



WHITE MESA URANIUM MILL SITE LICENSING

PUBLIC HEARING

WHITE MESA HEARING - 6/8/17

Alpine Court Reporting  
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PUBLIC HEARING

Proposed licensing action to renew the Energy Fuels Resources (USA) Inc. (Licensee) 11e.(2) Byproduct Radioactive Material License (RML UT1900479) and the Groundwater Quality Discharge Permit (Permit UGW370004) for the White Mesa Uranium Mill site near Blanding, San Juan County, Utah

June 8, 2017

1:02 p.m. - 5:13 p.m.

\*\* Bracketed words [\*] are corrections provided by the Division.

Reported by: Emily A. Gibb, RPR, CSR, CCR

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A P P E A R A N C E S

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PANEL TO ANSWER QUESTIONS:

- Gwyn Galloway
- Tom Rushing
- Russ Topham
- Ryan Johnson
- Phil Goble
- Bret Randall, Esq.
- Craig Anderson, Esq.
- David Frydenlund
- Harold Roberts
- Michael Zody, Esq.
- Jon Luellen
- Gary Merrell

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I N D E X

DISCUSSION	PAGE
Bradley Angel - Greenaction for Health and Environmental Justice	9
Aaron Paul, Esq. - Grand Canyon Trust	17
Scott Clow - Ute Mountain Ute Tribe	47
Michael Keller, Esq. - Fabian Vancott	
Sarah Fields - Uranium Watch	102

\* \* \*

PUBLIC COMMENT

Ephraim Dutchie	148
Sharee Tso	153
Yolanda Badback	155
Melisa Brady	159
Thelma Whiskers	162

\* \* \*

## 1 P R O C E E D I N G S

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3  
4 MR. ANDERSON: Okay. Well, let's get  
5 started. My name is Craig Anderson. I'm the hearing  
6 officer for this afternoon's proceedings. This is  
7 the time and place scheduled for the  
8 question-and-answer hearing on licensing actions  
9 proposed by Utah Division of Waste Management and  
10 Radiation Control.

11 The licensing actions that we'll be  
12 discussing this afternoon deal with the renewal of  
13 the 11e.(2) byproduct license and the ground water  
14 discharge permit relating to the White Mesa Uranium  
15 Mill near Blanding in San Juan County. The mill is  
16 owned and operated by Energy Fuels Resources. This  
17 licensing action also includes a request by Energy  
18 Fuels to receive as alternative feed certain  
19 byproduct materials from Sequoyah -- that's  
20 S-e-q-u-o-y-a-h, for the court reporter -- Fuels.

21 The purpose of this hearing is a little bit  
22 unusual and varies from most of the hearing  
23 procedures that we usually follow here. This is  
24 limited to a question-and-answer hearing, and it is  
25 implemented to satisfy the requirements of the

1 Federal Atomic Energy Act that requires that  
2 agreement states provide an opportunity for  
3 cross-examination for major permitting actions.

4 The former radiation control board adopted  
5 procedural rules to meet this requirement, and  
6 they're found in Utah Administrative Code R313-17-4.  
7 That provision of the Administrative Code sets forth  
8 the procedures and the requirements and the basis for  
9 this particular proceeding.

10 Under these rules, only persons who have  
11 previously submitted written questions will be  
12 recognized and allowed to ask questions during  
13 today's hearing. The scope of the questions will be  
14 limited to matters relevant to the licensing actions  
15 that I mentioned just a moment ago.

16 Staff from the Division and the Division's  
17 contractor and representatives of Energy Fuels are  
18 present and will be answering the questions that will  
19 be propounded [proposed] this afternoon.

20 One of the major limitations that we're  
21 looking at today is that under the rules, the  
22 hearings are normally not to exceed three hours.  
23 Today's hearing, however, has been scheduled for four  
24 hours due to the extensive number of questions that  
25 have been submitted in advance. So we are hoping to

1 be able to conclude by 5 p.m. this afternoon. A  
2 number of our participants have flights to catch this  
3 evening, so I'm hopeful that we'll be able to get  
4 through all of the questions and wrap things up  
5 around 5 p.m. But that's the timetable for -- for  
6 the hearing today.

7 As I mentioned, the following parties have  
8 submitted written questions as provided for the rules  
9 and will be heard in the following order:

10 Greenaction, Grand Canyon Trust, and following  
11 Grand Canyon Trust, depending upon where we are  
12 question wise and time wise, we'll probably take a  
13 short break.

14 And then following the break, Ute Mountain  
15 Utes [Ute Mountain Ute Tribe] will be recognized, and  
16 then following Ute Mountain Utes [Ute Mountain Ute  
17 Tribe], Uranium Watch.

18 This hearing is being recorded and  
19 transcribed by our court reporter. The transcript  
20 will become part of the administrative record. And a  
21 couple of ground rules regarding our reporter. In  
22 order to have a clear record, it's important that the  
23 questioners and respondents not talk over each other.  
24 That allows the court reporter to get everyone's  
25 statements down and not try and sort out who's

1 talking at what time.

2 In addition, a number of the questions that  
3 have been submitted are compound, meaning that there  
4 are several questions contained within a question.  
5 And for this reason, I'm going to ask the questioners  
6 to wait for a response to each discrete question  
7 before moving on to the next part of their question  
8 so there's a clear record of the question and the  
9 response.

10 Also, since the questions have been  
11 submitted in advance and are already in the record,  
12 it will not be necessary to make any kind of  
13 narrative statement or introductory statement before  
14 moving into the question. We would request that you  
15 go directly to the question and not include any type  
16 of an opening statement.

17 As previously noted, due to the number of  
18 questions, it is not anticipated that there will be  
19 sufficient time for general public comments to be  
20 received today. However, a public comment hearing  
21 [meeting] is set on June 15th at 5 p.m. in Blanding.  
22 In addition, the Division will accept written  
23 comments through July 31st of 2017. So members of  
24 the public who wish to comment can appear at the  
25 public hearing in Blanding and also may submit



1 written comments that must be received on or before  
2 July 31, 2017.

3 So with all that said, I'd like to invite  
4 the parties to state their appearances for the  
5 record, and then we'll get into the questions and  
6 answers.

7 So I'm Craig Anderson. I'm with the Utah  
8 Attorney General's Office.

9 MR. RANDALL: I'm Bret Randall. I'm also  
10 with the Utah Attorney General's Office. I'm here as  
11 counsel for the Division and ...

12 MR. GOBLE: I'm Phil Goble. I am the  
13 Uranium Mill's and Radon Materials section manager  
14 for the Division of Waste Management and Radiation  
15 Control.

16 MR. JOHNSON: I'm Ryan Johnson. I'm with  
17 the Division, environmental scientist and project  
18 lead.

19 MR. TOPHAM: Russ Topham. I am an  
20 environmental engineer with the Division.

21 MR. RUSHING: Tom Rushing, environmental  
22 scientist with the Division.

23 MS. GALLOWAY: I'm Gwyn Galloway,  
24 environmental scientist for the Division.

25 MR. MERRELL: I'm Gary Merrell with URS.

1 I'm a contractor to the Division and participated in  
2 the development of the SER.

3 MR. LUELLEN: Jon Luellen with URS as well.  
4 Similar role on the project, helped develop the SER  
5 and helped do the submittal documents.

6 MR. ZODY: I'm Michael Zody. I'm an  
7 attorney with Parsons Behle & Latimer law firm, legal  
8 counsel for Energy Fuels.

9 MR. FRYDENLUND: Dave Frydenlund, senior  
10 vice president, general counsel, and corporate  
11 secretary of Energy Fuels.

12 MR. ROBERTS: My name is Harold Roberts and  
13 I'm a former executive and officer of Energy Fuels  
14 Resources and currently a consultant for the company.

15 MR. ANDERSON: Okay. With the introductions  
16 done, we're going to ask that each of our questioners  
17 step to the table and submit their question at the  
18 microphone so that it can be recorded. We have  
19 Bradley Angel as the individual who submitted  
20 questions.

21 Mr. Angel.

22 \* \* \* \* \*

23 MR. ANGEL: Good afternoon. My name is  
24 Bradley Angel, and I submitted questions on behalf of  
25 the organization for which I'm executive director of,

1 Greenaction for Health & Environmental Justice on  
2 behalf of our constituents at the White Mesa Ute  
3 community and the surrounding communities.

4 And just for the record, on the agenda it  
5 has our name as Green Action two separate words.  
6 That is not our name. And I hope there's more  
7 attention to detail and facts in your decision-making  
8 process.

9 Question No. 1: What laws and regulations  
10 apply to and are used by DEQ and the Division in  
11 permitting and license decisions for the White Mesa  
12 Uranium Mill?

13 MR. GOBLE: So for the groundwater permit,  
14 it's the Groundwater Protection Rules, which is  
15 R317-6, and that is under the Utah Water Quality Act,  
16 Title 19, Chapter 5.

17 For the radioactive materials license it's  
18 Radiation Control Rules R312, 14, 15-- oh, sorry,  
19 R313-12, 14, 15, 17, 18, 19, 22, 24, and 70. And the  
20 Utah Radiation Control Act is 19-3.

21 MR. ANGEL: And that's the complete list  
22 that the permit decision is based on?

23 MR. GOBLE: Yes, sir.

24 MR. ANGEL: And is that the complete list  
25 that in terms of applicable laws is considered in

1 your decision?

2 MR. GOBLE: Yes, sir. Because what the  
3 federal rules are referenced are actually referenced  
4 in the rules, so yes.

5 MR. ANGEL: And so --

6 MR. GOBLE: We as an agreement state are  
7 basically the NRC for the rollover over [regulatory]  
8 uranium rules for oversight.

9 MR. ANGEL: Right. And so it's -- the  
10 Divisions and DEQ's contention that there are no  
11 other laws that need to be considered are applicable  
12 to this decision?

13 MR. RANDALL: I'm going to object because  
14 that calls for a legal conclusion.

15 MR. ANGEL: Okay. I'll ask the question  
16 differently.

17 Does your agency -- so just to confirm what  
18 Mr. Goble just said, you provided the full list of  
19 laws in consideration of this decision, right, to  
20 make a decision?

21 MR. GOBLE: There are NRC guidance  
22 documents, regulatory guides, we follow those as  
23 well.

24 MR. ANGEL: Right. And -- okay. Great.

25 But in terms of laws.

1 MR. GOBLE: Yes.

2 MR. ANGEL: Okay. So there was another law  
3 I was wondering why it's not on the list.

4 Is the Department and Division aware of  
5 Title VI in the United States Civil Rights act of  
6 1964?

7 MR. RANDALL: I object because that question  
8 was not submitted previously in writing as pursuant  
9 to our rules.

10 MR. ANGEL: I'll reframe it.

11 Title VI of the United States Civil Rights  
12 Act of 1964 is not one of the laws that you stated  
13 was applicable to your decision; is that correct?

14 MR. RANDALL: Can we move on to the  
15 questions that were presented.

16 MR. ANGEL: This was a question presented.  
17 I'm just clarifying. I asked what laws and  
18 regulations applied to this decision. So I'm just  
19 clarifying that Title VI is not one of those ones  
20 mentioned in your response.

21 MR. RANDALL: No, not directly, but the  
22 question has to do with the licensing action.

23 MR. ANGEL: Absolutely.

24 MR. RANDALL: So it doesn't directly apply  
25 to the licensing action.

1 MR. ANGEL: Well, it actually does, sir.  
2 With all due respect, I believe Utah is in the United  
3 States of America, and this is not rhetoric, sir.  
4 Title VI of the United States Civil Rights Act  
5 applies to all states. And so --

6 MR. RANDALL: So we can list the United  
7 States Constitution and Utah has a constitution.

8 MR. ANGEL: That's right. Let's move on.

9 What is -- 2: What is the closest community  
10 to the White Mesa Uranium Mill?

11 MR. GOBLE: The White Mesa Ute Mountain Ute  
12 Tribe community is 4.5 miles away.

13 MR. ANGEL: And then is there a reason that  
14 in the opening when the June 15th hearing was  
15 announced that the reference was to Blanding and not  
16 to the White Mesa concerned community, which is  
17 clearly the closest community?

18 MR. ZODY: Object. That's not a -- question  
19 seems to be argumentative to me.

20 MR. ANDERSON: Sustained.

21 MR. ANGEL: Well, I believe you answered  
22 Question No. 3, how close is it to the boundary. So  
23 thank you.

24 Is that correct, Mr. Goble?

25 MR. GOBLE: To the boundary, yeah.

1 MR. ANGEL: Okay. Thanks.

2 Question No. 4: Do air emissions, including  
3 from the stack, piles, or any other source leave the  
4 mill boundary?

5 MR. JOHNSON: Yes. However, the  
6 environmental monitoring indicates that it's below  
7 regulatory limits.

8 MR. ANGEL: That wasn't my question. But it  
9 leaves the boundary.

10 MR. JOHNSON: Yes.

11 MR. ANGEL: Thank you.

12 And have any contaminants whatsoever left  
13 the boundary?

14 MR. JOHNSON: Same as before --

15 MR. ANGEL: Yes.

16 MR. JOHNSON: -- yes, but they are below  
17 regulatory limits.

18 MR. ANGEL: Question No. 6: Does DEQ  
19 acknowledge the presence of a large number of  
20 archaeological and culturally significant sites  
21 within and adjacent to the mill boundary?

22 MR. GOBLE: Yes.

23 MR. ANGEL: Question No. 7, I got a letter a  
24 couple of days ago, an email with a letter attached  
25 from your agency saying you would not answer the --

1 my question: Does the DEQ receive any federal  
2 funding, as though it wasn't relevant. And I was  
3 wondering if that could be explained. Seems directly  
4 relevant.

5 MR. RANDALL: It's not relevant to this  
6 licensing action.

7 MR. ANGEL: It is if Title VI of the Civil  
8 Rights Act applies, which it does. But we can leave  
9 it at that.

10 Number 8: Please describe the outreach and  
11 public notice conducted by DEQ, if any, to tribal  
12 members at the White Mesa Ute community for this  
13 permitting process.

14 MR. GOBLE: So on April 11th of 2017, the  
15 Division sent the Ute Mountain Ute Tribe all the  
16 documents associated with the licensing action. This  
17 allowed the tribe to present any questions or  
18 concerns they had regarding the licensing action  
19 before the documents were sent out for public  
20 comment, and we received no such question or comment  
21 from the tribe before the period began.

22 MR. ANGEL: And -- thanks for that  
23 information. However, that's not the question I  
24 asked.

25 What public -- outreach and public notice



1 was conducted by the agency to tribal members at the  
2 White Mesa Ute community?

3 MR. GOBLE: Our point of contact is Scott  
4 Clow and Colin Larrick and their attorney Leland  
5 Begay. That's who we sent it to.

6 After we sent it to them, I don't know how  
7 they disseminated the information to the tribal  
8 members.

9 MR. ANGEL: So your agency did not directly  
10 disseminate information and notice to tribal members  
11 at White Mesa directly. You used your outreach to --

12 MR. GOBLE: I explained what we did.

13 MR. ANGEL: Okay. Thank you.

14 And I guess that's the answer to No. 9: How  
15 many tribal members, if any, were sent notice of  
16 opportunities for public comment on this  
17 permit/license renewal process? And I guess the  
18 answer is other than your point of contact.

19 MR. GOBLE: Yes, sir. Same answer.

20 MR. ANGEL: All right. Well, thank you very  
21 much.

22 MR. GOBLE: Yep.

23 MR. ANDERSON: Thank you, Mr. Angel.

24 \* \* \* \* \*

25 In the order that we've set out, as I

1 explained before, the next is Grand Canyon Trust.

2 Would you please state your name for the  
3 reporter.

4 MR. PAUL: My name's Aaron Paul. I'm the  
5 staff attorney with Grand Canyon Trust.

6 Thank you for taking the time today to  
7 answer the questions that we posed. We appreciate  
8 it.

9 MR. ANDERSON: Thanks for coming.

10 MR. PAUL: First question on our list was  
11 the following: In its discussion of Reclamation Plan  
12 Revision 5.1, the Division's Technical Evaluation and  
13 environmental Assessment observes Energy Fuels "could  
14 not resolve all of the staff's concerns" with the  
15 proposed evapotranspirative cover system. I'm  
16 wondering what the Divisions unresolved concerns are.

17 MR. TOPHAM: The licensee is required to  
18 provide a plan that has a high probability of  
19 success. Quoting from 10 CFR 40, Appendix A  
20 Criterion 4(d), which is referenced in our state  
21 rules, "A full self-sustaining vegetative cover must  
22 be established or rock cover employed to reduce wind  
23 and water erosion to negligible levels. Where a full  
24 vegetative cover is not likely to be self-sustaining  
25 due to climatic or other conditions, such as in

1 semi-arid and arid regions, rock cover must be  
2 employed on slopes of the impoundment system. The  
3 NRC" -- or I might add parenthetically in this case,  
4 the state -- "will consider relaxing this requirement  
5 for extremely gentle slopes such as those which may  
6 exist on the top of the pile."

7           The -- federal government has provided  
8 guidance documents including NUREG/CR 7028 to provide  
9 guidance on designing and constructing  
10 evapotranspirative covers such as has been proposed  
11 in Reclamation plan 5.1. Too little data existed in  
12 the public record or in sources that the licensee  
13 provided to the state to convince us that the  
14 evapotranspirative cover would meet these  
15 requirements.

16           Just to make sure that I have fully covered  
17 your question there.

18           MR. PAUL: So if I understood correctly, the  
19 primary concern is that not enough vegetation will be  
20 established on the evapotranspirative cover to  
21 adequately promote evapotranspiration?

22           MR. TOPHAM: Correct. We were not convinced  
23 that the diversity and density of vegetation could be  
24 achieved.

25           MR. PAUL: Okay. So it wasn't under --

1 MR. TOPHAM: We're open to other data, to  
2 additional data.

3 MR. PAUL: Understood. So it wasn't other  
4 issues with, say, the layers and the cover and lack  
5 of a capillary break, things of that nature? It was  
6 basically the vegetation issue?

7 MR. TOPHAM: I believe the questions on  
8 capillary break and so forth come up a little bit  
9 later. Your general concern here had to do with  
10 diversity and density on vegetation as well as  
11 biointrusion.

12 MR. PAUL: Okay.

13 MR. TOPHAM: And I believe biointrusion also  
14 comes up later.

15 MR. PAUL: So let me move on, then.

16 So my second question was: Why the Division  
17 is proposing to require the company to revert to the  
18 1996 cover design if the test section for the  
19 evapotranspirative cover fails to meet the  
20 performance criteria that is set out in the  
21 Stipulation and Consent Agreement.

22 MR. TOPHAM: As we view it, it's not really  
23 a reversion to the rock cover because the rock armor  
24 cover is fully approved. In 1996 the Nuclear  
25 Regulatory Commission approved that cover. And we

1 need to have something in the reclamation plan that  
2 can be used should the -- should closure proceed at  
3 this point.

4 MR. PAUL: So if I understood the consent  
5 agreement correctly, it seems with some conditions to  
6 provide for a fallback, basically, an automatic  
7 fallback to the 1996 cover design if the Division is  
8 ultimately unsatisfied with ET -- ET meaning  
9 evapotranspirative -- ET cover or any adjustments  
10 that are made to the cover.

11 Am I understanding the consent agreement  
12 correctly?

13 MR. TOPHAM: Our intention was to make clear  
14 that there was an approved system that could be  
15 employed and that entering into the agreement, the  
16 Stipulation and Consent Agreement, would not extend  
17 an automatic approval of the new system, that it was  
18 a demonstration project, and it's a way to hold the  
19 licensee accountable for the terms that were  
20 negotiated in that process.

21 MR. PAUL: Okay. I'll move on to my third  
22 question and perhaps ask for follow-up in that  
23 context.

24 So why isn't the Division requiring the 1996  
25 cover design to meet the same performance standards

1 as the ET cover design is being required to meet?

2 MR. TOPHAM: I would answer that in two  
3 ways. The first is that the technical standards for  
4 the two systems are different. Therefore, the review  
5 process would have to be different.

6 And the second is that the rock armor system  
7 had already been fully vetted. It had been through a  
8 review process and had been approved. So there was  
9 no reason since it wasn't being submitted as a new  
10 element to review it again.

11 MR. PAUL: I guess to get at the heart of my  
12 confusion, I mean, is there any expectation that the  
13 1996 cover design will perform better than the ET  
14 cover? Does the Division think that the 1996 cover  
15 design may be better than the ET cover?

16 MR. TOPHAM: That is why we are doing the  
17 data collection and analysis and demonstration  
18 project. We don't know which will be better in this  
19 particular climate. We're hopeful that we find a  
20 solution, and then we would use the superior  
21 solution.

22 MR. PAUL: But if the 1996 cover isn't being  
23 tested, how are you going to determine which solution  
24 is superior?

25 MR. TOPHAM: I believe if you read the

1 Stipulation and Consent Agreement carefully, you'll  
2 see a lot of what we're looking for, trying to  
3 determine which parameters -- trying to determine  
4 that the parameters that are outlined in 10 CFR 40 --  
5 if I go back to my notes here, the cited section in  
6 Appendix A, if -- if -- we're trying to see that the  
7 new cover system meets those criteria.

8 MR. PAUL: Uh-huh.

9 MR. TOPHAM: If it does, then the licensee  
10 has -- has made a proposal that we could consider  
11 fully vetted.

12 MR. PAUL: And if it doesn't? And if it  
13 doesn't, my understanding is they can -- the licensee  
14 can submit some changes to the ET cover, which the  
15 Division will consider and perhaps implement, but  
16 ultimately the Division is unsatisfied. I think that  
17 the consent agreement says the 1996 cover will be  
18 built.

19 Am I -- I just -- I'm not trying to -- this  
20 isn't a gotcha question. I'm just trying to  
21 understand that that's the system that's --

22 MR. TOPHAM: If the data cannot support the  
23 new cover design, we have a fully approved cover that  
24 we could implement. That's the extent to which I'm  
25 willing to speculate at this point.

1 MR. PAUL: Okay. I'll move on.

2 So why did the Division enter into the  
3 Stipulation and Consent Agreement to govern  
4 reclamation of Cell 2?

5 MR. TOPHAM: I began to mention earlier that  
6 the Stipulation and Consent Agreement was a mechanism  
7 to hold the licensee accountable for the agreements  
8 that we had negotiated in terms of collecting  
9 additional data and assessing the performance of the  
10 new system.

11 MR. RANDALL: Let me explain it this way:  
12 The 1996 cover is -- has -- was approved by the NRC.  
13 It was deemed to meet all applicable performance  
14 criteria. The NRC's approved that. We're not going  
15 to revisit that. There's no reason to.

16 The licensee applied for us to consider the  
17 evapotranspirative cover. The staff reviewed the  
18 application and determined that there was  
19 insufficient data to decide whether or not the new  
20 proposed cover, the alternate cover, would meet  
21 applicable criteria.

22 The purpose of that consent agreement is to  
23 set out the parameters for testing of the  
24 evaporative -- the ET cover so that the Division has  
25 sufficient data to make a final decision up to seven



1 years from now to decide whether the ET cover meets  
2 applicable criteria.

3 That's the only reason for the consent  
4 agreement was to set the parameters under which the  
5 data would be collected upon which a decision could  
6 be made in the future.

7 MR. PAUL: Was there a concern that the  
8 company might not meet its obligations without a  
9 consent agreement to -- to carry out the testing as  
10 proposed? I mean, it just seemed unusual to me that  
11 there was a consent agreement on this. And so I'm  
12 just curious what motivated that. Sounds like you  
13 guys just wanted to have a better enforcement  
14 mechanism in place.

15 Am I understanding that correctly?

16 MR. RANDALL: I think that's correct. I  
17 mean, the proposal was to put -- you know, Cell 2 has  
18 been covered -- and we'll get into this later, but  
19 Cell 2 is completely covered with a radon barrier,  
20 and we just want the formal mechanism -- enforcement  
21 mechanism to describe the basis upon which the  
22 testing would occur and what would happen.

23 If it fails, they have to use the approved  
24 cover.

25 MR. PAUL: So one of the subparts to my

1 question was whether the Division concluded that the  
2 company violated any regulatory requirements before  
3 entering in the Stipulation and Consent Agreement?

4 MR. RANDALL: No, none whatsoever.

5 MR. PAUL: This is a pretty technical  
6 question, No. 5. Or at least for me it's technical,  
7 perhaps not for other folks out there. But the test  
8 section, the primary test section, as I understand  
9 it, of the evapotranspirative cover is supposed to be  
10 installed in the southeast corner of Cell 2 in an  
11 area that's sloped at a grade of 1 percent, meaning  
12 that the top layer is going to have a topsoil gravel  
13 mixture rather than all topsoil.

14 And so I'm curious whether in light of that  
15 difference and what's going to happen on the vast  
16 majority of the cover, the Division thinks the test  
17 section is going to be representative of the rest of  
18 the evapotranspirative cover.

19 MR. TOPHAM: I realize it's going to take a  
20 little bit longer than a yes or no answer here.

21 Appendix A to the reclamation plan included  
22 test data on all of the stockpiles of material that  
23 were intended for use on the Cell 2 cover. That  
24 included all of the topsoil. That material, the  
25 topsoil material, included a gravel fraction and, in

1 fact, it's the same material as specified for the  
2 test section.

3 So with that in mind, using the same  
4 materials we would expect the same performance, yes.

5 MR. PAUL: And even though there's -- if I  
6 understood correctly, even though there's going to be  
7 some gravel, which I would assume would inhibit plant  
8 growth to some degree in a 1 percent sloped area, is  
9 what you're saying is you think the -- when you say  
10 performance, the plant growth on the -- in the all  
11 topsoil section on the cover that's at a slope of  
12 less than 1 percent is going to be the same -- the  
13 same performance?

14 MR. TOPHAM: The purpose of the gravel --  
15 and I hope this helps answer the question -- is to  
16 provide some erosion protection while the plants are  
17 having an opportunity to take and establish their  
18 root systems.

19 MR. PAUL: Okay.

20 MR. TOPHAM: And that will be required so  
21 that the licensee doesn't have to go in and mess up  
22 the plants, so to speak, to repair areas that may  
23 have eroded. It is a small amount of erosion  
24 protection that's there for a temporary protection  
25 until the root system takes.

1           So the -- the answer is we do expect the  
2 same performance.

3           MR. PAUL: Okay. My sixth question was  
4 whether the Division evaluated an off-site disposal  
5 option for the uranium byproduct material of the  
6 White Mesa Mill?

7           MR. GOBLE: So the answer is no. And the  
8 reason why is because in 10 CFR 40, Appendix A --  
9 sorry. In 10 CFR 40, Appendix A, the intention for  
10 11e.(2) byproduct material, whether that be tailings  
11 or other 11e.(2) waste, its intention is for it to be  
12 disposed of on-site tailing cells in accordance with  
13 Criterion 6. Criterion 2 describes it is federal  
14 policy that in order to avoid small proliferation of  
15 small waste -- small waste disposal sites, byproduct  
16 material from the In-Situ leach operations, such as  
17 residues from solution extraction and contaminated  
18 control processes and wastes from small remote above  
19 ground extraction operations must be disposed of in  
20 existing large mill tailings disposal site. The  
21 White Mesa Uranium Mill is allowed by their license  
22 to receive byproduct material from In-Situ lease  
23 extraction operations.

24           So it's federal policy it's disposed of on  
25 site.

1           MR. PAUL: Well, I won't try to quibble with  
2 your interpretation of Appendix A right now, but are  
3 you basically saying that it's the Division's view  
4 that Appendix A prohibits off-site disposal of the  
5 tailings of the White Mesa Mill?

6           MR. GOBLE: It doesn't prohibit, but it's  
7 pretty clearly the intention that it will be disposed  
8 on site.

9           MR. PAUL: Okay. My seventh question was  
10 whether the -- well, let me start over.

11           So the company developed a model of  
12 infiltration and contaminant transport, and one of  
13 the types of covers the company modeled in that  
14 report was an evapotranspirative design that had a  
15 capillary break in -- I think it was the third cover  
16 design model in the ICTM, which means Infiltration  
17 and Contaminant Transport Model reports. The third  
18 cover in the ICTM had a capillary break.

19           I'd like to know why it was not included in  
20 the final cover design.

21           MR. RUSHING: Yeah, the proposed cover  
22 design never included a capillary break. One of the  
23 Division's comments when reviewing the Infiltration  
24 and Contaminant Transport Model was to provide  
25 sensitivity showing that a capillary break in fact

1 was not needed. So the model was conducted with that  
2 layer and was shown that it wasn't needed.

3 MR. PAUL: If I understood the ICTM report  
4 correctly, it looked to me like the predicted, the  
5 model infiltration into the tailings through the  
6 cover design that included a capillary break would be  
7 lower as in it would -- at least on that metric would  
8 perform better than the model with the ET cover.

9 Did I understand that right?

10 MR. RUSHING: Whether or not it was lower,  
11 the cover without the capillary break met the design  
12 requirements.

13 MR. PAUL: I see.

14 So assuming I'm right that it was lower,  
15 what you're basically saying is that the model with  
16 the cover was good enough that the difference between  
17 those two covers wasn't significant enough to mean  
18 that the capillary break would be of -- I guess of  
19 use or would be a better cover system?

20 MR. RUSHING: Correct.

21 MR. PAUL: Okay. My eighth question was why  
22 the proposed cover design doesn't include -- I'm  
23 sorry. Why doesn't the proposed cover design include  
24 a geosynthetic root barrier to deter biointrusion  
25 into the tailings?

1 MR. TOPHAM: In this case, the licensee is  
2 relying on a combination of plant diversity, thick  
3 layers of soil cover, and a highly compacted layer at  
4 depth to resist biointrusion. And this was covered  
5 in Reclamation Plan Revision 5.1, Appendix A,  
6 page 17.

7 While the design shows promise, part of the  
8 demonstration -- demonstration study includes looking  
9 at this biointrusion element. There is more than one  
10 way to prevent biointrusion. A geosynthetic mat is a  
11 good way, but there are other ways that work as well,  
12 and they have elected to go a different direction.

13 MR. PAUL: Okay. If I understood the design  
14 of the primary test section for the ET cover  
15 correctly, and I think this is also in Appendix A,  
16 the test section does include a -- some sort of  
17 geosynthetic root barrier in it; is that right?

18 MR. TOPHAM: The only geosynthetic barrier  
19 that I am aware of in the test section is laterally  
20 to keep any edge effects from getting in and  
21 influencing the test itself.

22 MR. PAUL: Yeah, it was called the Reemay  
23 [sic] Biobarrier. Is that what you're talking about?

24 MR. TOPHAM: That is only on the edges. It  
25 is not -- it is not meant to prevent vertical

1 penetration of roots.

2 MR. PAUL: Got it.

3 So it's to protect the test section from  
4 outside intrusion to make sure that what's  
5 represented in the test section is going to look like  
6 the final cover that's ultimately to be --

7 MR. TOPHAM: Yes.

8 MR. PAUL: Makes sense.

9 If I could just try to move on by  
10 summarizing my ninth question quickly, it's my  
11 understanding that there's a new version of MILDOS  
12 available as of about a year ago, March 2016, and it  
13 looks like the Division didn't use that new version  
14 of MILDOS in its modeling and I'm curious why.

15 MS. GALLOWAY: MILDOS is, as you indicated,  
16 a modeling program. We began the process of  
17 following or doing our model back in 2011. It took a  
18 number of years to collect all the information, to  
19 input into the program, and to compile the results  
20 once the program was run.

21 We felt that when it -- when the new version  
22 came out in March 2016, it wasn't worth delaying  
23 putting the renewal out another three or four years  
24 in order to redo what we had done to this point.

25 At the next amendment or modification to the



1 license where they will be doing anything affect --  
2 that may affect those, they'll be required to submit  
3 a new model using the newer version.

4 MR. PAUL: Do you have any idea whether the  
5 newer model, how much it might affect the results of  
6 the modeling that was done?

7 MS. GALLOWAY: Given that the results were  
8 substantially below the -- the amounts or the limits  
9 produced, or the standards I should say, we don't  
10 anticipate that the results would have been affected  
11 with the new model, no.

12 MR. PAUL: Would you be able to describe for  
13 me just the key changes in the modeling? And I  
14 realize that's pretty specific and narrow. And if  
15 you can't, I understand.

16 MS. GALLOWAY: Well, and to be perfectly  
17 honest with you, I did a little of the beta testing  
18 on the new model. However, I haven't looked at the  
19 new model since it came out, so I don't know exactly  
20 what came out. So I -- I'd kind of be speculating as  
21 to what those changes actually end up being.

22 I apologize that I haven't had a chance to  
23 do that as of yet, but ...

24 MR. PAUL: It wasn't the question I wrote up  
25 specifically, so I understand.

1           My tenth question asks about variability  
2 that shows up in Table 1 of the technical evaluation,  
3 and I just didn't understand why that variability  
4 exists. And the figure I pulled out was for whole  
5 body or single organ doses through annual exposure  
6 varying from 2 mrem in 2007 to 16.2 in 2010.

7           I was curious if you could describe what the  
8 main reasons for that variability are?

9           MS. GALLOWAY: Yeah. The Table 1 that  
10 you're pointing to, there's two potential things you  
11 may be observing.

12           One is there's three columns in that table.  
13 Each of those columns relates to a different  
14 standard, and the different standards require  
15 different things be taken into account. Two of the  
16 columns would have included radon and one would not  
17 have. So that's going to be a difference in the  
18 results right there.

19           If you're considering the year-to-year  
20 difference within the column itself --

21           MR. PAUL: Mm-hmm.

22           MS. GALLOWAY: -- we tried to run the model  
23 as realistically as possible and took into account  
24 what -- what the licensee received each year and what  
25 they processed. And because there were times when

1 the mill was not running, you know, and there were a  
2 lot of downtimes, some years they received more, some  
3 years they didn't receive as much.

4 So that's going to cause a pretty wide  
5 variability.

6 MR. PAUL: Did the type of feed the mill was  
7 processing contribute much to the variability in the  
8 year to year?

9 MS. GALLOWAY: That was taken into account  
10 for each year. We -- as I indicated, we developed  
11 the model based on what they received and what they  
12 processed. So based on what they received, what they  
13 processed, you know, the ores, whether it be Arizona  
14 strip, Colorado plateau, alternate feed, whatever the  
15 case may be, that was all taken into account.

16 So yeah, that would have been included in  
17 the model, so ...

18 MR. PAUL: Is there a document where that  
19 would be available for me to study as we go to  
20 comment on the -- is that printed out anywhere?

21 MS. GALLOWAY: I'm not certain what document  
22 you're trying or what --

23 MR. PAUL: The modeling results and input or  
24 output.

25 I mean, is there a way that I could see?

1 MS. GALLOWAY: This is one year  
2 (indicating).

3 MR. PAUL: Got it.

4 MS. GALLOWAY: And there are eight years of  
5 it.

6 MR. PAUL: Is it available electronically as  
7 something the public could have access to?

8 MS. GALLOWAY: I imagine we could get it if  
9 we received a GRAMA request --

10 MR. GOBLE: If you wanted to request it, we  
11 can provide it.

12 MR. PAUL: Okay. Thank you.

13 My 11th question asked about a specific  
14 condition in the revisions to the radioactive  
15 materials license, Condition 9.5, which says, "On or  
16 before March 4, 2018, the annual surety estimate  
17 shall also include all costs necessary to remediate  
18 any groundwater contamination required by License  
19 Condition 10.21, after facility closure, to be  
20 determined by the director.

21 And I just was confused about that phrasing.  
22 And I was hoping you-all could clarify that what  
23 means.

24 MR. TOPHAM: Well, thank you for pointing  
25 that out. That was a clerical error. The clause in

1 the license to which you referred had reference to  
2 work that had already been completed and it was left  
3 in inadvertently. And then in our -- and somebody's  
4 insert was they changed the date due on it even  
5 though the work was already done.

6 So that is being totally stricken from the  
7 license.

8 MR. PAUL: The language "after facility  
9 closure, to be determined by the Director"?

10 MR. TOPHAM: Yes.

11 MR. PAUL: Yeah.

12 MR. TOPHAM: That related to one of the  
13 contaminant clauses that is already under  
14 abbreviation, and the work that was contemplated with  
15 that particular clause is already complete.

16 MR. PAUL: That makes sense. Thank you.

17 Number 12, why is the Division proposing to  
18 give Energy Fuels until March of next year to update  
19 the surety to include groundwater remediation costs  
20 rather than doing that right now?

21 MR. TOPHAM: We asked that the -- we require  
22 that the licensee update their surety annually.

23 March 2018 would be the next recurring --  
24 would be the next regular due date of a surety if  
25 that license were to be renewed before then. So

1 that's why that date appears in there.

2 It's just clear that we're not leapfrogging  
3 a cycle. We receive what comes out on -- a submittal  
4 every year to update the surety.

5 MR. PAUL: So are you saying that the  
6 current reclamation cost estimate that was submitted  
7 last year and is approved now already includes costs  
8 for remediating groundwater?

9 MR. TOPHAM: We require that upon discovery  
10 of a plume, the plume be characterized and an  
11 estimate put together of what it would take to  
12 perform the remediation, and that money is  
13 immediately added to the surety.

14 So the answer to your question is yes.

15 MR. PAUL: Okay. I've seen those  
16 provisions.

17 Is there anything that's going to be  
18 different about what they do next year as a result of  
19 this requirement?

20 MR. TOPHAM: Our procedure is not going to  
21 change.

22 MR. PAUL: Got it.

23 MR. TOPHAM: Unless we get some data that  
24 indicates we need to make an improvement there.

25 MR. PAUL: Question 13, the company plans to

1 complete a lot of reclamation tasks at some point in  
2 the future.

3 Do the cost estimates that are in the  
4 current backup for the surety, Attachment C to the  
5 Reclamation Plan Revision 5.1, do they account for  
6 inflation?

7 MR. TOPHAM: The simple answer is yes. And  
8 the way that is accomplished is by asking for a new  
9 estimate every year. That way, we're using current  
10 costs rather than costs that need to be inflation  
11 adjusted.

12 MR. PAUL: And what about costs within the  
13 plan that won't occur for a long time? Are those  
14 escalated in some way to account for inflation?

15 So, for example, dewatering takes a while,  
16 so all the tasks that will happen after dewatering is  
17 complete presumably will be anywhere from 7 to 10 to  
18 15 years out in the future.

