So, secondly, is the Tongue River alluvial
- 19 aquifer itself. We have pushed for four years, five years,
- $20\,$ $\,$ to get Brook to assess this aquifer. Some very simple
- 21 things which are always done. A water table map. We've
- 22 never seen one. Which direction does this water flow in
- 23 this aquifer? It is likely, given the location of the --
- 24 of this river, adjacent to the Bighorn Mountains, that you
- 25 have what we refer to as strong hyper reed flow. And what

- 1 that means is mountains -- when streams come out of the
- 2 mountains like that and go from high energy to low energy,
- 3 you often have a saturated alluvial deposit adjacent to the
- 4 river, and the river water moves in and out of that
- 5 alluvium and alluvium water moves in and out of the river.
- 6 And that only happens in the areas where rivers come
- 7 immediately out of mountains. Most other places there's
- 8 groundwater discharge to rivers when the groundwater levels
- 9 are higher.
- 10 But there's no discussion of that, that --
- 11 there's only been really three wells in this alluvium. Two
- of them, by the way, were abandoned after only being
- 13 sampled once. And one of them was on the south side of the
- 14 Tongue River, which is frankly useless in terms of a water
- 15 table map for that alluvium on the north side of the Tongue
- 16 River, which is the critical resource here.
- 17 You have to have at least three wells to even
- 18 construct a water table map. There isn't three wells.
- 19 Also, the wells that they have used are the very eastern
- 20 end of this property. So there's nothing up on the west
- 21 end adjacent to the mine permit in terms of the west end of
- 22 this alluvial aquifer along the Tongue River. There's just
- 23 no data up there. And that includes monitoring data in the
- 24 Tongue River.
- 25 So we don't have any sense of seasonal trends

- 1 with respect to water levels or water quality in the Tongue
- 2 River alluvial aquifer. We have very old data that was
- 3 some -- very limited data collected in 2018, but it was
- 4 simply not sufficient -- you know, added on to what had
- 5 been collected before to get any sense of the groundwater
- 6 flow system in this aguifer, of its connection to the
- 7 Tongue River, of its potential connection to the Tongue
- 8 River member of the Fort Union formation. That's just --
- 9 it just can't be done. So we have no way of assessing
- 10 potential impacts, because we don't understand the current
- 11 conditions in this aquifer.
- 12 And in 2018, Brook provided some additional
- 13 cross-sections, which went north and south and went across
- 14 the Tongue River Valley. However, all of the points on
- 15 those cross-sections that are -- extent over there on the
- 16 southern end of these cross-sections, those are based on
- 17 lithologies from state engineer's office well permits in
- 18 the logs. I'm not knocking the state engineer. It's the
- 19 same in every state I've ever worked in. Lithology
- 20 information on water well permits, in particular domestic
- 21 permits, are just simply not good. They just aren't. And
- 22 they can't be used for this. Brook should have drilled
- 23 holes to construct those cross-sections. And should have
- 24 drilled more holes so they could complete wells and -- and
- 25 look at seasonal trends in water table.

- 1 There were two paired sets of wells in 2018 that
- 2 were Carney wells constructed immediately adjacent to
- 3 alluvial wells. The data in this application and in the
- 4 CHIA seemed to indicate that there was a connection. That
- 5 the water level in one of these paired wells in the Carney
- 6 was higher in the alluvium. That indicates a potential for
- 7 upward movement.
- 8 In the CHIA, in Addendum MP.3, Figure 2.3-3, it
- 9 indicates that there's a potential for flow from the Carney
- 10 up into the alluvium. So that should be further assessed
- 11 with real data and quantitative data so that we can know if
- 12 it's going to be a problem. When you dewater the Carney in
- 13 the adjacent sandstones, that's going to reduce recharge in
- 14 some way to this alluvial aquifer and subsequently affect
- 15 the AVFs.
- 16 Finally on this issue, the water quality data are
- 17 very old, for the most part. There's no recent water
- 18 quality data for Slater Creek or Hidden Woman Creek -- or
- 19 Hidden Water Creek, and only a very limited amount of water
- 20 quality data for the Tongue River alluvium and the Tongue
- 21 River.
- 22 And there are no seasonal trends for water
- 23 quality, no seasonal trends for flow, and you just have to
- 24 have that. You can't make decisions based on one data
- 25 point in the middle of the summer and not know what goes on

- 1 the rest of the year. And these systems have seasonal
- 2 trends.
- 3 And then on -- on this point, I'll end by saying
- that the modeling -- you know, it was a good model. And 4
- 5 model that's used a lot. But models are extremely limited
- 6 by data. And there's very little data. This model focuses
- 7 really on looking at the radial extent of a cone of
- 8 depression related to the dewatering issue, and how that
- 9 might affect nearby domestic wells. The model did not
- address the potential impacts to the Tongue River alluvial 10
- 11 aquifer, didn't really address flow down-gradient from this
- 12 Tongue River member. So that's an issue. I'm not knocking
- 13 the model, it's a good choice of models. But models are,
- 14 obviously, very limited by data.
- 15 And then moving onto my second point, which will
- 16 not take as much time, are the AVFs. We all know there's a
- 17 requirement to protect those. First of all, the permit
- 18 application doesn't seem to have any data or information on
- 19 the Slater Creek AVF, which DEQ has identified.
- 20 Secondly, both Brook and DEQ agreed that there
- 21 are AVFs on the alluvial aquifer on the north side of the
- 22 Tongue River, and that's obvious. They're there, and
- 23 they're adjacent to the mine permit boundary. There's
- 2.4 really no assessment of those.
- 25 DEQ apparently has determined that no action with

- respect to characterizing these AVFs or mapping them or
- monitoring them is required because Brook says there will 2
- 3 be no surface disturbance to the AVFs. Well, that totally
- ignores any potential impact of dewatering the Carney seam, 4
- 5 and that impact to the water budget of these AVFs. It's
- 6 just ignored. And so I really don't see how that
- 7 conclusion was reached with respect to the AVFs. It also
- 8 ignores any future agricultural use of these AVFs.
- 9 And then, finally, the last point is monitoring.
- 10 You know, mines require baseline monitoring. They require
- 11 operational monitoring. They require postclosure
- 12 monitoring. The monitoring program here is a mess,
- 13 frankly. It is not very well defined. It's not laid out.
- 14 There's no strategy here with respect to these programs.
- 15 They're not based on a plan to collect data that can be
- used to determine and evaluate impacts. They're simply not 16
- 17 that -- that thinking didn't go in here.
- 18 There's no monitoring upstream on the Tonque
- 19 River. None. There never has been, west of the mine
- 20 permit boundary. It's common sense that you have stream
- 21 monitoring above this mine permit boundary to the west, and
- 22 then downstream, so that you can look to see what changes
- 23 happen along that course. They didn't do that.
- 24 There are no monitoring wells in the Tongue River
- 25 alluvium on the west end of this site. There's mention in

- 1 here of using the existing monitoring. Well, some of these
- 2 sites haven't been monitored in a long time. Some of them
- 3 may be destroyed during monitor -- or during mining.
- 4 There's some promise to restore those. I'm not real sure
- 5 what that means and how -- how clear that that is.
- 6 The frequency of monitoring is unclear in terms
- 7 of postclosure. There's no discussion of what would
- 8 trigger end of postclosure monitoring. I recall some
- 9 discussion that there would be one or two annual
- 10 monitoring, and then trends would be established based on
- 11 that. Well that's simply not possible. You got to have at
- 12 least quarterly monitoring over three or four or five years
- 13 to establish any trends that might be used to make
- 14 decisions about ending the monitoring. So that's not
- 15 there.
- 16 So those are really the three main issues I have.
- 17 I'm just very -- just frustrated with not being able to add
- 18 to the data. We've been at this for 10, 15 years now. To
- 19 add to the data and to do a complete assessment of baseline
- 20 hydrology that can then be used to base mining operations,
- 21 to base closure elements and future monitoring. It's just
- 22 not there.
- 23 And so given that, there's huge uncertainty here
- 24 with respect to impacts to these critical water resources.
- 25 So I'll leave it at that.

1

2 Just one question. And that was you made reference that there's more data that needs to be 3 4 collected, more holes need to be drilled, more wells need 5 to be drilled. Do you have some kind of -- I don't know if 6 you'll know the answer to this -- but do you have some kind 7 of sense as to how many additional wells would be necessary and over what period of time? 8 9 MR. WIREMAN: Yes. I mean, I can give you 10 that. I could. I mean, I could go over it here on the 11 phone, but it would take some time. But the answer to that 12 is yes. First of all, you would start with wells up on the 13 west end on the north side of the river in the alluvium up 14 there, totally west of the permit boundary. You would spread out wells -- like I said, you have to have three 15 16 wells in any given aquifer to determine direction of flow. 17 That's not there. So you would put one on the west end, 18 maybe one in the middle, and one on the -- on the east end. 19 They've gotten rid of the two of three wells they 20 had, and there was no explanation of why those wells were 21 abandoned. They were sampled one time. 22 So with respect to the Tongue River alluvial aquifer, I would suspect right now, my understanding -- and 23 24 Brook can correct me if I'm wrong -- but there's one kind 25 of alluvium well left. There's a need for at least three

DIRECTOR PARFITT: Okay. Thanks, Mike.

- 1 more. So that's that.
- 2 With respect to the Tonque River member of the
- 3 Fort Union, the holes that they use for monitoring there,
- 4 many times are abandoned core holes that were put in for
- 5 exploration of the coal resources. Those are poor, poor
- 6 water monitoring holes. They just are. They're usually
- 7 2 inch. You can hardly get a water quality sample out of
- 8 them. So you need to start over there a little bit.
- 9 Big Horn Coal identified areas where this
- 10 sandstone is located. So, first of all, I'd put a well
- 11 screened only in that sandstone on the east end so that
- 12 that could be watched. There's more wells that need to go
- 13 up on the west end, even though I recognize up there the
- 14 Tongue River member is often dry. It's up near the
- 15 recharge area, and so depth of water sometimes is -- is
- 16 great. But you need to know that. You need those wells in
- 17 there to see what may change over a year.
- 18 And then, finally, there needs to be a little
- 19 more look at Slater Creek alluvium, because the aquifer
- 20 tests that were done by Brook some time ago -- 10, 12 years
- 21 ago -- using wells to the east of this area in the coals,
- 22 there were never any monitoring wells in the Slater Creek
- 23 alluvium. And that was just simply a mistake. You've got
- 24 to monitor that, because that's a potential place where
- 25 impact could occur.

- And so, yes, that can be put together in a
- 2 detailed plan. I was hoping to see that in this
- 3 application, and didn't. But I'd be happy, if you want, to
- 4 put that on paper and run it up through Shannon, if
- 5 that's -- if that would be helpful.
- 6 MS. ANDERSON: Todd -- and this is
- 7 Shannon -- if I may just add on that as well. You may
- 8 remember that the agency was reviewing a sampling analysis
- 9 plan from the Company, and there was some rounds of review
- 10 on that plan, and then all the sudden it just disappeared
- 11 and wasn't actually going forward. And then in October of
- 12 that year, we got a new -- again, some additional
- 13 information in the permit.
- So from our standpoint, it was unclear why the
- 15 sampling analysis plan was abandoned, because it was under
- 16 DEQ review at the time.
- 17 DIRECTOR PARFITT: Okay. All right. Mike,
- 18 thank you.
- 19 Shannon, thanks.
- But, Mike, thanks. And no need to put anything
- 21 additional together. I think your -- your -- your
- 22 explanation helped me out there from what I was looking
- 23 for.
- I'm going to turn it over back to Shannon. I
- 25 don't know if, Shannon, you're going to have Jill make some

- 1 remarks or statements.
- 2 MS. ANDERSON: Yeah, I think that's up to
- 3 Jill. She was not knowing whether she wanted to or not
- 4 when last I talked to her, so...
- 5 DIRECTOR PARFITT: Okay.
- 6 MS. ANDERSON: And, Jill, it's hard for me
- 7 to see you, so...
- 8 MS. MORRISON: Hi.
- 9 MR. GUILLE: Let's see here. One sec.
- 10 DIRECTOR PARFITT: Hold on. We're still
- 11 trying to get -- there we go.
- 12 All right. We're on.
- MS. MORRISON: All right. Thank you.
- If there's time, I'd just like to make some
- 15 points. And, first of all, I do want to thank again DEO
- 16 for working through a difficult process for helping us to
- 17 try to be able to participate in a meaningful way. And so
- 18 we do appreciate your time and your efforts through this
- 19 process.
- I have four or five points I want to kind of
- 21 round up and really emphasize as we've gone through this
- 22 process and as we've been working on this issue. And one
- 23 of the very important points under the laws that this mine
- 24 application has to be complete and accurate. That is a
- 25 number one point. And, unfortunately, this application is

- not complete or accurate. It is deficient. It has been
- 2 noted it's somewhat of a speculative permit. And that both
- 3 undermines the law and -- and fails to protect and prevent
- material damage outside the permit area. And that is 4
- 5 another requirement.
- 6 We have problems with subsidence, problems that
- 7 could occur from the blasting, problems with potential
- fires related to blasting and mining, incorrect maps, 8
- 9 incorrect -- well, we really have no real defined
- 10 identified, disclosed, or information reviewed about where
- 11 is this water coming from that will be used for the mine.
- 12 That's another incomplete permit area.
- 1.3 Again, the roads and the facilities for the mine
- 14 don't match some of what's in the permit previous to what
- 15 is being talked about now. And I -- I don't know of any
- 16 mine -- coal mine in the state of Wyoming that uses public
- 17 haul roads, state highways as haul roads. I don't know of
- any. Mines are required -- they move state highways in 18
- 19 order to have a haul road or build one. And I don't know,
- 20 maybe you do, but it -- it's very unclear. And the setback
- 21 distances from those are deficient in this permit.
- 22 The zoning identification in the permit is
- 23 inaccurate. It's noted as -- parts of the area around the
- 24 area zoned heavy industry. We have double-checked with the
- 25 county, and, no, there's nothing zoned in that area heavy

- 1 industry. The area where Ramaco has and Big Horn Coal has
- 2 some locations were zoned light industry, but nothing is
- 3 zoned heavy industry, and that's an inaccuracy in the
- permit, again. 4
- 5 We don't know, again, who the operator is going
- 6 to be. That's a deficiency, and it's incomplete. And not
- 7 knowing what financial bonds or instrument is there is also
- 8 an incompleteness. It seems there's a lot related, as Mike
- 9 and Gerry mentioned, on subsidence and water.
- 10 And I think, again, to emphasize how serious it
- 11 is to get this right, this is a very important place.
- 12 There's a lot of people who live there. There's an
- 13 interstate highway running through there. This is not just
- 14 your run of the mill Powder River Basin coal mine. And we
- got to get this one right. We want to help get it right. 15
- 16 We want it to be done right. We want it to be done well,
- 17 and we hope that you can prevail over the political
- 18 pressure and do -- do your job. And we appreciate that.
- 19 Thank you.
- 20 DIRECTOR PARFITT: Thank you. And I'm
- 21 going to go back to Shannon and see if, Shannon, you had
- 22 any kind of wrap-up remarks that you'd like to make.
- 23 MS. ANDERSON: I don't. That concludes our
- organizational presentation. So thank you. 24
- 25 DIRECTOR PARFITT: Well, perfect. You kept

- 1 that right at 60 minutes, so...
- 2 MS. ANDERSON: Again, completely
- 3 unorchestrated. So amazing how that happened. But thank
- 4 you.
- 5 DIRECTOR PARFITT: Well done.
- 6 All right. What we're going to do now is we'll
- take an hour break -- yeah, we'll take an hour for lunch 7
- 8 break, and when we come back, we'll pick up with Tom
- 9 Sansonetti and Brook Mine. That will go for -- they have
- 10 60 minutes. That leave us some additional time, so if
- 11 there are some closing remarks that some folks want to
- 12 make, we'll offer up that, depending on who all wants to do
- 13 that.
- 14 I know that Keith Burron, you had expressed some
- 15 interest in that. So there should be some time at the end
- 16 for -- to allow for that.
- So we'll break until 1:05. And we'll reconvene 17
- 18 at 1:05.
- 19 Thank you, everyone.
- 20 MR. GUILLE: Thank you.
- 21 (Informal conference proceedings
- 22 recessed 12:05 p.m. to 1:05 p.m.)
- 23 DIRECTOR PARFITT: Tom, are you on? Tom
- 24 Sansonetti?
- 25 MR. GUILLE: We don't have him as listed,

- 1 but I'm going to unmute Joanna Dewald. No, I can't. I'm
- 2 going to unmute Jeff Barron.
- MR. BARRON: I can hear you, yes.
- 5 DIRECTOR PARFITT: Okay. Is Tom with you?
- 6 MR. BARRON: He -- let me check in another
- 7 room really quick.
- B DEPUTY DIRECTOR EDWARDS: While he's
- 9 checking, Mark, do you have anybody with you in the
- 10 Sheridan office?
- 11 MR. GUILLE: Hold on. Go ahead, Mark. I'm
- 12 sorry.
- MR. ROGACZEWSKI: That's all right.
- 14 I do have Ms. Tellez. And John Buyok said before
- 15 he left he was probably going to come back, but he has not
- 16 returned yet.
- 17 And Mrs. Westbrook was thinking of coming back,
- 18 but she has not arrived yet.
- 19 DIRECTOR PARFITT: Okay. Thank you.
- MR. BARRON: Can you still hear me?
- MR. ROGACZEWSKI: Yes.
- 22 MR. BARRON: Tom's working on getting
- 23 logged in. I'm not sure which computer he's on. But he's
- 24 in there with Joanna right now.
- 25 MR. GUILLE: Joanna -- I'm sure Joanna can

- 1 hear me. Actually, Joanna, I'm going to unmute you now,
- 2 and, Jeff, I'm going to mute you.
- 3 And, Joanna, you should be live now. Can --
- 4 MR. SANSONETTI: Can you hear me now,
- 5 Keith?
- 6 MR. GUILLE: We can.
- 7 MR. SANSONETTI: Yeah, it's Tom.
- 8 MR. GUILLE: Okay, Tom. Hey, Tom, did you
- 9 want us to have you on video?
- MR. SANSONETTI: That would be fine, yes.
- 11 MR. GUILLE: Okay. Great. Bear with me.
- 12 MR. SANSONETTI: Make sure you got a wide
- 13 enough screen, Keith.
- MR. GUILLE: So I should have made you as a
- 15 panelist, and then I'm going to send the invite to -- for
- 16 your camera.
- 17 MR. SANSONETTI: Okay. After I'm finished,
- 18 I'm going to go straight to Jeff Barron, who's in another
- 19 room. So you'll need to get to Jeff's computer. Are you
- 20 set for that?
- 21 MR. GUILLE: Yep. We can actually do that
- 22 right now. I'll get that set up while you speak.
- MR. SANSONETTI: Very good.
- 24 DIRECTOR PARFITT: Tom --
- MR. SANSONETTI: So I'll give things back

- 1 to Todd, then.
- 2 DIRECTOR PARFITT: Thanks, Tom. And so
- 3 we'll let you kind of facilitate your group. And so when
- 4 you need us to open up the mic to somebody, just let us
- know. And I know you've got some materials too that you're 5
- 6 going to be presenting as well.
- 7 So we've got about 60 minutes for your
- 8 presentation. We've got some time. So we've got a little
- 9 flexibility there to go over a little.
- 10 MR. SANSONETTI: Okay. That sounds fine.
- 11 It's about 1:08, or something like that?
- 12 DIRECTOR PARFITT: Yeah.
- 13 MR. SANSONETTI: Let me know when you're
- 14 ready to start.
- 15 MR. GUILLE: We are ready to go.
- 16 DIRECTOR PARFITT: All right. You're up.
- 17 MR. SANSONETTI: Good afternoon. Thank
- 18 you, everyone, for attending this informal conference.
- 19 Director Parfitt, DEQ professionals, and interested local
- 20 and statewide citizens. Your time is appreciated.
- 21 I'm Tom Sansonetti from the Holland & Hart law
- firm. Along with Pat Day and Joanna Dewald, I am 22
- 23 representing Ramaco and the Brook Mine.
- 24 Now, Ramaco wants to showcase Sheridan as the
- 25 "carbon valley," for a new higher tech future for one of