19 Are those already -- do they already include  
20 inflation?

21 MR. TOPHAM: I think I can clear that up  
22 fairly easily.

23 The assumption behind the surety is not that  
24 we will exercise the surety in 7, 10, or 15 years.

25 The assumption behind the surety is that in the event

1 something happens and we need to close the facility  
2 this year, this is the money that would be required.  
3 So 15, 20 years out, we would have -- we would have  
4 reviewed an additional submittal 15, 20 times, and it  
5 would have been updated that many times.

6 This is to cover what happens between now  
7 and the next submittal.

8 MR. PAUL: Right. And I think I understand  
9 that element of my question, but I'm going to try  
10 again with a slightly separate question.

11 If, say, the mill were to shut down tomorrow  
12 and you-all were to exercise your rights of that  
13 surety, does that amount that was calculated into the  
14 surety already include inflation for all the tasks  
15 that will happen ten years from now? Because it's  
16 going to take a long time before the cover is placed  
17 on Cells 3, 4A and 4B; right? A lot of tasks in the  
18 estimate itself would occur a long time from now even  
19 if the company defaulted tomorrow.

20 So my question is, do those estimates  
21 include inflation?

22 MR. TOPHAM: The work plan that a company's  
23 surety contemplates closing and reclaiming the  
24 facility within two years.

25 So the only things that might be remaining



1 might be a small amount of remedial work and the  
2 long-term care that will be done when this is turned  
3 over to the Department of Energy. And there is --  
4 there is a provision for some of that.

5 MR. PAUL: Is that a question the company  
6 can answer? I mean, I literally can't tell with the  
7 cost estimates whether inflation for tasks that will  
8 happen far into the future is included in that  
9 attachment.

10 MR. ROBERTS: The estimate, as Mr. Topham  
11 said, is an estimate about what the costs are. If  
12 the company would turn that money over to the State  
13 and the State would take that money, then use it for  
14 the costs going forward.

15 So it may not directly include a factor for  
16 inflation, but it also doesn't include any factor for  
17 the -- the investment value or the increase in value  
18 of the surety money that the State would inherit  
19 should that occur.

20 MR. PAUL: Question 14, in short, is why was  
21 a contingency of 25 percent selected for the  
22 contingency in the surety estimate?

23 MR. TOPHAM: Beginning about five years ago,  
24 we took a long hard look at the current state of  
25 industry practice. We consulted a number of sources,

1 including RSMeans, American Society for Testing and  
2 Materials. We looked at all of the literature that  
3 the NRC had put out, and it was determined that at  
4 the stage of planning that was possible at this --  
5 with the plant remaining in operation, it was most  
6 appropriate to move to 25 percent from the previous  
7 value of 15 percent.

8 MR. PAUL: And was that adopted directly  
9 from NUREG-1757?

10 MR. TOPHAM: If you look in our rules, it's  
11 currently located in R313-22, 35(3)(h). It refers to  
12 Volume 3 of NUREG-1757.

13 MR. PAUL: Impressive memory of the  
14 recitation.

15 MR. TOPHAM: I've had to deal with it once  
16 or twice.

17 MR. PAUL: Got it.

18 And if I understand Volume 3 of NUREG-1757  
19 correctly, it basically says a 25 percent is the --  
20 the minimum contingency factor that the NRC  
21 recommends for surety requirements.

22 Is my understanding; right?

23 MR. TOPHAM: Yes. That also comported along  
24 with the other literature I cited. The exception to  
25 that is NUREG-1620, and that seemed to be the only

1 outlier.

2 MR. PAUL: My 15th question, I'll skip all  
3 the introductory stuff.

4 I'm just curious, one, whether I'm reading  
5 the groundwater discharge permit correctly when I  
6 understand it to be saying that the slimes-drain  
7 pumps in each of the cells aren't going to be turned  
8 on until closure of each cell begins; is that right?

9 MR. TOPHAM: That is essentially correct.

10 During operation prior to placing cover,  
11 fluid is being placed on top of the tailings. So it  
12 makes more sense to recirculate fluids from the top  
13 rather than the bottom of the pile. You're not  
14 dewatering if you're replenishing the water as fast  
15 as it is pulled out.

16 MR. PAUL: And why can't you do both? Is  
17 there a technical reason?

18 MR. TOPHAM: It's -- I suppose if the  
19 licensee wanted to, they could. But there's no --  
20 that's no benefit to it.

21 MR. PAUL: So your expectation is that the  
22 impoundments could not be watered -- dewatered any  
23 faster if you were pumping both from the slimes-drain  
24 and from the surface water on top of the mound.

25 MR. TOPHAM: While you're regenerating the

1 slimes -- the process fluids, but you're still  
2 introducing process fluids while the tailing cell is  
3 still open and precipitation can get in there,  
4 dewatering is not going to occur. It will just  
5 recharge.

6 MR. PAUL: There's just too much -- too  
7 small amount they pump out of the slimes-drain,  
8 basically, that it's irrelevant in the grand scheme  
9 of things? Is that --

10 MR. TOPHAM: Well, there's only -- the fluid  
11 can only move through the tailings mass so fast.  
12 It's going to be constantly recharged as fast as we  
13 can pull -- as fast as the licensee can pull the --  
14 pull the fluid out.

15 So it really doesn't give any benefit to be  
16 pulling water from the bottom if you're already  
17 pulling it from the top.

18 MR. PAUL: Okay. Question 16 had to do with  
19 the license amendment for the Sequoyah Fuels  
20 material. And to summarize, it looks to me like the  
21 Division, through its consultant, URS, reached the  
22 conclusion that the Sequoyah Fuels material is not  
23 hazardous waste under an exemption that I understand  
24 is commonly called the Bevell Amendment, but  
25 basically an exemption from hazardous waste rules for

1 mining wastes, yet the Sequoyah Fuels material is  
2 sort of, as I understand it, a waste that was  
3 produced by processing yellowcake.

4 And the Bevell Amendment applies to waste  
5 produced by processing ore, and so I didn't  
6 understand how that conclusion was reached that the  
7 Sequoyah Fuels material is a waste from processing  
8 ore.

9 MR. JOHNSON: So the NRC actually determined  
10 that the Sequoyah Fuels material is already 11e.(2)  
11 material based on the fact that they were just --  
12 they were taking yellowcake and making it to spec  
13 versus before the enrichment process.

14 So in their document, SECY -- it's  
15 S-E-C-Y -- -02-0095, the commission ruled that this  
16 material was 11e.(2).

17 MR. PAUL: And so if I'm understanding  
18 correctly, there's an assumption that the EPA's  
19 definition of ore under its hazardous waste rules is  
20 the same as the commission's definition of what ore  
21 is?

22 MR. JOHNSON: So in this case where it's  
23 been ruled 11e.(2) material, the EPA regulations  
24 don't even apply.

25 MR. PAUL: And is that because it could be

1 disposed of directly into the impoundment's  
2 developing process at the mill?

3 MR. JOHNSON: If that was the choice, yes.

4 MR. PAUL: Is there any possibility that  
5 will happen with the Sequoyah Fuels material?

6 MR. ZODY: Objection. Calls for  
7 speculation.

8 MR. JOHNSON: Right now, it's -- the plan is  
9 that the Sequoyah Fuels material would be processed  
10 first for its uranium content.

11 MR. PAUL: Due to time constraints, I'll  
12 just skip Question 17.

13 My last question is, you know, in reading  
14 the report about the Sequoyah Fuels material, there  
15 is a handful of circumstances under which the  
16 licensee will be required to apply water to the  
17 material while it sits on the ore pad. And one of  
18 those circumstances is if a Super Sack is leaking.  
19 And so I'm just wondering if there's any risk that  
20 the practice of applying the water into the material  
21 while it's in the ore pad could cause groundwater  
22 contamination.

23 MR. GOBLE: So the answer is no.

24 So as you described, the material is  
25 received in Super Sacks, and the only time the Energy

1 Fuels would be required to apply water will be if  
2 there's a damaged sack or it's leaking. And the  
3 amount of water we're talking about is more like a  
4 water spray from a water truck. It's kind of  
5 de minimus. It's not going to be enough water to  
6 actually cause infiltration on the ore pad.

7 MR. PAUL: So it would just contaminate the  
8 soil beneath the ore pad and not groundwater? Is  
9 that --

10 MR. GOBLE: Well, it would just basically  
11 keep the material damp so it's not dispersible for --  
12 under the wind conditions. And if, let's say, it  
13 contaminated the ore storage pad anyways, that  
14 actually all gets cleaned up and then put in the  
15 tailing cell in the reclamation anyways, so ...

16 MR. PAUL: Okay. That's all I have.

17 Thank you.

18 MR. GOBLE: All right. Thank you, Aaron.

19 MR. ANDERSON: We did have a break built  
20 into the schedule, but since we're moving along, I  
21 think we might as well stay on schedule.

22 MR. GOBLE: Sure. That's fine.

23 MR. ANDERSON: So next is Ute Mountain Utes.

24 \* \* \* \* \*

25 MR. CLOW: Thank you. Can you hear me?

1 MR. RANDALL: Could you state your name for  
2 the reporter, please.

3 MR. CLOW: I'm Scott Clow. I'm the  
4 environmental programs director for the tribe. And  
5 this is Michael Keller. He represents us in the  
6 state of Utah.

7 Looks like we're well ahead of what we  
8 thought we would be timewise, so thank you for -- for  
9 having us here today.

10 MR. ANDERSON: Thank you.

11 MR. CLOW: Our first question is what is the  
12 expected remaining operational and pre-reclamation  
13 life of the White Mesa Mill?

14 MR. ROBERTS: That the mill has no  
15 predetermined operational life. The mill operational  
16 schedule is to determine or is dependent on the  
17 availability of both the ore from conventional mines  
18 which is dependent on the price of uranium which  
19 could fluctuate wildly as other commodities do.

20 Each of the tailing cells is reclaimed as it  
21 is filled and according to milestones set out in the  
22 reclamation plan.

23 Since there's no set schedule for filling  
24 any one of the ponds, there's no set schedule for  
25 actual final closure of the mill.



1 MR. CLOW: Thank you.

2 Our second question: Has an environmental  
3 assessment been conducted that assesses the impacts  
4 of the mill on surrounding communities over the  
5 mill's entire past 37 plus years and projected  
6 remaining operational and pre-reclamation life?

7 MR. GOBLE: So the -- an environmental  
8 impact statement was conducted by the NRC and was  
9 completed before the mill existed to assess the  
10 impacts of social impacts of the mill. There isn't  
11 currently a requirement for one to be performed  
12 again; however, there is a rigorous environmental  
13 monitoring program at the mill for all types of media  
14 including air, soil, water, surface water, and  
15 vegetation. And there are regulatory standards that  
16 the mill is required to meet.

17 As long as the standards are met, the  
18 effects on the public should be minimal. According  
19 to the sample results, the licensee hasn't exceeded  
20 any regulatory limits at their property boundary.  
21 Therefore, no individual member of the public has  
22 received a dose greater than the public dose limit of  
23 100 millirem per calendar year.

24 This dose limit and the dose limit for  
25 radiation workers were established after several

1 multiyear international health studies.

2 MR. CLOW: Thank you.

3 Question 3: How has the Division determined  
4 the projected cumulative radiologic impacts of the  
5 mill on people living in White Mesa and other nearby  
6 communities over the period of time the mill has  
7 operated since 1979 and will continue to be in  
8 operation or pre-reclamation?

9 MR. GOBLE: So as I stated before, the  
10 analytical results show that the mill has not  
11 exceeded the regulatory limits of their property  
12 boundary. So, therefore, no individual member of the  
13 public have received a dose greater than 100 millirem  
14 in a calendar year.

15 The regulatory limits is 5,000 millirem a  
16 year per calendar year for a radiation worker.  
17 Therefore, no individual -- sorry. I'm reading the  
18 wrong one. I apologize.

19 So over this last ten years, the total  
20 effective dose equivalent, average dose, so that's  
21 basically a dose for the public for everything  
22 they're exposed to. That's internal, outernal  
23 [external], what they might inhale, ingest, et  
24 cetera.

25 Over the last ten years for our work [a

1 worker] at the White Mesa Mill has averaged 80  
2 millirem to 180 millirem versus the standard of 5,000  
3 millirem, and it's been well below the regulatory  
4 limit.

5           Again, as I stated, there hasn't been a --  
6 an exceedance of the property boundary levels, so  
7 it's not expected based off the calculations of the  
8 limit that anyone has received a dose greater than  
9 that what's allowed.

10           MR. CLOW: Thank you.

11           Our fourth question: Has the Division  
12 assessed the cumulative radiologic impacts of the  
13 mill to people living in White Mesa and other nearby  
14 communities in light of the much higher radioactive  
15 material content over that of local uranium ores of  
16 the alternative feed materials approved and being  
17 approved for processing and disposal at the mill? I  
18 think that was partially answered earlier.

19           MR. GOBLE: We have -- we've got another  
20 part to that that might help provide some information  
21 for you, Scott.

22           So as we said, there's not a requirement for  
23 one to be performed. But the Sequoyah Fuels  
24 alternate feed is similar to actually what's already  
25 been accepted at the mill. So the impact for what

1 will be received is pretty much the same of what's  
2 already been received.

3 And Gwyn had some more she wanted to add to  
4 that.

5 MS. GALLOWAY: As indicated before, we took  
6 the alternate feeds into account when we did the  
7 MILDOS modeling, and it showed that no limits were  
8 exceeded.

9 MR. CLOW: In the techno -- technical  
10 evaluation document for the license, the license,  
11 there's a table that has the MILDOS calculations from  
12 2007 to 2015, I believe it was.

13 Do you have those calculations in the -- did  
14 the Division perform those prior to 2007?

15 MS. GALLOWAY: No.

16 MR. CLOW: Thank you.

17 Our fifth question: What measures have been  
18 and will be taken by the Division and EFR to ensure  
19 that off-site impacts from the White Mesa Mill  
20 identified in the 2012 USGS report, Scientific  
21 Investigations Report 2011-5231, have been remediated  
22 and do not pose a hazard to the public or the  
23 environment?

24 MR. GOBLE: So the majority of the impacts  
25 that were identified with the USGS report were

1 actually located on the Energy Fuels' property.  
2 Therefore, they will be addressed at closure as  
3 applicable.

4 For off-site areas, the value of the uranium  
5 samples ranged from 2.6 parts per million to 6.6 ppm.  
6 These samples are below backgrounds -- now, these  
7 included samples that are below background that the  
8 USGS determined were as a result of natural  
9 weathering rather than ore migration.

10 The value of vanadium samples ranged from  
11 56 parts per million to 79 parts per million. The  
12 EPA level at which the EPA immediate action would be  
13 triggered is 207 parts per million and 390 parts per  
14 million, respectively for a residential scenario.

15 The off-site samples were all significantly  
16 lower than the immediate action level. Plus the  
17 areas where the samples were collected is not a  
18 residential area. Therefore, no remediation has been  
19 performed at this time.

20 MR. CLOW: Thanks.

21 Similarly, Question 6: What measures are  
22 the Division taking or requiring EFR to take to  
23 ensure that off-site impacts from the White Mesa Mill  
24 of the type and nature identified in the 2012 USGS  
25 report are no longer occurring and will not occur in

1 the future?

2 MR. GOBLE: So the license was last revised  
3 on July 10, 2014, and that revised license added  
4 License Condition 11.9 which was in direct response  
5 to the results observed in the USGS report. And we  
6 required the licensee to submit a revised  
7 environmental protection manual that included two  
8 additional air monitoring stations and a revised soil  
9 and vegetative sampling program.

10 The licensee was also required to begin  
11 sampling for thorium 232 and radium 222 -- sorry,  
12 radon 222 at each air monitoring station. The  
13 revised environmental manual was approved by the  
14 director on December 10, 2014. Since then, the  
15 licensee has implemented the required changes in  
16 their environmental management plan, and it is  
17 expected that any potential for off-site release will  
18 be identified by the enhanced environmental  
19 monitoring plan.

20 MR. CLOW: Thanks. We appreciate that.

21 Question 7: How long will it take until  
22 Cell 2 is permanently capped and no longer poses a  
23 source of radon or other radionuclides to the  
24 atmosphere?

25 MR. TOPHAM: I'll answer the second part

1 first.

2 Beginning last summer and including early  
3 May of this year, radon barrier was installed on  
4 Cell 2. That installation is complete.

5 The latest round of testing for radon  
6 resulted in levels of .5 picocuries per square meter  
7 per second, which is well below the limits  
8 established in 10 CFR 40, Appendix A, Criterion 6, at  
9 20 picocuries per square meter per second. So with  
10 that in mind, the radon issue for that particular  
11 cell appears to be resolved. Ongoing monitoring  
12 will -- will take place to confirm that.

13 As far as final closure of that -- that  
14 tailing cell, what that would require is the -- the  
15 construction of the remaining layers of the cover  
16 system. And there is nothing that -- that would  
17 indicate that has to be done immediately. We have a  
18 licensee on site who can make repairs to the radon  
19 barriers should erosion occur.

20 And the thing we would gain by placing  
21 remaining layers would be the wind and water erosion  
22 protection. What we might lose is the ability --  
23 with the additional material that's been placed  
24 compressing the tailings, is the ability to wait  
25 until settlement is complete. If we wait until

1 settlement is complete, we'll have less chance of the  
2 cover system being compromised due to differential  
3 settling. So it's better to wait for the remainder  
4 of the construction.

5 As far as a timetable, that's really up to  
6 the licensee. But we're monitoring their reports of  
7 settlement.

8 MR. CLOW: Thanks.

9 Similarly, how long will it take until  
10 Cell 3 is permanently capped and no longer poses a  
11 source of radon or other radionuclides to the  
12 atmosphere?

13 MR. FRYDENLUND: I'll answer that, and this  
14 answer applies to all the cells. So it addresses  
15 your Questions 8, 9, and 10.

16 We -- milestones for the closure of each  
17 tailings impoundment commence once it is filled with  
18 tailings. The time it takes to fully reclaim an  
19 impoundment depends on a number of factors, including  
20 the time it takes to dewater the tailings  
21 sufficiently out of the cell and prior to placing the  
22 final layers of the reclamation cover.

23 So we first have to fill the cells. Then  
24 milestones kick in and we've got to go through a  
25 reclamation timetable. But that could vary depending



1 on each cell depending on how long it takes to  
2 dewater.

3 As Mr. Topham said, we're finding the cell,  
4 two, that the -- the radon amount has been reduced  
5 significantly by partial reclamation. But I want to  
6 remind you that the standard for a cell that is fully  
7 reclaimed is not zero radon. It's 20 picocuries per  
8 meter squared per second.

9 MR. CLOW: So just relative to that time  
10 frame, once Cell 3 is -- is full, you would place the  
11 radon barrier or would you wait until more settling  
12 occurs before placing the radon barrier?

13 MR. FRYDENLUND: The reclamation plan sets  
14 out a number of milestones, including, you know,  
15 eliminating freestanding water, contouring, things  
16 like that. Maybe Harold can address that.

17 MR. ROBERTS: Yeah. Once the cell is  
18 officially declared closed and is full, then the  
19 interim layer would be the first one to be placed on  
20 the cell, which is basically the bottom layer, the  
21 platform layer for construction of the remaining  
22 portions of the CAP. There's a significant portion  
23 of that actual layer already placed on Cell 3, but  
24 there's still a portion of the cell that is in active  
25 operation. So until that -- until the cell is fully

1 utilized and declared closed, then it won't start the  
2 final sequencing of reclamation.

3 But part of the reclamation is placement of  
4 the interim layer which puts a surcharge on the  
5 tailings and helps to consolidate those, and then we  
6 continually monitor the settlement monitors to see  
7 how the sands are consolidating and what kind of  
8 stability we're seeing in the tailing cell itself.

9 MR. CLOW: About how long did it take for  
10 the majority of the settling to occur on Cell 2 after  
11 the first base layer was put on there?

12 MR. ROBERTS: I think that information is  
13 contained in the records. The annual evaluation is  
14 done on the tailings, so those records and graphs are  
15 contained in that report.

16 MR. CLOW: Thanks.

17 MR. TOPHAM: I think it's worth noting that  
18 on placement of the radon barrier, the amount of  
19 water that was being withdrawn increased due to the  
20 consolidation that was induced, but with the  
21 additional material. It also kicked off a new round  
22 of settlement. So we -- we're seeing beneficial  
23 effects from the placement of the radon barrier on  
24 Cell 2.

25 I would anticipate that with the placement

1 of the platform fill that Mr. Roberts has indicated  
2 on Cell 3, we would begin that process to start  
3 seeing the beneficial effects immediately.

4 MR. CLOW: Okay. Well, in the interest of  
5 time, as Mr. Frydenlund explained, Questions 8 and 9  
6 are similar in nature, so we'll just go ahead and  
7 move on to Question 11. That's relative to Cells 4A  
8 and 4B.

9 How long will it take until Cell 1 is  
10 permanently capped and no longer poses a source of  
11 radon or other radionuclides to the atmosphere?

12 MR. ROBERTS: Well, point of clarification.  
13 Cell 1 is not a tailings disposal cell. So the  
14 reclamation plan calls for any materials liners and  
15 any materials in Cell 1 to be removed upon final  
16 reclamation. And the entire area will be  
17 decontaminated according to the regulations, and then  
18 they will become a catchment basin that will further  
19 enhance the stability of the entire tailings disposal  
20 system by preventing and aiding in preventing any  
21 runoff or precipitation from getting back in the  
22 existing tailings cells.

23 MR. CLOW: So at final reclamation is when  
24 that will be closed?

25 MR. ROBERTS: That is correct.

1 MR. CLOW: And does it receive 11e.(2)  
2 byproduct material? Cell 1?

3 MR. ROBERTS: No.

4 MR. CLOW: Thanks.

5 MR. ROBERTS: It's an evaporation pond.

6 MR. CLOW: Question 12: What, if any, plans  
7 are there to approve additional cells at -- at the  
8 White Mesa Mill, and under what conditions and  
9 circumstances would the Division approve construction  
10 of additional cells?

11 MR. GOBLE: So at this current time, we do  
12 not have an application for any additional tailings  
13 cells from the licensee. And the procedures we would  
14 use are the same procedures we used when we approved  
15 Tailing Cell 4B.

16 MR. CLOW: Thank you.

17 Our 13th question: How long is corrective  
18 action pumping of groundwater at the mill expected to  
19 continue?

20 MR. RUSHING: The corrective action will  
21 continue until the cleanup standards are met. And  
22 those are listed in the corrective action plans as  
23 the groundwater action limits basically returning the  
24 contaminants back to the groundwater quality  
25 standard. The -- the removal of the contamination,

1 one of the elements of a CAP, a corrective action  
2 plan, is to maximize that pump performance and  
3 contaminant removal. So we're trying to do it as  
4 fast as possible. I mean, the exact timeline would  
5 be speculation.

6 MR. CLOW: Thank you.

7 Question 14: Will corrective action pumping  
8 of groundwater continue during and after reclamation?

9 MR. RUSHING: Similar, the corrective  
10 actions will -- may continue during and after  
11 reclamation. As before, the company will continue  
12 the cleanup standards from that.

13 MR. CLOW: Thanks.

14 Question 15: Where and how will pumped  
15 groundwater be managed during and after reclamation?

16 MR. TOPHAM: Well, this question calls for a  
17 certain level of speculation, so I can't answer  
18 firmly right now. There are a number different  
19 options for how contaminated water could be disposed.  
20 I can list some of those options.

21 Contaminated water must be either cleaned up  
22 to a discharge standard where it can be released to  
23 the environment or disposed in some kind of  
24 acceptable manner. One of the ways that cleanup  
25 water can be used, if you will, is to put it back in

1 the plant process. It could be used as compaction  
2 water for any of the layers of the CAP for any of  
3 these tailing cells. Because the contaminants would  
4 be still contained above the final liner, and as long  
5 as we can minimize infiltration, it won't be going  
6 anywhere.

7 So that's a couple of options. So no, which  
8 of the many options will be used in the future would  
9 require some speculation, and I don't think it's --  
10 it would be wise to do that at this point.

11 MR. CLOW: (Nods head.)

12 MR. TOPHAM: Just be assured that  
13 appropriate standards will be followed.

14 MR. CLOW: Our 16th question: What period  
15 of time and relative costs will EFR and the Division  
16 use in calculating the appropriate amount of  
17 reclamation surety for corrective action pumping of  
18 groundwater?

19 MR. TOPHAM: First, a statement of  
20 principle. A surety must be sufficient at all times  
21 to complete the required work.

22 Each plume is evaluated as it's discovered,  
23 and I think we started talking about this earlier,  
24 and a cost estimate is assembled based upon the  
25 plume's size, location, and other appropriate

1 parameters. What contaminants are we dealing with?

2 How can we remove them, things of that nature.

3 Typically the Division has the surety  
4 amended to include the remediation costs within about  
5 two months of discovery of the plume, just because  
6 that's generally how long it takes to do a full  
7 characterization completely understood. But the  
8 cleanup begins as soon as it's practical.

9 On -- bonds are looked at annually.  
10 Typically, we don't reduce any of the cleanup money  
11 until the cleanup is complete.

12 MR. CLOW: Thanks.

13 Okay. Question 17 was kind of a multipart  
14 question. So we're -- if it pleases the board, we're  
15 going to simplify that and shorten it for you instead  
16 of asking multiple related questions.

17 So what is the technical basis for the  
18 decisions [Division's] continued reliance on the  
19 summary of work completed, data results,  
20 interpretations and recommendations for the July --  
21 July 2007 sampling event at the Denison Mines, USA,  
22 White Mesa Uranium Mill near Blanding, Utah, prepared  
23 by T. Grant Hurst and D. Kip Solomon, Department of  
24 Geology and Geophysics, University of Utah, submitted  
25 May 2008, otherwise known as the University of Utah

1 Study as evidence of no leakage from tailing cells  
2 despite current evidence -- excuse me, as current  
3 evidence, not despite, but as a means of evidence to  
4 support the leakage from the tailing cells?

5 MR. RUSHING: The University of Utah report  
6 confirmed that leakage and transported tailings  
7 wastewater to the water table had not occurred to  
8 that date. The report confirmed that observed  
9 monitoring concentrations up to that date were due to  
10 background or other preexisting sources.

11 Verification of the pre-identified  
12 background, concentrations in the monitoring wells  
13 assist us in evaluation of current and future  
14 monitoring concentrations and trends and regardless  
15 of changes on site.

16 One of the examples in the original question  
17 was, say, the removal of the wildlife ponds. The  
18 study findings and conclusions are still technically  
19 valid.

20 MR. CLOW: Have conditions changed all of a  
21 sudden?

22 MR. RUSHING: Conditions at the site, you  
23 know, without the specifics, there are conditions at  
24 the site that are changing continually. The response  
25 to that question is that regardless of those changes,



1 the conclusions made by the University of Utah study  
2 are still valid, that contamination had not occurred  
3 at the date of the study.

4 MR. CLOW: Okay. Thanks.

5 Question 18: What measures are the Division  
6 taking or requiring EFR to take to confirm that  
7 groundwater is not flowing preferentially in a  
8 southeasterly trend from the mill towards the White  
9 Mesa community?

10 MR. RUSHING: There's no evidence of a  
11 preferred southeasterly flow path. Energy Fuels  
12 Resources is required to measure groundwater  
13 elevations at all of the wells on site. That  
14 includes the point of compliance wells, the  
15 piezometers, background wells, the general monitoring  
16 wells as well as all of the CAPs [corrective action  
17 plans], the new wells, quarterly. They do that on a  
18 quarterly basis. Based on that data, groundwater  
19 contour maps showing groundwater flow direction is  
20 prepared by Energy Fuels Resources which depict  
21 groundwater flow directions. Groundwater mounding  
22 from the wildlife ponds has created a more southerly  
23 direction on the east side of the mill. However,  
24 these flow directions have been stabilizing since the  
25 discontinuation of use of the wildlife ponds in

1 December 2011. Lateral monitoring wells and  
2 chloroform cap wells are present on the  
3 east/southeast margin of the tailing cells to monitor  
4 groundwater flow directions east and southeast from  
5 the mill and tailing cells.

6 MR. CLOW: In the stipulated consent  
7 agreement, it was for chloroform monitoring? There's  
8 a series of projected wells towards the east if the  
9 plume continues moving in that direction.

10 Has that receded?

11 MR. RUSHING: Well, the -- so that is due to  
12 the impacts of groundwater mounding from the wildlife  
13 ponds. That mounding has altered flow directions in  
14 that area of the site. And those are --

15 MR. CLOW: So it is moving in that direction  
16 or it's receding from that with the pumping?

17 MR. RUSHING: The flow directions are  
18 restabilizing towards what would be pre-wildlife  
19 ponds, which are more of the south -- southern and  
20 southwesterly direction.

21 MR. CLOW: Thanks.

22 Question 19: What measures are the Division  
23 taking or requiring EFR to take to prevent the  
24 increasingly degraded quality of shallow groundwater  
25 beneath the mill from adversely affecting the quality

1 of the shallow aquifer downgradient of the mill?

2 MR. RUSHING: There's no indication that the  
3 tailing cells have leaked or are degrading water  
4 quality.

5 The historical groundwater contamination  
6 from the mill processed areas which caused  
7 groundwater contamination, that's the chloroform and  
8 the nitrate chloride plume, are being cleaned up  
9 according to corrective action plans and consent  
10 orders, and all contamination is within the mill  
11 property boundary.

12 The shallow aquifer continues to meet  
13 identify groundwater class standards listed in Utah  
14 Administrative Code R317-6-3 per the monitoring  
15 results at the permitted groundwater wells. An  
16 evaluation of the monitoring wells was conducted for  
17 the groundwater permit renewal and found that all of  
18 the monitoring wells meet their previously identified  
19 classes and beneficial uses.

20 MR. CLOW: So the Utah groundwater code is  
21 protecting the downgradient shallow groundwater?

22 MR. RUSHING: That would be an indicator  
23 that the groundwater has not degraded.

24 MR. CLOW: Thank you.

25 Question 20: What measures are the Division

1 taking or requiring EFR to take to prevent the  
2 increasingly graded quality of the shallow  
3 groundwater beneath the mill from adversely affecting  
4 the deep Navajo aquifer?

5 MR. RUSHING: There's no hydraulic  
6 connection between the shallow and the deep aquifer.  
7 I'm using the Ute Mountain Ute terminology. The  
8 shallow Burro Canyon Aquifer is separated from the  
9 deep Navajo Aquifer by approximately 1100 feet of  
10 Morrison and Summerville Formation materials which  
11 have low average vertical permeability. More than  
12 200 feet of the Brushy Basin Member, which is a  
13 bentonitic clay, is directly beneath the shallow  
14 aquifer which is actually perching the aquifer, and  
15 isolates the aquifer from the underlying materials.

16 In addition, another source of communication  
17 could be from deep water well drilling that  
18 penetrates that Brushy Basin Member. Any drilling  
19 conducted that penetrates the Brushy Basin is done  
20 according to the Division of Water Rights'  
21 requirements and requires seals to prevent any kind  
22 of communication between those aquifers.

23 MR. CLOW: Thanks.

24 Question 21: What measures are the Division  
25 taking or requiring EFR to take to confirm that

1 unusual levels of metals and other constituents and  
2 parameters in monitoring well MW-22 are not due to  
3 the impacts from the mill operations and from  
4 preferential southeasterly flow of groundwater?

5 MR. RUSHING: Monitoring well MW-22 is an  
6 anomaly in the mill groundwater monitoring well  
7 network.

8 MW-22 is located hydraulically cross  
9 gradient from the tailing cells and is approximately  
10 1 mile from the closest possible mill discharge.  
11 Monitoring wells which do not show the same anomalies  
12 as MW-22 are located upgradient from MW-22 to detect  
13 potential mill contamination.

14 The University of Utah study included MW-22  
15 specifically and concluded that tailings wastewater  
16 and processed water from the mill was not present in  
17 the monitored well. Based on those findings, the  
18 mill is not the cause of those anomalies at MW-22,  
19 and really no additional required measures are  
20 warranted.

21 MR. CLOW: Was MW-22 cross gradient of the  
22 tailings before, during, or after the groundwater  
23 mounding from the wildlife ponds?

24 MR. RUSHING: To my knowledge, it's always  
25 been cross gradient from the tailing cells.

1 MR. CLOW: Okay. Thanks.

2 Question 22: How does the Division explain  
3 the unusually elevated, unnatural and increasing  
4 levels of fluoride, a constituent distinctly  
5 associated with tailings being detected in MW-22?

6 MR. RUSHING: Per the previous question  
7 answer, monitoring Well MW-22 is an anomaly, it is  
8 not being impacted by tailing solution or mill  
9 activities. Monitoring the wells closer to the  
10 facility on the east side of the tailing cells, for  
11 example, monitoring Well MW-17, do not show the same  
12 anomalies, including fluoride.

13 Fluoride concentrations in monitoring  
14 Well MW-22 are required to be collected semiannually,  
15 recorded, but no additional explanation of parameter  
16 concentrations in the well is required or warranted.

17 MR. CLOW: Thanks.

18 Question 23: How does the Division explain  
19 the fact that the quality of the shallow groundwater  
20 beneath and immediately downgradient of the mill is  
21 continually changing and degrading while the quality  
22 of the same shallow aquifer detected in the Ute  
23 Mountain Ute Tribes monitoring wells shows virtually  
24 no variability over the same period of time?

25 MR. RUSHING: Well, per Division review of

1 well data that was submitted a couple years ago by  
2 the Ute Mountain Ute Tribe for the east and west  
3 wells -- wells, it appeared per our review that there  
4 is actually substantial variability in the data.

5           The Ute Mountain Ute Tribe needs to provide  
6 examples and evidence supporting the statements in  
7 the question so that we can understand what's meant  
8 by the term "virtually no variability" in comparison  
9 with the mill monitoring wells, well data. And we  
10 would need that information to be able to -- to fully  
11 respond to the question.

12           MR. CLOW: Thanks. We'll provide that.

13           Question 24: Why hasn't the Division  
14 required monitoring wells to be located between MW-17  
15 and MW-22 to confirm the source of the unusual  
16 chemistry in groundwater at MW-22?

17           MR. RUSHING: There's no regulatory basis to  
18 require monitoring wells at those locations. As  
19 previously discussed, MW-22 is an anomaly and was  
20 confirmed not to have been impacted by tailings  
21 wastewater or mill activities.

22           Compliance monitoring wells are located  
23 upgradient close to the mill to detect potential  
24 groundwater contamination. The wells upgradient do  
25 not show the same anomalous characteristics as MW-22.

1 MR. CLOW: Thanks.

2 In the interest of simplifying Question  
3 No. 25, I'm going to split it into two parts because  
4 it's really two questions that we put together.

5 Has the Division required an annual water  
6 balance to be calculated for the White Mesa Mill?

7 MR. RUSHING: No. There is no technical  
8 basis or need to calculate the type of water balance  
9 proposed in the question. That type of calculation  
10 would contain a large amount of assumptions and would  
11 be of little practical use.

12 MR. CLOW: The second part of the question:  
13 How is the Division determining how much water is  
14 used by the mill whether and what amount of processed  
15 water is being lost annually through the impoundments  
16 into the groundwater.

17 MR. RUSING: Well, the volume of water  
18 that's lost through the bottom liners of the tailing  
19 cells is measured by the leak detection systems for  
20 each cell. And the groundwater permit, those would  
21 be the best available technology and the discharge  
22 minimization technology standards. So they're  
23 regulated through that process, and that gives us  
24 physical information of the amount of water that's  
25 lost through the -- the liners of the tailing cells.



1 MR. CLOW: So if there aren't monitor leak  
2 detection systems on Cells 1, 2, and 3, how are those  
3 calculated?

4 MR. RUSHING: So those would fall into the  
5 discharge minimization technology requirements of the  
6 permit. Those cells do have leak detections  
7 installed. They're not the same type of leak  
8 detection as best available technology, but those  
9 systems have been fairly effective in capturing leaks  
10 from liner tears that have occurred in the older  
11 cells.

12 Another element of the discharge  
13 minimization technology is to use well data from  
14 monitoring wells that are located in very close  
15 proximity to the edges of the tailing cells.

16 MR. CLOW: So the standpipes are kind of the  
17 first line of this defense on those older cells?

18 MR. RUSHING: That's a good way to put it.  
19 The older cells have a first line of defense, which  
20 is not as rigorous or as good as the newer cells.

21 However, in the event those don't work,  
22 there's the backup of using the monitoring well data.

23 MR. CLOW: In the groundwater that you're  
24 protecting?

25 MR. RUSHING: Right.

1           MR. CLOW: Question 26: What measure is the  
2 Division taking or requiring EFR to take to  
3 investigate mounding of groundwater near MW-27 and  
4 Cell 1?

5           MR. RUSHING: Groundwater mounding at MW-27  
6 was caused by infiltration from the wildlife ponds  
7 and that was verified by the University of Utah  
8 study. Since the discontinuation of use of the  
9 wildlife ponds in December 2011, the water elevations  
10 at Monitoring Well 27 have dropped over 3 feet.

11           The University of Utah study confirmed that  
12 water in the MW-27 was being charged by the wildlife  
13 ponds and also verified that no tailings or  
14 wastewater was in the well. Based on that, no  
15 additional measures are warranted.

16           MR. CLOW: Thanks.

17           Question 27: What factors justify the  
18 recent reduction in the amount of reclamation surety  
19 for the White Mesa Mill by over \$1.7 million from  
20 22.58 million to 20.82 million.

21           MR. TOPHAM: Again, our -- our principle is  
22 it's the surety should be sufficient at all times.

23           The licensee has placed primary and  
24 secondary radon barrier material on Cell 2. With --  
25 that material placement was previously covered in the

1 surety. Since that work is already done, we have  
2 given fair credit to the licensee for the completion  
3 of that work.

4 MR. CLOW: Thank you.

5 Question 28: What level of confidence does  
6 the Division have that the three sample values  
7 reported in the Safety Evaluation Report for the  
8 Sequoyah Fuels alternative feed material are  
9 representative of the entire sample size of  
10 485,000 cubic feet which is assumed to have a volume  
11 of over 87,800 square feet? The size of a football  
12 field is 57,000.

13 MR. LUELLEN: Well, several samples of the  
14 Sequoyah uranium materials were collected and tested  
15 in accordance with the License Amendment Request.  
16 Sections 1.4 and 4.1 of the Safety Evaluation Report  
17 detail these samples which included several -- a  
18 composite of several grab of the dewatered sludge in  
19 2005. The samples of the material collected in 2012  
20 tested for total metals and eight RCRA metals,  
21 toxicity characteristic leaching testing procedure of  
22 leachate extracts from the dewatered selection in  
23 2012. Samples of the water selection in 2005 tested  
24 for total uranium and thorium isotopes. Samples of  
25 the sludge prior to dewatering in the mid-2000s as

1 part of the initial custom feasibility for dewatering  
2 processes at the ore facility. Samples of the  
3 dewatered sludge from different basins and clarifiers  
4 at the Oklahoma facility.