- our state's oldest, most valuable and abundant natural 1
- 2 resources, namely coal.
- 3 Now, Ramaco is proud to have invested in Wyoming
- for almost 10 years to try and make this dream a reality. 4
- 5 With the forthcoming decision resulting from this
- 6 conference, we are positively close.
- 7 Now, since 2011, both our employees and countless
- 8 local vendors and professionals that we have employed have
- 9 been dedicated to improving the Sheridan community and the
- 10 state. Ramaco has invested with full faith in the desire
- 11 and ability of Wyoming people innovate, lead, and create.
- 12 Now, the Brook Mine may be small by Wyoming
- 13 standards, but it is unique. It is the first step in the
- 14 only vertically integrated coal tech project designed to
- 15 produce the feed stock for coal to product, research,
- 16 development, and manufacturing of advanced carbon products
- 17 and materials.
- 18 Our Brook Mine permit has now been over eight
- 19 years in the making. It has been reviewed and re-reviewed
- 20 and rendered as "complete and compliant" twice by the State
- 21 of Wyoming's own mining experts at the DEQ.
- 22 Now, in response to the Environmental Quality
- 23 Council's decision in 2017, which declared the existence of
- 24 certain deficiencies in the original application, the Brook
- 25 Mine has made major revisions to that application,

- 1 including the removal of the entire TR-1 trench area from
- 2 the mining plan. In addition, the Brook Mine's hired two
- 3 of the country's top engineering companies to review the
- 4 mine plan and to address each and every one of the EQC's
- 5 concerns.
- 6 Consequently, Mr. Director, as part of your
- 7 deliberations whether to grant this permit, consider that
- 8 your DEQ professionals with their top-notch expertise,
- 9 knowledge, skills, ability, and experience, have deemed
- 10 this Brook Mine permit to be 100 percent compliant with the
- 11 rigorous environmental protections afforded by Wyoming's
- 12 strong laws.
- And this permit is being held to the highest
- 14 standards. Those who would say otherwise have different
- 15 agendas regarding the issuance answer of this permit, or,
- 16 indeed, any extractive industry permit, whether it be for
- 17 coal, oil, or gas.
- The original application, as you know, went
- 19 through five rounds of DEQ scrutiny. And this revised
- 20 application has gone through an additional seven rounds.
- Now, this proposed mine is not in a national
- 22 park. This area is a coal mining region, and proudly so.
- 23 Our mine is in an historic mining district that once
- 24 brought good-paying jobs that allowed Wyoming families to
- 25 live here for generations. This permit is potentially the

- 1 future of coal. Coal tech. Unlike all other coal
- 2 operations in Wyoming, Ramaco is not intent on sending
- 3 coal-laden railroad cars down the tracks to coal-burning
- power plants. 4
- 5 And so with this permit, we have a chance to
- 6 enter a new age for Wyoming's future. It is the right
- 7 permit, in the right place, at the right time, when Wyoming
- 8 needs this investment in new manufacturing base.
- 9 Now, I reference the upcoming Wyoming state
- 10 legislature's special session to deal with our budget
- 11 crisis. Now, a majority of the written responses sent to
- 12 DEQ during the public comment period offered strong support
- 13 for the mining permit. Nevertheless, the opposition has
- 14 worked hard to make the mine supporters doubt the abilities
- 15 of Ramaco and of the DEQ.
- 16 I would note very quickly the answers to a couple
- 17 of the questions that were brought forward earlier today.
- 18 I would note from the beginning that Ramaco sponsored
- 19 several community action committee meetings as outlets.
- 20 And they were held for neighbors and citizens to
- 21 participate over the last few years. So outreach did
- 22 occur.
- 23 I would also note that the iCAM building is being
- 24 all privately funded. Ramaco's federal grants are for
- 25 research, not bricks and mortar on the iCAM itself.

- 1 As far as the size of the building is concerned,
- 2 why that's important, I don't know, but the building size
- 3 increase was based on the fact that the scope of some of
- 4 the research that will be conducted has also increased.
- Now I've listened to the objectors' comments
- 6 today. And people living nearby the mine have the right to
- 7 be concerned about the impacts of the mine on their
- 8 property. They have a right to be heard and their concerns
- 9 addressed. And any valid concerns of our neighbors can be
- 10 resolved if need be through conditions to the permit.
- 11 However, some objectors are asking for a 100 percent
- 12 guarantee that no hydrological subsidence or blasting
- 13 difficulties will ever arise. Now, that is an impossible
- 14 standard to meet, and it's not the standard embedded in the
- 15 Wyoming statutes.
- 16 And, unfortunately, as we have also heard today
- 17 from some other objectors, no amount of permit review will
- 18 ever be sufficient. Those objectors just want no more coal
- 19 mining, period. No matter the purpose. And it's to those
- 20 objectors that were railing about potential failure of
- 21 Ramaco's business plan, or not knowing enough about what
- 22 it's about, they have no standing to do so. Their
- 23 prediction and prognostications are irrelevant to the
- 24 factors to be considered by the DEQ in granting the permit.
- This is not federal coal owned by all U.S.

- 1 citizens. This is not state coal by all Wyoming citizens.
- 2 This is private coal purchased and owned by a company
- 3 wanting to make a profit, but while making a difference to
- 4 the Sheridan community.
- 5 The Company deserves the opportunity to succeed
- 6 in developing its innovative plans. It's Ramaco's risk to
- 7 take and if Ramaco eventually succeeds or fails, that's the
- 8 American way of capitalism. On the other hand, if the
- 9 objectors desire to prevent Ramaco from mining its coal, no
- 10 matter what comes to pass, then who is going to reimburse
- 11 Ramaco for the value of its coal duly purchased, but
- 12 ordered left in the ground in perpetuity? The objectors?
- 13 The State?
- 14 What other extractive mineral company is going to
- 15 want to come to Wyoming after observing what Ramaco has
- 16 been through?
- 17 So you will now hear from Ramaco's witnesses in
- 18 support of the revised application. First, Jeff Barron of
- 19 WWC Engineering, a Sheridan company, who filed the
- 20 application. And then expert witnesses, licensed in
- 21 Wyoming, on hydrology and subsidence from the respective
- 22 companies of Petrotek and Agapito.
- 23 I thank you for your time and attention, and here
- 24 now is Mr. Barron.
- MR. BARRON: Okay. Can you hear me?

- 1 Great.
- 2 All right. I'm Jeff Barron. I'm a licensed
- engineer in both Wyoming and Montana. I work at WWC 3
- Engineering, who was hired in 2013 to prepare the original 4
- 5 and now the amended Brook Mine permit to mine application.
- 6 Little bit about me. During my college
- 7 internship, I focused on studying the use of wetlands to
- 8 treat wastewater, primarily trying to identify those
- 9 species of plants that can do so during their dormant
- 10 periods in the winter months.
- 11 I grew up in Sheridan, Montana, a place with a
- 12 rich history of both mining and agriculture. My father was
- 13 the district conservationist for the Soil Conservation
- 14 Service, now known as the NRCS. I grew up understanding
- the importance and value of caring for our environment and 15
- 16 the application of science to achieve that goal.
- 17 Director Parfitt, members of the DEQ, and the
- 18 public at large, I'm here to say that we have heard and
- 19 responded to your concerns, culminating from two public
- 20 comment periods on the same application. To that end,
- 21 we've hired Petrotek, a third-party firm, to evaluate our
- 22 groundwater model. We also hired Agapito Associates to
- 23 develop our highwall mining subsidence plan.
- 24 I want to say that we've heard from the EQC as
- 25 well. They had concerns about our TR-1 mining area. We

- 1 removed that area from the mine plan, and with it any
- 2 hydrologic effects that may have occurred from mining in
- 3 that area.
- 4 We've also added to the application a subsidence
- 5 control plan for mining not set to occur until the next
- 6 term of the permit so that the public, the DEQ, could get a
- 7 sense of how we were going to treat and handle subsidence
- 8 within our permit mine.
- 9 I want to say that we'll have no substantial
- 10 impact to the AVF. We've heard from Mike Wireman who said
- 11 we abandoned three of our alluvial monitoring wells.
- 12 That's just not true. We have established three monitoring
- 13 wells along the Tongue River, and three along Slater Creek,
- 14 all of which are still active and we are still monitoring.
- During that testing we had two Carney pumping
- 16 wells adjacent to two of our alluvial monitoring wells. We
- 17 conducted pumping tests and observed no change in the water
- 18 level in the alluvium. To Mike Wireman's point, even
- 19 seeing the hydrostatic level of the Carney well above the
- 20 alluvial well would indicate a limited amount of
- 21 communication, otherwise they might be at the same
- 22 elevation.
- Now, this is in addition to more monitoring and
- 24 testing that we have conducted on our previous monitor well
- 25 network. We have 33 total wells within our network that we

- 1 have been studying and monitoring for baseline conditions.
- 2 I want to point out that will not affect the high spring
- 3 runoff in the Tongue River. That's the primary source of
- 4 recharge to the alluvial valley floor. When the Tongue
- 5 River sees high flows, that water permeates into the Tonque
- 6 River alluvium and then is released during the drier months
- 7 of the year.
- 8 Another portion of the Tongue River alluvium we
- 9 will not affect is the Tongue River ditch. It lies between
- 10 the Brook Mine and the Tongue River, and serves as an
- 11 irrigation source for those farms and ranches that are
- 12 growing crops on their lands. We have even taken samples
- 13 of that Tongue River ditch to understand its nature and
- 14 makeup. As you might understand, that Tongue River ditch
- 15 flows slower than the river itself and has a higher
- 16 temperature. Those are some of the things we found.
- 17 As it relates to the Yellowstone Compact, our
- 18 company did a great deal of work as relates to that compact
- 19 and helped established the 1950 cutoff date where Montana
- 20 can make for a call for water. It's very important to note
- 21 that Ramaco controls 1908 and 1903 Tonque River water
- 22 rights on its own property and fee service, not subject to
- 23 the 1950 call date from Montana.
- The overarching theme in all of this is we
- 25 learned through the increased data, we didn't gain a better

- 1 understanding of the area, rather we reaffirmed our
- 2 existing understanding of the area.
- As was brought up previously, there's a concern
- 4 about our impacts to county roads. I want to say that our
- 5 impacts will be minimal. It would be something equivalent
- 6 to a gravel operator getting or winning a new contract and
- 7 the traffic that might result from that new contract. Now,
- 8 this is partly due to the scaled-back production of the
- 9 mine site and the beneficial use of coal as a building
- 10 material.
- 11 I do want to address Ms. Anderson's comments that
- 12 the county road will be used as a haul road. This just is
- 13 not true. Coal processing, as I explained on the tour,
- 14 will occur on the mine site, and final processed coal will
- 15 be delivered via highway trucks to its end location,
- 16 primarily the iCAM. This is no different than any other
- 17 mine operating in the Basin who delivers "stovering coal"
- 18 to a person in a pickup truck or a highway hauler for their
- 19 operation. They get clean, processed coal, which they
- leave the mine site and hop onto a county road.
- This is a three-mile stretch of road between
- 22 Tongue River -- or Taylor Quarry and the iCAM. So it's
- 23 just a small segment of road. Now, the County has
- 24 contemplated the use of industry in this area. They
- 25 developed the County Use Plan and identified a special use

- 1 area where industrial activities will be urged to happen.
- 2 Contrary to statements before, there is
- 3 industrial zoning in the area. There's some 140 acres
- 4 zoned Industrial 2, both on Ramaco's property, Big Horn
- 5 Coal's property, as Jordan Sweeney spoke about, and there's
- 6 6 acres of Industrial 1 at the old Acme Power Plant site.
- 7 This is also the area of the special use and zoning
- 8 provisions contemplated by the County in their plan. In
- 9 that plan they've identified improvements to rural roads to
- 10 handle this industrial traffic.
- 11 Now, we did conduct mine site tours, which I was
- 12 a party of, and conducted for those that wanted to see the
- 13 property. And I'd like to bring up some of the questions
- 14 that arose during that tour. For residents within one-half
- 15 mile of the operation, they'll have the ability to request
- 16 that a preblast survey be conducted. Now, some of these
- 17 requests have already been made. This includes a baseline
- 18 inventory of the house. These are photographs of the
- 19 exterior, the interior, looking for cracks, the status of
- 20 the foundation, the status of the walls. It also includes
- 21 an evaluation of the water well on the property. Again,
- 22 pictures of the exterior, to the extent we can grab a water
- 23 sample by pumping the well, and a water level if there
- 24 isn't wires or other things impeding an investigation of
- 25 the water level within that well.

- 1 This is to have a baseline condition that's both
- 2 given to the landowner and the Brook Mine and filed at DEO,
- 3 so that if an upset condition were to occur, the mining
- 4 operator can be approached by a landowner and deal with
- 5 this request.
- 6 Now, in our studies, it's important to say that
- 7 we won't have impacts, and we don't foresee impacts on
- 8 residents' groundwater wells, but it doesn't mean we
- 9 haven't planned for that to occur. So if in an
- 10 investigation our landowner has an upset condition and they
- 11 reach out to the Brook Mine, we are obligated to replace
- 12 both in quality and quantity their well. This is a permit
- 13 obligation that's already well spelled out within document.
- 14 Now, at the prior EQC hearing, we contemplated
- 15 that there was a viable aquifer some 800 feet below the
- 16 surface. But I can tell you today that there is, in fact,
- 17 that aquifer. We drilled a well on Ramaco's fee surface to
- 18 that depth and found an aquifer capable of producing
- 19 5 gallons a minute at the surface artesian. This means for
- 20 residents along the Tongue River Valley there's a
- 21 possibility for replacing their well in kind for a well
- 22 that goes down to 800 feet.
- Now, that doesn't mean we're going to leave the
- 24 homeowner stranded while the well is being constructed. As
- 25 was mentioned before, there's potable water sources to feed

- 1 a homeowner while the well was being built. This would
- 2 come from Ranchester or Sheridan. They have an excess
- 3 capacity for their rights on Tongue River to supply this
- 4 kind of water.
- 5 So they were right in saying that we may be able
- 6 to truck water from Ranchester or Dayton. Certainly we'd
- 7 have to purchase that water via their ordinances lined out
- 8 in each of the towns, but it's something that's achievable.
- 9 Now, I want to point out we also drove the sites
- 10 where the fires were mapped in 1978 by the USGS. We drove
- 11 right near that area, and I want to point out that we saw
- 12 no evidence of fires underground. Now, it's not to say
- 13 that we believe they may be totally out or not present. We
- 14 recognize the validity of the '78 report, but we just
- 15 haven't seen any evidence in the ground.
- 16 But I want to be clear, we're willing to accept a
- 17 condition on the permit that we do not undermine areas of
- 18 active fires. Now, that's not to say that we wouldn't be
- 19 able to undermine an area that's previously been mined.
- 20 Certainly when highwall mining is conducted, and especially
- 21 in areas where there's multiple seams, typically the higher
- 22 seam is mined first, and then seams below that.
- 23 And then certainly potentially the case here,
- 24 where an old mine exists above the Carney coal seam. We
- 25 don't want to preclude mining there, but we're willing to

- 1 not mine those areas where we prove out there may be fires
- 2 present.
- 3 Now, the issue of dust abatement was raised on
- the property. Again, Ramaco has drilled a water well on 4
- 5 its own property that can serve as a source of water for
- 6 dust abatement. Now, during the first five years of
- 7 mining, we're talking about a thousand to 1200-foot haul
- 8 road from the mine pit to the processing center on the
- property. There just isn't a lot of length of road that's 9
- 10 going to require a great deal of dust abatement.
- 11 As I pointed out, Ramaco owns 1908 water rights
- 12 on the Tongue River, to some 918 gallons per minute that we
- 13 can provide water that would be hauled via highway-capable
- 14 truck to the mine site and provide dust abatement on roads
- 15 when necessary.
- 16 There's also the opportunity during high flows in
- 17 the Tongue River to apply for and obtain a temporary water
- 18 haul permit from the Tongue River for dust abatement. In
- 19 the past WYDOT has applied for such permits. Sheridan
- 20 County has, and various contractors doing work for both the
- 21 state and the county.
- On the property there's also available shallow 22
- 23 groundwater wells. Those could be developed to pump to a
- pond that's lined and stored and used for dust abatement. 24
- 25 And, finally, in the scoria outcrop near Taylor

- 1 Quarry there are intervals of water available that can also
- 2 be pumped through the same line pond and used for dust
- 3 abatement on the property.
- 4 And really what I'm trying to say here is we've
- heard the comments and the -- the arguments from the 5
- 6 opponents, and we're -- we have mechanisms to deal with
- 7 these issues.
- 8 The issue of blasting came up. And I described
- while on the mine site tour the intermittent nature of 9
- 10 blasting. Ramaco only needs to remove a small amount of
- 11 overburden, but then is trucked and hauled and moved away
- 12 from the coal, then the coal gets blasted. This isn't a
- 13 24/7 operation, nor is it a 12-hour operation on a daily
- 14 basis. It's just intermittent to provide the uncovering of
- 15 the coal and the overburden so that Ramaco can access its
- 16 asset.
- 17 But the permit itself is flexible enough to allow
- 18 cases where maybe you need to blast three days in a row, or
- 19 maybe some upset condition occurred where you need to blast
- 20 on a weekend. The permit needs to remain this flexible in
- 2.1 case some kind of situation arises. And it's certainly
- 22 contemplated by Wyoming statutes.
- 23 Now the issue of subsidence was also brought up.
- 24 Now, for subsidence that's occurring outside of the mine
- 25 area, I want to reiterate that Ramaco has supported AML's

- work. Other than the Playcheck Pit, there hasn't been a
- 2 time we've been approached by AML and denied some resident
- 3 the ability to fix subsidence features on their property.
- 4 And then for subsidence within our mine, it's
- 5 important to note when we develop a subsidence control plan
- 6 from mining panels inside our mining operation, you would
- 7 never develop a plan for all 39 years of mining. You make
- 8 detailed plans in five-year increments. And Ramaco went
- 9 out of its way to develop such a plan that's five years
- from now, in its next term of permit, just to demonstrate 10
- 11 what such plan might look like and what would be entailed
- 12 in that plan, collecting the necessary core samples, and
- 13 subsequent samples will be taken for additional mine panels
- 14 that are developed.
- 15 And finally the effects of mining on recreational
- 16 areas. We will not affect recreation near the mine site.
- 17 People will be able to access Tongue River as they always
- 18 have. As a matter of fact, Ramaco, in a good faith
- 19 gesture, created Tongue River access site in the Sheridan
- 20 County recreational area. And just like some of the
- commenters stated, I've gone by that site and I've seen 21
- 22 people fishing from that very location, where it was
- 23 unsuitable for people to navigate before.
- 24 People will be able to enjoy the Sheridan County
- Recreation Area. They do so, even though it's immediately 25

- next to Tongue River Stone, a guarry operation that
- 2 operates on a daily basis. That hasn't hindered anyone
- 3 from using that site.
- 4 There's a piece of State ground that's adjacent
- 5 to the Brook mine and adjacent to the Sheridan County
- 6 Recreation Area. We won't limit access to that site in any
- 7 way either. People will be able to freely access that
- 8 State property and look at birds and travel paths and take
- 9 their dogs for a walk.
- 10 So I just want to reiterate that we will not have
- 11 an impact on the recreation of the area. As a matter of
- 12 fact, it's Ramaco's intent to enhance that area for those
- 13 activities.
- So that concludes my remarks at this time, and 14
- I'd like to introduce Mr. Lawrence with Petrotek. 15
- 16 DIRECTOR PARFITT: Jeff, this is Todd. I
- 17 do have a question before we move on to the next speaker,
- 18 if that's all right.
- 19 MR. BARRON: I'm sorry, Mr. Parfitt. I
- 20 should have opened it up for questions. My apologies.
- 21 DIRECTOR PARFITT: No problems.
- 22 You had talked a fair amount about how you have
- 23 planned for addressing where the water for different needs
- 24 would come from based on your water rights and so forth.
- 25 Is that all laid out, as you described it, in the

- 1 application?
- MR. BARRON: It is, Director.
- 3 DIRECTOR PARFITT: Okay. Thank you. That
- 4 was the only question I had, so I'll let you introduce the
- 5 next speaker.
- 6 MR. BARRON: Great. Errol Lawrence from
- 7 Petrotek.
- MR. GUILLE: Do we have Mr. Lawrence on?
- 9 MR. LAWRENCE: Yes. I'm here. And I have
- 10 a presentation that I would like to have you guys pull up.
- 11 I understand you're going to control that.
- MR. GUILLE: We can, or we can also make
- 13 you a presenter and share your screen, or if you'd like us
- 14 to control it and have -- did you want a video of yourself
- 15 on?
- MR. LAWRENCE: Sure. I quess I'm not
- 17 sure ==
- MR. GUILLE: We're going to set you up
- 19 here, Mr. Lawrence.
- MR. LAWRENCE: Okay.
- MR. GUILLE: Okay. All right.
- MR. LAWRENCE: Okay. There we go.
- MR. GUILLE: Great. Bear with me while I
- 24 get up your presentation. And which one was it,
- 25 Mr. Lawrence?