5 Based on the reported concentrations that  
6 were listed in the License Application Request and  
7 impact testing of the same material also available to  
8 the Division concluded that the characterization of  
9 the materials appear to be reasonable,  
10 representative, and bounding.

11 MR. CLOW: In the -- in the Safety  
12 Evaluation Report, it describes testing results for  
13 the filtrate, the actual liquid that was removed  
14 during the -- the dewatering process.

15 Is that in there?

16 MR. LUELLEN: I'd have to check the detail  
17 to receive the answer to that question. I think that  
18 was also included. Everything that was available  
19 from the application and available in the published  
20 realm was included in the SER that I'm aware of.

21 MR. CLOW: Thanks.

22 Relative to the Sequoyah Fuels, Question 29:  
23 What limits are there for the amount of thorium-230  
24 and thorium-232 allowed in the Sequoyah Fuels  
25 alternative feed material received at the White Mesa

1 Mill?

2 MR. MERRELL: There are no specific  
3 regulatory limits as to the maximum allowed  
4 concentrations of either thorium-230 or thorium-232.  
5 However, those concentrations aren't limited  
6 indirectly by the requirement that the operation be  
7 protective of human health and the environment. And  
8 that is done by several analyses. Those analyses  
9 were conducted by the licensee and reviewed by the  
10 Division and found to meet all of the applicable  
11 regulatory requirements for human health and  
12 protection of the environment.

13 And then an extra layer of safety is  
14 provided by verifying this through the environmental  
15 monitoring program.

16 MR. CLOW: Thank you.

17 Question 30: Are thorium isotopes being  
18 individually monitored in the tailing cells' leak  
19 detection systems?

20 MR. JOHNSON: No, they're not, and they're  
21 not required.

22 MR. CLOW: Thanks.

23 Question 31: What is the current Emergency  
24 Response Plan for the White Mesa Mill and what  
25 procedures does it provide for addressing and

1 handling uncontrolled liquid releases from the mill  
2 now that Roberts Pond is no longer in existence?

3 MR. ROBERTS: Since the closure of Roberts  
4 Pond, the mill has operated without the need for an  
5 emergency containment. In the event the mill should  
6 experience a situation that a emergency release is  
7 necessary, the liquids will follow the existing  
8 contours and drainage into Cell 1. Any contaminated  
9 soils resulting from that liquid release would be  
10 cleaned up and placed into one of the active tailing  
11 cells.

12 MR. CLOW: Thanks.

13 Question 32: Why is the White Mesa Ute  
14 community not on any list or communication tree for  
15 any emergency involving potential off-site or public  
16 releases of hazardous or radiological substances?

17 MR. ROBERTS: Energy Fuels is not required  
18 to make direct notification to the Ute Mountain Ute  
19 Tribe as a part of the Emergency Response Plan.  
20 Notifications are given to the local authorities who  
21 then coordinate efforts as needed with members of the  
22 public.

23 MR. CLOW: So similar to Question 32,  
24 Question 33 was a multitiered question. So we're  
25 going to just shorten it down in the interest of time

1 and simplify it.

2           Why didn't the Division promptly notify or  
3 require EFR to promptly notify the White Mesa  
4 community and other neighboring communities of recent  
5 radiological incidents involving transportation of  
6 radioactive materials on public highways regularly  
7 traveled by school buses and residents of White Mesa  
8 and surrounding communities?

9           MR. JOHNSON: EFR followed the requirements  
10 to notify the Division, and the Division also  
11 followed our requirements to notify the NRC and  
12 others. So those -- as far as notifying the White  
13 Mesa Mill -- I mean, White Mesa community, sorry,  
14 that was not required.

15           MR. CLOW: Besides the Nuclear Regulatory  
16 Commission, the NRC, who are the others you're  
17 referring to?

18           MR. JOHNSON: So we have a database that  
19 when we have an incident, we fill that into. I only  
20 know them by the acronyms. Maybe Gwyn could help me  
21 out.

22           MS. GALLOWAY: The National Operation Center  
23 for the Nuclear Regulatory Commission must be  
24 notified. If it involves transportation, the U.S.  
25 Department of Transportation has to be notified for

1 hazardous materials. A number of them also, in  
2 addition to what we call the NRC, the Nuclear  
3 Regulatory Commission, the National Reporting Center,  
4 NRC, has to be notified.

5 So there are various agencies that must be  
6 notified through regulations.

7 MR. CLOW: Did you notify the National  
8 Response Center of this incident?

9 MS. GALLOWAY: The National Response Center  
10 was notified.

11 MR. JOHNSON: And those spills were below  
12 reportable quantities as well.

13 MR. CLOW: Does the reporter need a break?

14 COURT REPORTER: I'm okay. Thank you.

15 MR. CLOW: Okay. Question 34, then: What  
16 measures are being taken to prevent radiological  
17 incidents involving leaking shipments of radioactive  
18 waste and other radioactive materials to the White  
19 Mesa Mill?

20 MR. ROBERTS: Control of radioactive waste  
21 shipments is the responsibility of the shipper by not  
22 Energy Fuels prior to reaching the White Mesa Mill.  
23 So we are not controlling those.

24 But shipments are regulated by, again, as  
25 said, the U.S. Department of Transportation.



1 MR. CLOW: Thanks.

2 What measures are being taken --

3 Question 35: What measures are being taken  
4 to ensure prompt notification to the White Mesa  
5 community and other nearby communities of  
6 radiological incidents at or in connection with the  
7 White Mesa Mill or along the public thoroughfares?

8 MR. ROBERTS: Again, this is the same  
9 response as the earlier question along that line.  
10 We're not required to give direct notification to the  
11 Ute Mountain Ute Tribe. The Emergency Response Plan  
12 requires that we notify the local authorities who  
13 then take responsibility for notifying and  
14 coordinating with members of the public as needed.

15 MR. CLOW: So San Juan County emergency  
16 response is who you call?

17 MR. ROBERTS: San Juan County, the City of  
18 Blanding. The Sheriff's office basically.

19 MR. CLOW: Would it be acceptable for you to  
20 call the BIA police who patrols on the reservation?

21 MR. ROBERTS: I think there's merit to  
22 discussing with Energy Fuels management some type of  
23 coordination with the Ute Mountain Ute Tribe,  
24 depending on what kind of arrangements could be  
25 arranged along that line, what kind of procedure

1 could be established.

2 But that's something that I'm going to have  
3 to have Energy Fuels management evaluate.

4 MR. CLOW: We'll reach out to David  
5 Frydenlund on that. Thank you.

6 Question 36: What is the most current Spill  
7 Prevention, Controls and Countermeasures Plan, SPCC  
8 Plan, and when was it updated for the mill?

9 MR. RUSHING: The most current and updated  
10 SPCC Plan is dated December 12th of 2016.

11 MR. CLOW: Relative to that, Question 37:  
12 Since Cell 2 is in interim closure and accepting no  
13 more material from the mill operations, where will  
14 contaminated soils and residues from spills be  
15 disposed and where is this information reflected in  
16 the current SPCC Plan or other plan?

17 MR. RUSHING: Part 7 of the SPCC specifies  
18 that on-site personnel will assess a spill and direct  
19 corrective actions, including potential disposal of  
20 contaminated soils or residues. So the mill is  
21 determining that, per previous comment, that material  
22 will go into an active tailing cell.

23 MR. CLOW: Thanks.

24 Question 38: What protections from  
25 radiologic or other impacts from the mill are in

1 place for wildlife such as deer, coyotes, rodents,  
2 and birds?

3 MR. JOHNSON: So right now the mill uses  
4 physical barriers such as fences. They also use  
5 statues of large eagles and loud noise-making  
6 machines to deter wildlife from being within the  
7 restricted area.

8 And then also, one of the benefits of  
9 draining the wildlife ponds, that there's no water  
10 source close to the -- to the mill site.

11 MR. CLOW: Cell 1 isn't an evaporative large  
12 body of water?

13 MR. JOHNSON: It's a solution. It's not  
14 really monitored.

15 MR. CLOW: Okay. So are you using -- do you  
16 know, are the CO2 cannons firing again there, as far  
17 as loud noise making?

18 MR. JOHNSON: They're available. So I was  
19 told they have bangers, screamers, propane cannons.  
20 All of those are available.

21 MR. CLOW: Okay. They're available.  
22 Thanks.

23 Do you think the -- the fencing is adequate  
24 to keep deer away from the tailing cells?

25 MR. JOHNSON: Around Cell 4A and Cell 4B,

1 yes.

2 MR. CLOW: And Cell 3?

3 MR. JOHNSON: Cell 3 does not have the same  
4 fencing, no.

5 MR. CLOW: Thank you.

6 This was alluded to earlier, but

7 Question 39: How many water wells were drilled  
8 historically on the White Mesa Mill property into the  
9 Navajo aquifer?

10 MR. GOBLE: There's historically been six  
11 deep water supply wells. Three have been abandoned,  
12 so there's three currently on site. They were all  
13 constructed in accordance with the requirements of  
14 the Division of Water Rights.

15 For the wells particularly, because you  
16 asked where they're located, Well WW-4 is located  
17 upgradient to the far north of the White Mesa Mill  
18 nonrestricted boundary. WW-2 is located a quarter  
19 mile upgradient of the mill building. WW-5 is  
20 located along the eastern boundary near the air  
21 monitoring station BHV-6 along Interstate 191. And  
22 all of these deep water supply wells are drilled to  
23 approximately 2,000 feet below the ground surface,  
24 and they are cased with steel tubing to a depth of  
25 approximately 1250 feet below the ground surface, and

1 the casing is grouted from the surface to the top of  
2 the Brushy Basin Member. And the Navajo aquifer is  
3 an artisan pressure in the region which would be  
4 unlikely for any contamination to reach the aquifer.

5 MR. CLOW: Where were the other three wells  
6 drilled?

7 MR. GOBLE: Do you remember, Harold?

8 MR. ROBERTS: One of them was drilled  
9 directly to the east of the mill ore storage pad  
10 which was the original well on site. One of them was  
11 drilled directly to the east of Cell 1. And the  
12 other one was actually drilled very close to the most  
13 northern well. Is that No. 3? And that was  
14 abandoned several years ago because of a casing  
15 collapse.

16 MR. CLOW: Thanks.

17 I guess the third part of that, which Phil  
18 described as far as the structural engineering of the  
19 well. What has been done to protect the Navajo  
20 aquifer from potential migration of contaminants from  
21 the mill and tailings via the historic wells?

22 MR. GOBLE: So it was built in accordance  
23 with water volume [driller requirements] -- Division  
24 of Water Rights. And like I said, there is actually  
25 a seal at the Brushy Basin Member which prevents

1 migration to the lower aquifer.

2 MR. CLOW: Thanks.

3 Question 40 --

4 MR. RANDALL: Can I just interject here? It  
5 looks like we're making really good time, but I'd  
6 like to make a motion to maybe have a break. It  
7 Looks like we're a good halfway through the hearing.

8 MR. ANDERSON: Ten-minute break?

9 MR. RANDALL: Ten-minute break. Looks like  
10 we're making good time.

11 MR. ANDERSON: Yeah. Yeah.

12 (Short recess taken.)

13 MR. ANDERSON: Scott, do you want to  
14 continue?

15 MR. CLOW: Sure. Thank you.

16 Question 40: Does the proposed phased test  
17 plot approach for reclamation of Cell 2 give Energy  
18 Fuels another seven years to implement final closure  
19 on the cell?

20 MR. TOPHAM: I'm not sure really how to  
21 answer that question. I don't think the two are  
22 really connected. The licensee could use the  
23 currently approved rock armor cover to close today.  
24 As we discussed earlier, there's benefit to leaving  
25 the last two layers off until the settlement is

1 complete. So it's totally driven by physical  
2 processes rather than by a calendar timeline.

3 (Clarification by court reporter.)

4 MR. RANDALL: It's driven by physical  
5 processes not a calendar timeline is what he said.

6 MR. CLOW: How long has Cell 2 been drying  
7 and settling? I think Harold has mentioned that  
8 earlier, but ...

9 MR. ROBERTS: I think we determined --  
10 figured Cell 2 was actually closed officially in  
11 2008.

12 MR. CLOW: Thanks.

13 Question 41: When URS -- I think the  
14 follow-up question, A, on that was already answered  
15 by Mr. Topham.

16 Question 41: When URS reviews documents  
17 submitted by Energy Fuels, is URS acting as a  
18 contractor for the State of Utah or as a contractor  
19 for Energy Fuels?

20 MR. GOBLE: So as Gary Merrell introduced  
21 himself in the introduction, basically URS is here as  
22 a contractor for the State of Utah --

23 MR. CLOW: Thanks.

24 MR. GOBLE: They have reviewed it on behalf  
25 of the Division.

1 MR. CLOW: Okay. Question 42, I'm going to  
2 reword it a little. It was a little bit of leading  
3 into the way it was phrased.

4 So under Subpart W, Rule 40 CFR Part 61  
5 Subpart W, of the Clean Air Act, as a phased disposal  
6 facility, why is Energy Fuels allowed to fill Cell 4A  
7 and 4B with tailings and liquid 11e.(2) wastes before  
8 completely filling Cell 3 with such tailings and  
9 wastes bringing it closer to immediate drying and  
10 final closure?

11 MR. ZODY: Object to the extent it calls for  
12 a legal conclusion, and it's not directly relevant to  
13 the licensing action. I'm just preserving the record  
14 on that.

15 MR. ANDERSON: Go ahead.

16 MR. CLOW: Okay.

17 MR. GOBLE: Oh, the answer? Okay.

18 Well, Tailing Cell 3 is the tailing cell  
19 that's currently for ISL disposal. It is the most  
20 suitable because it's a -- you can actually drive on  
21 it safely. To require ISL disposal into 4A at this  
22 moment wouldn't actually be safe because it would go  
23 into the damaged -- it would actually damage the  
24 liner as you try to go down there for disposal.

25 With the new Subpart W rule, Tailing Cell 4B



1 is currently used as a nonconventional impoundment.  
2 So there are no tailings that have been placed in  
3 Tailing Cell 4B.

4 So Energy Fuels, their plan is not to move  
5 in the Tailing Cell 4A -- I mean, sorry, Tailing  
6 Cell 4B until they are ready to close Tailing Cell 3.  
7 Those are the reasons for a safety factor.

8 MR. CLOW: But they're not putting tailings  
9 per se into it? They're just putting ISL 11e.(2)  
10 byproduct material?

11 MR. GOBLE: It's process solution.  
12 According to Subpart W, it's considered a  
13 nonconventional impoundment. It doesn't count  
14 against the tailing cells and operation.

15 MR. CLOW: Right. I meant into Tailing  
16 Cell 3, they're not putting tailings in there.  
17 They're putting liquid ISL waste?

18 MR. GOBLE: They are not putting any  
19 tailings currently into Tailing Cell 3. It is  
20 currently used for mill waste, and also they use that  
21 cell for ISL disposal. There's no tailings being  
22 placed in Tailing Cell 3 right now. All tailings are  
23 going to Tailing Cell 4A.

24 MR. CLOW: Is that going to happen forever,  
25 for the foreseeable future? Is it going to ever

1 receive any more tailing cells and, you know, get  
2 into closure sometime?

3 MR. GOBLE: That's speculation, but Energy  
4 Fuels, if they want to, they can answer when they  
5 think they might close Cell 3.

6 MR. ROBERTS: Let me clarify that there is  
7 still some remaining capacity in Cell 3 for tailings  
8 material, for tailing sands. And we're preserving  
9 that capacity right now. But it -- as Mr. Goble  
10 said, it is primarily used for ISL waste and some of  
11 our mill site debris. But there is capacity still  
12 for tailing sands.

13 MR. CLOW: Thanks.

14 Question 43: Why has Cell 3 been designated  
15 as the most appropriate disposal location for ISL  
16 wastes?

17 MR. TOPHAM: I am presuming that the  
18 question centers on why is this the most appropriate  
19 place on the facility; is that correct?

20 MR. CLOW: Yes, at the White Mesa Mill for  
21 the waste they're approved to receive.

22 MR. TOPHAM: Okay. A quick cataloging of  
23 the potential uses of all of the five cells would be  
24 a -- in order at this point. Cell 1 and Cell 4A are  
25 used for process fluid control only -- 4B. I mean.

1 4B, I'm sorry. One -- Cell 1 and 4B are being used  
2 for processed fluid control only and are not  
3 authorized for receipt of tailings at this point.

4 Cell 2 is closed and, therefore, cannot  
5 receive anything at all further, other than the  
6 remaining layers of the cover system.

7 Cells 3 and 4A are available for tailings  
8 and for RSR and plant -- plant debris.

9 Now, why is No. 3 the most appropriate?  
10 Right now, the tailings beach in Cell 4A is too thin  
11 and unstable to drive on. So they couldn't get a  
12 truck down there to place ISR waste in Cell 4A  
13 without damaging the liner.

14 That leaves Cell 3. There is sufficient  
15 protection of the liner to make Cell 3 safe.

16 MR. CLOW: Thanks.

17 Is Cell 3 safer for the protection of public  
18 health and environment than Cell 4A or 4B for the  
19 disposal of ISL wastes?

20 MR. TOPHAM: At the current -- at present,  
21 yes, for the reasons stated previously. You'd  
22 perforate the liner on either Cell 4A or 4B if you  
23 tried to drive your trucks into deposit ISR  
24 decommissioned debris.

25 MR. CLOW: For Question 45, we're going to

1 shorten it and simplify it.

2 Why has the division not required a  
3 hydrologic investigation of shallow groundwater to be  
4 conducted in a southeasterly direction from the mill  
5 facilities in the area of MW-22? I believe we  
6 touched on this, but ...

7 MR. RUSHING: Yeah, so it sounds like you  
8 removed the element of the recent recharge from the  
9 question?

10 MR. CLOW: (Nods head.)

11 MR. RUSHING: As discussed in -- in previous  
12 questions, the University of Utah study confirmed  
13 that mill activities were not impacting Monitoring  
14 Well, MW-22. The University of Utah report does  
15 state that an extremely localized area of recharge is  
16 occurring near Monitoring Well MW-22. The University  
17 of Utah report also states that because of its  
18 location, it is unlikely that MW-22 is being  
19 influenced by similar aspects of the groundwater  
20 system as the other monitoring wells.

21 Again, since MW-22 has been verified not to  
22 be impacted by mill activities, requirements for EFR,  
23 Energy Fuels Resources, to identify the localized  
24 source of recharge is not warranted.

25 MR. CLOW: So it wouldn't have been

1 influenced by the mounding at all?

2 MR. RUSHING: The University of Utah study  
3 confirmed that it was a standalone source of recharge  
4 located in the immediate vicinity of Monitoring Well  
5 MW-22.

6 MR. CLOW: Thanks.

7 Question 46: What was the Division's  
8 rationale for requiring a hydrologic investigation  
9 southwest of the tailings cells, and why doesn't this  
10 rationale support a need for a similar or expanded  
11 investigation to the southeast?

12 MR. RUSHING: There's no rationale to  
13 require a southeast study.

14 The southwest study was conducted to define  
15 unsaturated portions of the shallow aquifer in the  
16 southwest area as identified during the construction  
17 of Tailing Cell 4B monitoring that work. And also to  
18 confirm that Cottonwood seep was connected to the  
19 shallow aquifer. There is really no technical basis  
20 to require a study in the southeast.

21 There's also no technical basis to locate a  
22 monitoring well specified in the question. I don't  
23 know if you removed that portion of the question.

24 MR. CLOW: No, I was going to ask it.

25 Go ahead.

1 MR. RUSHING: Well, if you want to go ahead  
2 and ask that portion.

3 MR. CLOW: Sure. The second part: Will the  
4 Division consider requiring a monitoring well located  
5 approximately 350 meters or 1200 feet east of Well  
6 MW-17 to verify that potential contaminants are not  
7 migrating in this direction?

8 MR. RUSHING: And there's no technical basis  
9 to locate a monitoring well in the location that you  
10 specified. Cross gradient monitoring wells currently  
11 exist in that same area.

12 MR. CLOW: So how many wells were drilled in  
13 the southwest investigation, the DW series?

14 MR. GOBLE: The DR series, the Dry Ridge  
15 series? Approximately, I think 15.

16 MR. CLOW: But you're not seeing any  
17 rationale for drilling one in the southeast?

18 MR. RUSHING: Again, the reason that the  
19 southwest study was conducted was because dry areas  
20 were noted in the southwest area when installing the  
21 monitoring network for Cell 4B, and the intention of  
22 that was to delineate those dry areas and investigate  
23 the impacts of them.

24 That same -- that same situation does not  
25 occur in the southwest area or has not been

1 determined to occur in the southwest area -- in the  
2 southeast area. Sorry.

3 MR. CLOW: If there aren't any wells, how do  
4 you know it's wet or dry down in that area?

5 MR. RUSHING: Well, you don't. But  
6 currently, there are monitoring wells located around  
7 the tailing cells and mill operations in the east and  
8 southeast of the mill activities, and they were not  
9 shown to be impacted by dry areas. That's what began  
10 the southwest study.

11 MR. CLOW: Thank you. We'll shorten 47.

12 Has the Division notified other divisions  
13 within Utah Department of Environmental Quality about  
14 the potential risks to human health so private  
15 individuals using the Burro Canyon aquifer as a  
16 domestic source, who would be pumping much more  
17 frequently than the mill monitoring wells, are  
18 protected?

19 MR. RUSHING: So I answered the -- the  
20 element of that question. No other DEQ divisions  
21 have not been notified and explain them in order.

22 Pyrite oxidation is accepted as a possible  
23 explanation for sitewide pH decreases. I would note  
24 that we're seeing those pH decreases in wells  
25 upgradient from the mill facility and also far

1 downgradient from the mill facility.

2           It has been confirmed -- identified and  
3 confirmed, that tailings wastewater is not causing  
4 those pH decreases. And in order to make that  
5 determination, we needed to use multiple lines of  
6 evidence.

7           Increased pumping of the aquifer, and it's a  
8 low permeability shallow aquifer, was offered as one  
9 of several potential ways that oxygen could  
10 potentially be introduced around the well screens  
11 aiding in pyrite dissolution.

12           MR. CLOW: You said far downgradient of  
13 the -- of the mill facility.

14           How far downgradient are we seeing the pH  
15 decline?

16           MR. RUSHING: It's on a well-by-well basis.  
17 I would have to have data in front of me. I don't  
18 have that right offhand.

19           MR. CLOW: So MW-22 is approximately a mile  
20 south, give or take. Further south than that, the  
21 tribe has monitoring wells. The pH is stable. We've  
22 been pumping those things dry with sampling events,  
23 which would theoretically introduce oxygen the same  
24 way as the pyrite theory and the pH is stable.

25           How about the people who are pumping their



1 wells every day in Blanding?

2 MR. RUSHING: Well, again, so it's a low  
3 permeability aquifer. When that particular mechanism  
4 was discussed in the pyrite investigation report and  
5 the pH report, it was noted that the mill was  
6 conducting a lot more groundwater monitoring at the  
7 facility for -- a lot of wells were conducting  
8 quarterly groundwater sampling. They're pumping  
9 frequently.

10 In addition, we have the corrective action  
11 monitoring wells that are being pumped continually,  
12 and just based on a -- an increased number of wells  
13 and increased monitoring frequency, in addition, the  
14 addition of the corrective action plan wells, that's  
15 creating more of a condition where you have that --  
16 again, that pump down and recharge in the well  
17 screens around that well screen area.

18 MR. CLOW: Thanks.

19 Question 48: Why are increases in levels of  
20 the Division's groundwater indicator parameters,  
21 i.e., chloride, fluoride, sulfate, and uranium,  
22 concentrations in MW-31 from 2009 to 2016 not  
23 considered potentially from the tailing cells?

24 MR. RUSHING: So I went back and looked at  
25 the indicator parameters for Monitoring Well MW-31,

1 again, those parameters are chloride, fluoride,  
2 sulfate, and uranium.

3 In MW-31, the fluoride is showing a  
4 decreasing trend. The uranium concentrations,  
5 although they're showing a slight increasing trend,  
6 the concentrations themselves are very low for  
7 monitoring wells in the facility comparing ranges 6  
8 to 9 micrograms per liter.

9 The sulfate is showing a moderately  
10 increasing trend, but it appears to be stabilizing  
11 towards the most recent monitoring data.

12 And chloride, there's a complication with  
13 using chloride at that monitoring well because it's  
14 right on the margin of the nitrate and chloride  
15 plume. So typically in source assessments, we don't  
16 use chloride as the indicator parameter. Therefore,  
17 indicator parameters as a line of evidence alone do  
18 not support a mill-related source for any of the  
19 parameters currently and have a combined status at  
20 that well.

21 And I would note that indicator parameters  
22 are only one of multiple lines of evidence that are  
23 used to support findings whether or not mill  
24 activities are the source for those out-of-compliance  
25 parameters.

1 MR. CLOW: So three out of four are showing  
2 some signs of increase but not fluoride.

3 MR. RUSHING: Fluoride is showing decrease.

4 The uranium -- you know, per my review, I  
5 would say that uranium is essentially a flat trend.  
6 And in addition to that, the uranium concentrations  
7 are extremely low, not what you would expect in the  
8 case of a release from the tailing cells.

9 MR. CLOW: Thanks.

10 Question 49: What were the coefficients of  
11 retardation and mobility determined for the selection  
12 of key groundwater indicator parameters?

13 MR. RUSHING: So, again, those are the  
14 chloride, fluoride, sulfate, and uranium. And the  
15 indicator parameters used in source assessments were  
16 selected based on literature values, use parameters  
17 with literature values with low retardation and  
18 higher mobility. Or alternately, in the case of  
19 uranium, we're using that due to its high  
20 concentrations in the tailing cells.

21 MR. CLOW: Thanks.

22 Question 50: What, if any, laboratory  
23 testing was performed to assess the absorption  
24 capacity of the Burro Canyon formation at the mill?

25 MR. RUSHING: That's a rather broad

1 question. The only study that I'm aware of where  
2 laboratory testing was conducted was testing that was  
3 conducted to support work done for the Infiltration  
4 and Contaminant Transport Modeling. Part of that  
5 modeling was to predict masses of -- of hydrous  
6 ferric oxide and calcite in the Burro Canyon aquifer,  
7 the unsaturated portions of that. For that testing,  
8 bedrock -- a bedrock extracted solution was analyzed  
9 for several metals and ions.

10 I would note that based on that -- that  
11 analysis and the geochemical modeling that was done  
12 based on that analysis, it was found that chloride,  
13 sulfate, and fluoride, three of the indicator  
14 parameters, were predicted to migrate with little or  
15 no absorption.

16 MR. CLOW: But uranium would be absorbed in  
17 the -- in Burro Canyon?

18 MR. RUSHING: You know, if you look at  
19 the -- and I'm referring to the first Infiltration  
20 and Contaminant Transport Modeling. Uranium is  
21 not -- is definitely not predicted to be a  
22 conservative tracer by any means.

23 But with the metals, it's -- it's more  
24 complicated to say whether or not one is going to  
25 have more absorption or less. And even the study,

1 when they look at the metals, they will state per the  
2 modeling results, these metals are predicted to be  
3 more mobile. However -- they always put in the  
4 "however" statement -- based on other information,  
5 these metals may not be as mobile as reflected in the  
6 modeling results.

7 Again, we used uranium as a tracer because  
8 it has high concentrations in the tailing cells.

9 MR. CLOW: Thanks.

10 What -- which transport model was that,  
11 approximately?

12 MR. RUSHING: I think that was the -- in  
13 2009.

14 MR. CLOW: Question 51, we actually had a  
15 typo in there when we submitted it. So I'm going to  
16 reword that one and simplify it.

17 Was the acidity of the tailing solutions  
18 taken into account in assessing the absorption  
19 capacity of the Burro Canyon formation?

20 MR. RUSHING: Yes. The -- the tailings  
21 wastewater source was measured and characterized with  
22 a geochemical modeling in the Infiltration and  
23 Contaminant Transport Modeling.

24 MR. CLOW: Thanks.

25 And the last one. Question 52: Does the

1 Division's implementation of the groundwater  
2 discharge permit and related regulatory actions  
3 comply with the methodology for assessment and  
4 remediation of groundwater contamination described in  
5 EPA 530-R-04-030, Handbook of Groundwater Protection  
6 and Cleanup Policies for RCRA Corrective Actions, for  
7 facilities subject to corrective action under --  
8 excuse me, subtitle C of the Resource Conservation  
9 and Recovery Act?

10 MR. GOBLE: So the White Mesa Mill property  
11 is actually an 11e.(2) site not a RCRA site. So  
12 therefore, it's not applicable.

13 MR. CLOW: So it's not applicable, but does  
14 your discharge permit comply with it?

15 MR. GOBLE: Does the groundwater discharge  
16 permit comply with it? The groundwater discharge  
17 permit complies with the rules of R317-6. Again,  
18 this is not a RCRA site.

19 MR. CLOW: Right. I guess where we're going  
20 with that is we've been informed that that's the  
21 guidance document for the implementation of the  
22 groundwater permit. So if it's not applicable, then,  
23 you know, perhaps it shouldn't be implemented that  
24 way.

25 Is there another guidance document, a State

1 guidance document that you use to guide the  
2 implementation of the groundwater permit to protect  
3 groundwater?

4 MR. GOBLE: We actually use the rules  
5 defined in R317-6, groundwater protection rules.

6 If you have evidence that you'd like to  
7 present in your final, you know, formal comments, I  
8 will take a look at it.

9 MR. CLOW: Thanks. We appreciate the  
10 opportunity to be here today.

11 MR. GOBLE: All right. Thank you, Scott.  
12 Thank you, Michael.

13 \* \* \* \* \*

14 MR. ANDERSON: Okay. The next commenter is  
15 Uranium Watch, Sarah Fields.

16 MS. FIELDS: My name is Sarah, with an "h,"  
17 Fields, and I'm with Uranium Watch in Moab, Utah.  
18 Thank you for the opportunity to come here and ask  
19 questions.

20 I'm sorry. I'm reading from my computer.

21 Okay. My first question: Does Energy Fuels  
22 US -- Resources USA, Incorporated, own the roadway  
23 between State Highway 191 and the mill entrance gate  
24 and pay property taxes on the road and land  
25 between -- and the land between the road and the

1 fenced mill area?

2 MR. ROBERTS: The mill access road is a  
3 private road on property owned by Energy Fuels  
4 Resources. Energy Fuels pays property taxes on all  
5 the property that the company owns in San Juan  
6 County.

7 MS. FIELDS: Okay. Thank you.

8 What epidemiological or other health studies  
9 are being or have been conducted to evaluate the  
10 impacts of the operation of the mill on the health of  
11 the community and mill workers? I mean, specific to  
12 White Mesa.

13 MR. GOBLE: So as I stated in response to  
14 one of Scott Clow's comments, there was an  
15 environmental impact statement conducted by --  
16 completed by the NRC before the mill was actually put  
17 into operation. Since then, there hasn't been an  
18 epidemiological study being done, nor is there one to  
19 be required to be done.

20 As I stated before, the standards that are  
21 put in place for the public and also workers are --  
22 were done with the international multiyear studies to  
23 determine what would be the best suited for the  
24 public and the mill workers. There hasn't been any  
25 exceedances of the limits at the boundary.



1           Also, as I stated, the -- the limit for a  
2 Rad worker at the White Mesa Mill is actually 5,000  
3 millirem, and the average we've seen over the last  
4 ten years ranges anywhere from 80 to 180 [millirem],  
5 so well below the limit.

6           MS. FIELDS: Thank you.

7           Questions 2.1: How has the Division  
8 fulfilled requirements with respect an environmental  
9 analysis of, one, the White Mesa Mill license  
10 renewal; and two, the mill reclamation plan?

11           And I was referring to the requirement for  
12 an environmental analysis in 42 U.S.C.  
13 Section 2021(3)(C) and I wanted to know how that  
14 was -- how that requirement was fulfilled.

15           MR. RANDALL: So I'm going to start  
16 answering this question because it's a legal question  
17 in part.

18           During the time that the NRC managed this  
19 mill, NEPA applied and was followed until 2004.  
20 Under federal law, under the law that you just cited,  
21 agreement states are not required to follow NEPA, per  
22 se. Instead, the Atomic Energy Act requires that  
23 agreement states like Utah undertake written  
24 environmental analysis. The Utah rule is codified in  
25 UAC R313-24-3.

1           There's a detail legal memorandum that the  
2 attorney general's office has prepared on this topic  
3 dated February 22, 2017, that was provided to Uranium  
4 Watch. And I want to go ahead and make sure it gets  
5 incorporated into the record here because it's a more  
6 detailed analysis of the legal issues.

7           The other thing I want to say is that  
8 virtually everything that the Division does in  
9 connection with the licensing action is in substance  
10 a form of environmental assessment within the meaning  
11 of the rule and within the meaning of the Atomic  
12 Energy Act regardless of whether the document or  
13 analysis is formally entitled an environmental  
14 assessment. So I would say on virtually everything  
15 that we've done, this qualifies as an environmental  
16 assessment generally.

17           And, Phil, you have more details as far as  
18 specifics on what you've done.

19           MR. GOBLE: Sure. So for the specific  
20 licensing action that Sarah is talking about, as  
21 you'll remember, we actually started the public  
22 comment period -- the initial public comment period  
23 for the license renewal actually goes back in October  
24 of 2011. And part of that package was a Safety  
25 Evaluation Report put together.

1           We received public comments from the public,  
2 and what we did is we -- after looking at those, DRC  
3 management at the time -- they did a radiation  
4 control management at the time, they decided that,  
5 you know, more work should be done in addition to the  
6 comments received from the public. And so we decided  
7 to do our own independent MILDOS evaluation.

8           And so when we went back out to public  
9 comment, there was a bunch of other documents you  
10 guys have seen. So there was a technical  
11 evaluation -- technical evaluation and environmental  
12 assessment. There was a statement basis for the  
13 groundwater permits. There was a Safety Evaluation  
14 Report for Sequoyah Fuels.

15           So in addition to what we actually held  
16 [sent] out for public comment now, what we did back  
17 in 2011 for the public comment period then is also  
18 part of the record for this action.

19           MS. FIELDS: But in 2011 that didn't include  
20 the reclamation plan. And as part of your review of  
21 the reclamation plan, I really didn't see any kind of  
22 environmental analysis associated with the  
23 reclamation and long-term care of the tailings.

24           MR. GOBLE: So the reclamation plan that's  
25 out for public comment right now is identical to the

1 one that was approved by the NRC back in 1996, with  
2 the exception when Tailing Cells 4A and 4B were  
3 constructed, we basically added the design drawings  
4 for the cover to be the same. So that's why the  
5 previous was actually tailing -- it was actually  
6 Reclamation Plan 3.2B.

7 On our website, and as part of the record  
8 for actually what was done for Reclamation 5.1, you  
9 can see the different rounds of submittals. You can  
10 actually see our interrogatories going back with  
11 them, formalizing ways to protect, you know, the  
12 environment, and make sure things were done  
13 appropriately were actually incorporated into the  
14 stipulated consent agreement we talked about earlier  
15 of the test area that Russ described.

16 So it's included in -- in the technical  
17 evaluation of our -- technical evaluation of our  
18 annual assessment, in addition to what's referenced  
19 with the stipulated consent order. And those are  
20 actually available on our website.

21 MS. FIELDS: Okay. Do you know if in 1996  
22 the NRC issued a public notice and opportunity for  
23 public comment on their approval of the reclamation  
24 plan? I'm sorry. I wasn't involved in this in 1996,  
25 so I really don't know myself.

1 MR. GOBLE: I was in -- I was a senior in  
2 high school in 1996, so I honestly couldn't tell you  
3 that either. So I'm sorry, Sarah. That was the NRC.

4 MS. FIELDS: Okay. Well, I'll look into  
5 that.

6 MR. GOBLE: Thank you.

7 MS. FIELDS: Thank you. Okay. So you  
8 answered those questions.

9 Oh, as a -- I hope that the transcript will  
10 be made available as soon as possible and before the  
11 end of the comment period so anybody can look at your  
12 answers, because it's hard to listen and take notes  
13 and get a full understanding of your responses  
14 without actually seeing a transcript of it --

15 MR. GOBLE: Sure.

16 MS. FIELDS: -- your responses.

17 MR. GOBLE: I don't have a problem with  
18 that, but that really depends on whether she can  
19 provide -- because this has, you know, been almost a  
20 four-hour meeting. I guess that's -- depends on when  
21 she can get it to us.

22 If she can get it to us before the close,  
23 I'll be happy to share that with you, but I can't  
24 speculate when we get that.

25 MS. FIELDS: Okay. Thank you.

1 I know I got a memo regarding my questions  
2 about the mine water from the Canyon Mine. But I do  
3 want to know, have an understanding of when Energy  
4 Fuels commenced shipping the mine water to the mill  
5 and when did it cease? That's assuming that it has  
6 ceased, and if it, in fact, has solely been used  
7 to -- for -- in the processing circuit rather than  
8 direct disposal.

9 And I wanted to know how long they -- and if  
10 they intend to continue shipping mine water from the  
11 Canyon Mine to the White Mesa Mill.

12 MR. RANDALL: That's a question -- I mean,  
13 technically under our procedural rules, I mean, the  
14 question-and-answer hearing is supposed to be for the  
15 Division.

16 We've taken the position that all of these  
17 questions about the -- the water from Arizona are not  
18 relevant. I suppose if -- since we're all here, if  
19 you-all want to volunteer to answer.

20 Or what's your position, Mr. Zody?

21 MR. ZODY: It's up to you guys.

22 MR. FRYDENLUND: The water has been used as  
23 processed water at the mill, it has not been directly  
24 disposed of.

25 What was your other question?

1 MS. FIELDS: How long -- are you -- I wanted  
2 to know when shipments started and when shipment has  
3 ceased. I'm assuming that you're no longer shipping  
4 that -- trucking the water.

5 MR. FRYDENLUND: I do not believe there's  
6 any water being shipped at this time.

7 MS. FIELDS: Do you intend to continue maybe  
8 next year --

9 MR. FRYDENLUND: I don't know.

10 MS. FIELDS: You don't know.

11 MR. FRYDENLUND: No.

12 MS. FIELDS: Okay. Thank you.

13 This has to do with the shipment of the  
14 Cameco resources and ISL waste. Question 4 --  
15 Questions 4.1: Is the Division satisfied with the  
16 NRC's inspection and findings of the factors that led  
17 to the spill of barium-radium sludge at the mill?