- 1 MR. LAWRENCE: It was the one Ramaco Brook
- 2 Mine Groundwater Hydrology and Modeling.
- 3 There we go.
- 4 MR. GUILLE: I'm going to start the slide
- 5 show, hopefully -- see if it works, huh. Yeah.
- 6 MR. LAWRENCE: Okay. I think we're good.
- 7 All right. Well, my name is Errol Lawrence. I
- 8 am a senior hydrogeologist with the firm of Petrotek.
- 9 Petrotek is a firm specializing in groundwater issues
- 10 related to mining trona, hydrocarbon extraction, deep
- 11 disposal well work, quite a wide variety of industry, but
- 12 groundwater is really our thing.
- Petrotek was tasked with conducting an
- 14 independent third-party review of the groundwater
- 15 components of the Brook Mine permit application, with
- 16 emphasis on the modeling, but also looking at the other
- 17 groundwater components as well.
- Next slide, please.
- 19 As you all know, a groundwater model was
- 20 developed to help support or at least assess hydrologic
- 21 impacts from the Ramaco Brook Mine project. It is intended
- 22 to assess the indirect, direct, and cumulative hydrologic
- 23 impacts to identify potential impacts to adjacent water
- 24 rights and to estimate long-term impacts to the hydrologic
- 25 system from the mine operations.

- 1 I have -- I am the person directly responsible
- 2 for doing that review, and based on my professional
- 3 opinion, the groundwater model presents a reasonable and
- thorough assessment of probable hydrologic impacts from the 4
- Brook Mine. 5
- 6 Can I have the next slide, please.
- 7 Just since many of you are probably not familiar
- 8 with me, this is my first venture into this project. I'll
- 9 give you some -- little overview of my expertise or
- 10 abilities. I've been conducting hydrologic investigations
- 11 and focused on groundwater modeling, that the development,
- 12 review, mentoring of models for 30 years now. I have a
- 13 master of science degree in geological engineering from
- 14 Colorado School of Mines. I'm a licensed professional
- qeologist at the State of Wyoming. And I -- I have quite a 15
- 16 bit of experience relevant to Wyoming, and specifically the
- 17 Powder River Basin.
- 18 I have worked both collaboratively and on the
- 19 other side of the table, I'll say, from several DEQ staff
- 20 over the years. Many times my models have been critically
- reviewed by Wyoming staff -- DEQ staff, and accepted by 21
- 22 them. And I've had a number of models that were based
- 23 on -- or were reviewing uranium sites in the state that
- 24 have gone through federal review from the U.S. Nuclear
- 25 Regulatory Commission. So bottom line is that groundwater

- 1 modeling, that's pretty much what I do.
- Next slide, please.
- 3 Let's talk about the model a little bit. As
- 4 you're aware, it was developed by WWC using the U.S.
- 5 Geologic Survey code MODFLOW. As Mr. Wireman testified,
- 6 you know, he felt the model was a good model. I would
- 7 agree with that. It is complex, but it does represent the
- 8 complexity that is inherent in the site. It covers an area
- 9 of almost 40,000 acres. Probably important thing to look
- 10 at in this particular slide, which is the plan view of the
- 11 entire model domain, is you see the property boundary
- 12 marked in blue. Note that the model domain extends a
- 13 considerable distance outside of that property boundary.
- 14 And the reason being is that we wanted to be able to assess
- 15 impacts to surrounding water rights. And so it's important
- 16 consideration. And in any model, you need to extend quite
- 17 a bit beyond the -- the -- the area of interest.
- 18 Can I have the next slide, please.
- 19 This is a cross-sectional view through the model.
- 20 The model has seven layers in it. So not only does it
- 21 model the Carney coal, it also models the Masters coal seam
- 22 that is beneath it, the overburden above, and definitely
- 23 includes the alluvial aquifer where it is present in the
- 24 uppermost layer.
- 25 Each layer has distinct hydrologic properties,

- 1 based on aquifer tests, slug tests, you know, various
- 2 information. What's interesting about, if you look closely
- 3 at this cross-section going on the very left side, you'll
- 4 see two thin parallel bands, gray bands, kind of in the
- 5 middle of the brown section there. That represents the
- 6 Carney coal. As you trace that going from left to right,
- 7 you see there's areas where the Carney coal is absent
- 8 because it's been eroded away in some of the surface
- 9 drainages. And then when you go to the other side of that
- 10 surface drainage, you see that eventually the Carney coal
- 11 is truncated against a fault that has enough displacement
- 12 to offset it totally.
- So all of these complexities are important to
- 14 understand the hydrologic system, and they have been
- 15 incorporated into the model, you know, to the extent the
- 16 data allows it.
- 17 This particular model incorporates a very high
- 18 level of detail of spec -- blah, blah, blah -- I always
- 19 mess up that word -- specificity, excuse me, probably much
- 20 greater than I would anticipate seeing for a mine permit
- 21 application. Typically when you go to mine something, you
- 22 don't have all the answers on the front end, and so things
- 23 are very generalized. In this case, there's the benefit of
- 24 a lot of previous historic mining, as well as the data
- 25 that's been collected to support the permit directly by

- Brook Mine. So I think this model has a much greater level 1
- 2 of detail than I'm used to seeing for a model of this
- 3 purpose.
- 4 Next slide, please.
- This is a very important figure as far as 5
- 6 understanding the hydrologic system here. What you're
- 7 seeing is a delineation of the areas of saturation, or at
- least partial saturation. In other words, areas that have 8
- 9 groundwater within various specific units.
- 10 The purple hatching are areas that are indicated
- 11 as basically having groundwater within them. And what you
- 12 notice on that figure -- and it's restricted -- just to the
- 13 permit area. So, you know, we're not looking at things
- outside the permit area for purposes of this illustration. 14
- 15 But what you see is less than half of the permit
- 16 area is saturated or even partially saturated for the
- 17 Carney coal. So more than 50 percent of the area is dry.
- As you might expect, if you're mining in an area where 18
- there is no water, you can't really expect a whole lot of 19
- 20 hydrologic impacts from that.
- 21 Next slide, please.
- 22 Now, I'll just briefly touch on this. If a
- model -- if you're going to use it to make some type of a 23
- 24 projection for future impacts, you need to calibrate for
- 25 some measurable or observable phenomenon. Typically we use

- 1 water levels in monitor wells. This particular model was
- 2 calibrated to 22 different site monitor wells, and not all
- 3 of them are in the Carney coal. There were a number
- 4 spreads in -- across the alluvium and underlying aguifer,
- 5 the Masters coal. So it has been calibrated.
- 6 Next slide, please. I'm sorry if I'm going
- 7 through these quickly. I just had a lot more material than
- 8 I probably had time to present.
- 9 Once the model's calibrated, it was used to
- 10 simulate the mining sequence. And this figure has a bunch
- 11 of features on it. Those green polygons that you see
- 12 that have numbers in them are mine panels. And the mining
- 13 was -- is planned to occur going from east to west. And
- 14 basically one of those polygons or mine panels would be
- 15 mined each year.
- 16 If you remember, you know, the mining plan was
- 17 increased from a 12-year period to a 39-year period. This
- is extremely beneficial in terms of minimizing hydrologic
- 19 impacts, because now we've spread the impact over a much
- 20 larger period of time, so that reduces it at any one
- 21 specific point in time or place.
- The blue -- well, let me also say that during
- 23 mining, the model indicates the maximum amount of water
- 24 that will need to be extracted during dewatering of a
- 25 particular mine panel. It's about 24 gallons per minute.

- 1 That's the maximum. Most of the mine panels will produce
- 2 less than 5 gallons a minute during dewatering. Five
- gallons a minute is not much water. I mean, that's a 3
- 4 garden hose at about half -- half of full capacity. So
- 5 it's -- it's a relatively small amount of water for a
 - 6 majority of the mine that's going to occur.
 - 7 The blue symbols with descriptors on those are
 - 8 private wells. Part of the exercise in modeling was try to
 - 9 determine how much of an impact would occur at the private
- 10 wells. And the red circles or red symbols indicate targets
- 11 placed in the model in the alluvium to try and estimate
- 12 what the impact the alluvium was going to be. And the
- model results indicate that the impacts will be very small. 13
- 14 Typically less than a -- one foot, and as you get close to
- 15 the river, actually much less than that. Probably less
- 16 than tenth of a foot in most cases.
- 17 And then just the other output from the model or
- the final results indicate that post-mining within five 18
- 19 years, the water levels within the permit boundary will be
- 20 returned within about 5 feet of their pre-mining levels.
- 21 So fairly rapid recovery.
- 22 Next slide, please.
- 23 So I went through my assessment of mining --
- 24 modeling, you know, I use a number of categories that I --
- 25 it's kind of a cookbook approach that I've developed over