18 MR. JOHNSON: Yes.

19 MS. FIELDS: Have you evaluated the problems  
20 associated with Energy Fuels' actions when leaking  
21 shipments were discovered by mill staff and informed  
22 Energy Fuels of what actions mill staff must take in  
23 the future when leaks and spills are discovered, for  
24 example, documenting the spills and leaks before any  
25 remedial action commences?

1 MR. JOHNSON: Yes. So we evaluated each of  
2 those incidents with the mill, and we identified ways  
3 that they can improve their notifications. And  
4 they've made changes to their SOPs.

5 MS. FIELDS: Okay. So these changes will  
6 occur in -- have they already occurred in new SOPs or  
7 they will in the future?

8 MR. JOHNSON: They are -- they have been  
9 implemented, yes.

10 MS. FIELDS: Have you determined any changes  
11 in Division practice for inspections of the mill when  
12 they're receiving waste? Because I know there have  
13 been instances where you actually are there on site  
14 when they receive waste for disposal.

15 MR. GOBLE: So this is your Question 4.1.4?

16 MS. FIELDS: Yeah.

17 MR. GOBLE: Yeah. The answer is no, we  
18 don't plan on a change or inspection [for  
19 inspections] based on the March 29, 2016, leak you're  
20 referring to.

21 So currently, what the Division does is we  
22 conduct four quarterly inspections related to ISL  
23 disposal. And actually, since the March 29, 2006 --  
24 16 leak, there hasn't been any shipments from Cameco  
25 that have gone to the White Mesa Mill.



1           And in our normal frequency of quarterly  
2 inspections, we've actually inspected shipments from  
3 Cameco before for the same type of material. So what  
4 Energy Fuels is required to do when a shipment's  
5 coming in, they're required to notify us, and then we  
6 go down on a quarterly basis.

7           In addition to that, as part of one of our  
8 quarterly inspections, we do kind of an overview for  
9 the entire year to make sure that Energy Fuels was  
10 doing what was required according to their license or  
11 standard operation procedures.

12           So it's expected that if they were to start  
13 again, we would see them in our normal routine  
14 inspection frequency.

15           MS. FIELDS: Also, I -- thank you.

16           I wondered if the Division has developed an  
17 environmental analysis of the potential impacts from  
18 spills of ISL and other materials shipped to White  
19 Mesa. As it happened, that material apparently  
20 spilled right at the entrance of the mill, but the  
21 truck went through -- went through Moab. It went  
22 through Monticello. It went through Blanding. And  
23 if that had spilled along the roadway, it would have  
24 been dispersed over a wide area and people wouldn't  
25 really have known about it until after the fact.

1           And I've just wondered what kind of analysis  
2 you've done of the potential impacts, if there are  
3 spills in the future.

4           MR. JOHNSON: So we haven't performed an  
5 environmental analysis.

6           However, when we are -- we are notified of  
7 an incident like that, we do have procedures that we  
8 follow, which include sitting down and discussing  
9 what the incident is and what proper -- what kind of  
10 responses that we need to do at the time.

11          MS. FIELDS: Okay. Thank you.

12          I'll go on to the draft License  
13 Condition 9.7 which has to do with the cultural  
14 resources at the site. And in License Condition 9.7,  
15 there are three referenced documents from the 1980s.

16          And I wonder, are the three referenced  
17 documents readily available to the Division staff and  
18 the public? I really haven't been able to locate  
19 those documents. And I find it difficult, if you  
20 reference a document in the license, if that document  
21 isn't avail -- readily available to me, it's not  
22 readily available to the staff. And it -- that makes  
23 it difficult for both the staff and the public and  
24 also the licensee to know exactly what the  
25 requirements are, particularly you're going back to

1 the 1980s, so ...

2 MR. GOBLE: So the documents are available  
3 to Division staff, but they're not available to the  
4 public on the DEQ's Easy Search that I think you're  
5 referring to. So when we started having electronic  
6 data -- the document database available to us as a  
7 department, the Division director of the Division of  
8 Radiation Control at the time made the decision that  
9 rather than going and scanning in everything that had  
10 ever come before, they drew a line -- he drew a line  
11 in the sand and we scanned everything after that.

12 And so those documents are available. If  
13 you want to put in a GRAMA request, Sarah, we'll be  
14 happy to send it to you.

15 MS. FIELDS: Yeah, I really feel that  
16 anything referenced in the license is -- has a very  
17 special status because it's part of the license and  
18 that those documents, any document historical,  
19 current, should be readily available because it's  
20 part of the license.

21 Also wondered if the memorandums of 1979 and  
22 '83 have been superseded by more current letters or  
23 MOUs. I guess that's between the State Historical  
24 Society, the NRC. I just wondered if any of these  
25 have been updated, if you're aware of any updates in

1 those agreements.

2 MR. GOBLE: No, they have not.

3 MS. FIELDS: Has the Division determined  
4 whether the July 1988 list of archaeological sites  
5 related to the White Mesa project submitted by the  
6 licensee is complete and accurate?

7 MR. GOBLE: So the July 1988 list that  
8 you're referring to for archeological sites, it's  
9 used as a guide as a survey of an area potentially  
10 impacted, but the potential sites are not limited to  
11 that original list.

12 So that was what they had observed at the  
13 time. There's been things that have been identified  
14 since then when construction commences.

15 What happens at that time as required by  
16 License Condition 9.7, they're required to retain an  
17 archaeologist to do an assessment of the work. That  
18 information gets sent to the state office of -- State  
19 Historical Preservation Office, and then we have  
20 to -- then basically, that letter -- the --  
21 basically, they approve it. They send it to our  
22 division director, and we basically say, okay, you've  
23 got permission from SHPO to even proceed. And then  
24 we give the authorization for Energy Fuels to  
25 proceed. So that's what happens now.

1 MS. FIELDS: But do you think that that list  
2 needs to be updated, made more complete and updated?

3 MR. GOBLE: That was the list for what was  
4 going on at the time.

5 MS. FIELDS: Well, that's --

6 MR. GOBLE: Basically, we're talking about  
7 realtime. When there's something that needs to be  
8 done at the time, it's done on a realtime. So it's  
9 been updated several times since then based on what's  
10 been completed at the site. That's used as a guide  
11 for what was done at the time. There's not a reason  
12 to update a list of a guide that was presented in  
13 1988 when we're already proactively and --  
14 proactively responding to what is observed on site.

15 MS. FIELDS: That license condition  
16 referenced the April 13, 1981, letter regarding a  
17 research design.

18 Do you believe that that research design is  
19 up to date or should be -- there should be a  
20 reference to a more recent research design?

21 MR. GOBLE: So the -- my response to this  
22 question is the same as the previous question.

23 So when there's going to be a commencement  
24 of activities on the site that hasn't been previously  
25 evaluated, they're required to do this assessment

1 using an archaeologist.

2 For example, when they constructed -- when  
3 they planned the construction of Tailing Cell 4B,  
4 there was a survey that was done.

5 MS. FIELDS: So maybe in that license  
6 condition, it needs to be updated with more -- a  
7 little more accurate to reflect some of the comments  
8 that you've made.

9 But I'll put those in my reading comments.  
10 Thank you.

11 MR. GOBLE: All right.

12 MS. FIELDS: Okay. Under operational  
13 controls, limits, and restrictions, does the Division  
14 require the licensee to document the shipments of  
15 waste that are received at the mill to be processed?  
16 For example, the number of shipments, the number of  
17 containers in each shipment, type of container,  
18 source, weight, and other pertinent information?

19 Is the licensee required to test one or more  
20 containers to document and verify the radiological  
21 and non-radiological constituents of the materials?

22 MR. JOHNSON: So the answer to the question  
23 is no, they are not required to do it, but the mill  
24 does do it for their own purposes.

25 MS. FIELDS: So in some situation -- many of

1 the situations, you really don't know how many  
2 shipments, let's say, of waste from Metropolis,  
3 Illinois, come to the mill for processing and  
4 disposal.

5 MR. JOHNSON: We don't require the  
6 information, but if we need to know the information,  
7 it is available at the mill for us to inspect.

8 MS. FIELDS: Okay. And License Condition  
9 10.5. I'll go to just the -- the third question  
10 there.

11 Does the current SOP for ISL disposal take  
12 into consideration the problems encountered with the  
13 shipments of ISL waste? I think you've already  
14 answered that question. Thank you.

15 MR. JOHNSON: Yeah. They updated it. So it  
16 tells personnel what to do when a leak is  
17 encountered. And it talks about how to notify the  
18 Division and what type of information we would need  
19 from them.

20 MS. FIELDS: So was that on the easy docs?  
21 Is that part of -- had that been posted, the new SOP?

22 MR. JOHNSON: I -- yeah. But it was mailed  
23 to us, so --

24 MR. GOBLE: It should be.

25 MR. JOHNSON: So it should be. If you can't

1 find it, let me know, and I'll -- I'll find it later,  
2 too.

3 MS. FIELDS: Okay. Thank you.

4 Do you require any detailed engineering  
5 drawings for the placement of each ISL waste  
6 disposal, and are they submitted? I know they're  
7 required to have the tail engineering drawings. I  
8 just wondered if they're submitted to the Division.

9 MR. TOPHAM: Well, as you stated, Sarah, in  
10 the question, the licensee is required to document  
11 the location of disposal of each load of ISL  
12 decommissioned debris that it receives. These data  
13 are available at the mill for our inspection, and we  
14 do look at it every time we do this kind of  
15 inspection. It's not routinely submitted to the  
16 Division. As such, we don't house that information  
17 here. And it is not -- therefore, not available on  
18 the Easy Search or -- or such.

19 The licensee can make that information  
20 available, if they choose to, to the public.

21 MS. FIELDS: Do you -- do you feel that that  
22 information is relevant to the final reclamation plan  
23 for Cell 3, where exactly the waste is disposed of,  
24 how much, where it's located?

25 MR. TOPHAM: I don't see how it would affect



1 the performance of the cell as far as protection  
2 beyond knowing that it's there.

3 MS. FIELDS: Okay. The licensee is required  
4 to monitor -- here I am seeing my misspellings -- the  
5 radon in the vicinity of the mill on a quarterly  
6 basis.

7 Why is there not a requirement to monitor  
8 the radon continually and report the data? And  
9 I'm -- I think we're all aware that they do have  
10 monitoring devices that continually monitor radon.  
11 And I wondered why it's not continual because four  
12 times a year may not exactly reflect the --  
13 accurately the radon emissions at the site.

14 MR. JOHNSON: So the devices that they  
15 deploy actually record all of the radon that it comes  
16 in contact with while it's deployed. So what you see  
17 is the average over that period of time.

18 Do you understand?

19 MS. FIELDS: So what's the period of time?  
20 I got the impression that it's a very short period of  
21 time.

22 MR. JOHNSON: It's a quarterly. So they put  
23 them out once a quarter.

24 MS. FIELDS: Oh, so it's -- so I just  
25 misunderstood some of the information.

1           They -- they put the devices out quarterly  
2 so it measures the radon over that quarter.

3           MR. JOHNSON: Over that quarter, yes.

4           MS. FIELDS: Okay. Gotcha. Thank you.

5           Is there any requirement the licensee clean  
6 up any on-site and off-site radionuclide  
7 contamination above the EPA's would be Part 192  
8 cleanup standard for uranium mills during the  
9 operation of the mill rather than waiting until mill  
10 closure? So when, let's say, there's a spill, when  
11 you're aware there's an area of uranium contamination  
12 that is possibly higher than the final cleanup  
13 levels, are you going to wait until the mill closure  
14 or are you going to require cleanup as you go, you  
15 might say?

16           MR. GOBLE: So the answer is yes, if they've  
17 exceeded the cleanup standard, they'll be required to  
18 address it. However, your question, you say on site  
19 and off site.

20           For off site, it would be something you  
21 would have to address, you know, immediately. If it  
22 was on site, it would be basically a case-by-case  
23 basis whether it needed to be taken care of  
24 immediately or not.

25           MS. FIELDS: Okay. Thank you.

1 I'm going to go to Cell 2.

2 Question is: Will the licensee continue to  
3 monitor and report the radon emissions from Cell 2?  
4 They're currently required to measure those emissions  
5 twice yearly and report that, and I wondered if  
6 that's going to continue.

7 MR. GOBLE: Yes. As you stated, the radon  
8 flux sampling is done at Tailing Cell 2 on a  
9 semiannual basis, and this will continue until the  
10 licensee can demonstrate to the director's  
11 satisfaction the cover construction of Tailing Cell 2  
12 is successful in meeting the radon flux standard.

13 MS. FIELDS: Okay. Do you have any estimate  
14 of the -- of when that final measurement is going to  
15 take place?

16 MR. GOBLE: I can't speculate. With, you  
17 know, the most recent sampling that showed it was a  
18 0.5, and that appears to be working. But we'll have  
19 to watch it over time to determine whether that's  
20 lasting or not, but ...

21 MS. FIELDS: One -- the next question is  
22 when Cell 3 ceases operation and no longer falls  
23 under the Subpart W requirement, does the Division  
24 intend to require monitoring, reporting, and  
25 compliance with the 20 picocuries per meter squared

1 with radon emission standard and -- and mitigative  
2 measures if Cell 3 exceeds the standard? In other  
3 words, are you going to treat Cell 3 when it enters  
4 closure the way that you treat Cell 1?

5 MR. GOBLE: Cell 2?

6 MS. FIELDS: I mean Cell 2. Sorry.

7 MR. GOBLE: Yes. The answer is yes. The  
8 requirement is the same thing that's required for  
9 Cell 2 in accordance with 10 CFR 40, Appendix A,  
10 Criterion 6.

11 MS. FIELDS: Okay. And then there was a  
12 discussion of the July 3rd -- hope I got that date  
13 right -- letter which required the monitoring of  
14 Cell 2. And the licensee was supposed to submit  
15 information in their Environmental Monitoring Plan  
16 for procedures for radon flux from Cell 2, but it  
17 doesn't appear that they did so, because I -- I  
18 checked the Environmental Monitoring Plan from  
19 September and December 2014, and there didn't appear  
20 to be any procedures for Cell 2.

21 MR. GOBLE: So yes, that's correct. It is  
22 not there.

23 If you look at the letter where we suspended  
24 them and had to start sampling for Subpart W, but  
25 they had to start sampling under 10 CFR 40,

1 Appendix A, Criterion 6, we said the Division  
2 requests they put this in their, you know,  
3 procedures. Well, we didn't get it, but they're  
4 still doing what they're supposed to do. They're  
5 collecting the semiannual samples and they've been  
6 submitting reports as necessary.

7 So you could say it was an oversight, but  
8 the end result's the same. They're doing the  
9 required sampling.

10 MS. FIELDS: Okay. Thank you.

11 Now I'll move on to some of the issues  
12 related to the License Amendment Request to process  
13 the Sequoyah Fuels waste. And as already discussed,  
14 the NRC has determined that the Sequoyah Fuels waste  
15 is 11e.(2) byproduct material.

16 So the question in my mind is when does it  
17 become ore? Because for the waste from the  
18 processing of this 11e.(2) byproduct material to also  
19 be defined as 11e.(2) byproduct material, the  
20 material has to somehow become ore, and I just wonder  
21 at what point in time and place is that 11e.(2)  
22 byproduct material going to revert to ore so that  
23 after it's processed, the waste can also be defined  
24 as 11e.(2) byproduct material.

25 MR. JOHNSON: Okay. When the license

1 condition for the Sequoyah Fuels material is  
2 approved, it would be considered an alternate feed.  
3 It can be processed as ore.

4 MS. FIELDS: But is it ore?

5 MR. JOHNSON: It is ore as defined by  
6 alternate feed, yes.

7 MS. FIELDS: As defined -- is this a  
8 regulation or a statute?

9 MR. JOHNSON: No, it's not.

10 MS. FIELDS: Okay. So my next question was  
11 which reg -- federal and state statutes and  
12 regulation, that is definitions and requirements that  
13 enforce and effect, apply to the process whereby  
14 material is ore and is processed to become 11e.(2)  
15 byproduct material and then comes to a mill and then  
16 is processed again and then somehow reverts to ore,  
17 what I've discussed. So what -- what statutes and  
18 regulations apply to that convoluted definitional  
19 process?

20 MR. ZODY: I'm going to just object to the  
21 question. It calls for legal conclusion. And the  
22 issue's been resolved in the Fansteel case ruled upon  
23 by the board, and the rules were established at that  
24 time.

25 MS. FIELDS: What right do you have in this

1 hearing to -- to object to my question?

2 MR. ZODY: I'll let the hearing officer  
3 address that.

4 MR. ANDERSON: It's provided for in the  
5 administrative rules that have been adopted by the  
6 board that objections can be interposed during the  
7 hearing.

8 MS. FIELDS: Well, do you agree with that  
9 objection?

10 MR. RANDALL: Well, let me speak to that.

11 I think part of the answer, the State of  
12 Utah did appeal this issue to the NRC in the past.  
13 I'm not personally that familiar with the case. I  
14 think it's the Fansteel case.

15 MR. ZODY: The Fansteel case was adopted  
16 when the state became an agreement state. It was the  
17 first case when the State had issued an amendment for  
18 the alternate feed program. So it confirmed it at  
19 state level, the prior --

20 MR. RANDALL: Well, I'm referring to the  
21 cases involving the State's position previously about  
22 CHAN disposal that the NRC also ruled upon and  
23 determined that that was an invalid argument.

24 So we can -- we can get into some of the  
25 legal issues. But I think you can go ahead and

1 answer the question as best you can as you understand  
2 it.

3 MR. JOHNSON: So the definitions that are  
4 used for alternate feeds comes from the Federal  
5 Registers that the NRC published in 1992 and 1995.  
6 And those Federal Registers, they talk about how  
7 alternate feeds are applicable to the Atomic Energy  
8 Act, and UMTRCA, and also to EPA regulations.

9 MS. FIELDS: I don't think the NRC has the  
10 authority to make determinations regarding EPA  
11 regulations and those FRNs were not rule makings.  
12 I'm making a comment here.

13 Okay. I'll just move on with Question 6.2,  
14 and, as you know, that the EP -- it's the EPA  
15 standards in 40 CFR, Part 192, Subpart C that reg --  
16 are the standards for uranium byproduct materials  
17 under the Atomic Energy Act.

18 And I wanted to know if the Division has  
19 made a determination regarding EPA -- whether EPA  
20 standards apply to the waste from the processing of  
21 the materials than -- other than natural ore? I  
22 mean, have you made a determination or do you have  
23 any evidence EPA has made a determination that their  
24 standards apply to the waste from alternate feed?

25 MR. JOHNSON: So we would consider the waste



1 from alternate feed as it goes out to the tailing  
2 cells as 11e.(2) material. Therefore, the standards  
3 that the EPA developed for uranium mills cleanups  
4 would apply.

5 MS. FIELDS: But has the EPA ever made that  
6 determination? Do you know that the EPA has made  
7 that determination?

8 MR. JOHNSON: Not that I'm aware of.

9 MS. FIELDS: Okay. Okay. And to process  
10 the Sequoyah Fuels, you're using an NRC guidance  
11 which provides a new definition of ore. And I wanted  
12 to know if that definition of ore is found in the  
13 Atomic Energy Act or in anywhere in any -- in NRC  
14 regulation.

15 MR. RANDALL: Well, I'm going to object  
16 because it calls -- this is not a fact question.  
17 It's a legal question.

18 But he can explain his understanding of the  
19 law.

20 MR. JOHNSON: So I have not found the  
21 definition of ore in the Atomic Energy Act, as you  
22 stated.

23 MS. FIELDS: So you have not found that  
24 the -- any indication the Atomic Energy Act that the  
25 term "ore" means other than anything than the common

1 meaning of the term ore?

2 MR. JOHNSON: There was no definition of ore  
3 at all in the Atomic Energy Act.

4 MS. FIELDS: Is there a definition of water  
5 in the Atomic Energy Act?

6 MR. JOHNSON: No.

7 MS. FIELDS: Why do you think there is no  
8 definition of ore in the Atomic Energy Act?

9 MR. ZODY: Object. Calls for a legal  
10 conclusion and speculation.

11 MR. RANDALL: Well, I'm going to have the  
12 same objection.

13 Let's move on.

14 MS. FIELDS: Okay. I am going to skip the  
15 next question since, you know, you're -- I will go to  
16 Section 6.5.

17 What is the route that the Sequoyah Fuels  
18 waste will take between I-40 in Arizona and State  
19 Highway 262 in Utah? It wasn't included in the SER.  
20 Also, there was no mention of the fact that the route  
21 that they would have to go along between I-70 and  
22 State Highway 262 would go through the Navajo Nation  
23 and the Ute Mountain Ute Nation. I wondered why  
24 there was no mention of that.

25 MR. ROBERTS: The Sequoyah materials will be

1 transported along I-40, Highway 491, 262, and then  
2 191 to the mill. The materials will be transported  
3 on state and federal highways in accordance with the  
4 Department of Transportation requirements. The same  
5 precautions will be followed over the entire route.

6 MS. FIELDS: Are you making any -- what  
7 accommodations will be made for the fact that the  
8 haul route between Gallup and the mill will pass  
9 through tribal lands? Will the Navajo and Ute  
10 Mountain tribal governments be notified of the  
11 transport of those materials through tribal lands?

12 MR. ROBERTS: Again, the materials will be  
13 transported on state and federal highways in  
14 accordance with all applicable Department of  
15 Transportation requirements.

16 MS. FIELDS: How many other ore trucks or  
17 other trucks, like trucks shipping chemicals to the  
18 mill associated with the operation of the White Mesa  
19 Mill travel on that haul route between Gallup and  
20 White Mesa? I mean, are there any other trucks  
21 associated with the mill operation besides this ore  
22 Oklahoma waste that go on that route?

23 MR. FRYDENLUND: Sarah, the transportation  
24 considerations are dealt with the details in  
25 Section 4.2 of the license amendment application.

1 And that goes through -- you know, it talks about the  
2 number of trucks associated with the mill at full  
3 operations being about 68 ore trucks a day for full  
4 operations.

5           What we're talking about here with the  
6 Sequoyah material is approximately 5 trucks a day for  
7 a short time period, 22 to 33 weeks. It's a very  
8 small percentage of full mill capacity. So the total  
9 amount of trucks associated with full capacity on  
10 those routes is going to be insignificant compared to  
11 normal trucking. And there will be an insignificant  
12 number of other trucks associated with mill  
13 operations over and above the Sequoyah trucks on  
14 those routes.

15           MS. FIELDS: I was wondering about the  
16 number of trucks because in the SER, it states from  
17 555 to 835 trucks over 22 to 33 weeks. And that's a  
18 big gap, a gap of 300 different -- 300 truckloads.  
19 And I'm wondering why the estimate was so broad.

20           MR. FRYDENLUND: Well, what we found in our  
21 experience with alternate feed materials is that  
22 there has been some variability in the ability to  
23 estimate the quantities. So we typically assume  
24 about 50 percent more than maybe the initial amount.  
25 And that's why you're seeing a range of about

1 50 percent of 500 to about 800.

2 But all of our analysis of impacts to the  
3 mill assume a larger number. So we conservatively  
4 assume the larger number for impacts on the mill and  
5 any environmental impacts and -- which is a broader  
6 range because it's impossible to quantify with  
7 precision the exact numbers.

8 MS. FIELDS: Okay. Thank you.

9 The next thing goes for the Sequoyah Fuels  
10 SER Table 11, page 28. And I've noticed that in the  
11 table, the data and information referred to Cell 3  
12 rather than Cell 4A. In looking the table, one would  
13 assume that any of the waste from the processing of  
14 the Sequoyah Fuels material would go into Cell 3 when  
15 it apparently will go into Cell 4A, possibly 4B.  
16 But -- and there's a mention of any future tailings  
17 impoundments.

18 So I wondered why the data regarding the  
19 radiological and non-radiological constituents in 4A  
20 before and after processing is not used. All -- all  
21 the data seems to deal with Cell 3, which seems to --  
22 I don't understand why that's relevant and why data  
23 from Cell 4A isn't being used.

24 MR. LUELLEN: Data from Cell 3 would  
25 incorporate in the table. That was data available at

1 the time the SER was prepared, and that was  
2 considered a general representative of tailings and  
3 alternate feed materials disposed within the tailings  
4 impoundments which include Cells 2, 3, and 4A.

5 MS. FIELDS: Okay. On Table 3, Footnote 11,  
6 it refers to Column J, concentration in ores and  
7 other alternate feed material, and then also refers  
8 to Maywood, New Jersey, alternate feed material.  
9 That material was never received at the mill, and now  
10 it's going to be deleted from the license.

11 So, again, I wondered why the constituents  
12 of the Maywood waste are relevant to the proposed  
13 license amendment.

14 MR. LUELLEN: The Maywood material is  
15 included in the Safety Evaluation Report because it  
16 is included in the current radioactive materials  
17 license.

18 The material was approved as an alternate  
19 feed for processing at the White Mesa Mill but has  
20 not been processed at the mill. These materials were  
21 included in the SER because they show the  
22 non-radiological and radiological characteristics of  
23 the materials that have been evaluated and approved  
24 as alternate feed materials for processing at the  
25 mill.

1           As such, they provide an example of the  
2 non-radiological and radiological characteristics of  
3 byproduct materials that are within the envelope of  
4 approved materials that might be processed and the  
5 residues therefrom disposed in the impoundments  
6 without endangering human health or the environment.

7           MS. FIELDS: Was any -- was there any effort  
8 to look at the cumulative impacts of all those  
9 different materials?

10           MR. LUELLEN: This License Amendment Request  
11 was reviewed for the materials on a specific case  
12 basis and for its impacts on the impoundments as --  
13 as -- as an episode.

14           MS. FIELDS: Yeah, but not looking at any  
15 cumulative impacts from all the other alternate feed  
16 material that has been or might be disposed of?

17           MR. ZODY: Object to compound question.  
18 Calls for speculation.

19           MS. FIELDS: Well, I just wondered if you  
20 looked at -- I guess you haven't looked at any  
21 cumulative impacts from all -- all the alternate feed  
22 material.

23           MR. LUELLEN: The analysis looked at the  
24 quantities and concentrations of this alternate feed  
25 material in relation to the volumes and tonnages and

1 concentrations of existing tailings and alternate  
2 feed materials.

3 In that context, they were incorporated into  
4 what kind of impact they would have on the  
5 concentration overall within the impoundments.

6 MS. FIELDS: I wonder which waste materials  
7 or non-ore materials that have been processed are  
8 being used by the Division for comparison in  
9 Column J. And unfortunately, I don't have it right  
10 up in front of me. It doesn't -- it mentions some of  
11 the non-ore materials, but it doesn't list all of  
12 them.

13 And previously today, the Division indicated  
14 that they don't keep track of all the shipments of  
15 the non-ore materials that have come to the mill for  
16 processing. So it's hard to know exactly what you're  
17 talking about when it comes to the amounts of  
18 materials and their radiological constituents that  
19 have gone into Cell 3 or would go into Cell 4A.

20 MR. ZODY: That, to me, seems in the nature  
21 of a comment as opposed to a question.

22 MR. RANDALL: Well, and I object because I  
23 think it misstates the testimony.

24 The testimony was that the Division doesn't  
25 receive actual shipments of waste, but I think the



1 quantities of materials that are shipment process are  
2 known. So I think that misstates the testimony.

3 But -- but if you can comment on -- the  
4 question relates to Column J in the SER. Can we get  
5 back to that question, maybe answer it.

6 MS. FIELDS: I guess the question was, does  
7 the data in Column J refer to the concentration of  
8 radiological and non-radiological constituents of  
9 other ways that have not or will not be received at  
10 the mill?

11 MR. LUELLEN: The data in Column J refer to  
12 the total concentrations, and that is in terms of  
13 ranges of previous alternate feed materials that have  
14 been approved or -- and/or processed at the mill. So  
15 they're representing general ranges of those  
16 concentrations.

17 For comparative purposes, the SER can be  
18 clarified. The footnote can be clarified to indicate  
19 which of those considered in Column J that were  
20 approved and which were not processed and those which  
21 were approved and processed for clarity. That can be  
22 done.

23 MS. FIELDS: Were you also looking at  
24 concentrations of ways that were disposed of in  
25 Cells 2 -- 2 and 4A? I think most of the data refers

1 to Cell 3. So are -- or were you looking at  
2 everything that had ever been disposed of in the  
3 tailings impoundments that was considered alternate  
4 feed?

5 MR. LUELLEN: It was the general  
6 consideration of everything that was either processed  
7 and disposed or approved. It was all comprehensive.

8 MS. FIELDS: So you were looking at cement  
9 and asphalt and boards and things like that?

10 MR. LUELLEN: Well, the bound --

11 MS. FIELDS: -- is alternate feed material  
12 for processing.

13 MR. LUELLEN: The bounding alternate feeds  
14 would be those, Sarah. I think some of them are  
15 referred to in the footnotes already that were  
16 approved but not processed. In order to get the  
17 range, upper and lower concentrations that were  
18 previously considered.

19 MS. FIELDS: Okay. Thank you.

20 6.7: Does Division have data on the total  
21 amount of each radiological and non-radiological  
22 constituent that has been disposed of from the  
23 processing of waste or what you call alternate feed  
24 material at the mill?

25 MR. GOBLE: So the mill doesn't process

1 waste. They process alternate feed material.

2 MS. FIELDS: But they are waste. They're  
3 waste from the processing of -- of other -- other  
4 materials. They are -- there are wastes. They're  
5 defined as waste. They -- they don't become ore  
6 until after they've been processed. So I call them  
7 waste. It's a matter of semantics, I guess.

8 MR. GOBLE: So do you want me to answer your  
9 question?

10 MS. FIELDS: I want to know if you have data  
11 on the total amount of each radiological and  
12 non-radiological constituent that has been disposed  
13 of in the processing of alternate feed material at  
14 the mill.

15 MR. GOBLE: The answer is no, nor is the --  
16 nor is the licensee required to provide that  
17 information.

18 What we do have is on an annual basis, the  
19 tailings solution is actually sampled for 38  
20 constituents. That information is submitted to an  
21 annual wastewater sampling report.

22 MS. FIELDS: Do you include radium in that  
23 sample on an annual basis?

24 MR. GOBLE: No. What's actually sampled is  
25 the same thing which is the same constituents which

1 are required to be sampled in the -- one of the  
2 compliance wells. It's the same 38 constituents.  
3 Radium is not one of them.

4 MS. FIELDS: Okay. The SER draws  
5 conclusions regarding the acceptability of the  
6 Sequoyah waste for processing or the Sequoyah  
7 alternate feed, but it is for processing based on the  
8 assumption that this 11e.(2) byproduct material  
9 contains similar or greater -- or that waste, other  
10 materials containing similar or greater levels of  
11 radiological or non-radiological constituents have  
12 been placed -- already been placed in the tailings.

13 And I believe you've already asked --  
14 answered this question of whether Division has looked  
15 at the cumulative impacts of the disposal of these  
16 constituents from alternate feed material in the  
17 impoundments.

18 MR. GOBLE: Yeah, Jon answered that  
19 question.

20 MS. FIELDS: Okay. What information does  
21 the Division have regarding the environmental impacts  
22 of the processing and disposal of alternate feed that  
23 have been accepted at the mill?

24 MR. GOBLE: So as Jon said, we don't have  
25 the cumulative radiological and non-radiological

1 constituents of what's been received. As -- what we  
2 do, actually, for an environmental analysis for the  
3 site is we review the wastewater reports that come  
4 in.

5           You also want to know -- well, did you ask  
6 your second question, Please refer to dates. You  
7 haven't asked that yet.

8           So we basically, like I said, the -- let me  
9 start over. I apologize.

10           The regulatory standards even though --  
11 there is regulatory standards and those are required  
12 to emit -- sorry, to meet. As long as the standards  
13 are met, the public should be -- the public -- the  
14 effects to the public should be minimum.

15           And there actually is an environmental  
16 review each time the Division reviews an  
17 environmental report.

18           MS. FIELDS: There's an environmental review  
19 for each of the alternate feed?

20           MR. GOBLE: Not for each alternate feed.  
21 When the wastewater sampling report comes in, it's  
22 reviewed, and the Division does, then, a review of  
23 that.

24           MS. FIELDS: Okay. So you -- thank you.

25           MR. GOBLE: Yeah. Sorry if I was a little

1 blurry. I apologize, Sarah.

2 MS. FIELDS: It's getting late. Okay.

3 MR. GOBLE: It's getting late.

4 MS. FIELDS: Does the Division -- this is  
5 6.8: Does the Division have data on the total amount  
6 of materials disposed of and the total amount of  
7 constituents from these other sources? These are the  
8 other sources of alternate feed material. I mean, do  
9 you have an overall picture of the total amounts of  
10 materials disposed of and the total amount of  
11 constituents from these sources?

12 MR. GOBLE: We have the total amount of  
13 volume that's been disposed of at the tailings cells.  
14 I don't have a constituent by constituent, no.

15 MS. FIELDS: Okay. I'll go on to 6.9.

16 In the SER, it talked about the alternative  
17 and for -- for dealing with the ore material.

18 And I wondered why the SER did not consider  
19 the alternative of direct disposal of the 11e.(2)  
20 byproduct material at the Clive Disposal Facility,  
21 which has an 11e.(2) byproduct material disposal  
22 cell, or why the SER did not consider the alternate  
23 of direct disposal, which is allowed at the White  
24 Mesa Mill because the material is 11e.(2) byproduct  
25 material just as ISL waste is 11e.(2) byproduct

1 material.

2 MR. GOBLE: So there is no requirement for  
3 the Division to consider alternatives of direct  
4 disposal for the material. That decision you -- that  
5 decision actually lies with Sequoyah Fuels and what  
6 they want to do with their material.

7 What was presented to us was a request to  
8 receive it for alternate feed from Energy Fuels.  
9 That's a question for Sequoyah Fuels.

10 MS. FIELDS: Okay. Thank you.

11 And I wondered why the radiological  
12 constituents -- this is 6.10 -- of the waste -- of  
13 waste that has not and will not be received at the  
14 White Mesa Mill relevant to the proposed license  
15 amendment.

16 I mean, alternate feed, over time, there  
17 were a number of license amendments to receive and  
18 process alternate feed, but much of that feed never  
19 arrived at the mill. Such as Maywood, they're  
20 dumping waste material.

21 So I wonder why it's really relevant to this  
22 license amendment, why these waste materials that  
23 have never been processed and never will be processed  
24 are relevant today.

25 MR. MERRELL: The alternate feed material

1 from W.R. Grace and from Maywood were included in the  
2 SER because they are included in the current license.  
3 And as Jon mentioned earlier, those materials, even  
4 though they were never received or processed, serve  
5 the purpose of showing a radiological profile of  
6 materials that would be acceptable were they to be  
7 processed. So they were included for those two  
8 reasons.

9 MS. FIELDS: But is -- is there a cutoff  
10 point? Is -- has the State ever made a determination  
11 that there's some radiological profile that wouldn't  
12 be acceptable for alternate feed? Is there any  
13 cutoff point? Is there any standard? Is there any  
14 limit? Is there any ...

15 MR. MERRELL: Some of this we -- we talked  
16 about earlier. We do not have regulatory limits for  
17 specific radionuclide concentrations, but we do have  
18 a requirement for protecting human health and the  
19 environment.

20 So in an indirect way, that requirement  
21 places limits on the maximum radionuclide  
22 concentrations that are acceptable. But to make that  
23 connection between a radionuclide concentration and  
24 whether it's protective of human health in the  
25 environment requires an analysis. And that analysis



1 was done by the applicant, reviewed by the Division,  
2 and was found to satisfy all of the applicable  
3 regulatory requirements.

4 MS. FIELDS: I get into a lot of very deep,  
5 detailed questions about the radiological analysis  
6 which will probably take a lot of time. I think one  
7 of the important things is, I wonder whether the  
8 Division will require a limit on the time that the  
9 Sequoyah Fuels waste can be stored prior to  
10 processing. I think there are concerns about the  
11 possible breakdown of the sacks, about keeping it in  
12 safe storage.

13 MR. GOBLE: So this is your question in  
14 6.10.7?

15 MS. FIELDS: Yes.

16 MR. GOBLE: Okay. So there isn't,  
17 apparently, a requirement that limits the storage  
18 time of the alternate feed material. However, the  
19 licensee would be required to follow what's specified  
20 in License Condition 10.8 such as if the Super Sacks  
21 are damaged or if they're leaking, then they'll be  
22 required, to, you know, put water on that, like I  
23 said, causing a water spray to help prevent  
24 migration.

25 But there's no limit for storage time.

1 MS. FIELDS: I think my questions, and I'll  
2 submit them as comments, in my comments, and then you  
3 can give me your responses to comments -- responses  
4 to my questions that way.

5 MR. GOBLE: All right.

6 MS. FIELDS: I think that would be a little  
7 more productive.

8 But just the final question: The SER  
9 describes a number of protective actions that the  
10 licensee will take during the handling and processing  
11 of the waste, and I wondered how the Division will  
12 assure that such procedures are followed.

13 Will there be specific inspections? Will  
14 there be special training for the workers?

15 MR. JOHNSON: I do inspections for alternate  
16 feeds.

17 MS. FIELDS: Do you know if there's going to  
18 be specific training for the workers?

19 MR. GOBLE: Energy Fuel's?

20 MR. ROBERTS: Yeah. The Sequoyah material  
21 would be processed under our Radiation Work Permit  
22 system, and that utilizes an SOP that is specifically  
23 for alternate feed materials that have a higher than  
24 typical level of thorium.

25 MS. FIELDS: Okay. So you're going to in

1 part rely on that SOP for high thorium content  
2 material --

3 MR. ROBERTS: Yes, ma'am.

4 MS. FIELDS: -- that was developed?

5 Okay. Thank you. Thank you for your  
6 patience.

7 MR. GOBLE: All right. Thank you, Sarah.

8 MR. ANDERSON: Well, that concludes the  
9 question-and-answer period for the hearing today. We  
10 do have additional time. As I mentioned, we had  
11 scheduled this for four hours from 1 to 5. The panel  
12 has indicated that they're willing to accept comments  
13 from the audience since we do have additional time.  
14 We finished a little early.

15 So if anyone from the audience would like to  
16 comment, you're invited to come up to the table.  
17 Please state your name. The time will be -- oh,  
18 good. We have a list of people who want to submit  
19 comments.

20 So we'll start with --

21 MR. RANDALL: Can I just make a motion for  
22 the Division? I think we're interested in opening  
23 this up for comments.

24 We have -- we have a public comment hearing  
25 scheduled for next week, next Thursday, down in

1 Blanding. So given -- even though there is some time  
2 available, it's still limited. And so I think we  
3 want to preferentially provide an opportunity for  
4 people who are not going to be able to attend the  
5 hearing in Blanding. And then if we could put some  
6 reasonable time -- can we show by hand how many  
7 people want to provide comments today? Three, four?  
8 Four or five? So maybe up to five?

9 MR. GOBLE: Let's start with five minutes.

10 MR. RANDALL: Five minutes each?

11 MR. ZODY: A point of clarification. This  
12 is just for public comment.

13 MR. GOBLE: Right.

14 MR. ZODY: The question-and-answer session  
15 is over.

16 MR. GOBLE: Is over.

17 MR. ZODY: Thank you.

18 MR. RANDALL: Correct, yeah. Yeah, members  
19 of the panel will be excused. There's no response to  
20 the public comments. The record is open for public  
21 comments.

22 MR. ANDERSON: So based on the -- the sheet  
23 that we have made available regarding individuals who  
24 wish to make a comment, first individual that I have  
25 on this particular record that's been made available

1 is Ivan Weber.

2 Is Mr. Weber here?

3 Let's see. Okay. We'll just -- those who  
4 raised their hands, we'll just call you up.

5 And sir, would you please state your name  
6 for the reporter and the record.

7 \* \* \* \* \*

8 MR. DUTCHIE: Yes, sir. My name is Ephraim  
9 Dutchie. I'm a White Mesa resident.

10 And my question is, you know, you guys are  
11 talking about -- there was something that happened at  
12 the mill. How much time, and what is the safety  
13 perimeter, you know, to be in a safe zone, so to  
14 speak? What is a safe zone to be when there is a --  
15 when you guys are -- when there's something going on  
16 at the mill? Like a alarm, something happens, you  
17 know, what's the safe perimeter around the whole  
18 area? Can you guys answer that for me?

19 MR. ANDERSON: Anyone want to take that one  
20 on?

21 MR. RANDALL: Well, I think this -- I think  
22 this portion of the hearing is just for public  
23 comment. So you make your comment. We'll take that  
24 under advisement, and we'll issue a formal written  
25 response to your question.

1 MR. DUTCHIE: So you can't, you know, answer  
2 it off the top of your head? You guys can't just  
3 answer one little --

4 MR. GOBLE: It would be basically a  
5 case-by-case basis depending on what the incident  
6 was. So it's hard for me to speculate what would be  
7 safe zone for anything that happens at the mill.

8 What we can do is, like Bret Randall said,  
9 is this: You know, we will submit a formal response  
10 to your comment, and we'll take it into consideration  
11 maybe with some different scenarios on what we'll  
12 need to do for different scenarios. That, I think,  
13 would be better for actually addressing your concern  
14 rather than to speculate. Because it depends on what  
15 the issue is.

16 MS. GALLOWAY: It does.

17 MR. DUTCHIE: Well, I mean, with any -- with  
18 any serious situation, you know, I mean, you're  
19 working with some toxic stuff here, you know. I  
20 mean, what -- that's what I mean. That's -- the  
21 perimeter, the safety perimeter around the whole  
22 area, you know.

23 Is it within White Mesa range or is it out  
24 of White Mesa range is what I'm asking?

25 MR. GOBLE: Yeah, I -- honestly, I can't

1 speculate on what would be -- because I don't know  
2 what different incidents could possibly be.

3 Right now, there is quite the buffer  
4 property between where the mill building is at versus  
5 where the property boundaries begins.

6 For the potential place where you would have  
7 the tailings cell leak or if there was an emission,  
8 you know, let's say from some of the processes for  
9 the mill, I can't speculate. It would have to depend  
10 on the concentrations, the extent, the duration.

11 Perhaps Gwyn can add more to that.

12 MS. GALLOWAY: There's so many variables  
13 involved. You know, the weather could be taken into  
14 account, the material that's involved.

15 MR. DUTCHIE: Yes, very -- exactly weather.

16 MS. GALLOWAY: Well, the weather, the  
17 materials, the -- the concentration of the materials,  
18 the incident itself. You know, there are some things  
19 you can pretty much stand right next to it. There's  
20 some things you have to be a little further away  
21 from.

22 It -- it's so specific to the incident that  
23 we would be best to pose some potential scenarios  
24 that could happen, perhaps, and -- and then address  
25 your issues based on those than try and speculate

1 just a general statement saying X amount. Because  
2 for some situations, you know, X would be okay. In  
3 some situations it wouldn't.

4 MR. DUTCHIE: Well, I don't know what, you  
5 know, the mill's working with. You know, they're  
6 working with all kinds of different, all the --  
7 uranium level different kind of sorts that they're  
8 bringing into the mill. You know, I don't know all  
9 of them on top of my head.

10 But, you know, you -- you said weather. You  
11 know, 75 percent of the time, the wind comes from the  
12 north south -- south. And when all that stuff --  
13 when you guys are moving the piles out there outside  
14 of the mill, sometimes it's wind blowing. Sometimes  
15 that wind carries that down to White Mesa.

16 MS. GALLOWAY: But it would probably be best  
17 for us to develop a scenario to account for those  
18 types of things and answer your -- and address your  
19 question more -- more completely --

20 MR. DUTCHIE: Yeah, that's where we're  
21 basically going is like a scenario. I mean, like the  
22 safe zone, you know, like bring back to my question,  
23 you know.

24 MS. GALLOWAY: Yes, sir. And what Phil --

25 MR. DUTCHIE: How far would that reach? The



1 whole -- basically the whole perimeter throughout --  
2 from -- from the mill outward, you know, how many  
3 miles is that? How many miles is a safe zone?

4 MS. GALLOWAY: What Phil was trying to say  
5 was what we can do is propose some scenarios, and for  
6 each of those scenarios, then state what an  
7 appropriate amount would be for -- to address your  
8 question more completely. Because if we try and  
9 address it here, we're not going to be able to  
10 address it very well. But we can address it in  
11 writing at a later date and address better  
12 scenarios --

13 MR. DUTCHIE: Please tell me --

14 MR. ANDERSON: Sir, your time has run, and  
15 it's an open-ended question. And I think that the  
16 proposal to respond and develop some scenarios will  
17 probably be the best way to address your comment.

18 MR. DUTCHIE: All right. All right.

19 MR. ANDERSON: Thank you.

20 MR. DUTCHIE: Yep, thank you guys. You  
21 know, you guys all have a good evening. May the  
22 Creator bless each and every one of you. And sure  
23 hope you guys know, you know, White Mesa we do care  
24 about our land and we do care about people, you know.

25 And can you guys please, you know, listen to

1 what, you know, I'm trying to say. You know, I'm  
2 here as a White Mesa resident, you know. Obviously  
3 you guys maybe never really seen a Ute Mountain Ute  
4 or Ute from White Mesa speak on a community's behalf.

5 MR. ANDERSON: Well, thank you. We  
6 appreciate your time.

7 MR. DUTCHIE: Thank you guys for opening  
8 your doors here and letting me speak and listen to  
9 what you guys got going on here. Thank you.

10 MR. ANDERSON: Thank you.

11 Anyone else?

12 Yes, ma am.

13 And remember, this is for public comments  
14 and not questions. So if you have a comment you'd  
15 like to make before --

16 \* \* \* \* \*

17 MS. TSO: I have several comments. My name  
18 is Sharee Tso. I'm originally from Arizona, a small  
19 community. Probably a lot bigger than White Mesa,  
20 but it's Greasewood Springs, Arizona.

21 My first comment is for Harold Roberts and  
22 Jon Luellen [Mike Zody] and Phil Goble, Tom Rushing,  
23 Russ Topham, and Gwyn Galloway. I'm really, really  
24 disappointed in you guys. Bret Reynolds --  
25 Randalls -- Randall.

1           As I sat here listening to how heartless,  
2 insensitive, and basically evil and criminal how  
3 your -- how you responded to an event of a  
4 catastrophe at the mill, how you would handle an  
5 emergency. Oh, well, call Blanding first. White  
6 Mesa community is 5 miles away, less than 10 miles.  
7 And you had the gall to say, well, we'll have to  
8 coordinate with the BIA and we'll have to coordinate  
9 that, and we'll have to think about how we're going  
10 to address an emergency.

11           And this is what my brother was trying to  
12 say. What is the safe zone? How are you going to  
13 handle an emergency?

14           My comment is if this was -- if this mill  
15 was here in Salt Lake, man, you guys would be on it.  
16 You guys would be on the TV, on the radio, you'd have  
17 sirens going on, you'd have police knocking at doors  
18 and everything.

19           But in the small community of White Mesa,  
20 you guys wouldn't even give a care. That's how  
21 heartless and criminal your corporation to get this  
22 license for a uranium mill to process uranium. I'm  
23 not stupid. And, you know, what you're doing and  
24 what you're saying up there is criminal.

25           You guys are just doing it for the money.

1 You're just doing it so you can go through the  
2 reservation. You want to go through several  
3 reservations to bring it -- bring this contaminated  
4 stuff for money, for money.

5 You can't eat money. You can put it in the  
6 bank. You can put it in the stock market, but you  
7 can't eat it. You can't drink it.

8 You're contaminating the waters there.  
9 You're contaminating the waters on the White  
10 Mountain -- White Mesa Reservation. You're going to  
11 contaminate the waters on the Navajo Reservation, on  
12 the Havasupai Reservation. And you're bringing it  
13 all over the country for money.

14 You guys are all sitting up there in suits,  
15 all nicely groomed and everything, shoes shined, you  
16 know, but who gives a care about the damn Indians?  
17 Nobody. You think we're all uneducated? I have a  
18 master's degree in education. I may not look like  
19 it. I'm not dressed in a suit or a dress or  
20 anything, but I'm smart. I can see right through  
21 you. I can see right through your heart. I can see  
22 right through your soul. I can see right through  
23 your pocketbook.

24 That's my comment. Thank you.

25 MR. ANDERSON: Thank you.

1 (Clapping from people in audience.)

2 \* \* \* \* \*

3 MS. BADBACK: Hi. My name is Yolanda  
4 Badback.

5 MR. ANDERSON: Ma'am, would you sit down.

6 MS. BADBACK: I don't want to have a seat,  
7 sir.

8 MR. ANDERSON: Okay. If you could speak  
9 into the microphone, though, just so that --

10 MS. BADBACK: My name is Yolanda Badback.

11 MR. ANDERSON: Thanks.

12 MS. BADBACK: I'm a resident of the White  
13 Mesa Ute Reservation there just 4 1/2 miles south of  
14 the mill there.

15 I don't understand why the three individuals  
16 up there are sitting on the board while they're  
17 employed with the mill. You guys tell me that. Why?  
18 Why are they sitting up there? If this is a hearing  
19 to renew the license, them three shouldn't be sitting  
20 up there.

21 MR. ANDERSON: They're here to answer  
22 questions. They're the --

23 MS. BADBACK: But, you know, as answering  
24 questions, there's eventually a lot of chairs here  
25 that they could be able to sit at, just like the rest

1 of us here.

2 MR. ANDERSON: The important thing to  
3 remember is that this is a process to consider a  
4 license. And they're the applicant for the license.

5 MS. BADBACK: I know, but, you know, sitting  
6 up there makes it look like, oh, they're with you  
7 individuals here that are sitting up there on the  
8 board. You know, that hurts. That hurts to see a  
9 person that comes from a reservation come here to  
10 Salt Lake to see you guys sitting up there and  
11 sitting there like bigshots and whatnot and listening  
12 to our complaints every time we complain and  
13 complain.

14 And you guys tell me, how many tribal  
15 members are employed at the mill as of today that you  
16 guys had promised back in the past, that the tribal  
17 reservation, Ute Mountain Ute Tribe will be the first  
18 ones to be employed at the mill. Tell me today, as  
19 of today, how many tribal members are employed at the  
20 mill?

21 As when I'm sitting back here looking at you  
22 guys and listening to everybody asking their  
23 questions and whatnot, all I see is you guys looking  
24 at each other like, okay, who's going to answer this  
25 question? Let me zip through my notes first, let me

1 read what -- what I had studied before I came here.  
2 That's the reason why you guys ask for all these  
3 questions ahead of time so you guys can study and  
4 then have the answer for the people that show up here  
5 to these hearings.

6 Use your head. Don't go and start looking  
7 at notes and saying, oh, this is how it is. You  
8 don't do that. If you guys have your degree in all  
9 these stuff, you use it from the top of your head.  
10 You don't go and study and look at the documents and  
11 having these people to have their questions or their  
12 answers or whatever to -- to be here within like  
13 what, two, three weeks ahead of time.

14 And yes, we do live off of well water too as  
15 well. And you guys did when the mill had first --  
16 had been in process. You guys have ruined our  
17 ancestors. Buried up our ancestors.

18 I don't know if you guys would like it if I  
19 came here, went to your ancest -- your ancestors and  
20 buried them up, pushed them aside and put a site  
21 there. You guys might not like it.

22 Yeah, Blanding is probably a little bit  
23 further up ahead of the mill, but we're south of the  
24 mill. I've been fighting for this since back in  
25 1980s when my uncle was fighting for this mill. I

1 took upon this thing to go forward to help my people  
2 to try to stop this.

3 I wish each and every one of you guys have a  
4 heart and go home and realize what you guys are doing  
5 to the tribal members.

6 MR. ANDERSON: Thank you.

7 Anyone else like to make a comment?

8 \* \* \* \* \*

9 MS. BRADY: I do.

10 So my name's Melisa Brady, and I am a Utah  
11 native.

12 And it's true. I can see into your hearts  
13 and into your souls, as you can see into mine. And  
14 it's very important that each and every one of you  
15 realize that we are all connected.

16 And think long and hard about the power that  
17 you have and the position that you are in making  
18 decisions. All of us count. You are on the board,  
19 and you're -- you're in the positions that you're in.  
20 I'm not going to make any judgments, but I would very  
21 much like to remind you how important it is what you  
22 do with your energy. And to think about your family,  
23 your sons, your daughters, your wives, yourself as  
24 this mine is 5 miles from your house.

25 If I understand correctly, there's no fence



1 around No. 3, Cell No. 3. Okay. So animals can get  
2 to this. We're talking about your -- what are you  
3 going to eat? Are you going to eat that? These  
4 animals, there are animals who have been opened up  
5 and they're foamy inside. They're sick because  
6 they're getting this -- this waste or this -- however  
7 you describe it. You don't call it waste. You call  
8 it another technical term to hide it. It's poison.

9           So good solution is clean energy. We all  
10 make decisions every single day. We can all improve,  
11 me included. You can smirk. You can, you know, talk  
12 later. But realize, this is you we're talking about.  
13 Yourself. And we all will stand before the Creator.  
14 And what you do matters, and it is not too late to  
15 change and to start making good decisions and to  
16 listen to your heart.

17           It's not about money. It's very serious.  
18 This is a turning point and you men and you, my dear  
19 lady, have power. We all do. And we are here to ask  
20 you to do what's right.

21           Think about your kids. Don't separate  
22 yourself and be like, oh, it's just the desert.  
23 Nothing's there. Well, there's 250 natives left. If  
24 it wasn't for them, we wouldn't be here. We would be  
25 dead. They are the ones that made it possible for us

1 to survive. The pioneers, thank you, Native  
2 Americans for bestowing upon us your wisdom so that  
3 we could survive.

4 Think about it. Seriously.

5 I made some notes here. There's no limit.  
6 I don't understand that. I don't -- I don't know who  
7 all of you are, but I know that you participate in  
8 these decisions. So intelligently thinking about  
9 this, if I understand it correctly, trucks can come  
10 and deliver waste or particles and, you know, things,  
11 chemicals, and there's no limit before it can be  
12 processed? Are you saying that stuff can just be  
13 delivered and delivered and delivered and it's just  
14 sitting there? And, you know, what if you don't  
15 identify a broken sack and there is one because it's  
16 buried, but there's no limit? Okay. Can you please  
17 change that?

18 Make sure there's a fence so that no  
19 animals, no animals -- I mean, rodents, come on,  
20 they're tiny. And then, you know, it's a food chain.  
21 I just want you to really think about it as if it  
22 were you. Put yourself in that position. I'm almost  
23 done.

24 And please, dear God, put it in the -- it's  
25 not just the cops that need to know, the city that

1 needs to know. Have some respect and let the natives  
2 know. Make a beautiful connection.

3 Thank you.

4 MR. ANDERSON: Thank you for your comment.

5 Anyone else like to make a comment?

6 \* \* \* \* \*

7 MS. WHISKERS: Well, good afternoon. My  
8 name is Thelma Whiskers, and I'm a tribal member and  
9 I live in White Mesa. And good to see you, every one  
10 of you here to talk about White Mesa Mill.

11 And I was just listening to every one of you  
12 that comment about the White Mesa Mill. And I've  
13 been fighting for this for so many years, since my  
14 brother passed away. Then from there, I kind of -- I  
15 didn't want to fight against it.

16 So someone was just telling me, come on.  
17 Take over. Take over what your brothers was doing.  
18 So here I am. Me and my family.

19 And I am a mother. I'm a single mother.  
20 And my -- my husband passed away about 40-some years,  
21 47 years ago. And I got children. I got  
22 grandchildren. I got great-great-grandkids.

23 So I've been living in White Mesa for so  
24 many years, and I care for my people who are in White  
25 Mesa, especially my grandkids, my children. I talk

1 to them for them to understand.

2 And years, years before that, we used to  
3 have a lot of herbs around by the Mesa Mill. Native  
4 tea and a herb for the -- for the coughs, when you  
5 got a coughing, stuffy nose, all that. I know all of  
6 that herbs. That's where I used to get all my herbs  
7 to get my grandkids or my children to get better.

8 And now, to these days, everything is  
9 destroyed. Everything is not there where all the  
10 herbs used to grow. Nothing. And I had to go all  
11 the way down into New Mexico or Arizona to get a herb  
12 from down there. Before the winter comes, I dry  
13 them. When my grandkids or my kids are sick or if  
14 they have a cold, I boil that herb for them.

15 And you people here are sitting up there. I  
16 wish you guys would understand because I care for my  
17 people, White Mesa. We're not that many anymore. My  
18 tribal members, there are just -- they're sick. The  
19 young people. They're young people, and they still  
20 got little kids from baby. The parents are sick.  
21 That's the reason why I'm really fighting against  
22 this mill, for not to have it close to our  
23 reservation.

24 And this water here, every one of us here,  
25 we drink this water. It is important. It's our

1 life. It goes through into our blood veins. Makes  
2 us happy. Make us feel good. But us people -- I  
3 mean, my people, we just got well water. And they  
4 say that water don't taste good. They don't -- my  
5 tribal people, they don't drink water from the White  
6 Mesa. They buy water. They go up town, and they get  
7 about two, three case of water. That's how it is  
8 now. And the water is alive for us natives. Now  
9 everybody are holding bottles of water. They drink  
10 it wherever they go.

11 I wish we would have a good, clean water and  
12 good air how it used to be. But now, huh-uh. Just  
13 because that mill is close to our reservation.

14 I feel bad. That's the reason why I'm  
15 standing here and I'm fighting against it. I tell my  
16 people, my tribe, the young ones, my grandkids, hey,  
17 come on. Stand up. Let's fight for this mill up  
18 here. We don't want it to be close to our  
19 reservation.

20 What do you people think of? Oh, shall we  
21 just leave it? Shall we let this people just run  
22 over us? Maybe there will be -- if they still -- if  
23 the mill still going, maybe we'll be only but three,  
24 four houses in the Mesa. And I don't want to see  
25 that. I want to see my grandkids grow up. I want

1 them to be healthy. I want them to know. That's why  
2 I talk to my kids, my grandkids, my  
3 great-great-grand -- I want to see them finish their  
4 school. Get the education.

5 That's where the bus goes all the way to  
6 Blanding to take our kids to go to school, for them  
7 to get their education. Maybe some of these days one  
8 of my grandkids will be sitting like this. He might  
9 go for the money. He might go, oh, I want to be  
10 rich. He might think that way.

11 But no. I don't want none of my grandkids  
12 to be sitting like this.

13 MR. ANDERSON: Thank you, ma'am.

14 MS. WHISKERS: Make a lot of money.

15 MR. ANDERSON: That concludes the time  
16 that's available. Thank you.

17 MS. WHISKERS: Yeah, thank you.

18 MR. ANDERSON: Anyone else?

19 Well, if no one else is up for a comment,  
20 then that will conclude the question-and-answer  
21 period as provided for in the rules.

22 I would remind you that the next public  
23 hearing is set on January -- or June 15th, excuse me,  
24 at 5 p.m. in Blanding. In addition, the Division  
25 will continue to receive written public comments

1 through July 31st, and they can be submitted to the  
2 Division at this address.

3 So thank you. That concludes the hearing.

4 (This hearing was concluded at  
5 5:13 p.m.)

6 \* \* \* \* \*

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REPORTER'S CERTIFICATE

STATE OF UTAH            )  
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I, EMILY A. GIBB, a Certified Shorthand  
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THAT the foregoing proceedings were taken  
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and accurate record of such testimony adduced and  
oral proceedings had, and of the whole thereof.

I have subscribed my name on this 30th  
day of June, 2017.



\_\_\_\_\_  
Emily A. Gibb, RPR, CSR, CCR



<hr/>	<b>11th</b> 15:14 35:13	<b>1996</b> 19:18,24 20:7,24
<b>\$</b>	<b>12</b> 36:17 59:6	21:13,14,22 22:17 23:12
<hr/>	<b>1200</b> 93:5	107:1,21,24 108:2
<b>\$1.7</b> 73:19	<b>1250</b> 83:25	<hr/>
<hr/>	<b>12th</b> 81:10	<b>2</b>
<b>-</b>	<b>13</b> 37:25 116:16	<b>2</b> 13:9 23:4 24:17,19
<hr/>	<b>13th</b> 59:17	25:10,23 27:13 33:6
<b>-02-0095</b> 44:15	<b>14</b> 10:18,19 40:20 60:7	53:22 54:4 57:10,24
<b>-000-</b> 4:2	<b>15</b> 10:19 38:18,24 39:3,4	72:2 73:24 81:12 85:17
<hr/>	41:7 60:14 93:15	86:6,10 90:4 122:1,3,8,
<b>0</b>	<b>15--</b> 10:18	11 123:5,6,9,14,16,20
<hr/>	<b>15th</b> 7:21 13:14 42:2	133:4 136:25
<b>0.5</b> 122:18	165:23	<b>2,000</b> 83:23
<hr/>	<b>16</b> 43:18 111:24	<b>2.1</b> 104:7
<b>1</b>	<b>16.2</b> 33:6	<b>2.6</b> 52:5
<hr/>	<b>16th</b> 61:14	<b>20</b> 39:3,4 54:9 56:7
<b>1</b> 10:9 25:11 26:8,12	<b>17</b> 10:19 30:6 45:12	66:25 122:25
33:2,9 58:9,13,15 59:2	62:13	<b>20.82</b> 73:20
68:10 72:2 73:4 77:8	<b>18</b> 10:19 64:5	<b>200</b> 67:12
82:11 84:11 89:24 90:1	<b>180</b> 50:2 104:4	<b>2004</b> 104:19
123:4 146:11	<b>19</b> 10:16,19 65:22	<b>2005</b> 74:19,23
<b>1.4</b> 74:16	<b>19-3</b> 10:20	<b>2006</b> 111:23
<b>1/2</b> 156:13	<b>191</b> 83:21 102:23 130:2	<b>2007</b> 33:6 51:12,14
<b>10</b> 17:19 22:4 27:8,9	<b>192</b> 121:7 127:15	62:21
38:17,24 53:3,14 54:8	<b>1964</b> 12:6,12	<b>2008</b> 62:25 86:11
55:15 123:9,25 154:6	<b>1979</b> 49:7 114:21	<b>2009</b> 96:22 100:13
<b>10.21</b> 35:19	<b>1980s</b> 113:15 114:1	<b>2010</b> 33:6
<b>10.5</b> 118:9	158:25	<b>2011</b> 31:17 65:1 73:9
<b>10.8</b> 144:20	<b>1981</b> 116:16	105:24 106:17,19
<b>100</b> 48:23 49:13	<b>1988</b> 115:4,7 116:13	<b>2011-5231</b> 51:21
<b>11</b> 58:7 132:10 133:5	<b>1992</b> 127:5	<b>2012</b> 51:20 52:24 74:19,
<b>11.9</b> 53:4	<b>1995</b> 127:5	23
<b>1100</b> 67:9		<b>2014</b> 53:3,14 123:19
<b>11e.(2)</b> 4:13 27:10,11		<b>2015</b> 51:12
44:10,16,23 59:1 87:7		
88:9 101:11 124:15,18,		
19,21,24 125:14 128:2		
139:8 141:19,21,24,25		

<b>2016</b> 31:12,22 81:10 96:22 111:19	<b>30</b> 76:17	<b>45</b> 90:25
<b>2017</b> 7:23 8:2 15:14 105:3	<b>300</b> 131:18	<b>46</b> 92:7
<b>2018</b> 35:16 36:23	<b>31</b> 8:2 76:23	<b>47</b> 94:11 162:21
<b>2021(3)(C)</b> 104:13	<b>31st</b> 7:23	<b>48</b> 96:19
<b>207</b> 52:13	<b>32</b> 77:13,23	<b>485,000</b> 74:10
<b>21</b> 67:24	<b>33</b> 77:24 131:7,17	<b>49</b> 98:10
<b>22</b> 10:19 69:2 105:3 131:7,17	<b>34</b> 79:15	<b>491</b> 130:1
<b>22.58</b> 73:20	<b>35</b> 80:3	<b>4A</b> 39:17 58:7 82:25 87:6,21 88:5,23 89:24 90:7,10,12,18,22 107:2 132:12,15,19,23 133:4 135:19 136:25
<b>222</b> 53:11,12	<b>35(3)(h)</b> 41:11	<b>4B</b> 39:17 58:8 59:15 82:25 87:7,25 88:3,6 89:25 90:1,18,22 92:17 93:21 107:2 117:3 132:15
<b>23</b> 69:18	<b>36</b> 81:6	
<b>232</b> 53:11	<b>37</b> 48:5 81:11	
<b>24</b> 10:19 70:13	<b>38</b> 81:24 138:19 139:2	
<b>25</b> 40:21 41:6,19 71:3	<b>39</b> 83:7	
<b>250</b> 160:23	<b>390</b> 52:13	
<b>26</b> 73:1	<b>3rd</b> 123:12	
<b>262</b> 129:19,22 130:1		<hr/> <b>5</b> <hr/>
<b>27</b> 73:10,17	<hr/> <b>4</b> <hr/>	<b>5</b> 6:1,5 7:21 10:16 25:6 54:6 131:6 146:11 154:6 159:24 165:24
<b>28</b> 74:5 132:10	<b>4</b> 14:2 35:16 110:14 156:13	<b>5,000</b> 49:15 50:2 104:2
<b>29</b> 75:22 111:19,23	<b>4(d)</b> 17:20	<b>5.1</b> 17:12 18:11 30:5 38:5 107:8
<hr/> <b>3</b> <hr/>	<b>4.1</b> 74:16 110:15	<b>50</b> 98:22 131:24 132:1
<b>3</b> 13:22 39:17 41:12,18 49:3 55:10 56:10,23 58:2 72:2 73:10 83:2,3 84:13 87:8,18 88:6,16, 19,22 89:5,7,14 90:7,9, 14,15,17 119:23 122:22 123:2,3 132:11,14,21,24 133:4,5 135:19 137:1 160:1	<b>4.1.4</b> 111:15	<b>500</b> 132:1
<b>3.2B</b> 107:6	<b>4.2</b> 130:25	<b>51</b> 100:14
	<b>4.5</b> 13:12	<b>52</b> 100:25
	<b>40</b> 17:19 22:4 27:8,9 54:8 85:3,16 87:4 123:9, 25 127:15	<b>530-R-04-030</b> 101:5
	<b>40-some</b> 162:20	<b>555</b> 131:17
	<b>41</b> 86:13,16	<b>56</b> 52:11
	<b>42</b> 87:1 104:12	<b>57,000</b> 74:12
	<b>43</b> 89:14	

<u>6</u>	<u>9</u>	
<b>6</b> 14:18 27:13 52:21 54:8 97:7 123:10 124:1	<b>9</b> 16:14 55:15 58:5 97:8	<b>accurately</b> 120:13
<b>6.10</b> 142:12	<b>9.5</b> 35:15	<b>achieved</b> 18:24
<b>6.10.7</b> 144:14	<b>9.7</b> 113:13,14 115:16	<b>acidity</b> 100:17
<b>6.2</b> 127:13	<u>A</u>	<b>acknowledge</b> 14:19
<b>6.5</b> 129:16	<b>Aaron</b> 17:4 46:18	<b>acronyms</b> 78:20
<b>6.6</b> 52:5	<b>abandoned</b> 83:11 84:14	<b>act</b> 5:1 10:15,20 12:5,12 13:4 15:8 87:5 101:9 104:22 105:12 127:8,17 128:13,21,24 129:3,5,8
<b>6.7</b> 137:20	<b>abbreviation</b> 36:14	<b>acting</b> 86:17
<b>6.8</b> 141:5	<b>ability</b> 54:22,24 131:22	<b>action</b> 4:17 10:5 12:22, 25 15:6,16,18 52:12,16 59:18,20,22,23 60:1,7 61:17 64:16 66:9 87:13 96:10,14 101:7 105:9,20 106:18 110:25
<b>6.9</b> 141:15	<b>Absolutely</b> 12:23	<b>actions</b> 4:8,11 5:3,14 60:10 81:19 101:2,6 110:20,22 145:9
<b>61</b> 87:4	<b>absorbed</b> 99:16	<b>active</b> 56:24 77:10 81:22
<b>68</b> 131:3	<b>absorption</b> 98:23 99:15, 25 100:18	<b>activities</b> 69:9 70:21 91:13,22 94:8 97:24 116:24
<u>7</u>	<b>accept</b> 7:22 146:12	<b>actual</b> 47:25 56:23 75:13 135:25
<b>7</b> 14:23 38:17,24 53:21 81:17	<b>acceptability</b> 139:5	<b>add</b> 18:3 51:3 150:11
<b>70</b> 10:19	<b>acceptable</b> 60:24 80:19 143:6,12,22	<b>added</b> 37:13 53:3 107:3
<b>7028</b> 18:8	<b>accepted</b> 50:25 94:22 139:23	<b>addition</b> 7:2,22 67:16 79:2 96:10,13,14 98:6 106:5,15 107:18 112:7 165:24
<b>75</b> 151:11	<b>accepting</b> 81:12	<b>additional</b> 19:2 23:9 39:4 53:8 54:23 57:21 59:7,10,12 68:19 69:15 73:15 146:10,13
<b>79</b> 52:11	<b>access</b> 35:7 103:2	<b>address</b> 56:16 121:18, 21 126:3 150:24 151:18
<u>8</u>	<b>accommodations</b> 130:7	
<b>8</b> 15:10 55:15 58:5	<b>accomplished</b> 38:8	
<b>80</b> 50:1 104:4	<b>accordance</b> 27:12 74:15 83:13 84:22 123:9 130:3,14	
<b>800</b> 132:1	<b>account</b> 33:15,23 34:9, 15 38:5,14 51:6 100:18 150:14 151:17	
<b>83</b> 114:22	<b>accountable</b> 20:19 23:7	
<b>835</b> 131:17	<b>accurate</b> 115:6 117:7	
<b>87,800</b> 74:11		

152:7,9,10,11,17 154:10  
**addressed** 52:2  
**addresses** 55:14  
**addressing** 76:25  
 149:13  
**adequate** 82:23  
**adequately** 18:21  
**adjacent** 14:21  
**adjusted** 38:11  
**adjustments** 20:9  
**administrative** 5:6,7  
 6:20 66:14 126:5  
**adopted** 5:4 41:8 126:5,  
 15  
**advance** 5:25 7:11  
**adversely** 65:25 67:3  
**advisement** 148:24  
**affect** 32:1,2,5 119:25  
**affected** 32:10  
**affecting** 65:25 67:3  
**afternoon** 4:12 5:19 6:1  
 9:23 162:7  
**afternoon's** 4:6  
**agencies** 79:5  
**agency** 11:17 14:25  
 16:1,9  
**agenda** 10:4  
**agree** 126:8  
**agreement** 5:2 11:6  
 19:21 20:5,11,15,16  
 22:1,17 23:3,6,22 24:4,  
 9,11 25:3 65:7 104:21,  
 23 107:14 126:16  
**agreements** 23:7 115:1  
**ahead** 47:7 58:6 87:15  
 92:25 93:1 105:4 126:25  
 158:3,13,23  
**aiding** 58:20 95:11  
**air** 14:2 48:14 53:8,12  
 83:20 87:5 164:12  
**alarm** 148:16  
**alive** 164:8  
**allowed** 5:12 15:17  
 27:21 50:9 75:24 76:3  
 87:6 141:23  
**alluded** 83:6  
**altered** 65:13  
**alternate** 23:20 34:14  
 50:24 51:6 125:2,6  
 126:18 127:4,7,24 128:1  
 131:21 133:3,7,8,18,24  
 134:15,21,24 135:1  
 136:13 137:3,11,13,23  
 138:1,13 139:7,16,22  
 140:19,20 141:8,22  
 142:8,16,18,25 143:12  
 144:18 145:15,23  
**alternately** 98:18  
**alternative** 4:18 50:16  
 74:8 75:25 141:16,19  
**alternatives** 142:3  
**amended** 62:4  
**amendment** 31:25  
 43:19,24 44:4 74:15  
 124:12 126:17 130:25  
 133:13 134:10 142:15,  
 22  
**amendments** 142:17  
**America** 13:3  
**American** 41:1  
**Americans** 161:2  
**amount** 26:23 39:13  
 40:1 43:7 46:3 56:4  
 57:18 61:16 71:10,14,24  
 73:18 75:23 131:9,24  
 137:21 138:11 141:5,6,  
 10,12 151:1 152:7  
**amounts** 32:8 135:17  
 141:9  
**analyses** 76:8  
**analysis** 21:17 99:11,12  
 104:9,12,24 105:6,13  
 106:22 112:17 113:1,5  
 132:2 134:23 140:2  
 143:25 144:5  
**analytical** 49:10  
**analyzed** 99:8  
**ancest** 158:19  
**ancestors** 158:17,19  
**and/or** 136:14  
**Anderson** 4:4,5 8:7 9:15  
 13:20 16:23 17:9 46:19,  
 23 47:10 85:8,11,13  
 87:15 102:14 126:4  
 146:8 147:22 148:19  
 152:14,19 153:5,10  
 155:25 156:5,8,11,21  
 157:2 159:6 162:4  
 165:13,15,18  
**Angel** 9:19,21,23,24  
 10:21,24 11:5,9,15,24  
 12:2,10,16,23 13:1,8,13,  
 21 14:1,8,11,15,18,23  
 15:7,22 16:9,13,20,23  
**animals** 160:1,4 161:19  
**announced** 13:15  
**annual** 33:5 35:16 57:13  
 71:5 107:18 138:18,21,

23	<b>applies</b> 13:5 15:8 44:4 55:14	<b>areas</b> 26:22 52:4,17 66:6 93:19,22 94:9
<b>annually</b> 36:22 62:9 71:15	<b>apply</b> 10:10 12:24 44:24 45:16 46:1 125:13,18 127:20,24 128:4	<b>argument</b> 126:23
<b>anomalies</b> 68:11,18 69:12	<b>applying</b> 45:20	<b>argumentative</b> 13:19
<b>anomalous</b> 70:25	<b>approach</b> 85:17	<b>arid</b> 18:1
<b>anomaly</b> 68:6 69:7 70:19	<b>appropriately</b> 107:13	<b>Arizona</b> 34:13 109:17 129:18 153:18,20 163:11
<b>answering</b> 5:18 104:16 156:23	<b>approval</b> 20:17 107:23	<b>armor</b> 19:23 21:6 85:23
<b>answers</b> 8:6 108:12 158:12	<b>approve</b> 59:7,9 115:21	<b>arranged</b> 80:25
<b>anticipate</b> 32:10 57:25	<b>approved</b> 19:24,25 20:14 21:8 22:23 23:12, 14 24:23 37:7 50:16,17 53:13 59:14 85:23 89:21 107:1 125:2 133:18,23 134:4 136:14,20,21 137:7,16	<b>arrangements</b> 80:24
<b>anticipated</b> 7:18	<b>approximately</b> 67:9 68:9 83:23,25 93:5,15 95:19 100:11 131:6	<b>arrived</b> 142:19
<b>anymore</b> 163:17	<b>April</b> 15:14 116:16	<b>artisan</b> 84:3
<b>apologize</b> 32:22 49:18 140:9 141:1	<b>aquifer</b> 66:1,12 67:4,6,8, 9,14,15 69:22 83:9 84:2, 4,20 85:1 92:15,19 94:15 95:7,8 96:3 99:6	<b>asks</b> 33:1
<b>apparently</b> 112:19 132:15 144:17	<b>aquifers</b> 67:22	<b>aspects</b> 91:19
<b>appeal</b> 126:12	<b>archaeological</b> 14:20 115:4	<b>asphalt</b> 137:9
<b>appearances</b> 8:4	<b>archaeologist</b> 115:17 117:1	<b>assembled</b> 61:24
<b>appeared</b> 70:3	<b>archeological</b> 115:8	<b>assess</b> 48:9 81:18 98:23
<b>appears</b> 37:1 54:11 97:10 122:18	<b>area</b> 25:11 26:8 52:18 58:16 65:14 82:7 91:5, 15 92:16 93:11,20,25 94:1,2,4 96:17 103:1 107:15 112:24 115:9 121:11 148:18 149:22	<b>assessed</b> 50:12
<b>Appendix</b> 17:19 22:6 25:21 27:8,9 28:2,4 30:5,15 54:8 123:9 124:1		<b>assesses</b> 48:3
<b>applicable</b> 10:25 11:11 12:13 23:13,21 24:2 52:3 76:10 101:12,13,22 127:7 130:14 144:2		<b>assessing</b> 23:9 100:18
<b>applicant</b> 144:1 157:4		<b>assessment</b> 17:13 48:3 101:3 105:10,14,16 106:12 107:18 115:17 116:25
<b>application</b> 23:18 59:12 75:6,19 130:25		<b>assessments</b> 97:15 98:15
<b>applied</b> 12:18 23:16 104:19		<b>assist</b> 63:13
		<b>assume</b> 26:7 131:23 132:3,4,13
		<b>assumed</b> 74:10
		<b>assuming</b> 29:14 109:5 110:3
		<b>assumption</b> 38:23,25