- 1 the years. I'm not going to go into each one of those
- 2 because I don't have enough time.
- But my conclusion at the end of all this, as I
- 4 stated up front, was that the results are a reasonable and
- 5 thorough assessment of probable hydrologic impacts from the
- 6 proposed mining of Carney coal. And along with that, the
- 7 mining results indicate that there would be no material
- 8 damage to the hydrologic balance outside of the permit
- 9 boundary.
- 10 Next slide, please.
- I was also asked to look at a couple of other
- 12 issues related to the hydrogeology of the site. One of the
- 13 things I was asked was did Brook Mine adequately address
- 14 the issues brought forward by the EQC. And we've already
- 15 kind of gone over a bunch of these in some of the previous
- 16 discussion. I know CHIA was developed. The TR-1 mining
- 17 area was inadequately characterized. Maybe there was
- 18 insufficient hydrologic characterization, impact to private
- 19 wells were not adequately addressed. We've kind of gone
- 20 through all those.
- 21 So if I can have next slide, please.
- You know, obviously the cumulative health impact
- 23 assessment has been developed. I've reviewed that as well,
- 24 and I'll talk about that shortly. The mine plan 's been
- 25 drastically revised so the TR-1 area has been removed

- 1 totally, as well as the Masters coal. So we have a
- 2 separate underlying aquifer that can be readily monitored.
- 3 The periods of operations, as I talked about
- 4 before, was substantially increased, which decreases the
- footprint and the magnitude of drawdown. And one of the 5
- 6 things that I thought that Brook Mine did very well was
- 7 they went back in and looked at all the private wells more
- closely that had been included in the initial modeling.
- 9 And through that additional investigation, determined that
- most of those wells are not completed in the Carney coal, 10
- and so the predicted drawdown, which was made under the 11
- 12 assumption that those wells were the Carney coal was
- 13 excessive. And when you remove a lot of those wells, it
- 14 turns out I think there were only less than a half dozen
- 15 wells outside the permit boundary that -- private wells
- 16 that would have any kind of drawdown -- measurable
- 17 drawdown. And even that, the maximum was about 3 feet.
- 18 So relatively minor impacts. And those are very
- 19 localized and short-term in nature. Once the mining is
- 20 done in a panel, the area around that starts to recover
- 21 pretty quickly.
- 22 Next slide, please.
- 23 I did review the Cumulative Health Impact
- 24 Assessment, and I'm just going to go right to -- my
- conclusions were that the -- my conclusions are that the 25

- 1 conclusions reported in the CHIA are consistent with the
- 2 identified hydrologic concerns, the applicable statutes,
- 3 rules, and regulations, and the design components of the
- 4 Brook Mine permit. In other words, the mitigation
- 5 measures, the design of the mine is such that it will
- 6 minimize material balance to the hydrologic balance -- to
- 7 the -- minimal -- minimize material damage to the
- 8 hydrologic balance outside the permit boundary. That's
- 9 what it's supposed to do.
- 10 There's no guarantees -- you know, this is the
- 11 permit. And in the permit Brook Mine has stated these are
- 12 our intentions of how we plan to prevent damage. I think
- 13 that's done that successfully. I think the DEQ has looked
- 14 at that and compared that against the various criteria and
- 15 found that they agree with that.
- Next slide, please.
- 17 All right. So I was also asked to review some of
- 18 the Powder River Basin Resource Council's concerns. We've
- 19 heard some of them again today. Most of them are focused
- 20 on the Tongue River and the Tongue River alluvium. Maybe
- 21 not so much on the modeling assessment, but more on the
- 22 level of the hydrologic characterization, whether or not
- 23 that's adequate. And then some monitoring concerns, both
- 24 operational and post-mining.
- 25 Yeah. I'm going to say I strongly disagree with

- 1 some of the statements and contentions of PRBRC regarding
- 2 certainly the modeling. I think it does give a very good
- 3 representation and demonstrates that impacts should be
- short term in nature and very localized. So we really have 4
- 5 kind of addressed that.
- 6 The model is complex. And that goes along
- 7 with -- as Mr. Wireman said, it's a complex hydraulic
- 8 system. That's why the model has to be complex. If it was
- 9 a simple system, we wouldn't have needed to incorporate all
- 10 the data that was in there. It would have been a pretty
- 11 simple calculation.
- 12 Because of the complexity of the site, the model
- 13 addresses that. Is it a perfect match? Of course not. No
- 14 model is. Models are tools that help us make, you know,
- 15 reasonable decisions. I think the model in this case is a
- 16 good tool to use for predicting future impacts.
- 17 And, you know, there's always the -- the request
- 18 for more data. I'm a scientist. I'm a modeler. I always
- want more data. But from a practical standpoint, the 19
- 20 collection of additional data I don't think would change
- 21 the model outcome substantially. I think, you know, the
- conceptualization site is pretty good the way it is right 22
- 23 now. And so I don't really think additional data is
- 24 necessary. Although the data will continue to be
- 25 collected, monitoring is going to go on. As Jeff stated

- 1 earlier, there are three monitoring wells -- alluvial
- 2 monitoring wells along the Tongue River. Those are going
- 3 to be continually monitored on a quarterly basis once the
- 4 permit is issued.
- 5 There's five years before there will be any
- 6 interception of groundwater, so that's certainly long
- 7 enough period of time that we would see trends and be able
- 8 to develop a good baseline background information off of
- 9 that. There's also three wells in Slater Creek, so same
- 10 conditions apply there.
- 11 As far as -- I'll just leave that. Can I go to
- 12 the last slide, please.
- So, in summary, in my professional judgment, the
- 14 groundwater model presents a reasonable, thorough, and
- 15 representative assessment of probable hydrologic impacts of
- 16 the proposed mine in the Carney coal. I think the EQC
- 17 hydrogeology concerns are largely addressed through
- 18 additional data that's been collected, through the
- 19 revisions to the mine plan, and incorporation of all those
- 20 components back into the revised model.
- I find the CHIA -- I think the findings of the
- 22 CHIA are consistent with the hydrologic concerns that are
- 23 identified and the design components that are in the Brook
- 24 Mine permit. And it is my opinion that the Brook Mine will
- 25 not cause material damage to the hydrologic balance outside

- 1 the permit area.
- 2 And that concludes my presentation and I'm open
- to any questions you might have. 3
- 4 DIRECTOR PARFITT: Yeah. Errol, this is
- 5 Todd. So if we could go back to the slide where you had
- 6 shown the different panels.
- 7 DEPUTY DIRECTOR EDWARDS: That's slide 8.
- 8 DIRECTOR PARFITT: Slide 8?
- 9 DEPUTY DIRECTOR EDWARDS: Yes.
- 10 DIRECTOR PARFITT: Keith, if you go back to
- slide 8. 11
- 12 My question is, could you describe on this
- 13 particular map where the open pit area would be, because
- 14 that's really where it starts, right?
- 15 MR. LAWRENCE: That's -- the pit -- where's
- that, Jeff? 16
- 17 MR. BARRON: Up by Taylor Quarry.
- MR. LAWRENCE: Oh, by the Taylor Quarry, 18
- 19 right.
- 20 So it's kind of directly -- boy, the size of
- 21 this -- probably north of about -- is that A-5, kind of
- 22 around in there? Yeah. If you see the red -- the A-5, the
- 23 alluvial monitor point, it's directly north of that, kind
- of in that area, Taylor Quarry area. 24
- 25 DIRECTOR PARFITT: Okay. So that's where

- 1 the open pit area would be, and that would be the initial
- part of mining, correct?
- MR. LAWRENCE: Yes, sir. This
- 4 particular -- the panels shown here are beginning with year
- 5 5 on the eastern side. So after that initial five years is
- 6 completed, because no groundwater is anticipated to be
- 7 intercepted, the modeling sort of kicks in at that point
- 8 going forward.
- 9 DIRECTOR PARFITT: All right. Thank you.
- 10 Thank you.
- 11 Okay. Tom or Jeff, you can turn it over now I
- 12 think --
- MR. GUILLE: It's going to be Tim Ross,
- 14 right?
- 15 All right.
- 16 DIRECTOR PARFITT: Thank you, Errol.
- MR. GUILLE: Tim, do we got you?
- 18 MR. ROSS: Yeah, you do. I have a
- 19 PowerPoint presentation I'd like to have you put up too.
- MR. GUILLE: Absolutely. Bear with me.
- 21 I'm going to get into it here.
- And, Tim, did you also want to share a video?
- MR. ROSS: Yes, please.
- MR. GUILLE: All right. Great. One
- 25 second.

- 1 All right. Tim, we've got you. Just bear with
- 2 me. Let me just start this, and we'll start sharing.
- 3 All right. There you go.
- 4 MR. ROSS: Thanks.
- 5 My name is Tim Ross. I'm a principal at Agapito
- 6 Associates. I'm a mine engineer, licensed in the state of
- 7 Wyoming. I'm the professional engineer that signed off on
- 8 the Brook Mine highwall mine report.
- 9 Tom Vandergrift, who's also an Agapito principal
- 10 and is participating in this hearing, is a mine engineer
- 11 licensed in Colorado. He was the lead engineer on the
- 12 technical work for Agapito's highwall mine report. If need
- 13 be, Tom's available to address questions on the specifics
- 14 of his engineering work.
- 15 Agapito is a group of mining and geotechnical
- 16 engineers based in Colorado. One of our specialties is
- 17 highwall mine design. In the last 20 years, we have
- 18 completed 45 highwall mining studies mostly in the western
- 19 U.S.
- Next slide, please.
- 21 After the Wyoming EQC found deficiency in the
- 22 Brook Mine permit application, Agapito was contracted to
- 23 perform site -- a site-specific study for the TR-1 mining
- 24 area to address the findings of the EQC related to
- 25 subsidence risk, provide technical support for the Brook

- 1 Mine subsidence control plan, and address other
- 2 geotechnical or operational issues that might impact
- 3 highwall mining.
- 4 Note that the TR-1 area as shown here is
- different from the TR-1 of previous permit applications, 5
- 6 which was to the southeast and no longer part of the plan.
- 7 Next slide, please.
- 8 To achieve these objectives, Agapito completed a
- 9 site characterization study, developed the detailed
- 10 engineering -- engineered highwall mine design, and
- 11 conducted the study to determine the risk of subsidence.
- 12 For the surface characterization, Agapito
- 13 conducted a site visit to better understand the surface
- 14 conditions. However, we were unable to assess the
- 15 subsurface conditions, as it was no active mining taking
- 16 place on the site.
- 17 Next slide, please.
- 18 To evaluate the subsurface conditions, a core
- 19 sample was taken from the TR-1 mining area. Agapito
- 20 inspected, photographed, logged, and performed physical
- 21 property testing on the rock and coal surrounding the
- 22 over -- and overlying the mining horizon.
- 23 From these tests, it was determined that the
- 24 Carney coal seam targeted for highwall mining is about
- 25 15 percent weaker than the average for western surface

- coals, and that the roof and floor is only marginally
- 2 weaker compared to typical western coal seams.
- 3 Agapito recommended only one coal hole -- core
- 4 hole for the approximately 7 acres of the TR-1 mining area,
- 5 and it equals the requirements of our other highwall mining
- studies with a similar area, and we stand by the design 6
- 7 based on that data.
- 8 Next slide, please.
- 9 For the detailed engineering design, Agapito used
- 10 the site characterization data to complete web and pillar
- 11 design using industry-accepted empirical methods. And then
- 12 we confirmed those designs using two specialized computer
- 13 modeling programs, LAMODEL and UDEC. And the UDEC modeling
- 14 was based on the site-specific data considering the roof
- 15 from the floor physical properties from our testing to
- 16 confirm the stability of the roof and floor and indicated
- 17 that the pillars would not function to the roof or floor.
- 18 Next slide, please.
- 19 One of the major concerns that have been raised
- 20 today is the risk of surface subsidence from -- the risk of
- 21 surface damage from subsidence. There are two types of
- 22 subsidence that can occur. Trough subsidence, which is a
- 23 consequence of pillar failure or pillars punching into the
- 24 roof and/or floor over a large area that result in a
- 25 decrease of surface elevation above the failure.