44:18 139:8		
<b>assumptions</b> 71:10		
<b>assure</b> 145:12		
<b>assured</b> 61:12		
<b>atmosphere</b> 53:24 55:12 58:11		
<b>Atomic</b> 5:1 104:22 105:11 127:7,17 128:13, 21,24 129:3,5,8		
<b>attached</b> 14:24		
<b>attachment</b> 38:4 40:9		
<b>attend</b> 147:4		
<b>attention</b> 10:7		
<b>attorney</b> 8:8,10 9:7 16:4 17:5 105:2		
<b>audience</b> 146:13,15 156:1		
<b>authorities</b> 77:20 80:12		
<b>authority</b> 127:10		
<b>authorization</b> 115:24		
<b>authorized</b> 90:3		
<b>automatic</b> 20:6,17		
<b>avail</b> 113:21		
<b>availability</b> 47:17		
<b>average</b> 49:20 67:11 104:3 120:17		
<b>averaged</b> 50:1		
<b>avoid</b> 27:14		
<b>aware</b> 12:4 30:19 75:20 99:1 114:25 120:9 121:11 128:8		
	<b>B</b>	
	<b>baby</b> 163:20	
	<b>back</b> 22:5 31:17 58:21 59:24 60:25 96:24 105:23 106:8,16 107:1, 10 113:25 136:5 151:22 157:16,21 158:24	
	<b>background</b> 52:7 63:10, 12 64:15	
	<b>backgrounds</b> 52:6	
	<b>backup</b> 38:4 72:22	
	<b>bad</b> 164:14	
	<b>Badback</b> 156:3,4,6,10, 12,23 157:5	
	<b>balance</b> 71:6,8	
	<b>bangers</b> 82:19	
	<b>bank</b> 155:6	
	<b>barium-radium</b> 110:17	
	<b>barrier</b> 24:19 29:24 30:17,18 54:3 56:11,12 57:18,23 73:24	
	<b>barriers</b> 54:19 82:4	
	<b>base</b> 57:11	
	<b>based</b> 10:22 34:11,12 44:11 50:7 61:24 64:18 68:17 73:14 75:5 96:12 98:16 99:10,12 100:4 111:19 116:9 139:7 147:22 150:25	
	<b>basically</b> 11:7 19:6 20:6 28:3 29:15 41:19 43:8, 25 46:10 49:21 56:20 59:23 80:18 86:21 107:3 115:20,21,22 116:6 121:22 140:8 149:4 151:21 152:1 154:2	
		<b>basin</b> 58:18 67:12,18,19 84:2,25
		<b>basins</b> 75:3
		<b>basis</b> 5:8 24:21 62:17 64:18 70:17 71:8 92:19, 21 93:8 95:16 106:12 112:6 120:6 121:23 122:9 134:12 138:18,23 149:5
		<b>beach</b> 90:10
		<b>beautiful</b> 162:2
		<b>bedrock</b> 99:8
		<b>began</b> 15:21 23:5 31:16 94:9
		<b>Begay</b> 16:5
		<b>begin</b> 53:10 58:2
		<b>Beginning</b> 40:23 54:2
		<b>begins</b> 42:8 62:8 150:5
		<b>behalf</b> 9:24 10:2 86:24 153:4
		<b>Behle</b> 9:7
		<b>beneath</b> 46:8 65:25 67:3,13 69:20
		<b>beneficial</b> 57:22 58:3 66:19
		<b>benefit</b> 42:20 43:15 85:24
		<b>benefits</b> 82:8
		<b>bentonitic</b> 67:13
		<b>bestowing</b> 161:2
		<b>beta</b> 32:17
		<b>Bevell</b> 43:24 44:4
		<b>BHV-6</b> 83:21
		<b>BIA</b> 80:20 154:8

**big** 131:18  
**bigger** 153:19  
**bigshots** 157:11  
**Biobarrier** 30:23  
**biointrusion** 19:11,13  
 29:24 30:4,9,10  
**birds** 82:2  
**bit** 4:21 19:8 25:20 87:2  
 158:22  
**Blanding** 4:15 7:21,25  
 13:15 62:22 80:18 96:1  
 112:22 147:1,5 154:5  
 158:22 165:6,24  
**bless** 152:22  
**blood** 164:1  
**blowing** 151:14  
**blurry** 141:1  
**board** 5:4 62:14 125:23  
 126:6 156:16 157:8  
 159:18  
**boards** 137:9  
**body** 33:5 82:12  
**boil** 163:14  
**bonds** 62:9  
**bottles** 164:9  
**bottom** 42:13 43:16  
 56:20 71:18  
**bound** 137:10  
**boundaries** 150:5  
**boundary** 13:22,25 14:4,  
 9,13,21 48:20 49:12  
 50:6 66:11 83:18,20  
 103:25  
**bounding** 75:10 137:13

**Bradley** 9:19,24  
**Brady** 159:9,10  
**break** 6:13,14 19:5,8  
 28:15,18,22,25 29:6,11,  
 18 46:19 79:13 85:6,8,9  
**breakdown** 144:11  
**Bret** 8:9 149:8 153:24  
**bring** 151:22 155:3  
**bringing** 87:9 151:8  
 155:12  
**broad** 98:25 131:19  
**broader** 132:5  
**broken** 161:15  
**brother** 154:11 162:14  
**brothers** 162:17  
**Brushy** 67:12,18,19  
 84:2,25  
**buffer** 150:3  
**building** 83:19 150:4  
**built** 22:18 46:19 84:22  
**bunch** 106:9  
**buried** 158:17,20 161:16  
**Burro** 67:8 94:15 98:24  
 99:6,17 100:19  
**bus** 165:5  
**buses** 78:7  
**buy** 164:6  
**byproduct** 4:13,19 27:5,  
 10,15,22 59:2 88:10  
 124:15,18,19,22,24  
 125:15 127:16 134:3  
 139:8 141:20,21,24,25

---

**C**


---

**calcite** 99:6  
**calculate** 71:8  
**calculated** 39:13 71:6  
 72:3  
**calculating** 61:16  
**calculation** 71:9  
**calculations** 50:7 51:11,  
 13  
**calendar** 48:23 49:14,16  
 86:2,5  
**call** 79:2 80:16,20  
 137:23 138:6 148:4  
 154:5 160:7  
**called** 30:22 43:24  
**calls** 11:14 45:6 58:14  
 60:16 87:11 125:21  
 128:16 129:9 134:18  
**Cameco** 110:14 111:24  
 112:3  
**cannons** 82:16,19  
**Canyon** 6:10,11 17:1,5  
 67:8 94:15 98:24 99:6,  
 17 100:19 109:2,11  
**cap** 56:22 60:1 61:2 65:2  
**capacity** 89:7,9,11 98:24  
 100:19 131:8,9  
**capillary** 19:5,8 28:15,  
 18,22,25 29:6,11,18  
**capped** 53:22 55:10  
 58:10  
**CAPS** 64:16  
**capturing** 72:9  
**care** 40:2 106:23 121:23

152:23,24 154:20  
 155:16 162:24 163:16  
**carefully** 22:1  
**carries** 151:15  
**carry** 24:9  
**case** 18:3 30:1 34:15  
 44:22 98:8,18 125:22  
 126:13,14,15,17 134:11  
 164:7  
**case-by-case** 121:22  
 149:5  
**cased** 83:24  
**cases** 126:21  
**casing** 84:1,14  
**cataloging** 89:22  
**catastrophe** 154:4  
**catch** 6:2  
**catchment** 58:18  
**caused** 66:6 73:6  
**causing** 95:3 144:23  
**cease** 109:5  
**ceased** 109:6 110:3  
**ceases** 122:22  
**cell** 23:4 24:17,19 25:10,  
 23 42:8 43:2 46:15  
 53:22 54:4,11,14 55:10,  
 21 56:1,3,6,10,17,20,23,  
 24,25 57:8,10,24 58:2,9,  
 13,15 59:2,15 71:20  
 73:4,24 77:8 81:12,22  
 82:11,25 83:2,3 84:11  
 85:17,19 86:6,10 87:6,8,  
 18,25 88:3,5,6,16,19,21,  
 22,23 89:5,7,14,24 90:1,  
 4,10,12,14,15,17,18,22  
 92:17 93:21 117:3  
 119:23 120:1 122:1,3,8,  
 11,22 123:2,3,4,5,6,9,  
 14,16,20 132:11,12,14,  
 15,21,23,24 135:19  
 137:1 141:22 150:7  
 160:1  
**cells** 27:12 39:17 42:7  
 47:20 55:14,23 58:7,22  
 59:7,10,13 61:3 63:1,4  
 65:3,5 66:3 68:9,25  
 69:10 71:19,25 72:2,6,  
 11,15,17,19,20 77:11  
 82:24 88:14 89:1,23  
 90:7 92:9 94:7 96:23  
 98:8,20 100:8 107:2  
 128:2 133:4 136:25  
 141:13  
**cells'** 76:18  
**cement** 137:8  
**Center** 78:22 79:3,8,9  
**centers** 89:18  
**cetera** 49:24  
**CFR** 17:19 22:4 27:8,9  
 54:8 87:4 123:9,25  
 127:15  
**chain** 161:20  
**chairs** 156:24  
**CHAN** 126:22  
**chance** 32:22 55:1  
**change** 37:21 111:18  
 160:15 161:17  
**changed** 36:4 63:20  
**changing** 63:24 69:21  
**Chapter** 10:16  
**characteristic** 74:21  
**characteristics** 70:25  
 133:22 134:2  
**characterization** 62:7  
 75:8  
**characterized** 37:10  
 100:21  
**charged** 73:12  
**check** 75:16  
**checked** 123:18  
**chemicals** 130:17  
 161:11  
**chemistry** 70:16  
**children** 162:21,25  
 163:7  
**chloride** 66:8 96:21  
 97:1,12,13,14,16 98:14  
 99:12  
**chloroform** 65:2,7 66:7  
**choice** 45:3  
**choose** 119:20  
**circuit** 109:7  
**circumstances** 45:15,18  
 59:9  
**cited** 22:5 41:24 104:20  
**city** 80:17 161:25  
**Civil** 12:5,11 13:4 15:7  
**clapping** 156:1  
**clarification** 58:12 86:3  
 147:11  
**clarified** 136:18  
**clarifiers** 75:3  
**clarify** 35:22 89:6  
**clarifying** 12:17,19  
**clarity** 136:21  
**class** 66:13



<b>classes</b> 66:19	6,16 60:6,13 61:11,14	<b>commence</b> 55:17
<b>clause</b> 35:25 36:15	62:12 63:20 64:4 65:6,	<b>commenced</b> 109:4
<b>clauses</b> 36:13	15,21 66:20,24 67:23	<b>commencement</b> 116:23
<b>clay</b> 67:13	68:21 69:1,17 70:12	<b>commences</b> 110:25
<b>clean</b> 87:5 121:5 160:9	71:1,12 72:1,16,23 73:1,	115:14
164:11	16 74:4 75:11,21 76:16,	<b>comment</b> 7:20,24 15:20
<b>cleaned</b> 46:14 60:21	22 77:12,23 78:15 79:7,	16:16 34:20 81:21
66:8 77:10	13,15 80:1,15,19 81:4,	105:22 106:9,16,17,25
<b>cleanup</b> 59:21 60:12,24	11,23 82:11,15,21 83:2,	107:23 108:11 127:12
62:8,10,11 101:6 121:8,	5 84:5,16 85:2,15 86:6,	135:21 136:3 146:16,24
12,14,17	12,23 87:1,16 88:8,15,	147:12,24 148:23
<b>cleanups</b> 128:3	24 89:13,20 90:16,25	149:10 152:17 153:14,
<b>clear</b> 6:22 7:8 20:13 37:2	91:10,25 92:6,24 93:3,	21 154:14 155:24 159:7
38:21	12,16 94:3,11 95:12,19	162:4,5,12 165:19
<b>clerical</b> 35:25	96:18 98:1,9,21 99:16	<b>commenter</b> 102:14
<b>climate</b> 21:19	100:9,14,24 101:13,19	<b>comments</b> 7:19,23 8:1
<b>climatic</b> 17:25	102:9	28:23 102:7 103:14
<b>Clive</b> 141:20	<b>Clow's</b> 103:14	106:1,6 117:7,9 145:2,3
<b>close</b> 13:22 39:1 70:23	<b>CO2</b> 82:16	146:12,19,23 147:7,20,
72:14 82:10 84:12 85:23	<b>code</b> 5:6,7 66:14,20	21 153:13,17 165:25
88:6 89:5 108:22 163:22	<b>codified</b> 104:24	<b>commission</b> 19:25
164:13,18	<b>coefficients</b> 98:10	44:15 78:16,23 79:3
<b>closed</b> 56:18 57:1 58:24	<b>cold</b> 163:14	<b>commission's</b> 44:20
86:10 90:4	<b>Colin</b> 16:4	<b>commodities</b> 47:19
<b>closer</b> 69:9 87:9	<b>collapse</b> 84:15	<b>common</b> 128:25
<b>closest</b> 13:9,17 68:10	<b>collect</b> 31:18	<b>commonly</b> 43:24
<b>closing</b> 39:23	<b>collected</b> 24:5 52:17	<b>communication</b> 67:16,
<b>closure</b> 20:2 35:19 36:9	69:14 74:14,19	22 77:14
42:8 47:25 52:2 54:13	<b>collecting</b> 23:8 124:5	<b>communities</b> 10:3 48:4
55:16 77:3 81:12 85:18	<b>collection</b> 21:17	49:6 50:14 78:4,8 80:5
87:10 89:2 121:10,13	<b>Colorado</b> 34:14	<b>community</b> 10:3 13:9,
123:4	<b>column</b> 33:20 133:6	12,16,17 15:12 16:2
<b>Clow</b> 16:4 46:25 47:3,11	135:9 136:4,7,11,19	64:9 77:14 78:4,13 80:5
48:1 49:2 50:10 51:9,16	<b>columns</b> 33:12,13,16	103:11 153:19 154:6,19
52:20 53:20 55:8 56:9	<b>combination</b> 30:2	<b>community's</b> 153:4
57:9,16 58:4,23 59:1,4,	<b>combined</b> 97:19	<b>compacted</b> 30:3

<b>compaction</b> 61:1	<b>computer</b> 102:20	<b>confirm</b> 11:17 54:12 64:6 67:25 70:15 92:18
<b>company</b> 9:14 19:17 24:8 25:2 28:11,13 37:25 39:19 40:5,12 60:11 103:5	<b>concentration</b> 133:6 135:5 136:7 143:23 150:17	<b>confirmed</b> 63:6,8 70:20 73:11 91:12 92:3 95:2,3 126:18
<b>company's</b> 39:22	<b>concentrations</b> 63:9,12, 14 69:13,16 75:5 76:4,5 96:22 97:4,6 98:6,20 100:8 134:24 135:1 136:12,16,24 137:17 143:17,22 150:10	<b>confused</b> 35:21
<b>comparative</b> 136:17	<b>concern</b> 18:19 19:9 24:7 149:13	<b>confusion</b> 21:12
<b>compared</b> 131:10	<b>concerned</b> 13:16	<b>connected</b> 85:22 92:18 159:15
<b>comparing</b> 97:7	<b>concerns</b> 15:18 17:14, 16 144:10	<b>connection</b> 67:6 80:6 105:9 143:23 162:2
<b>comparison</b> 70:8 135:8	<b>conclude</b> 6:1 165:20	<b>consent</b> 19:21 20:4,11, 16 22:1,17 23:3,6,22 24:3,9,11 25:3 65:6 66:9 107:14,19
<b>compile</b> 31:19	<b>concluded</b> 25:1 68:15 75:8	<b>Conservation</b> 101:8
<b>complain</b> 157:12,13	<b>concludes</b> 146:8 165:15	<b>conservative</b> 99:22
<b>complaints</b> 157:12	<b>conclusion</b> 11:14 43:22 44:6 87:12 125:21 129:10	<b>conservatively</b> 132:3
<b>complete</b> 10:21,24 36:15 38:1,17 54:4,25 55:1 61:21 62:11 86:1 115:6 116:2	<b>conclusions</b> 63:18 64:1 139:5	<b>consideration</b> 11:19 118:12 137:6 149:10
<b>completed</b> 36:2 48:9 62:19 103:16 116:10	<b>condition</b> 35:14,15,19 53:4 96:15 113:13,14 115:16 116:15 117:6 118:8 125:1 144:20	<b>considerations</b> 130:24
<b>completely</b> 24:19 62:7 87:8 151:19 152:8	<b>conditions</b> 17:25 20:5 46:12 59:8 63:20,22,23	<b>considered</b> 10:25 11:11 88:12 96:23 125:2 133:2 136:19 137:3,18
<b>completion</b> 74:2	<b>conduct</b> 111:22	<b>consolidate</b> 57:5
<b>compliance</b> 64:14 70:22 122:25 139:2	<b>conducted</b> 15:11 16:1 29:1 48:3,8 66:16 67:19 76:9 91:4 92:14 93:19 99:2,3 103:9,15	<b>consolidating</b> 57:7
<b>complicated</b> 99:24	<b>conducting</b> 96:6,7	<b>consolidation</b> 57:20
<b>complication</b> 97:12	<b>confidence</b> 74:5	<b>constantly</b> 43:12
<b>complies</b> 101:17		<b>constituent</b> 69:4 137:22 138:12 141:14
<b>comply</b> 101:3,14,16		<b>constituents</b> 10:2 68:1 117:21 132:19 133:11 135:18 136:8 138:20,25 139:2,11,16 140:1 141:7,11 142:12
<b>comported</b> 41:23		<b>constitution</b> 13:7
<b>composite</b> 74:18		
<b>compound</b> 7:3 134:17		
<b>comprehensive</b> 137:7		
<b>compressing</b> 54:24		
<b>compromised</b> 55:2		

<b>constraints</b> 45:11	<b>contention</b> 11:10	<b>corporation</b> 154:21
<b>constructed</b> 83:13 107:3 117:2	<b>context</b> 20:23 135:3	<b>correct</b> 12:13 13:24 18:22 24:16 29:20 42:9 58:25 89:19 123:21 147:18
<b>constructing</b> 18:9	<b>contingency</b> 40:21,22 41:20	<b>corrective</b> 59:17,20,22 60:1,7,9 61:17 64:16 66:9 81:19 96:10,14 101:6,7
<b>construction</b> 54:15 55:4 56:21 59:9 92:16 115:14 117:3 122:11	<b>continual</b> 120:11	<b>correctly</b> 18:18 20:5,12 24:15 26:6 29:4 30:15 41:19 42:5 44:18 159:25 161:9
<b>consultant</b> 9:14 43:21	<b>continually</b> 57:6 63:24 69:21 96:11 120:8,10	<b>cost</b> 37:6 38:3 40:7 61:24
<b>consulted</b> 40:25	<b>continue</b> 49:7 59:19,21 60:8,10,11 85:14 109:10 110:7 122:2,6,9 165:25	<b>costs</b> 35:17 36:19 37:7 38:10,12 40:11,14 61:15 62:4
<b>contact</b> 16:3,18 120:16	<b>continued</b> 62:18	<b>Cottonwood</b> 92:18
<b>contained</b> 7:4 57:13,15 61:4	<b>continues</b> 65:9 66:12	<b>coughing</b> 163:5
<b>container</b> 117:17	<b>contour</b> 64:19	<b>coughs</b> 163:4
<b>containers</b> 117:17,20	<b>contouring</b> 56:15	<b>counsel</b> 8:11 9:8,10
<b>containment</b> 77:5	<b>contours</b> 77:8	<b>count</b> 88:13 159:18
<b>contaminant</b> 28:12,17, 24 36:13 60:3 99:4,20 100:23	<b>contractor</b> 5:17 9:1 86:18,22	<b>Countermeasures</b> 81:7
<b>contaminants</b> 14:12 59:24 61:3 62:1 84:20 93:6	<b>contribute</b> 34:7	<b>country</b> 155:13
<b>contaminate</b> 46:7 155:11	<b>control</b> 4:10 5:4 8:15 10:18,20 27:18 79:20 89:25 90:2 106:4 114:8	<b>County</b> 4:15 80:15,17 103:6
<b>contaminated</b> 27:17 46:13 60:19,21 77:8 81:14,20 155:3	<b>controlling</b> 79:23	<b>couple</b> 6:21 14:24 61:7 70:1
<b>contaminating</b> 155:8,9	<b>controls</b> 81:7 117:13	<b>court</b> 4:20 6:19,24 79:14 86:3
<b>contamination</b> 35:18 45:22 59:25 64:2 66:5,7, 10 68:13 70:24 84:4 101:4 121:7,11	<b>conventional</b> 47:17	<b>cover</b> 17:15,21,22,24 18:1,14,20 19:4,18,19, 23,24,25 20:7,9,10,25 21:1,13,14,15,22 22:7, 14,17,23 23:12,17,20,24 24:1,24 25:9,16,18,23
<b>contemplated</b> 36:14	<b>convince</b> 18:13	
<b>contemplates</b> 39:23	<b>convinced</b> 18:22	
<b>content</b> 45:10 50:15 146:1	<b>convoluted</b> 125:18	
	<b>coordinate</b> 77:21 154:8	
	<b>coordinating</b> 80:14	
	<b>coordination</b> 80:23	
	<b>cops</b> 161:25	
	<b>corner</b> 25:10	
	<b>corporate</b> 9:10	

26:11 28:15,18,20,21  
29:6,8,11,16,19,22,23  
30:3,14 31:6 39:6,16  
42:10 54:15 55:2,22  
85:23 90:6 107:4 122:11

**covered** 18:16 24:18,19  
30:4 73:25

**covers** 18:10 28:13  
29:17

**coyotes** 82:1

**Craig** 4:5 8:7

**created** 64:22

**creating** 96:15

**Creator** 152:22 160:13

**credit** 74:2

**criminal** 154:2,21,24

**criteria** 19:20 22:7  
23:14,21 24:2

**Criterion** 17:20 27:13  
54:8 123:10 124:1

**cross** 68:8,21,25 93:10

**cross-examination** 5:3

**cubic** 74:10

**cultural** 113:13

**culturally** 14:20

**cumulative** 49:4 50:12  
134:8,15,21 139:15,25

**curious** 24:12 25:14  
31:14 33:7 42:4

**current** 37:6 38:4,9  
40:24 59:11 63:2,13  
76:23 81:6,9,16 90:20  
114:19,22 118:11  
133:16 143:2

**custom** 75:1

**cutoff** 143:9,13

**cycle** 37:3

---

## D

---

**damage** 87:23

**damaged** 46:2 87:23  
144:21

**damaging** 90:13

**damn** 155:16

**damp** 46:11

**data** 18:11 19:1,2 21:17  
22:22 23:9,19,25 24:5  
25:22 37:23 62:19 64:18  
70:1,4,9 72:13,22 95:17  
97:11 114:6 119:12  
120:8 132:11,18,21,22,  
24,25 136:7,11,25  
137:20 138:10 141:5

**database** 78:18 114:6

**date** 36:4,24 37:1 63:8,9  
64:3 116:19 123:12  
152:11

**dated** 81:10 105:3

**dates** 140:6

**daughters** 159:23

**Dave** 9:9

**David** 81:4

**day** 96:1 131:3,6 160:10

**days** 14:24 163:8 165:7

**de** 46:5

**dead** 160:25

**deal** 4:12 41:15 132:21

**dealing** 62:1 141:17

**dealt** 130:24

**dear** 160:18 161:24

**debris** 89:11 90:8,24  
119:12

**December** 53:14 65:1  
73:9 81:10 123:19

**decide** 23:19 24:1

**decided** 106:4,6

**decision** 10:22 11:1,12,  
19,20 12:13,18 23:25  
24:5 114:8 142:4,5

**decision-making** 10:7

**decisions** 10:11 62:18  
159:18 160:10,15 161:8

**declared** 56:18 57:1

**decline** 95:15

**decommissioned** 90:24  
119:12

**decontaminated** 58:17

**decrease** 98:3

**decreases** 94:23,24 95:4

**decreasing** 97:4

**deemed** 23:13

**deep** 67:4,6,9,17 83:11,  
22 144:4

**deer** 82:1,24

**defaulted** 39:19

**defense** 72:17,19

**define** 92:14

**defined** 102:5 124:19,23  
125:5,7 138:5

**definition** 44:19,20  
128:11,12,21 129:2,4,8

**definitional** 125:18

**definitions** 125:12 127:3

<b>degraded</b> 65:24 66:23	<b>describes</b> 27:13 75:12 145:9	<b>developed</b> 28:11 34:10 112:16 128:3 146:4
<b>degrading</b> 66:3 69:21	<b>desert</b> 160:22	<b>developing</b> 45:2
<b>degree</b> 26:8 155:18 158:8	<b>design</b> 19:18 20:7,25 21:1,13,15 22:23 28:14, 16,20,22 29:6,11,22,23 30:7,13 107:3 116:17, 18,20	<b>development</b> 9:2
<b>delaying</b> 31:22	<b>designated</b> 89:14	<b>devices</b> 120:10,14 121:1
<b>deleted</b> 133:10	<b>designing</b> 18:9	<b>dewater</b> 55:20 56:2
<b>delineate</b> 93:22	<b>destroyed</b> 163:9	<b>dewatered</b> 42:22 74:18, 22 75:3
<b>deliver</b> 161:10	<b>detail</b> 10:7 74:17 75:16 105:1	<b>dewatering</b> 38:15,16 42:14 43:4 74:25 75:1, 14
<b>delivered</b> 161:13	<b>detailed</b> 105:6 119:4 144:5	<b>difference</b> 25:15 29:16 33:17,20
<b>demonstrate</b> 122:10	<b>details</b> 105:17 130:24	<b>differential</b> 55:2
<b>demonstration</b> 20:18 21:17 30:8	<b>detect</b> 68:12 70:23	<b>differently</b> 11:16
<b>Denison</b> 62:21	<b>detected</b> 69:5,22	<b>difficult</b> 113:19,23
<b>density</b> 18:23 19:10	<b>detection</b> 71:19 72:2,8 76:19	<b>direct</b> 53:4 77:18 80:10 81:18 109:8 141:19,23 142:3
<b>department</b> 12:4 40:3 62:23 78:25 79:25 94:13 114:7 130:4,14	<b>detections</b> 72:6	<b>direction</b> 30:12 64:19,23 65:9,15,20 91:4 93:7
<b>depend</b> 150:9	<b>deter</b> 29:24 82:6	<b>directions</b> 64:21,24 65:4,13,17
<b>dependent</b> 47:16,18	<b>determination</b> 95:5 127:19,22,23 128:6,7 143:10	<b>directly</b> 7:15 12:21,24 15:3 16:9,11 40:15 41:8 45:1 67:13 84:9,11 87:12 109:23
<b>depending</b> 6:11 55:25 56:1 80:24 149:5	<b>determinations</b> 127:10	<b>director</b> 9:25 35:20 36:9 47:4 53:14 114:7 115:22
<b>depends</b> 55:19 108:18, 20 149:14	<b>determine</b> 21:23 22:3 47:16 103:23 122:19	<b>director's</b> 122:10
<b>depict</b> 64:20	<b>determined</b> 23:18 35:20 36:9 41:3 44:9 49:3 52:8 86:9 94:1 98:11 111:10 115:3 124:14 126:23	<b>disappointed</b> 153:24
<b>deploy</b> 120:15	<b>determining</b> 71:13 81:21	<b>discharge</b> 4:14 42:5 60:22 68:10 71:21 72:5, 12 101:2,14,15,16
<b>deployed</b> 120:16	<b>develop</b> 9:4 151:17 152:16	<b>discontinuation</b> 64:25 73:8
<b>deposit</b> 90:23		
<b>depth</b> 30:4 83:24		
<b>DEQ</b> 10:10 14:18 15:1, 11 94:20		
<b>DEQ's</b> 11:10 114:4		
<b>describe</b> 15:10 24:21 32:12 33:7 160:7		

<b>discovered</b> 61:22 110:21,23	31:13 36:17 43:21 49:3 50:11 51:14,18 52:22 59:9 61:15 62:3 64:5 65:22 66:25 67:20,24 69:2,18,25 70:13 71:5, 13 73:2 74:6 75:8 76:10 78:2,10 83:14 84:23 86:25 91:2 93:4 94:12 104:7 105:8 109:15 110:15 111:11,21 112:16 113:17 114:3,7 115:3,22 117:13 118:18 119:8,16 122:23 124:1 127:18 135:8,13,24 137:20 139:14,21 140:16,22 141:4,5 142:3 144:1,8 145:11 146:22 165:24	<b>downgradient</b> 66:1,21 69:20 95:1,12,14
<b>discovery</b> 37:9 62:5		<b>downtimes</b> 34:2
<b>discrete</b> 7:6		<b>draft</b> 113:12
<b>discussed</b> 70:19 85:24 91:11 96:4 124:13 125:17		<b>drainage</b> 77:8
<b>discussing</b> 4:12 80:22 113:8		<b>draining</b> 82:9
<b>discussion</b> 17:11 123:12		<b>drawings</b> 107:3 119:5,7
<b>dispersed</b> 112:24		<b>draws</b> 139:4
<b>dispersible</b> 46:11		<b>DRC</b> 106:2
<b>disposal</b> 27:4,15,20 28:4 50:17 58:13,19 81:19 87:5,19,21,24 88:21 89:15 90:19 109:8 111:14,23 118:4,11 119:6,11 126:22 139:15, 22 141:19,20,21,23 142:4	<b>Division's</b> 5:16 17:12 28:3,23 62:18 92:7 96:20 101:1	<b>dress</b> 155:19
<b>disposed</b> 27:12,19,24 28:7 45:1 60:19,23 81:15 109:24 119:23 133:3 134:5,16 136:24 137:2,7,22 138:12 141:6,10,13	<b>divisions</b> 11:10 17:16 94:12,20	<b>dressed</b> 155:19
<b>disseminate</b> 16:10	<b>docs</b> 118:20	<b>drew</b> 114:10
<b>disseminated</b> 16:7	<b>document</b> 34:18,21 44:14 51:10 101:21,25 102:1 105:12 113:20 114:6,18 117:14,20 119:10	<b>drilled</b> 83:7,22 84:6,8, 11,12 93:12
<b>dissolution</b> 95:11	<b>documenting</b> 110:24	<b>driller</b> 84:23
<b>distinctly</b> 69:4	<b>documents</b> 9:5 11:22 15:16,19 18:8 86:16 106:9 113:15,17,19 114:2,12,18 158:10	<b>drilling</b> 67:17,18 93:17
<b>diversity</b> 18:23 19:10 30:2	<b>domestic</b> 94:16	<b>drink</b> 155:7 163:25 164:5,9
<b>division</b> 4:9 5:16 7:22 8:11,14,17,20,22,24 9:1 10:10 12:4 15:15 19:16 20:7,24 21:14 22:15,16 23:2,24 25:1,16 27:4	<b>doors</b> 153:8 154:17	<b>drive</b> 87:20 90:11,23
	<b>dose</b> 48:22,24 49:13,20, 21 50:8	<b>driven</b> 86:1,4
	<b>doses</b> 33:5	<b>dropped</b> 73:10
		<b>dry</b> 93:14,19,22 94:4,9 95:22 163:12
		<b>drying</b> 86:6 87:9
		<b>due</b> 5:24 7:17 13:2 17:25 36:4,24 45:11 55:2 57:19 63:9 65:11 68:2 98:19
		<b>dumping</b> 142:20
		<b>duration</b> 150:10
		<b>Dutchie</b> 148:8,9 149:1, 17 150:15 151:4,20,25 152:13,18,20 153:7
		<b>DW</b> 93:13

<b>E</b>	
<b>eagles</b> 82:5	<b>elements</b> 60:1
<b>earlier</b> 23:5 50:18 61:23 80:9 83:6 85:24 86:8 107:14 143:3,16	<b>elevated</b> 69:3
<b>early</b> 54:2 146:14	<b>elevations</b> 64:13 73:9
<b>easily</b> 38:22	<b>eliminating</b> 56:15
<b>east</b> 64:23 65:4,8 69:10 70:2 84:9,11 93:5 94:7	<b>email</b> 14:24
<b>east/southeast</b> 65:3	<b>emergency</b> 76:23 77:5, 6,15,19 80:11,15 154:5, 10,13
<b>eastern</b> 83:20	<b>emission</b> 123:1 150:7
<b>easy</b> 114:4 118:20 119:18	<b>emissions</b> 14:2 120:13 122:3,4
<b>eat</b> 155:5,7 160:3	<b>emit</b> 140:12
<b>edge</b> 30:20	<b>employed</b> 17:22 18:2 20:15 156:17 157:15,18, 19
<b>edges</b> 30:24 72:15	<b>encountered</b> 118:12,17
<b>education</b> 155:18 165:4, 7	<b>end</b> 32:21 108:11 124:8
<b>effect</b> 125:13	<b>endangering</b> 134:6
<b>effective</b> 49:20 72:9	<b>energy</b> 4:16,17 5:1,17 9:8,11,13 17:13 36:18 40:3 45:25 52:1 64:11, 20 77:17 79:22 80:22 81:3 85:17 86:17,19 87:6 88:4 89:3 91:23 102:21 103:3,4 104:22 105:12 109:3 110:20,22 112:4,9 115:24 127:7,17 128:13,21,24 129:3,5,8 142:8 145:19 159:22 160:9
<b>effects</b> 30:20 48:18 57:23 58:3 140:14	<b>enforce</b> 125:13
<b>effort</b> 134:7	<b>enforcement</b> 24:13,20
<b>efforts</b> 77:21	<b>engineer</b> 8:20
<b>EFR</b> 51:18 52:22 61:15 64:6 65:23 67:1,25 73:2 78:3,9 91:22	<b>engineering</b> 84:18 119:4,7
<b>eighth</b> 29:21	<b>enhance</b> 58:19
<b>elected</b> 30:12	<b>enhanced</b> 53:18
<b>electronic</b> 114:5	<b>enrichment</b> 44:13
<b>electronically</b> 35:6	<b>ensure</b> 51:18 52:23 80:4
<b>element</b> 21:10 30:9 39:9 72:12 91:8 94:20	<b>enter</b> 23:2
	<b>entering</b> 20:15 25:3
	<b>enters</b> 123:3
	<b>entire</b> 48:5 58:16,19 74:9 112:9 130:5
	<b>entitled</b> 105:13
	<b>entrance</b> 102:23 112:20
	<b>envelope</b> 134:3
	<b>environment</b> 51:23 60:23 76:7,12 90:18 107:12 134:6 143:19,25
	<b>environmental</b> 8:17,20, 21,24 10:1 14:6 17:13 47:4 48:2,7,12 53:7,13, 16,18 76:14 94:13 103:15 104:8,12,24 105:10,13,15 106:11,22 112:17 113:5 123:15,18 132:5 139:21 140:2,15, 17,18
	<b>EP</b> 127:14
	<b>EPA</b> 44:23 52:12 101:5 127:8,10,14,19,23 128:3,5,6
	<b>EPA's</b> 44:18 121:7
	<b>Ephraim</b> 148:8
	<b>epidemiological</b> 103:8, 18
	<b>episode</b> 134:13
	<b>equivalent</b> 49:20
	<b>eroded</b> 26:23
	<b>erosion</b> 17:23 26:16,23 54:19,21

<b>error</b> 35:25	102:6 127:23	<b>explanation</b> 69:15 94:23
<b>escalated</b> 38:14	<b>evil</b> 154:2	<b>exposed</b> 49:22
<b>essentially</b> 42:9 98:5	<b>exact</b> 60:4 132:7	<b>exposure</b> 33:5
<b>establish</b> 26:17	<b>examples</b> 63:16 70:6	<b>extend</b> 20:16
<b>established</b> 17:22 18:20 48:25 54:8 81:1 125:23	<b>exceed</b> 5:22	<b>extensive</b> 5:24
<b>estimate</b> 35:16 37:6,11 38:9 39:18 40:10,11,22 61:24 122:13 131:19,23	<b>exceedance</b> 50:6	<b>extent</b> 22:24 87:11 150:10
<b>estimates</b> 38:3 39:20 40:7	<b>exceedances</b> 103:25	<b>external</b> 49:23
<b>evaluate</b> 81:3 103:9	<b>exceeded</b> 48:19 49:11 51:8 121:17	<b>extra</b> 76:13
<b>evaluated</b> 27:4 61:22 110:19 111:1 116:25 133:23	<b>exceeds</b> 123:2	<b>extracted</b> 99:8
<b>evaluation</b> 17:12 33:2 51:10 57:13 63:13 66:16 74:7,16 75:12 105:25 106:7,11,13 107:17 133:15	<b>exception</b> 41:24 107:2	<b>extraction</b> 27:17,19,23
<b>evaporation</b> 59:5	<b>excuse</b> 63:2 101:8 165:23	<b>extracts</b> 74:22
<b>evaporative</b> 23:24 82:11	<b>excused</b> 147:19	<b>extremely</b> 18:5 91:15 98:7
<b>evapotranspiration</b> 18:21	<b>executive</b> 9:13,25	<hr/> <b>F</b> <hr/>
<b>evapotranspirative</b> 17:15 18:10,14,20 19:19 20:9 23:17 25:9,18 28:14	<b>exemption</b> 43:23,25	<b>facilities</b> 91:5 101:7
<b>evening</b> 6:3 152:21	<b>exercise</b> 38:24 39:12	<b>facility</b> 35:19 36:8 39:1, 24 69:10 75:2,4 87:6 89:19 94:25 95:1,13 96:7 97:7 141:20
<b>event</b> 38:25 62:21 72:21 77:5 154:3	<b>exist</b> 18:6 93:11	<b>fact</b> 26:1 28:25 44:11 69:19 109:6 112:25 128:16 129:20 130:7
<b>events</b> 95:22	<b>existed</b> 18:11 48:9	<b>factor</b> 40:15,16 41:20 88:7
<b>eventually</b> 156:24	<b>existence</b> 77:2	<b>factors</b> 55:19 73:17 110:16
<b>everyone's</b> 6:24	<b>existing</b> 27:20 58:22 77:7 135:1	<b>facts</b> 10:7
<b>evidence</b> 63:1,2,3 64:10 70:6 95:6 97:17,22	<b>exists</b> 33:4	<b>fails</b> 19:19 24:23
	<b>expanded</b> 92:10	<b>fair</b> 74:2
	<b>expect</b> 26:4 27:1 98:7	<b>fairly</b> 38:22 72:9
	<b>expectation</b> 21:12 42:21	<b>fall</b> 72:4
	<b>expected</b> 47:12 50:7 53:17 59:18 112:12	
	<b>experience</b> 77:6 131:21	
	<b>explain</b> 23:11 69:2,18 94:21 128:18	
	<b>explained</b> 15:3 16:12 17:1 58:5	