- 1 Trough subsidence can damage surface structures,
- 2 but in the absence of surface structures, the damaged
- 3 ground is usually easy to repair with regrading and
- 4 revegetation.
- 5 The second type is sinkhole subsidence, which is
- 6 caused by the overburden collapsing into the mine opening.
- 7 The most obvious and problematic historical subsidence in
- 8 the area of the Brook Mine is from sinkholes over the
- 9 intersections of room and pillar underground mines.
- Next slide, please.
- 11 If Agapito's highwall mine design recommendations
- 12 are followed, there's little risk of trough subsidence at
- 13 the Brook Mine because of properly designed stable pillars
- 14 that will be left between the openings.
- 15 Agapito used the ARMPS highwall mines approach
- 16 which was developed by NIOSH and recommended by MSHA for
- 17 highwall mine designs. The pillars are designed to 1.6
- 18 pillar satiability factor using conservative inputs.
- We use conservative coal strength of 6 -- 762
- 20 PSIs versus the recommended standard of 900 PSI. Agapito
- 21 has specified a conservative minimum pillar width-to-height
- 22 ratio of 1.0.
- 23 We use an overburden density of 162 pounds per
- 24 cubic foot, which is conservative by 12 percent of the
- 25 testing data. We use a conservative overburden depth of

- 1 90 percent of the maximum cover depth.
- 2 Also to ensure that the mine openings and the
- 3 pillars left between openings comply with the design.
- 4 Highwall mining systems are equipped with high-tech
- 5 guidance, systems which mine openings and leave pillars per
- 6 the design specification.
- 7 Next slide, please.
- 8 There's also a low risk of surfhole subsidence --
- 9 of sinkhole of subsidence at the Brook Mine. Agapito is
- 10 not aware of any sinkhole subsidence occurring at any of
- 11 the mines that have used our highwall mine design
- 12 recommendations.
- 13 Sinkhole subsidence is associated with shallow
- 14 mine workings, usually less than 140 feet. Most of the
- 15 highwall mining proposed for the Brook Mine has more than
- 16 140 feet of cover and goes up to 375 feet.
- 17 Finally, comparing the recommended highwall mine
- 18 design with the historical mining that contributed to many
- 19 of the sinkholes around the Brook Mine, proposed highwall
- 20 mine, in most locations, will be further below the surface
- 21 than the historical mine that caused the subsidence.
- The highwall mining opening widths are fixed at
- 23 11.5 feet. Where the historical underground subsidence
- 24 took place, the mine openings were up to 25 feet wide.
- 25 Smaller opening widths reduce the probability of sinkholes.

- 1 Highwall mining has no intersections. The
- 2 pattern of historical sinkholes indicates most of the
- 3 historical sinkhole subsidence occurred at the
- 4 intersections of underground room and pillar mines.
- 5 And, finally, highwall mining extracts about
- 6 40 percent of the coal, whereas the historical mining was
- 7 estimated at 50 percent.
- Next slide, please.
- 9 To summarize, Agapito geotechnical design results
- 10 in stable pillars and a low probably of trough subsidence.
- 11 Sinkholes may form in shallow cover areas, but not likely
- 12 or frequently. The Brook Mine subsidence control mine
- 13 appropriately addresses subsidence through a combination of
- 14 prevention by using an appropriate mine design, monitoring
- 15 for subsidence, and in the unlikely event there is
- 16 subsidence, mitigation by reclamation.
- 17 The current subsidence control plan meets
- 18 applicable Wyoming regulations.
- 19 Next slide, please.
- 20 Agapito's study in highwall mine design has
- 21 addressed all adverse EQC findings related to subsidence.
- 22 The finding that there were inadequate studies and testing
- 23 to assess the risk of subsidence was addressed by Agapito's
- 24 robust highwall mine design that meets or exceeds industry
- 25 standards.

- 1 The finding that there was not an adequate
- 2 subsidence plan was met by Agapito's highwall mine report
- 3 being incorporated into the subsidence control plan.
- 4 Finding that there was a lack of site-specific
- 5 data to assess pillar stability was met by Agapito's
- 6 site-specific ground characterization effort.
- 7 Next slide, please.
- 8 The finding that the original mine plan used too
- 9 high a coal strength value was met by Agapito's use of the
- 10 lower value based on the lab testing.
- 11 And the finding that subsidence control plans
- 12 should be stamped by Wyoming PE was met by Agapito's
- 13 report, which was stamped by a Wyoming PE.
- Next slide, please.
- 15 That concludes my comments. I appreciate the
- 16 opportunity to speak. And if you have any questions, I'll
- 17 be glad to take them. Or Tom Vandergrift, depending on the
- 18 question. So if you could -- and if you have questions, if
- 19 you could activate his mic, that would be great.
- DIRECTOR PARFITT: Thanks, Tim. I do have
- 21 a few questions for you.
- The first question I have is you had made
- 23 reference to you used 762 PSI coal strength versus the
- 24 900 PSI. My only question there is why did you do that and
- 25 how did you come up with 762?

1 MR. ROSS: Tom, are you online? 2 MR. VANDERGRIFT: Yes. Yes, I can address 3 that. 4 The 900 PSI coal strength is the standard. And 5 from our experience in the western highwall mine design, 6 that correlates to about a 2,070 PSI of laboratory 7 strength. 900 PSI is an in-place coal strength. Due to the fabric of the coal, its actual strength in ground is 8 9 less than you'll see in the laboratory. 10 So our laboratory test results indicated that it 11 was about 15 percent lower than that 2,070 PSI standard 12 strength. So we adjusted the in-situ strength down 13 15 percent as well. That's how you get the 762. 14 DIRECTOR PARFITT: Okay. Thank you. 15 And then some of the comments that we heard 16 earlier today related to subsidence of previously mined 17 areas, so as you get vibration from the mining activity, 18 that you might have subsidence in other areas, not just 19 from the highwall itself in that impacted mining area. Can 20 you speak to that a little bit as to how you did your 21 review on that and what your findings were? 22 MR. ROSS: Tom, can you address that? 23 MR. VANDERGRIFT: Our study did not consider any impacts to old mining. That was outside the 24

25

scope of our study.

- 1 DIRECTOR PARFITT: Okay. And then one last
- 2 question. Well, pretty much the same question that I just
- 3 asked, so I don't have any further questions.
- 4 So thank you. Thank you for the presentation.
- 5 And Jeff or Tom, I guess it's back to you.
- 6 Are they on?
- 7 MR. GUILLE: Yeah.
- MR. SANSONETTI: Yeah. That was our last 8
- 9 presenter, so that completed our time. And I've got 2:08,
- 10 so I think we hit the hour right on the head, guys.
- 11 DIRECTOR PARFITT: Perfect. Perfect.
- 12 DEPUTY DIRECTOR EDWARDS: They missed the
- 13 five minutes.
- 14 DIRECTOR PARFITT: All right. Well, so
- 15 thank you again for the presentation. Don't go away.
- 16 What I'd like to do now is get a sense of how
- 17 many of the parties that have given presentations would
- like to get a little additional time to make some closing 18
- remarks or follow-up remarks. 19
- 20 MR. GUILLE: And they can do that. If you
- 21 want to raise your hand. On the system off to the right,
- 22 there should be this little hand. Just press that and
- 23 we'll know to turn on your mic and ask any additional
- 24 questions or make additional comments.
- 25 Keith Burron.

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1 DIRECTOR PARFITT: Again, if you do, just 2 raise your hand or let Mark know, if you're in Sheridan. 3 Otherwise, we'll start, Keith, with you, and then 4 we'll see if we get any other hands raising as we go along. 5 So we'll open it up to Keith Burron with Big Horn 6 Coal. 7 MR. BURRON: Thank you, Director Parfitt. I will be brief here and don't have a lot to add here. 8 9 I just wanted to note that -- I mean, I didn't 10 hear a lot in specific -- in terms of the responses 11 specifically to Mr. Sweeney's comments, and so I wanted to 12 reiterate, you know, his comment on the order in lieu, 13 because, as Brook pointed out in his presentation, the mine 14 plan has changed significantly from what was presented at 15 the original -- in the original application. And what went 16 in front of the Council at the order in lieu proceedings. 17 So we just want to ensure there's more clarity in the mine and reclamation plan in terms of the activities 18 19 that are going to potentially occur or impact Big Horn Coal 20 surface. So to the extent that the -- the intent is for 21 the existing order in lieu from the prior proceeding to

be sort of utilized for the current mine plan, that its

application would be specific to this plan and not -- you

know the prior plan, not revised plan, that may occur in

the future. But -- you know, because the order in lieu

- 1 is -- again, it's not a general adjudication of property
- 2 rights or carte blanche right of access. It allows access
- 3 for specific purposes set forth in the permit application.
- 4 And, you know, what Mr. Sweeney presented in terms of the
- 5 deficiencies we believe are appropriate to address, and Big
- 6 Horn Coal would like to see those concerns addressed in the
- 7 application before it is -- before it's acted on by the
- 8 Department.
- 9 That's all -- all I would have to add.
- 10 DIRECTOR PARFITT: Okay. Thank you, Keith.
- 11 And just for the record, that was Keith Burron.
- 12 Okay. Keith, did you get anybody else raising
- 13 their hands?
- MR. GUILLE: It doesn't seem at this time.
- 15 I'm still scrolling through. It doesn't appear --
- DIRECTOR PARFITT: What I might do, I'll
- 17 just read through the list. And if you're there and you
- 18 want to make any closing remarks or other additional
- 19 statements, just let me know. So I'm going to walk down
- 20 the list here.
- 21 Bill Bensel, did you have any additional remarks?
- MR. GUILLE: He's not on.
- DIRECTOR PARFITT: Okay. Art Hayes.
- MR. GUILLE: Art is not on.
- DIRECTOR PARFITT: Okay. Joanne Westbrook.