<b>fallback</b> 20:6,7	<b>field</b> 74:12	<b>fine</b> 46:22
<b>falls</b> 122:22	<b>Fields</b> 102:15,16,17 103:7 104:6 106:19 107:21 108:4,7,16,25 110:1,7,10,12,19 111:5, 10,16 112:15 113:11 114:15 115:3 116:1,5,15 117:5,12,25 118:8,20 119:3,21 120:3,19,24 121:4,25 122:13,21 123:6,11 124:10 125:4, 7,10,25 126:8 127:9 128:5,9,23 129:4,7,14 130:6,16 131:15 132:8 133:5 134:7,14,19 135:6 136:6,23 137:8,11,19 138:2,10,22 139:4,20 140:18,24 141:2,4,15 142:10 143:9 144:4,15 145:1,6,17,25 146:4	<b>finish</b> 165:3
<b>familiar</b> 126:13	<b>fight</b> 162:15 164:17	<b>finished</b> 146:14
<b>family</b> 159:22 162:18	<b>fighting</b> 158:24,25 162:13 163:21 164:15	<b>firing</b> 82:16
<b>Fansteel</b> 125:22 126:14, 15	<b>figure</b> 33:4	<b>firm</b> 9:7
<b>fast</b> 42:14 43:11,12,13 60:4	<b>figured</b> 86:10	<b>firmly</b> 60:18
<b>faster</b> 42:23	<b>fill</b> 55:23 58:1 78:19 87:6	<b>flat</b> 98:5
<b>feasibility</b> 75:1	<b>filled</b> 47:21 55:17	<b>flights</b> 6:2
<b>February</b> 105:3	<b>filling</b> 47:23 87:8	<b>flow</b> 64:11,19,21,24 65:4,13,17 68:4
<b>federal</b> 5:1 11:3 15:1 18:7 27:13,24 104:20 125:11 127:4,6 130:3,13	<b>filtrate</b> 75:13	<b>flowing</b> 64:7
<b>feed</b> 4:18 34:6,14 50:16, 24 74:8 75:25 125:2,6 126:18 127:24 128:1 131:21 133:7,8,19,24 134:15,21,24 135:2 136:13 137:4,11,23 138:1,13 139:7,16,22 140:19,20 141:8 142:8, 16,18,25 143:12 144:18 145:23	<b>final</b> 23:25 28:20 31:6 47:25 54:13 55:22 57:2 58:15,23 61:4 85:18 87:10 102:7 119:22 121:12 122:14 145:8	<b>fluctuate</b> 47:19
<b>feeds</b> 51:6 127:4,7 137:13 145:16	<b>find</b> 21:19 113:19 119:1	<b>fluid</b> 42:11 43:10,14 89:25 90:2
<b>feel</b> 114:15 119:21 133:3 164:2,14	<b>finding</b> 56:3	<b>fluids</b> 42:12 43:1,2
<b>feet</b> 67:9,12 73:10 74:10, 11 83:23,25 93:5	<b>findings</b> 63:18 68:17 97:23 110:16	<b>fluoride</b> 69:4,12,13 96:21 97:1,3 98:2,3,14 99:13
<b>felt</b> 31:21		<b>flux</b> 122:8,12 123:16
<b>fence</b> 159:25 161:18		<b>foamy</b> 160:5
<b>fenced</b> 103:1		<b>folks</b> 25:7
<b>fences</b> 82:4		<b>follow</b> 4:23 11:22 77:7 104:21 113:8 144:19
<b>fencing</b> 82:23 83:4		<b>follow-up</b> 20:22 86:14
<b>ferric</b> 99:6		<b>food</b> 161:20
		<b>football</b> 74:11
		<b>footnote</b> 133:5 136:18
		<b>footnotes</b> 137:15
		<b>foreseeable</b> 88:25
		<b>forever</b> 88:24
		<b>form</b> 105:10
		<b>formal</b> 24:20 102:7 148:24 149:9

**formalizing** 107:11  
**formally** 105:13  
**formation** 67:10 98:24  
 100:19  
**forward** 40:14 159:1  
**found** 5:6 66:17 76:10  
 99:12 128:12,20,23  
 131:20 144:2  
**four-hour** 108:20  
**fourth** 50:11  
**fraction** 25:25  
**frame** 56:10  
**freestanding** 56:15  
**frequency** 96:13 112:1,  
 14  
**frequently** 94:17 96:9  
**FRNS** 127:11  
**front** 95:17 135:10  
**Frydenlund** 9:9 55:13  
 56:13 58:5 81:5 109:22  
 110:5,9,11 130:23  
 131:20  
**Fuel's** 145:19  
**Fuels** 4:16,18,20 5:17  
 9:8,11,13 17:13 36:18  
 43:19,22 44:1,7,10 45:5,  
 9,14 46:1 50:23 64:11,  
 20 74:8 75:22,24 77:17  
 79:22 80:22 81:3 85:18  
 86:17,19 87:6 88:4 89:4  
 91:23 102:21 103:3,4  
 106:14 109:4 110:22  
 112:4,9 115:24 124:13,  
 14 125:1 128:10 129:17  
 132:9,14 142:5,8,9  
 144:9

**Fuels'** 52:1 110:20  
**fulfilled** 104:8,14  
**full** 11:18 17:21,23  
 56:10,18 62:6 108:13  
 131:2,3,8,9  
**fully** 18:16 19:24 21:7  
 22:11,23 55:18 56:6,25  
 70:10  
**funding** 15:2  
**future** 24:6 38:2,18 40:8  
 53:1 61:8 63:13 88:25  
 110:23 111:7 113:3  
 132:16

---

**G**

---

**gain** 54:20  
**gall** 154:7  
**Galloway** 8:23 31:15  
 32:7,16 33:9,22 34:9,21  
 35:1,4,8 51:5,15 78:22  
 79:9 149:16 150:12,16  
 151:16,24 152:4 153:23  
**Gallup** 130:8,19  
**gap** 131:18  
**Gary** 8:25 86:20  
**gate** 102:23  
**general** 7:19 9:10 19:9  
 64:15 133:2 136:15  
 137:5 151:1  
**general's** 8:8,10 105:2  
**generally** 62:6 105:16  
**gentle** 18:5  
**geochemical** 99:11  
 100:22  
**Geology** 62:24

**Geophysics** 62:24  
**geosynthetic** 29:24  
 30:10,17,18  
**get all** 163:6  
**give** 36:18 43:15 80:10  
 85:17 95:20 115:24  
 145:3 154:20  
**Goble** 8:12 10:13,23  
 11:2,6,18,21 12:1 13:11,  
 24,25 14:22 15:14 16:3,  
 12,19,22 27:7 28:6  
 35:10 45:23 46:10,18,22  
 48:7 49:9 50:19 51:24  
 53:2 59:11 83:10 84:7,  
 22 86:20,24 87:17  
 88:11,18 89:3,9 93:14  
 101:10,15 102:4,11  
 103:13 105:19 106:24  
 108:1,6,15,17 111:15,17  
 114:2 115:2,7 116:3,6,  
 21 117:11 118:24  
 121:16 122:7,16 123:5,  
 7,21 137:25 138:8,15,24  
 139:18,24 140:20,25  
 141:3,12 142:2 144:13,  
 16 145:5,19 146:7  
 147:9,13,16 149:4,25  
 153:22  
**God** 161:24  
**good** 9:23 29:16 30:11  
 72:18,20 85:5,7,10  
 146:18 152:21 160:9,15  
 162:7,9 164:2,4,11,12  
**gotcha** 22:20 121:4  
**govern** 23:3  
**government** 18:7  
**governments** 130:10  
**grab** 74:18

<b>Grace</b> 143:1	22 102:2,3,5 106:13	<b>happened</b> 112:19 148:11
<b>grade</b> 25:11	<b>grouted</b> 84:1	<b>happy</b> 108:23 114:14 164:2
<b>graded</b> 67:2	<b>grow</b> 163:10 164:25	<b>hard</b> 40:24 108:12 135:16 149:6 159:16
<b>gradient</b> 68:9,21,25 93:10	<b>growth</b> 26:8,10	<b>Harold</b> 9:12 56:16 84:7 86:7 153:21
<b>GRAMA</b> 35:9 114:13	<b>guess</b> 16:14,17 21:11 29:18 84:17 101:19 108:20 114:23 134:20 136:6 138:7	<b>haul</b> 130:8,19
<b>grand</b> 6:10,11 17:1,5 43:8	<b>guidance</b> 11:21 18:8,9 101:21,25 102:1 128:10	<b>Havasupai</b> 155:12
<b>grandchildren</b> 162:22	<b>guide</b> 102:1 115:9 116:10,12	<b>hazard</b> 51:22
<b>grandkids</b> 162:25 163:7, 13 164:16,25 165:2,8,11	<b>guides</b> 11:22	<b>hazardous</b> 43:23,25 44:19 77:16 79:1
<b>Grant</b> 62:23	<b>guys</b> 24:13 106:10 109:21 148:10,15,18 149:2 151:13 152:20,21, 23,25 153:3,7,9,24 154:15,16,20,25 155:14 156:17 157:10,14,16,22, 23 158:2,3,8,15,16,18, 21 159:3,4 163:16	<b>head</b> 61:11 91:10 149:2 151:9 158:6,9
<b>graphs</b> 57:14	<b>Gwyn</b> 8:23 51:3 78:20 150:11 153:23	<b>health</b> 10:1 49:1 76:7,11 90:18 94:14 103:8,10 134:6 143:18,24
<b>gravel</b> 25:12,25 26:7,14		<b>healthy</b> 165:1
<b>Greasewood</b> 153:20		<b>hear</b> 46:25
<b>Great</b> 11:24		<b>heard</b> 6:9
<b>great-great-grand</b> 165:3		<b>hearing</b> 4:5,8,21,22,24 5:13,23 6:6,18 7:20,25 13:14 85:7 109:14 126:1,2,7 146:9,24 147:5 148:22 156:18 165:23
<b>great-great-grandkids</b> 162:22		<b>hearings</b> 5:22 158:5
<b>greater</b> 48:22 49:13 50:8 139:9,10		<b>heart</b> 21:11 155:21 159:4 160:16
<b>Green</b> 10:5		<b>heartless</b> 154:1,21
<b>Greenaction</b> 6:10 10:1		<b>hearts</b> 159:12
<b>groomed</b> 155:15		<b>held</b> 106:15
<b>ground</b> 4:13 6:21 27:19 83:23,25		<b>helped</b> 9:4,5
<b>groundwater</b> 10:13,14 35:18 36:19 37:8 42:5 45:21 46:8 59:18,23,24 60:8,15 61:18 64:7,12, 18,19,21 65:4,12,24 66:5,7,13,15,17,20,21, 23 67:3 68:4,6,22 69:19 70:16,24 71:16,20 72:23 73:3,5 91:3,19 96:6,8,20 98:12 101:1,4,5,15,16,		<b>helps</b> 26:15 57:5
	<hr/> <b>H</b> <hr/>	
	<b>halfway</b> 85:7	
	<b>hand</b> 147:6	
	<b>Handbook</b> 101:5	
	<b>handful</b> 45:15	
	<b>handle</b> 154:4,13	
	<b>handling</b> 77:1 145:10	
	<b>hands</b> 148:4	
	<b>happen</b> 24:22 25:15 38:16 39:15 40:8 45:5 88:24 150:24	

<b>herb</b> 163:4,11,14	<b>husband</b> 162:20	<b>implement</b> 22:15,24 85:18
<b>herbs</b> 163:3,6,10	<b>hydraulic</b> 67:5	<b>implementation</b> 101:1, 21 102:2
<b>hey</b> 164:16	<b>hydraulically</b> 68:8	<b>implemented</b> 4:25 53:15 101:23 111:9
<b>hide</b> 160:8	<b>hydrologic</b> 91:3 92:8	<b>important</b> 6:22 144:7 157:2 159:14,21 163:25
<b>high</b> 17:18 98:19 100:8 108:2 146:1	<b>hydrous</b> 99:5	<b>impossible</b> 132:6
<b>higher</b> 50:14 98:18 121:12 145:23	<hr/> <b>I</b> <hr/>	<b>impoundment</b> 18:2 55:17,19 88:1,13
<b>highly</b> 30:3	<b>I-40</b> 129:18 130:1	<b>impoundment's</b> 45:1
<b>Highway</b> 102:23 129:19, 22 130:1	<b>I-70</b> 129:21	<b>impoundments</b> 42:22 71:15 132:17 133:4 134:5,12 135:5 137:3 139:17
<b>highways</b> 78:6 130:3,13	<b>i.e.</b> 96:21	<b>impression</b> 120:20
<b>historic</b> 84:21	<b>ICTM</b> 28:16,18 29:3	<b>Impressive</b> 41:13
<b>historical</b> 66:5 114:18, 23 115:19	<b>idea</b> 32:4	<b>improve</b> 111:3 160:10
<b>historically</b> 83:8,10	<b>identical</b> 106:25	<b>improvement</b> 37:24
<b>hold</b> 20:18 23:7	<b>identified</b> 51:20,25 52:24 53:18 66:18 92:16 95:2 111:2 115:13	<b>In-situ</b> 27:16,22
<b>holding</b> 164:9	<b>identify</b> 66:13 91:23 161:15	<b>inadvertently</b> 36:3
<b>home</b> 159:4	<b>Illinois</b> 118:3	<b>incident</b> 78:19 79:8 113:7,9 149:5 150:18,22
<b>honest</b> 32:17	<b>imagine</b> 35:8	<b>incidents</b> 78:5 79:17 80:6 111:2 150:2
<b>honestly</b> 108:2 149:25	<b>immediately</b> 37:13 54:17 58:3 69:20 121:21,24	<b>include</b> 7:15 29:22,23 30:16 35:17 36:19 38:19 39:14,21 40:15,16 62:4 106:19 113:8 133:4 138:22
<b>hope</b> 10:6 26:15 108:9 123:12 152:23	<b>impact</b> 48:8 50:25 75:7 103:15 135:4	<b>included</b> 25:21,24,25 28:19,22 29:6 33:16 34:16 40:8 52:7 53:7 68:14 74:17 75:18,20 107:16 129:19 133:15, 16,21 143:1,2,7 160:11
<b>hopeful</b> 6:3 21:19	<b>impacted</b> 69:8 70:20 91:22 94:9 115:10	
<b>hoping</b> 5:25 35:22	<b>impacting</b> 91:13	
<b>hours</b> 5:22,24 146:11	<b>impacts</b> 48:3,10 49:4 50:12 51:19,24 52:23 65:12 68:3 81:25 93:23 103:10 112:17 113:2 132:2,4,5 134:8,12,15, 21 139:15,21	
<b>house</b> 119:16 159:24		
<b>houses</b> 164:24		
<b>huh-uh</b> 164:12		
<b>human</b> 76:7,11 94:14 134:6 143:18,24		
<b>Hurst</b> 62:23		
<b>hurts</b> 157:8		

<b>includes</b> 4:17 30:8 37:7 64:14	<b>influenced</b> 91:19 92:1	<b>intend</b> 109:10 110:7 122:24
<b>including</b> 14:2 18:8 41:1 48:14 54:2 55:19 56:14 69:12 81:19	<b>influencing</b> 30:21	<b>intended</b> 25:23
<b>incorporate</b> 132:25	<b>information</b> 15:23 16:7, 10 31:18 50:20 57:12 70:10 71:24 81:15 100:4 115:18 117:18 118:6,18 119:16,19,22 120:25 123:15 132:11 138:17, 20 139:20	<b>intention</b> 20:13 27:9,11 28:7 93:21
<b>incorporated</b> 102:22 105:5 107:13 135:3	<b>informed</b> 101:20 110:21	<b>interest</b> 58:4 71:2 77:25
<b>increase</b> 40:17 98:2	<b>ingest</b> 49:23	<b>interested</b> 146:22
<b>increased</b> 57:19 95:7 96:12,13	<b>inhale</b> 49:23	<b>interim</b> 56:19 57:4 81:12
<b>increases</b> 96:19	<b>inherit</b> 40:18	<b>interject</b> 85:4
<b>increasing</b> 69:3 97:5,10	<b>inhibit</b> 26:7	<b>internal</b> 49:22
<b>increasingly</b> 65:24 67:2	<b>initial</b> 75:1 105:22 131:24	<b>international</b> 49:1 103:22
<b>independent</b> 106:7	<b>input</b> 31:19 34:23	<b>interposed</b> 126:6
<b>Indians</b> 155:16	<b>insensitive</b> 154:2	<b>interpretation</b> 28:2
<b>indicating</b> 35:2	<b>insert</b> 36:4	<b>interpretations</b> 62:20
<b>indication</b> 66:2 128:24	<b>inside</b> 160:5	<b>interrogatories</b> 107:10
<b>indicator</b> 66:22 96:20,25 97:16,17,21 98:12,15 99:13	<b>insignificant</b> 131:10,11	<b>Interstate</b> 83:21
<b>indirect</b> 143:20	<b>inspect</b> 118:7	<b>introduce</b> 95:23
<b>indirectly</b> 76:6	<b>inspected</b> 112:2	<b>introduced</b> 86:20 95:10
<b>individual</b> 9:19 48:21 49:12,17 147:24	<b>inspection</b> 110:16 111:18 112:14 119:13, 15	<b>introducing</b> 43:2
<b>individually</b> 76:18	<b>inspections</b> 111:11,19, 22 112:2,8 145:13,15	<b>introduction</b> 86:21
<b>individuals</b> 94:15 147:23 156:15 157:7	<b>installation</b> 54:4	<b>introductions</b> 9:15
<b>induced</b> 57:20	<b>installed</b> 25:10 54:3 72:7	<b>introductory</b> 7:13 42:3
<b>industry</b> 40:25	<b>installing</b> 93:20	<b>intrusion</b> 31:4
<b>infiltration</b> 28:12,16,23 29:5 46:6 61:5 73:6 99:3,19 100:22	<b>instances</b> 111:13	<b>invalid</b> 126:23
<b>inflation</b> 38:6,10,14,20 39:14,21 40:7,16	<b>insufficient</b> 23:19	<b>investigate</b> 73:3 93:22
	<b>intelligently</b> 161:8	<b>investigation</b> 91:3 92:8, 11 93:13 96:4
		<b>Investigations</b> 51:21
		<b>investment</b> 40:17
		<b>invite</b> 8:3
		<b>invited</b> 146:16

<b>involved</b> 107:24 150:13, 14	<b>Juan</b> 4:15 80:15,17 103:5	<b>land</b> 102:24,25 152:24
<b>involves</b> 78:24	<b>judgments</b> 159:20	<b>lands</b> 130:9,11
<b>involving</b> 77:15 78:5 79:17 126:21	<b>July</b> 7:23 8:2 53:3 62:20, 21 115:4,7 123:12	<b>language</b> 36:8
<b>ions</b> 99:9	<b>June</b> 7:21 13:14 165:23	<b>large</b> 14:19 27:20 71:10 82:5,11
<b>irrelevant</b> 43:8	<b>Justice</b> 10:1	<b>larger</b> 132:3,4
<b>ISL</b> 87:19,21 88:9,17,21 89:10,15 90:19 110:14 111:22 112:18 118:11, 13 119:5,11 141:25	<b>justify</b> 73:17	<b>Larrick</b> 16:4
<b>isolates</b> 67:15	<hr/> <b>K</b> <hr/>	<b>lasting</b> 122:20
<b>isotopes</b> 74:24 76:17	<b>keeping</b> 144:11	<b>late</b> 141:2,3 160:14
<b>ISR</b> 90:12,23	<b>Keller</b> 47:5	<b>Lateral</b> 65:1
<b>issue</b> 19:6 54:10 126:12 148:24 149:15	<b>key</b> 32:13 98:12	<b>laterally</b> 30:19
<b>issue's</b> 125:22	<b>kick</b> 55:24	<b>latest</b> 54:5
<b>issued</b> 107:22 126:17	<b>kicked</b> 57:21	<b>Latimer</b> 9:7
<b>issues</b> 19:4 105:6 124:11 126:25 150:25	<b>kids</b> 160:21 163:13,20 165:2,6	<b>law</b> 9:7 12:2 104:20 128:19
<b>Ivan</b> 148:1	<b>kind</b> 7:12 32:20 46:4 57:7 60:23 62:13 67:21 72:16 80:24,25 106:21 112:8 113:1,9 119:14 135:4 151:7 162:14	<b>laws</b> 10:9,25 11:11,19, 25 12:12,17
<hr/> <b>J</b> <hr/>	<b>kinds</b> 151:6	<b>layer</b> 25:12 29:2 30:3 56:19,20,21,23 57:4,11 76:13
<b>January</b> 165:23	<b>Kip</b> 62:23	<b>layers</b> 19:4 30:3 54:15, 21 55:22 61:2 85:25 90:6
<b>Jersey</b> 133:8	<b>knocking</b> 154:17	<b>leach</b> 27:16
<b>Johnson</b> 8:16 14:5,10, 14,16 44:9,22 45:3,8 76:20 78:9,18 79:11 82:3,13,18,25 83:3 110:18 111:1,8 113:4 117:22 118:5,15,22,25 120:14,22 121:3 124:25 125:5,9 127:3,25 128:8, 20 129:2,6 145:15	<b>knowing</b> 120:2	<b>leachate</b> 74:22
<b>Jon</b> 9:3 139:18,24 143:3 153:22	<b>knowledge</b> 68:24	<b>leaching</b> 74:21
	<hr/> <b>L</b> <hr/>	<b>lead</b> 8:18
	<b>laboratory</b> 98:22 99:2	<b>leading</b> 87:2
	<b>lack</b> 19:4	<b>leak</b> 71:19 72:1,6,7 76:18 111:19,24 118:16 150:7
	<b>lady</b> 160:19	<b>leakage</b> 63:1,4,6
	<b>Lake</b> 154:15 157:10	<b>leaked</b> 66:3
		<b>leaking</b> 45:18 46:2 79:17

110:20 144:21	26:21 30:1 33:24 36:22	<b>listed</b> 59:22 66:13 75:6
<b>leaks</b> 72:9 110:23,24	42:19 43:13 45:16 48:19	<b>listen</b> 108:12 152:25
<b>leapfrogging</b> 37:2	53:6,10,15 54:18 55:6	153:8 160:16
<b>lease</b> 27:22	59:13 73:23 74:2 76:9	<b>listening</b> 154:1 157:11,
<b>leave</b> 14:3 15:8 164:21	85:22 113:24 115:6	22 162:11
<b>leaves</b> 14:9 90:14	117:14,19 119:10,19	<b>liter</b> 97:8
<b>leaving</b> 85:24	120:3 121:5 122:2,10	<b>literally</b> 40:6
<b>led</b> 110:16	123:14 138:16 144:19	<b>literature</b> 41:2,24 98:16,
<b>left</b> 14:12 36:2 160:23	145:10	17
<b>legal</b> 9:7 11:14 87:12	<b>licensing</b> 4:8,11,17 5:14	<b>live</b> 158:14 162:9
104:16 105:1,6 125:21	12:22,25 15:6,16,18	<b>living</b> 49:5 50:13 162:23
126:25 128:17 129:9	87:13 105:9,20	<b>load</b> 119:11
<b>Leland</b> 16:4	<b>lies</b> 142:5	<b>local</b> 50:15 77:20 80:12
<b>letter</b> 14:23,24 115:20	<b>life</b> 47:13,15 48:6 164:1	<b>localized</b> 91:15,23
116:16 123:13,23	<b>light</b> 25:14 50:14	<b>locate</b> 92:21 93:9 113:18
<b>letters</b> 114:22	<b>limit</b> 48:22,24 50:4,8	<b>located</b> 41:11 52:1 68:8,
<b>letting</b> 153:8	104:1,5 143:14 144:8,25	12 70:14,22 72:14
<b>level</b> 52:12,16 60:17	161:5,11,16	83:16,18,20 92:4 93:4
74:5 126:19 145:24	<b>limitations</b> 5:20	94:6 119:24
151:7	<b>limited</b> 4:24 5:14 76:5	<b>location</b> 61:25 89:15
<b>levels</b> 17:23 50:6 54:6	115:10 147:2	91:18 93:9 119:11
68:1 69:4 96:19 121:13	<b>limits</b> 14:7,17 32:8 48:20	<b>locations</b> 70:18
139:10	49:11,15 51:7 54:7	<b>long</b> 38:13 39:16,18
<b>license</b> 4:13 10:11,17	59:23 75:23 76:3 103:25	40:24 48:17 53:21 55:9
27:21 32:1 35:15,18	117:13 143:16,21	56:1 57:9 58:9 59:17
36:1,7,25 43:19 51:10	144:17	61:4 62:6 86:6 109:9
53:2,3,4 74:15 75:6	<b>liner</b> 61:4 72:10 87:24	110:1 140:12 159:16
104:9 105:23 112:10	90:13,15,22	<b>long-term</b> 40:2 106:23
113:12,14,20 114:16,17,	<b>liners</b> 58:14 71:18,25	<b>longer</b> 25:20 52:25
20 115:16 116:15 117:5	<b>lines</b> 95:5 97:22	53:22 55:10 58:10 77:2
118:8 124:12,25 130:25	<b>liquid</b> 75:13 77:1,9 87:7	110:3 122:22
133:10,13,17 134:10	88:17	<b>looked</b> 29:4 32:18 41:2
142:14,17,22 143:2	<b>liquids</b> 77:7	62:9 96:24 134:20,23
144:20 154:22 156:19	<b>list</b> 10:21,24 11:18 12:3	139:14
157:4	13:6 17:10 60:20 77:14	<b>lose</b> 54:22
<b>licensee</b> 17:17 18:12	115:4,7,11 116:1,3,12	
20:19 22:9,13 23:7,16	135:11 146:18	

<b>lost</b> 71:15,18,25	113:22 157:6 164:1	145:20 146:2 150:14
<b>lot</b> 22:2 34:2 38:1 39:17 96:6,7 144:4,6 153:19 156:24 163:3 165:14	<b>making</b> 44:12 82:17 85:5,10 127:12 130:6 159:17 160:15	<b>materials</b> 4:19 8:13 10:17 26:4 35:15 41:2 50:16 58:14,15 67:10,15 74:14 75:9 78:6 79:1,18 112:18 117:21 127:16, 21 129:25 130:2,11,12 131:21 133:3,16,20,23, 24 134:3,4,9,11 135:2,6, 7,11,15,18 136:1,13 138:4 139:10 141:6,10 142:22 143:3,6 145:23 150:17
<b>loud</b> 82:5,17	<b>makings</b> 127:11	
<b>low</b> 67:11 95:8 96:2 97:6 98:7,17	<b>man</b> 154:15	
<b>lower</b> 29:7,10,14 52:16 85:1 137:17	<b>managed</b> 60:15 104:18	
<b>Luellen</b> 9:3 74:13 75:16 132:24 133:14 134:10, 23 136:11 137:5,10,13 153:22	<b>management</b> 4:9 8:14 53:16 80:22 81:3 106:3, 4	
<hr/> <b>M</b> <hr/>		
<b>ma</b> 153:12	<b>manager</b> 8:13	<b>matter</b> 138:7
<b>machines</b> 82:6	<b>manner</b> 60:24	<b>matters</b> 5:14 160:14
<b>made</b> 20:10 22:10 24:6 64:1 108:10 111:4 114:8 116:2 117:8 127:19,22, 23 128:5,6 130:7 143:10 147:23,25 160:25 161:5	<b>manual</b> 53:7,13	<b>maximize</b> 60:2
<b>mailed</b> 118:22	<b>maps</b> 64:19	<b>maximum</b> 76:3 143:21
<b>main</b> 33:8	<b>March</b> 31:12,22 35:16 36:18,23 111:19,23	<b>Maywood</b> 133:8,12,14 142:19 143:1
<b>major</b> 5:3,20	<b>margin</b> 65:3 97:14	<b>meaning</b> 7:3 20:8 25:11 105:10,11 129:1
<b>majority</b> 25:16 51:24 57:10	<b>market</b> 155:6	<b>means</b> 28:16 35:23 63:3 99:22 128:25
<b>make</b> 7:12 11:20 18:16 20:13 23:25 31:4 37:24 54:18 77:18 85:6 90:15 95:4 105:4 107:12 112:9 119:19 127:10 143:22 146:21 147:24 148:23 153:15 159:7,20 160:10 161:18 162:2,5 164:2 165:14	<b>mass</b> 43:11	<b>meant</b> 30:25 70:7 88:15
<b>makes</b> 31:8 36:16 42:12	<b>masses</b> 99:5	<b>measure</b> 64:12 73:1 122:4
	<b>master's</b> 155:18	<b>measured</b> 71:19 100:21
	<b>mat</b> 30:10	<b>measurement</b> 122:14
	<b>material</b> 25:22,24,25 26:1 27:5,10,16,22 43:20,22 44:1,7,10,11, 16,23 45:5,9,14,17,20, 24 46:11 50:15 54:23 57:21 59:2 73:24,25 74:8,19 75:7,25 81:13, 21 88:10 89:8 112:3,19 124:15,18,19,20,22,24 125:1,14,15 128:2 131:6 132:14 133:7,8,9,14,18 134:16,22,25 137:11,24 138:1,13 139:8,16 141:8,17,20,21,24,25 142:1,4,6,20,25 144:18	<b>measures</b> 51:17 52:21 64:5 65:22 66:25 67:24 68:19 73:15 79:16 80:2, 3 121:2 123:2
		<b>mechanism</b> 23:6 24:14, 20,21 96:3
		<b>media</b> 48:13
		<b>meet</b> 5:5 18:14 19:19 20:25 21:1 23:20 24:8



48:16 66:12,18 140:12  
**meet all** 23:13 76:10  
**meeting** 7:21 108:20  
 122:12  
**meets** 22:7 24:1  
**Melisa** 159:10  
**member** 48:21 49:12  
 67:12,18 84:2,25 162:8  
**members** 7:23 15:12  
 16:1,8,10,15 77:21  
 80:14 147:18 157:15,19  
 159:5 163:18  
**memo** 109:1  
**memorandum** 105:1  
**memorandums** 114:21  
**memory** 41:13  
**men** 160:18  
**mention** 23:5 129:20,24  
 132:16  
**mentioned** 5:15 6:7  
 12:20 86:7 143:3 146:10  
**mentions** 135:10  
**merit** 80:21  
**Merrell** 8:25 76:2 86:20  
 142:25 143:15  
**Mesa** 4:14 10:2,11  
 13:10,11,16 15:12 16:2,  
 11 27:6,21 28:5 47:13  
 49:5 50:1,13 51:19  
 52:23 59:8 62:22 64:9  
 71:6 73:19 75:25 76:24  
 77:13 78:3,7,13 79:19,  
 22 80:4,7 83:8,17 89:20  
 101:10 103:12 104:2,9  
 109:11 111:25 112:19  
 115:5 130:18,20 133:19  
 141:24 142:14 148:9  
 149:23,24 151:15  
 152:23 153:2,4,19  
 154:6,19 155:10 156:13  
 162:9,10,12,23,25  
 163:3,17 164:6,24  
**mess** 26:21  
**met** 29:11 48:17 59:21  
 140:13  
**metals** 68:1 74:20 99:9,  
 23 100:1,2,5  
**meter** 54:6,9 56:8  
 122:25  
**meters** 93:5  
**methodology** 101:3  
**metric** 29:7  
**Metropolis** 118:2  
**Mexico** 163:11  
**Michael** 9:6 47:5 102:12  
**micrograms** 97:8  
**microphone** 9:18 156:9  
**mid-2000s** 74:25  
**migrate** 99:14  
**migrating** 93:7  
**migration** 52:9 84:20  
 85:1 144:24  
**Mike** 153:22  
**MILDOS** 31:11,14,15  
 51:7,11 106:7  
**mile** 68:10 83:19 95:19  
**miles** 13:12 152:3 154:6  
 156:13 159:24  
**milestones** 47:21 55:16,  
 24 56:14  
**mill** 4:15 10:12 13:10  
 14:4,21 27:6,20,21 28:5  
 34:1,6 39:11 45:2 47:13,  
 14,15,25 48:4,9,10,13,  
 16 49:5,6,10 50:1,13,17,  
 25 51:19 52:23 59:8,18  
 62:22 64:8,23 65:5,25  
 66:1,6,10 67:3 68:3,6,  
 10,13,16,18 69:8,20  
 70:9,21,23 71:6,14  
 73:19 76:1,24 77:1,4,5  
 78:13 79:19,22 80:7  
 81:8,13,20,25 82:3,10  
 83:8,17,19 84:9,21  
 88:20 89:11,20 91:4,13,  
 22 94:7,8,17,25 95:1,13  
 96:5 97:23 98:24 101:10  
 102:23 103:1,2,10,11,  
 16,24 104:2,9,10,19  
 109:4,11,23 110:17,21,  
 22 111:2,11,25 112:20  
 117:15,23 118:3,7  
 119:13 120:5 121:9,13  
 125:15 130:2,8,18,19,21  
 131:2,8,12 132:3,4  
 133:9,19,20,25 135:15  
 136:10,14 137:24,25  
 138:14 139:23 141:24  
 142:14,19 148:12,16  
 149:7 150:4,9 151:8,14  
 152:2 154:4,14,22  
 156:14,17 157:15,18,20  
 158:15,23,24,25 162:10,  
 12 163:3,22 164:13,17,  
 23  
**mill's** 8:13 48:5 151:5  
**mill-related** 97:18  
**million** 52:5,11,13,14  
 73:19,20  
**millirem** 48:23 49:13,15  
 50:2,3 104:3,4  
**mills** 121:8 128:3  
**mind** 26:3 54:10 124:16

<b>mine</b> 109:2,4,10,11 159:13,24	165:9,14	65:9,15 151:13
<b>mines</b> 47:17 62:21	<b>monitor</b> 57:6 65:3 72:1 120:4,7,10 122:3	<b>mrem</b> 33:6
<b>minimal</b> 48:18	<b>monitored</b> 68:17 76:18 82:14	<b>multipart</b> 62:13
<b>minimization</b> 71:22 72:5,13	<b>monitoring</b> 14:6 48:13 53:8,12,19 54:11 55:6 63:9,12,14 64:15 65:1,7 66:14,16,18 68:2,5,6,11 69:7,9,11,13,23 70:9,14, 18,22 72:14,22 73:10 76:15 83:21 91:13,16,20 92:4,17,22 93:4,9,10,21 94:6,17 95:21 96:6,11, 13,25 97:7,11,13 120:10 122:24 123:13,15,18	<b>multiple</b> 62:16 95:5 97:22
<b>minimize</b> 61:5		<b>multitiered</b> 77:24
<b>minimum</b> 41:20 140:14		<b>multiyear</b> 49:1 103:22
<b>minimus</b> 46:5		<b>MW-17</b> 69:11 70:14 93:6
<b>mining</b> 44:1		<b>MW-22</b> 68:2,5,8,12,14, 18,21 69:5,7,14 70:15, 16,19,25 91:5,14,16,18, 21 92:5 95:19
<b>minutes</b> 147:9,10		<b>MW-27</b> 73:3,5,12
<b>misspellings</b> 120:4		<b>MW-31</b> 96:22,25 97:3
<b>misstates</b> 135:23 136:2	<b>monitors</b> 57:6	
<b>misunderstood</b> 120:25	<b>months</b> 62:5	<hr/> <b>N</b> <hr/>
<b>mitigative</b> 123:1	<b>Monticello</b> 112:22	<b>name's</b> 17:4 159:10
<b>mixture</b> 25:13	<b>Morrison</b> 67:10	<b>narrative</b> 7:13
<b>Mm-hmm</b> 33:21	<b>mother</b> 162:19	<b>narrow</b> 32:14
<b>Moab</b> 102:17 112:21	<b>motion</b> 85:6 146:21	<b>Nation</b> 129:22,23
<b>mobile</b> 100:3,5	<b>motivated</b> 24:12	<b>National</b> 78:22 79:3,7,9
<b>mobility</b> 98:11,18	<b>mound</b> 42:24	<b>native</b> 159:11 161:1 163:3
<b>model</b> 28:11,16,17,24 29:1,5,8,15 31:17 32:3, 5,11,18,19 33:22 34:11, 17 100:10	<b>mounding</b> 64:21 65:12, 13 68:23 73:3,5 92:1	<b>natives</b> 160:23 162:1 164:8
<b>modeled</b> 28:13	<b>Mountain</b> 6:14,15,16 13:11 15:15 46:23 67:7 69:23 70:2,5 77:18 80:11,23 129:23 130:10 153:3 155:10 157:17	<b>natural</b> 52:8 127:21
<b>modeling</b> 31:14,16 32:6, 13 34:23 51:7 99:4,5,11, 20 100:2,6,22,23	<b>MOUS</b> 114:23	<b>nature</b> 19:5 52:24 58:6 62:2 135:20
<b>moderately</b> 97:9	<b>move</b> 12:14 13:8 19:15 20:21 23:1 31:9 41:6 43:11 58:7 88:4 124:11 127:13 129:13	<b>Navajo</b> 67:4,9 83:9 84:2, 19 129:22 130:9 155:11
<b>modification</b> 31:25	<b>moving</b> 7:7,14 46:20	<b>nearby</b> 49:5 50:13 80:5
<b>moment</b> 5:15 87:22		<b>needed</b> 29:1,2 77:21 80:14 95:5 121:23
<b>money</b> 37:12 39:2 40:12, 13,18 62:10 154:25 155:4,5,13 160:17		