1	MR. GUILLE: No. No.						
2	DIRECTOR PARFITT: Mary Brezik-Fisher.						
3	MR. GUILLE: Mary is on. Mary, I've turned						
4	on your mic. Did you have any additional comments or						
5	questions?						
6	DIRECTOR PARFITT: Statements.						
7	MR. GUILLE: Statements.						
8	MS. BREZIK-FISHER: Yes.						
9	DIRECTOR PARFITT: Okay.						
10	MS. BREZIK-FISHER: Can you hear me?						
11	MR. GUILLE: Yes, we can.						
12	MS. BREZIK-FISHER: A couple of things.						
13	Please note that the Brook presentation about subsidence						
14	focused entirely on the pillar strength and their						
15	conclusion that pillar strength was sufficient to avoid						
16	subsidence.						
17	Second comment, Dr. Marino was commenting on an						
18	entirely different issue, which was floor and roof strength						
19	above and below the mined-out area had not been assessed						
20	and presented risks. The Brook presentation did not						
21	respond to this criticism.						
22	A third comment, I believe that presenter Errol						
23	Lawrence from Petrotek made a statement that with this						
24	revised mine plan there were only a handful or maybe a half						
25	dozen private wells that would be impacted to approximately						

- 1 only 3 feet of drawdown. I would like to know if those
- 2 wells have been identified and whose property those wells
- 3 are on.
- 4 DIRECTOR PARFITT: Okay. Anything else
- 5 there, Mary?
- 6 MS. BREZIK-FISHER: No, that's it. Thank
- 7 you.
- 8 DIRECTOR PARFITT: Okay. Thank you.
- 9 Okay. Gillian Malone.
- 10 MS. MALONE: Yes, I would like to ask a
- 11 question.
- 12 Considering the fairly large discrepancy between
- 13 the presentations of Gerry Marino and Mike Wireman versus
- 14 Timothy Ross and Errol Lawrence, I was wondering if it
- 15 would be possible to have Gerry and Mike directly address
- 16 Timothy Ross and Errol Lawrence with questions and concerns
- 17 that they have so we can start to get to the bottom of some
- 18 of this.
- 19 DIRECTOR PARFITT: Yeah. So Gillian,
- 20 because there's no direct cross-examination here, I will be
- 21 giving the Powder River Basin Resource Council the
- 22 opportunity to provide any additional information. So when
- 23 they get to that, if Dr. Marino or Mike Wireman want to add
- 24 anything to their oral statement, we'll allow them to do
- 25 that.

- 1 MS. MALONE: So no possibility for an
- 2 actual dialogue between these experts so we can really get
- 3 this right.
- 4 DIRECTOR PARFITT: Not in this forum.
- 5 MS. MALONE: Okay. Thank you.
- 6 DIRECTOR PARFITT: Uh-huh. Okay. Joan
- 7 Tellez.
- 8 MR. GUILLE: No. No.
- 9 DIRECTOR PARFITT: Okay. John Buyok.
- MR. GUILLE: Yeah, John is no longer in the
- 11 Sheridan office.
- 12 DIRECTOR PARFITT: Anton Bocek.
- MR. GUILLE: No.
- 14 DIRECTOR PARFITT: Okay. I know, Keith,
- 15 you spoke for Big Horn Coal.
- 16 But, Jordan Sweeney, do you have any additional
- 17 additions to your statement?
- 18 MR. SWEENEY: No. I have nothing to add.
- 19 Thank you very much.
- 20 DIRECTOR PARFITT: And then Priscilla
- 21 Dillon?
- 22 MR. GUILLE: See if she's on. I don't see
- 23 her on.
- DIRECTOR PARFITT: All right. So then I go
- 25 to Shannon Anderson on behalf of PRBRC.

- 1 MS. ANDERSON: Hi, Director Parfitt. This
- 2 is Shannon. Can you hear me?
- 3 DIRECTOR PARFITT: Yes.
- 4 MS. ANDERSON: We just had, on behalf of
- 5 Powder River Basin Resource Council, we just had a few
- 6 responses.
- 7 The first on the water rights that Mr. Barron
- 8 spoke about and you asked a question if that was in the
- 9 permit, and we did not see anything about the delineation
- of all of those water rights and water sources, 10
- 11 particularly the city of Ranchester, mentioned directly in
- 12 the permit application. So I would just encourage you to
- 13 fact-check that. And if it's not in there, we do believe
- that's a real problem, because it doesn't explain where the 14
- 15 water for the mine will be coming from, and that could be a
- 16 fairly large deficiency, particularly when you consider the
- 17 need to look at all that within the CHIA.
- 18 And then I did correspond a little bit with Mike
- 19 Wireman. He didn't see a need to respond to anything
- 20 directly I think on the hydrology.
- 21 And I did text Dr. Marino, but I'm not sure if
- 22 he's still involved on the GoToWebinar, but I leave it to
- 23 him whether he feels he needs to say anything about
- subsidence. 24
- 25 MR. GUILLE: He is still on. I can turn on

- 1 his mic right now to see if he has anything more to add.
- Dr. Marino, are you with us?
- 3 DR. MARINO: Yes. I have no further
- 4 comments. Thank you.
- 5 MR. GUILLE: All right. Thank you.
- DIRECTOR PARFITT: I do --
- 7 MR. GUILLE: Shannon, I do have you still
- 8 on. Any other additional comments?
- 9 MS. ANDERSON: I don't think so. That
- 10 should be it. Thank you.
- MR. GUILLE: All right. Thank you.
- 12 DIRECTOR PARFITT: Thanks, Shannon.
- 13 And then I'll go back to Tom Sansonetti. Any
- 14 concluding remarks?
- MR. SANSONETTI: We've got a couple that
- 16 will be addressed by Jeff. Can you get Jeff Barron back
- 17 on, because he has the answers to a couple of points that
- 18 were raised.
- 19 MR. GUILLE: Yes, I have Jeff on now.
- MR. BARRON: Okay. Can you hear me?
- MR. GUILLE: Yeah. Let me turn that down.
- MR. BARRON: So I do want to address one of
- Big Horn Coal's concerns as far as the area of disturbance
 - 24 in the laydown area. We have that area slotted to allow
 - 25 the most maximum flexibility. It is not Ramaco's intent to

- 1 disturb that entire area, but maybe portions or pockets of
- 2 that area so we have that area slotted as an area of
- 3 disturbance. But the intent isn't to disturb the entire
- 4 area all at once.
- 5 As it relates to Mary Fisher's comments on the
- 6 wells that are impacted, they are in the permit. It's
- 7 Table MP-6-2A. There's five wells listed there. It's also
- 8 on page MP-53 of the permit application.
- 9 And as it relates to the use of the Town
- 10 of Ranchester's water, that's completely used for
- 11 replacement in case a water well should be damaged
- 12 and need some sort of municipal water to replace it
- 13 while a well is being drilled. I've looked briefly,
- 14 just in the short time I have, I haven't found the
- 15 location in the permit application, but I believe it
- 16 is in there.
- 17 DIRECTOR PARFITT: Anything further from
- 18 Brook Mine?
- MR. BARRON: I have nothing further,
- 20 Director Parfitt.
- 21 MR. SANSONETTI: I think that wraps it up
- 22 for us, Mr. Director.
- DIRECTOR PARFITT: Okay.
- MR. SANSONETTI: I think that's all
- 25 the questions we were able to answer, given the issues

- 1 that were brought up here by the last four or five
- 2 speakers. Thank you.
- 3 DIRECTOR PARFITT: Thank you, Tom.
- 4 All right. That will conclude the informal
- 5 conference. I want to thank everybody that participated
- 6 and took the time to participate in the informal
- 7 conference and provide additional information to be
- 8 considered.
- 9 Also want to say thank you to all the DEQ staff
- 10 that handled all of the technology aspects of this and made
- 11 it work. So the technology really can work and appreciate
- 12 those efforts.
- I also want to point out that since we're --
- 14 it's 2:20 now. We will keep the portal on the Smart
- 15 Comments open for written statements until 4:00 this
- 16 afternoon. And just so you all know, that's still open,
- 17 if there's additional documents we talked about that you
- 18 were going to upload to that system. And appreciate
- 19 that.
- Now, in closing, I will make a final decision on
- 21 the issuance or denial of the Brook Mining permit within
- 22 60 days of this informal conference. And when that
- 23 decision is made, all of the 89 entities that provided
- 24 timely comments will receive the final decision on the
- 25 application.

<u>_</u>		So	that	concludes	the	inf	ormal	coni	ere	nce,	and,
2	again,	thank	you,	everybody	•						
3				(Informa	al c	onfe	erence	prod	ceed	ings	
4				conclude	ed 2	:22	p.m.,	Мау	13,	2020).)
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1	CERTIFICATE
2	
3	I, KATHY J. KENDRICK, a Registered Professional
4	Reporter, do hereby certify that I reported by machine
5	shorthand the foregoing proceedings contained herein,
6	constituting a full, true and correct transcript.
7	Dated this 2nd day of June, 2020.
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9	HOTCA
10	4. H. 111 1
11	KATHY J. KENDRICK
12	Registered Professional Reporter
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