<b>negligible</b> 17:23	10	<b>objections</b> 126:6
<b>negotiated</b> 20:20 23:8	<b>notifications</b> 77:20 111:3	<b>obligations</b> 24:8
<b>neighboring</b> 78:4	<b>notified</b> 78:24,25 79:4,6, 10 94:12,21 113:6 130:10	<b>observed</b> 53:5 63:8 115:12 116:14
<b>NEPA</b> 104:19,21	<b>notify</b> 78:2,3,10,11 79:7 80:12 112:5 118:17	<b>observes</b> 17:13
<b>network</b> 68:7 93:21	<b>notifying</b> 78:12 80:13	<b>observing</b> 33:11
<b>newer</b> 32:3,5 72:20	<b>noting</b> 57:17	<b>occur</b> 24:22 38:13 39:18 40:19 43:4 52:25 54:19 57:10 93:25 94:1 111:6
<b>nicely</b> 155:15	<b>NRC</b> 11:7,21 18:3 23:12 41:3,20 44:9 48:8 78:11, 16 79:2,4 103:16 104:18 107:1,22 108:3 114:24 124:14 126:12,22 127:5, 9 128:10,13	<b>occurred</b> 63:7 64:2 72:10 111:6
<b>ninth</b> 31:10	<b>NRC's</b> 23:14 110:16	<b>occurring</b> 52:25 91:16
<b>nitrate</b> 66:8 97:14	<b>Nuclear</b> 19:24 78:15,23 79:2	<b>occurs</b> 56:12
<b>nods</b> 61:11 91:10	<b>number</b> 5:24 6:2 7:2,17 14:19 15:10 31:18 36:17 40:25 55:19 56:14 60:18 79:1 96:12 117:16 131:2,12,16 132:3,4 142:17 145:9	<b>October</b> 105:23
<b>noise</b> 82:17	<b>numbers</b> 132:7	<b>off-site</b> 27:4 28:4 51:19 52:4,15,23 53:17 77:15 121:6
<b>noise-making</b> 82:5	<b>NUREG-1620</b> 41:25	<b>offered</b> 95:8
<b>non-ore</b> 135:7,11,15	<b>NUREG-1757</b> 41:9,12,18	<b>offhand</b> 95:18
<b>non-radiological</b> 117:21 132:19 133:22 134:2 136:8 137:21 138:12 139:11,25	<b>NUREG/CR</b> 18:8	<b>office</b> 8:8,10 80:18 105:2 115:18,19
<b>nonconventional</b> 88:1, 13		<b>officer</b> 4:6 9:13 126:2
<b>nonrestricted</b> 83:18		<b>officially</b> 56:18 86:10
<b>normal</b> 112:1,13 131:11		<b>Oklahoma</b> 75:4 130:22
<b>north</b> 83:17 151:12		<b>older</b> 72:10,17,19
<b>northern</b> 84:13		<b>on-site</b> 27:12 81:18 121:6
<b>nose</b> 163:5		<b>Ongoing</b> 54:11
<b>note</b> 94:23 97:21 99:10		<b>open</b> 19:1 43:3 147:20
<b>noted</b> 7:17 93:20 96:5		<b>open-ended</b> 152:15
<b>notes</b> 22:5 108:12 157:25 158:7 161:5		<b>opened</b> 160:4
<b>Nothing's</b> 160:23		<b>opening</b> 7:16 13:14 146:22 153:7
<b>notice</b> 15:11,25 16:10,15 107:22		<b>operated</b> 4:16 49:7 77:4
<b>noticed</b> 132:10		
<b>notification</b> 77:18 80:4, 10	<b>object</b> 11:13 12:7 13:18 87:11 125:20 126:1 128:15 129:9 134:17 135:22	
	<b>objection</b> 45:6 126:9 129:12	
	<hr/> <b>O</b> <hr/>	

<b>operation</b> 41:5 42:10 49:8 56:25 76:6 78:22 88:14 103:10,17 112:11 121:9 122:22 130:18,21	<b>outlined</b> 22:4	<b>partially</b> 50:18
<b>operational</b> 47:12,15 48:6 117:12	<b>output</b> 34:24	<b>participants</b> 6:2
<b>operations</b> 27:16,19,23 68:3 81:13 94:7 131:3,4, 13	<b>outreach</b> 15:10,25 16:11	<b>participate</b> 161:7
<b>opportunities</b> 16:16	<b>outward</b> 152:2	<b>participated</b> 9:1
<b>opportunity</b> 5:2 26:17 102:10,18 107:22 147:3	<b>oversight</b> 11:8 124:7	<b>particles</b> 161:10
<b>opposed</b> 135:21	<b>overview</b> 112:8	<b>parties</b> 6:7 8:4
<b>option</b> 27:5	<b>owned</b> 4:16 103:3	<b>parts</b> 52:5,11,13 71:3
<b>options</b> 60:19,20 61:7,8	<b>owns</b> 103:5	<b>pass</b> 130:8
<b>order</b> 6:9,22 16:25 27:14 31:24 89:24 94:21 95:4 107:19 137:16	<b>oxidation</b> 94:22	<b>passed</b> 162:14,20
<b>orders</b> 66:10	<b>oxide</b> 99:6	<b>past</b> 48:5 126:12 157:16
<b>ore</b> 44:5,8,19,20 45:17, 21 46:6,8,13 47:17 52:9 75:2 84:9 124:17,20,22 125:3,4,5,14,16 127:21 128:11,12,21,25 129:1, 2,8 130:16,21 131:3 138:5 141:17	<b>oxygen</b> 95:9,23	<b>path</b> 64:11
<b>ores</b> 34:13 50:15 133:6		<b>patience</b> 146:6
<b>organ</b> 33:5	<hr/> <b>P</b> <hr/>	<b>patrols</b> 80:20
<b>organization</b> 9:25	<b>p.m.</b> 6:1,5 7:21 165:24	<b>Paul</b> 17:4,10 18:18,25 19:3,12,15 20:4,21 21:11,22 22:8,12 23:1 24:7,25 25:5 26:5,19 27:3 28:1,9 29:3,13,21 30:13,22 31:2,8 32:4,12, 24 33:21 34:6,18,23 35:3,6,12 36:8,11,16 37:5,15,22,25 38:12 39:8 40:5,20 41:8,13,17 42:2,16,21 43:6,18 44:17,25 45:4,11 46:7, 16
<b>original</b> 63:16 84:10 115:11	<b>package</b> 105:24	<b>pay</b> 102:24
<b>originally</b> 153:18	<b>pad</b> 45:17,21 46:6,8,13 84:9	<b>pays</b> 103:4
<b>out-of-compliance</b> 97:24	<b>panel</b> 146:11 147:19	<b>penetrates</b> 67:18,19
<b>outernal</b> 49:22	<b>parameter</b> 69:15 97:16	<b>penetration</b> 31:1
<b>outlier</b> 42:1	<b>parameters</b> 22:3,4 23:23 24:4 62:1 68:2 96:20,25 97:1,17,19,21,25 98:12, 15,16 99:14	<b>people</b> 49:5 50:13 95:25 112:24 146:18 147:4,7 152:24 156:1 158:4,11 159:1 162:24 163:15,17, 19 164:2,3,5,16,20,21
	<b>parenthetically</b> 18:3	<b>percent</b> 25:11 26:8,12
	<b>parents</b> 163:20	
	<b>Parsons</b> 9:7	
	<b>part</b> 6:20 7:7 30:7 50:20 53:25 57:3 71:12 75:1 77:19 81:17 84:17 87:4 93:3 99:4 104:17 105:24 106:18,20 107:7 112:7 114:17,20 118:21 121:7 126:11 127:15 146:1	
	<b>partial</b> 56:5	

40:21 41:6,7,19 131:24 132:1 151:11	<b>personnel</b> 81:18 118:16	123:15,18
<b>percentage</b> 131:8	<b>persons</b> 5:10	<b>planned</b> 117:3
<b>perching</b> 67:14	<b>pertinent</b> 117:18	<b>planning</b> 41:4
<b>perfectly</b> 32:16	<b>ph</b> 94:23,24 95:4,14,21, 24 96:5	<b>plans</b> 37:25 59:6,22 64:17 66:9
<b>perforate</b> 90:22	<b>phased</b> 85:16 87:5	<b>plant</b> 26:7,10 30:2 41:5 61:1 90:8
<b>perform</b> 21:13 29:8 37:12 51:14	<b>Phil</b> 8:12 84:17 105:17 151:24 152:4 153:22	<b>plants</b> 26:16,22
<b>performance</b> 19:20 20:25 23:9,13 26:4,10, 13 27:2 60:2 120:1	<b>phrased</b> 87:3	<b>plateau</b> 34:14
<b>performed</b> 48:11 50:23 52:19 98:23 113:4	<b>phrasing</b> 35:21	<b>platform</b> 56:21 58:1
<b>perimeter</b> 148:13,17 149:21 152:1	<b>physical</b> 71:24 82:4 86:1,4	<b>pleases</b> 62:14
<b>period</b> 15:21 49:6 61:14 69:24 105:22 106:17 108:11 120:17,19,20 131:7 146:9 165:21	<b>picocuries</b> 54:6,9 56:7 122:25	<b>plot</b> 85:17
<b>permanently</b> 53:22 55:10 58:10	<b>picture</b> 141:9	<b>plume</b> 37:10 61:22 62:5 65:9 66:8 97:15
<b>permeability</b> 67:11 95:8 96:3	<b>piezometers</b> 64:15	<b>plume's</b> 61:25
<b>permission</b> 115:23	<b>pile</b> 18:6 42:13	<b>pocketbook</b> 155:23
<b>permit</b> 4:14 10:13,22 42:5 66:17 71:20 72:6 101:2,14,16,17,22 102:2 145:21	<b>piles</b> 14:3 151:13	<b>point</b> 16:3,18 20:3 22:25 31:24 38:1 58:12 61:10 64:14 89:24 90:3 124:21 143:10,13 147:11 160:18
<b>permit/license</b> 16:17	<b>pioneers</b> 161:1	<b>pointing</b> 33:10 35:24
<b>permits</b> 106:13	<b>place</b> 4:7 24:14 54:12 56:10 82:1 89:19 90:12 103:21 122:15 124:21 150:6	<b>poison</b> 160:8
<b>permitted</b> 66:15	<b>placement</b> 57:3,18,23, 25 73:25 119:5	<b>police</b> 80:20 154:17
<b>permitting</b> 5:3 10:11 15:13	<b>places</b> 143:21	<b>Policies</b> 101:6
<b>person</b> 157:9	<b>placing</b> 42:10 54:20 55:21 56:12	<b>policy</b> 27:14,24
<b>personally</b> 126:13	<b>plan</b> 17:11,18 18:11 20:1 25:21 30:5 38:5,13 39:22 45:8 47:22 53:16, 19 56:13 58:14 60:2 76:24 77:19 80:11 81:7, 8,10,16 88:4 96:14 104:10 106:20,21,24 107:6,24 111:18 119:22	<b>pond</b> 59:5 77:2,4
		<b>ponds</b> 47:24 63:17 64:22,25 65:13,19 68:23 73:6,9,13 82:9
		<b>portion</b> 56:22,24 92:23 93:2 148:22
		<b>portions</b> 56:22 92:15 99:7

<b>pose</b> 51:22 150:23	<b>preferential</b> 68:4	<b>printed</b> 34:20
<b>posed</b> 17:7	<b>preferentially</b> 64:7 147:3	<b>prior</b> 42:10 51:14 55:21 74:25 79:22 126:19 144:9
<b>poses</b> 53:22 55:10 58:10	<b>preferred</b> 64:11	<b>private</b> 94:14 103:3
<b>position</b> 109:16,20 126:21 159:17 161:22	<b>prepared</b> 62:22 64:20 105:2 133:1	<b>proactively</b> 116:13,14
<b>positions</b> 159:19	<b>presence</b> 14:19	<b>probability</b> 17:18
<b>possibility</b> 45:4	<b>present</b> 5:18 15:17 65:2 68:16 90:20 102:7	<b>problem</b> 108:17
<b>possibly</b> 121:12 132:15 150:2	<b>presented</b> 12:15,16 116:12 142:7	<b>problems</b> 110:19 118:12
<b>posted</b> 118:21	<b>Preservation</b> 115:19	<b>procedural</b> 5:5 109:13
<b>potential</b> 33:10 53:17 68:13 70:23 77:15 81:19 84:20 89:23 93:6 94:14 95:9 112:17 113:2 115:10 150:6,23	<b>preserving</b> 87:13 89:8	<b>procedure</b> 37:20 74:21 80:25
<b>potentially</b> 95:10 96:23 115:9	<b>president</b> 9:10	<b>procedures</b> 4:23 5:8 59:13,14 76:25 112:11 113:7 123:16,20 124:3 145:12
<b>power</b> 159:16 160:19	<b>pressure</b> 84:3	<b>proceed</b> 20:2 115:23,25
<b>ppm</b> 52:5	<b>presuming</b> 89:17	<b>proceeding</b> 5:9
<b>practical</b> 62:8 71:11	<b>pretty</b> 25:5 28:7 32:14 34:4 51:1 150:19	<b>proceedings</b> 4:6
<b>practice</b> 40:25 45:20 111:11	<b>prevent</b> 30:10,25 65:23 67:1,21 79:16 144:23	<b>process</b> 10:8 15:13 16:17 20:20 21:5,8 31:16 43:1,2 44:13 45:2 58:2 61:1 71:23 75:14 88:11 89:25 124:12 125:13,19 128:9 136:1 137:25 138:1 142:18 154:22 157:3 158:16
<b>pre-identified</b> 63:11	<b>preventing</b> 58:20	<b>processed</b> 33:25 34:12, 13 45:9 66:6 68:16 71:14 90:2 109:23 117:15 124:23 125:3,14, 16 133:20 134:4 135:7 136:14,20,21 137:6,16 138:6 142:23 143:4,7 145:21 161:12
<b>pre-reclamation</b> 47:12 48:6 49:8	<b>Prevention</b> 81:7	<b>processes</b> 27:18 75:2 86:2,5 150:8
<b>pre-wildlife</b> 65:18	<b>prevents</b> 84:25	
<b>precautions</b> 130:5	<b>previous</b> 41:6 69:6 81:21 91:11 107:5 116:22 136:13	
<b>precipitation</b> 43:3 58:21	<b>previously</b> 5:11 7:17 12:8 66:18 70:19 73:25 90:21 116:24 126:21 135:13 137:18	
<b>precision</b> 132:7	<b>price</b> 47:18	
<b>predetermined</b> 47:15	<b>primarily</b> 89:10	
<b>predict</b> 99:5	<b>primary</b> 18:19 25:8 30:14 73:23	
<b>predicted</b> 29:4 99:14,21 100:2	<b>principle</b> 61:20 73:21	
<b>preexisting</b> 63:10		

**processing** 34:7 44:3,5,  
7 50:17 109:7 118:3  
124:18 127:20 132:13,  
20 133:19,24 135:16  
137:12,23 138:3,13  
139:6,7,22 144:10  
145:10

**produced** 32:9 44:3,5

**productive** 145:7

**profile** 143:5,11

**program** 31:16,19,20  
48:13 53:9 76:15 126:18

**programs** 47:4

**prohibit** 28:6

**prohibits** 28:4

**project** 8:17 9:4 20:18  
21:18 115:5

**projected** 48:5 49:4 65:8

**proliferation** 27:14

**promise** 30:7

**promised** 157:16

**promote** 18:21

**prompt** 80:4

**promptly** 78:2,3

**propane** 82:19

**proper** 113:9

**property** 48:20 49:11  
50:6 52:1 66:11 83:8  
101:10 102:24 103:3,4,5  
150:4,5

**proposal** 22:10 24:17  
152:16

**propose** 152:5

**proposed** 4:9 5:19 17:15  
18:10 23:20 24:10 28:21

29:22,23 71:9 85:16  
133:12 142:14

**proposing** 19:17 36:17

**propounded** 5:19

**protect** 31:3 84:19 102:2  
107:11

**protected** 94:18

**protecting** 66:21 72:24  
143:18

**protection** 10:14 26:16,  
24 53:7 54:22 76:12  
90:15,17 101:5 102:5  
120:1

**protections** 81:24

**protective** 76:7 143:24  
145:9

**provide** 5:2 17:18 18:8  
20:6 26:16 28:24 35:11  
50:20 70:5,12 76:25  
108:19 134:1 138:16  
147:3,7

**provided** 6:8 11:18 18:7,  
13 76:14 105:3 126:4  
165:21

**provision** 5:7 40:4

**provisions** 37:16

**proximity** 72:15

**public** 7:19,20,24,25  
15:11,19,25 16:16 18:12  
35:7 48:18,21,22 49:13,  
21 51:22 77:15,22 78:6  
80:7,14 90:17 103:21,24  
105:21,22 106:1,6,8,16,  
17,25 107:22,23 113:18,  
23 114:4 119:20 140:13,  
14 146:24 147:12,20  
148:22 153:13 165:22,  
25

**published** 75:19 127:5

**pull** 43:13,14

**pulled** 33:4 42:15

**pulling** 43:16,17

**pump** 43:7 60:2 96:16

**pumped** 60:14 96:11

**pumping** 42:23 59:18  
60:7 61:17 65:16 94:16  
95:7,22,25 96:8

**pumps** 42:7

**purpose** 4:21 23:22  
26:14 143:5

**purposes** 117:24 136:17

**pursuant** 12:8

**pushed** 158:20

**put** 24:17 37:11 41:3  
46:14 57:11 60:25 71:4  
72:18 100:3 103:16,21  
105:25 114:13 117:9  
120:22 121:1 124:2  
144:22 147:5 155:5,6  
158:20 161:22,24

**puts** 57:4

**putting** 31:23 88:8,9,16,  
17,18

**pyrite** 94:22 95:11,24  
96:4

---

**Q**

---

**qualifies** 105:15

**quality** 10:15 59:24  
65:24,25 66:4 67:2  
69:19,21 94:13

**quantify** 132:6

**quantities** 79:12 131:23

134:24 136:1	4:8,24 109:14 146:9 147:14 165:20	<b>radiologic</b> 49:4 50:12 81:25
<b>quarter</b> 83:18 120:23 121:2,3	<b>questioners</b> 6:23 7:5 9:16	<b>radiological</b> 77:16 78:5 79:16 80:6 117:20 132:19 133:22 134:2 135:18 136:8 137:21 138:11 139:11,25 142:11 143:5,11 144:5
<b>quarterly</b> 64:17,18 96:8 111:22 112:1,6,8 120:5, 22 121:1	<b>questions</b> 5:11,12,13, 18,24 6:4,8 7:2,4,10,18 8:5 9:20,24 12:15 15:17 17:7 19:7 55:15 58:5 62:16 71:4 91:12 102:19 104:7 108:8 109:1,17 110:15 144:5 145:1,4 153:14 156:22,24 157:23 158:3,11	<b>radionuclide</b> 121:6 143:17,21,23
<b>question</b> 6:12 7:4,6,7,8, 14,15 9:17 10:9 11:15 12:7,16,22 13:18,22 14:2,8,18,23 15:1,20,23 17:10 18:17 19:16 20:22 22:20 25:1,6 26:15 27:3 28:9 29:21 31:10 32:24 33:1 35:13 37:14,25 39:9,10,20 40:5,20 42:2 43:18 45:12,13 47:11 48:2 49:3 50:11 51:17 52:21 53:21 58:7 59:6, 17 60:7,14,16 61:14 62:13,14 63:16,25 64:5 65:22 66:25 67:24 69:2, 6,18 70:7,11,13 71:2,9, 12 73:1,17 74:5 75:17, 22 76:17,23 77:13,23,24 79:15 80:3,9 81:6,11,24 83:7 85:3,16,21 86:13, 14,16 87:1 89:14,18 90:25 91:9 92:7,22,23 94:20 96:19 98:10,22 99:1 100:14,25 102:21 104:16 109:12,25 110:14 111:15 116:22 117:22 118:9,14 119:10 121:18 122:2,21 124:16 125:10,21 126:1 127:1, 13 128:16,17 129:15 134:17 135:21 136:4,5,6 138:9 139:14,19 140:6 142:9 144:13 145:8 148:10,25 151:19,22 152:8,15 157:25	<b>quibble</b> 28:1	<b>radionuclides</b> 53:23 55:11 58:11
<b>question-and-answer</b>	<b>quick</b> 89:22	<b>radium</b> 53:11 138:22 139:3
	<b>quickly</b> 31:10	<b>radon</b> 8:13 24:19 33:16 53:12,23 54:3,5,10,18 55:11 56:4,7,11,12 57:18,23 58:11 73:24 120:5,8,10,13,15 121:2 122:3,7,12 123:1,16
	<b>Quoting</b> 17:19	<b>raised</b> 148:4
	<hr/> <b>R</b> <hr/>	<b>Randall</b> 8:9 11:13 12:7, 14,21,24 13:6 15:5 23:11 24:16 25:4 47:1 85:4,9 86:4 104:15 109:12 126:10,20 128:15 129:11 135:22 146:21 147:10,18 148:21 149:8 153:25
	<b>R312</b> 10:18	<b>Randalls</b> 153:25
	<b>R313-12</b> 10:19	<b>range</b> 131:25 132:6 137:17 149:23,24
	<b>R313-17-4</b> 5:6	<b>ranged</b> 52:5,10
	<b>R313-22</b> 41:11	<b>ranges</b> 97:7 104:4 136:13,15
	<b>R313-24-3</b> 104:25	<b>rationale</b> 92:8,10,12 93:17
	<b>R317-6</b> 10:15 101:17 102:5	<b>RCRA</b> 74:20 101:6,11,18
	<b>R317-6-3</b> 66:14	
	<b>Rad</b> 104:2	
	<b>radiation</b> 4:10 5:4 8:14 10:18,20 48:25 49:16 106:3 114:8 145:21	
	<b>radio</b> 154:16	
	<b>radioactive</b> 10:17 35:14 50:14 78:6 79:17,18,20 133:16	



**reach** 81:4 84:4 151:25  
**reached** 43:21 44:6  
**reaching** 79:22  
**read** 21:25 158:1  
**readily** 113:17,21,22  
 114:19  
**reading** 42:4 45:13  
 49:17 102:20 117:9  
**ready** 88:6  
**realistically** 33:23  
**realize** 25:19 32:14  
 159:4,15 160:12  
**realm** 75:20  
**realtime** 116:7,8  
**reason** 7:5 13:13 21:9  
 23:15 24:3 27:8 42:17  
 93:18 116:11 158:2  
 163:21 164:14  
**reasonable** 75:9 147:6  
**reasons** 33:8 88:7 90:21  
 143:8  
**receded** 65:10  
**receding** 65:16  
**receipt** 90:3  
**receive** 4:18 15:1 27:22  
 34:3 37:3 59:1 75:17  
 89:1,21 90:5 111:14  
 135:25 142:8,17 165:25  
**received** 7:20 8:1 15:20  
 33:24 34:2,11,12 35:9  
 45:25 48:22 49:13 50:8  
 51:1,2 75:25 106:1,6  
 117:15 133:9 136:9  
 140:1 142:13 143:4  
**receives** 119:12

**receiving** 111:12  
**recent** 73:18 78:4 91:8  
 97:11 116:20 122:17  
**recess** 85:12  
**recharge** 43:5 91:8,15,  
 24 92:3 96:16  
**recharged** 43:12  
**recirculate** 42:12  
**recitation** 41:14  
**reclaim** 55:18  
**reclaimed** 47:20 56:7  
**reclaiming** 39:23  
**reclamation** 17:11 18:11  
 20:1 23:4 25:21 30:5  
 37:6 38:1,5 46:15 47:22  
 55:22,25 56:5,13 57:2,3  
 58:14,16,23 60:8,11,15  
 61:17 73:18 85:17  
 104:10 106:20,21,23,24  
 107:6,8,23 119:22  
**recognized** 5:12 6:15  
**recommendations**  
 62:20  
**recommends** 41:21  
**record** 6:20,22 7:8,11  
 8:5 10:4 18:12 87:13  
 105:5 106:18 107:7  
 120:15 147:20,25 148:6  
**recorded** 6:18 9:18  
 69:15  
**records** 57:13,14  
**Recovery** 101:9  
**recurring** 36:23  
**redo** 31:24  
**reduce** 17:22 62:10

**reduced** 56:4  
**reduction** 73:18  
**Reemay** 30:22  
**refer** 136:7,11 140:6  
**reference** 13:15 36:1  
 113:20 116:20  
**referenced** 11:3 17:20  
 107:18 113:15,16  
 114:16 116:16  
**referred** 36:1 132:11  
 137:15  
**referring** 78:17 99:19  
 104:11 111:20 114:5  
 115:8 126:20  
**refers** 41:11 133:6,7  
 136:25  
**reflect** 117:7 120:12  
**reflected** 81:15 100:5  
**reframe** 12:10  
**reg** 125:11 127:15  
**regenerating** 42:25  
**region** 84:3  
**regions** 18:1  
**Registers** 127:5,6  
**regular** 36:24  
**regularly** 78:6  
**regulated** 71:23 79:24  
**regulation** 125:8,12  
 128:14  
**regulations** 10:9 12:18  
 44:23 58:17 79:6 125:18  
 127:8,11  
**regulatory** 11:7,22 14:7,  
 17 19:25 25:2 48:15,20  
 49:11,15 50:3 70:17

76:3,11 78:15,23 79:3  
101:2 140:10,11 143:16  
144:3

**related** 36:12 62:16  
101:2 111:22 115:5  
124:12

**relates** 33:13 136:4

**relating** 4:14

**relation** 134:25

**relative** 56:9 58:7 61:15  
75:22 81:11

**relaxing** 18:4

**release** 53:17 77:6,9  
98:8

**released** 60:22

**releases** 77:1,16

**relevant** 5:14 15:2,4,5  
87:12 109:18 119:22  
132:22 133:12 142:14,  
21,24

**reliance** 62:18

**rely** 146:1

**relying** 30:2

**remainder** 55:3

**remaining** 39:25 41:5  
47:12 48:6 54:15,21  
56:21 89:7 90:6

**remedial** 40:1 110:25

**remediate** 35:17

**remediated** 51:21

**remediating** 37:8

**remediation** 36:19 37:12  
52:18 62:4 101:4

**remember** 84:7 105:21  
153:13 157:3

**remind** 56:6 159:21  
165:22

**remote** 27:18

**removal** 59:25 60:3  
63:17

**remove** 62:2

**removed** 58:15 75:13  
91:8 92:23

**renew** 156:19

**renewal** 4:12 16:17  
31:23 66:17 104:10  
105:23

**renewed** 36:25

**repair** 26:22

**repairs** 54:18

**replenishing** 42:14

**report** 28:14 29:3 45:14  
51:20,21,25 52:25 53:5  
57:15 63:5,8 74:7,16  
75:12 91:14,17 96:4,5  
105:25 106:14 120:8  
122:3,5 133:15 138:21  
140:17,21

**reportable** 79:12

**reported** 74:7 75:5

**reporter** 4:20 6:19,21,24  
17:3 47:2 79:13,14 86:3  
148:6

**reporting** 79:3 122:24

**reports** 28:17 55:6 124:6  
140:3

**representative** 25:17  
74:9 75:10 133:2

**representatives** 5:17

**represented** 31:5

**representing** 136:15

**represents** 47:5

**request** 4:17 7:14 35:9,  
10 74:15 75:6 114:13  
124:12 134:10 142:7

**requests** 124:2

**require** 19:17 33:14  
36:21 37:9 54:14 61:9  
70:18 78:3 87:21 92:13,  
20 117:14 118:5 119:4  
121:14 122:24 144:8

**required** 17:17 21:1  
26:20 32:2 35:18 39:2  
45:16 46:1 48:16 53:6,  
10,15 61:21 64:12 68:19  
69:14,16 70:14 71:5  
76:21 77:17 78:14 80:10  
91:2 103:19 104:21  
112:4,5,10 115:15,16  
116:25 117:19,23 119:7,  
10 120:3 121:17 122:4  
123:8,13 124:9 138:16  
139:1 140:11 144:19,22

**requirement** 5:5 18:4  
37:19 48:11 50:22 76:6  
104:11,14 120:7 121:5  
122:23 123:8 142:2  
143:18,20 144:17

**requirements** 4:25 5:8  
18:15 25:2 29:12 41:21  
67:21 72:5 76:11 78:9,  
11 83:13 84:23 91:22  
104:8 113:25 125:12  
130:4,15 144:3

**requires** 5:1 67:21 80:12  
104:22 143:25

**requiring** 20:24 52:22  
64:6 65:23 67:1,25 73:2  
92:8 93:4

<b>research</b> 116:17,18,20	<b>restricted</b> 82:7	<b>Ridge</b> 93:14
<b>reservation</b> 80:20 155:2, 10,11,12 156:13 157:9, 17 163:23 164:13,19	<b>restrictions</b> 117:13	<b>rights</b> 12:5,11 13:4 15:8 39:12 83:14 84:24
<b>reservations</b> 155:3	<b>result</b> 37:18 52:8	<b>Rights'</b> 67:20
<b>resident</b> 148:9 153:2 156:12	<b>result's</b> 124:8	<b>rigorous</b> 48:12 72:20
<b>residential</b> 52:14,18	<b>resulted</b> 54:6	<b>risk</b> 45:19
<b>residents</b> 78:7	<b>resulting</b> 77:9	<b>risks</b> 94:14
<b>residues</b> 27:17 81:14,20 134:5	<b>results</b> 31:19 32:5,7,10 33:18 34:23 48:19 49:10 53:5 62:19 66:15 75:12 100:2,6	<b>road</b> 102:24,25 103:2,3
<b>resist</b> 30:4	<b>retain</b> 115:16	<b>roadway</b> 102:22 112:23
<b>resolve</b> 17:14	<b>retardation</b> 98:11,17	<b>Roberts</b> 9:12 40:10 47:14 56:17 57:12 58:1, 12,25 59:3,5 77:2,3,17 79:20 80:8,17,21 84:8 86:9 89:6 103:2 129:25 130:12 145:20 146:3 153:21
<b>resolved</b> 54:11 125:22	<b>returning</b> 59:23	<b>rock</b> 17:22 18:1 19:23 21:6 85:23
<b>Resource</b> 101:8	<b>reversion</b> 19:23	<b>rodents</b> 82:1 161:19
<b>resources</b> 4:16 9:14 64:12,20 91:23 102:22 103:4 110:14 113:14	<b>revert</b> 19:17 124:22	<b>role</b> 9:4
<b>respect</b> 13:2 104:8 162:1	<b>reverts</b> 125:16	<b>rollover</b> 11:7
<b>respond</b> 70:11 152:16	<b>review</b> 21:4,8,10 69:25 70:3 98:4 106:20 140:3, 16,18,22	<b>root</b> 26:18,25 29:24 30:17
<b>responded</b> 154:3	<b>reviewed</b> 23:17 39:4 76:9 86:24 134:11 140:22 144:1	<b>roots</b> 31:1
<b>respondents</b> 6:23	<b>reviewing</b> 28:23	<b>round</b> 54:5 57:21
<b>responding</b> 116:14	<b>reviews</b> 86:16 140:16	<b>rounds</b> 107:9
<b>response</b> 7:6,9 12:20 53:4 63:24 76:24 77:19 79:8,9 80:9,11,16 103:13 116:21 147:19 148:25 149:9	<b>revised</b> 53:2,3,6,8,13	<b>route</b> 129:17,20 130:5,8, 19,22
<b>responses</b> 108:13,16 113:10 145:3	<b>Revision</b> 17:12 30:5 38:5	<b>routes</b> 131:10,14
<b>responsibility</b> 79:21 80:13	<b>revisions</b> 35:14	<b>routine</b> 112:13
<b>rest</b> 25:17 156:25	<b>revisit</b> 23:15	<b>routinely</b> 119:15
<b>restabilizing</b> 65:18	<b>reword</b> 87:2 100:16	<b>RSMEANS</b> 41:1
	<b>Reynolds</b> 153:24	<b>RSR</b> 90:8
	<b>rhetoric</b> 13:3	<b>ruined</b> 158:16
	<b>rich</b> 165:10	

**rule** 87:4,25 104:24  
105:11 127:11

**ruled** 44:15,23 125:22  
126:22

**rules** 5:5,10,21 6:8,21  
10:14,18 11:3,4,8 12:9  
17:21 41:10 43:25 44:19  
101:17 102:4,5 109:13  
125:23 126:5 165:21

**run** 31:20 33:22 152:14  
164:21

**running** 34:1

**runoff** 58:21

**Rushing** 8:21 28:21  
29:10,20 59:20 60:9  
63:5,22 64:10 65:11,17  
66:2,22 67:5 68:5,24  
69:6,25 70:17 71:7 72:4,  
18,25 73:5 81:9,17 91:7,  
11 92:2,12 93:1,8,18  
94:5,19 95:16 96:2,24  
98:3,13,25 99:18  
100:12,20 153:22

**RUSING** 71:17

**Russ** 8:19 107:15  
153:23

**Ryan** 8:16

---

**S**

---

**S-E-C-Y** 44:15

**S-E-Q-U-O-Y-A-H** 4:20

**sack** 45:18 46:2 161:15

**sacks** 45:25 144:11,20

**safe** 87:22 90:15 144:12  
148:13,14,17 149:7  
151:22 152:3 154:12

**safely** 87:21

**safer** 90:17

**safety** 74:7,16 75:11  
76:13 88:7 105:24  
106:13 133:15 148:12  
149:21

**Salt** 154:15 157:10

**sample** 48:19 74:6,9  
138:23

**sampled** 138:19,24  
139:1

**samples** 52:5,6,7,10,15,  
17 74:13,17,19,23,24  
75:2 124:5

**sampling** 53:9,11 62:21  
95:22 96:8 122:8,17  
123:24,25 124:9 138:21  
140:21

**San** 4:15 80:15,17 103:5

**sand** 114:11

**sands** 57:7 89:8,12

**Sarah** 102:15,16 105:20  
108:3 114:13 119:9  
130:23 137:14 141:1  
146:7

**sat** 154:1

**satisfaction** 122:11

**satisfied** 110:15

**satisfy** 4:25 144:2

**scanned** 114:11

**scanning** 114:9

**scenario** 52:14 151:17,  
21

**scenarios** 149:11,12  
150:23 152:5,6,12,16

**schedule** 46:20,21  
47:16,23,24

**scheduled** 4:7 5:23  
146:11,25

**scheme** 43:8

**school** 78:7 108:2 165:4,  
6

**Scientific** 51:20

**scientist** 8:17,22,24

**scope** 5:13

**Scott** 16:3 47:3 50:21  
85:13 102:11 103:14

**screamers** 82:19

**screen** 96:17

**screens** 95:10 96:17

**seal** 84:25

**seals** 67:21

**Search** 114:4 119:18

**seat** 156:6

**secondary** 73:24

**secretary** 9:11

**section** 8:13 19:18 22:5  
25:8,17 26:2,11 30:14,  
16,19 31:3,5 104:13  
129:16 130:25

**Sections** 74:16

**SECY** 44:14

**seep** 92:18

**selected** 40:21 98:16

**selection** 74:22,23 98:11

**self-sustaining** 17:21,24

**semantics** 138:7

**semi-arid** 18:1

<b>semiannual</b> 122:9 124:5	91:3 92:15,19 95:8	<b>side</b> 64:23 69:10
<b>semiannually</b> 69:14	<b>share</b> 108:23	<b>significant</b> 14:20 29:17 56:22
<b>send</b> 114:14 115:21	<b>Sharee</b> 153:18	<b>significantly</b> 52:15 56:5
<b>senior</b> 9:9 108:1	<b>sheet</b> 147:22	<b>signs</b> 98:2
<b>sense</b> 31:8 36:16 42:12	<b>Sheriff's</b> 80:18	<b>similar</b> 9:4 50:24 58:6 60:9 77:23 91:19 92:10 139:9,10
<b>sensitivity</b> 28:25	<b>shined</b> 155:15	<b>Similarly</b> 52:21 55:9
<b>separate</b> 10:5 39:10 160:21	<b>shipment</b> 110:2,13 117:17 136:1	<b>simple</b> 38:7
<b>separated</b> 67:8	<b>shipment's</b> 112:4	<b>simplify</b> 62:15 78:1 91:1 100:16
<b>September</b> 123:19	<b>shipments</b> 79:17,21,24 110:2,21 111:24 112:2 117:14,16 118:2,13 135:14,25	<b>simplifying</b> 71:2
<b>sequencing</b> 57:2	<b>shipped</b> 110:6 112:18	<b>single</b> 33:5 160:10 162:19
<b>Sequoyah</b> 4:19 43:19,22 44:1,7,10 45:5,9,14 50:23 74:8,14 75:22,24 106:14 124:13,14 125:1 128:10 129:17,25 131:6, 13 132:9,14 139:6 142:5,9 144:9 145:20	<b>shipper</b> 79:21	<b>sir</b> 10:23 11:2 13:1,3 16:19 148:5,8 151:24 152:14 156:7
<b>SER</b> 9:2,4 75:20 129:19 131:16 132:10 133:1,21 136:4,17 139:4 141:16, 18,22 143:2 145:8	<b>shipping</b> 109:4,10 110:3 130:17	<b>sirens</b> 154:17
<b>series</b> 65:8 93:13,14,15	<b>shoes</b> 155:15	<b>sit</b> 156:5,25
<b>serve</b> 143:4	<b>short</b> 6:13 40:20 85:12 120:20 131:7	<b>site</b> 27:20,25 28:8 54:18 63:15,22,24 64:13 65:14 82:10 83:12 84:10 89:11 101:11,18 111:13 113:14 116:10,14,24 120:13 121:18,19,20,22 140:3 158:20
<b>session</b> 147:14	<b>shorten</b> 62:15 77:25 91:1 94:11	<b>sites</b> 14:20 27:15 115:4, 8,10
<b>set</b> 7:21 16:25 19:20 23:23 24:4 47:21,23,24 165:23	<b>show</b> 49:10 68:11 69:11 70:25 133:21 147:6 158:4	<b>sitewide</b> 94:23
<b>sets</b> 5:7 56:13	<b>showed</b> 51:7 122:17	<b>sits</b> 45:17
<b>settlement</b> 54:25 55:1,7 57:6,22 85:25	<b>showing</b> 28:25 64:19 97:3,5,9 98:1,3 143:5	<b>sitting</b> 113:8 155:14 156:16,18,19 157:5,7, 10,11,21 161:14 163:15 165:8,12
<b>settling</b> 55:3 56:11 57:10 86:7	<b>shown</b> 29:2 94:9	<b>situation</b> 77:6 93:24
<b>seventh</b> 28:9	<b>shows</b> 30:7 33:2 69:23	
<b>shallow</b> 65:24 66:1,12, 21 67:2,6,8,13 69:19,22	<b>SHPO</b> 115:23	
	<b>shut</b> 39:11	
	<b>sic</b> 30:23	
	<b>sick</b> 160:5 163:13,18,20	

117:25 149:18	146:1	<b>specifically</b> 32:25 68:15 145:22
<b>situations</b> 118:1 151:2,3	<b>SOPS</b> 111:4,6	<b>specifics</b> 63:23 105:18
<b>sixth</b> 27:3	<b>sort</b> 6:25 30:16 44:2	<b>specifies</b> 81:17
<b>size</b> 61:25 74:9,11	<b>sorts</b> 151:7	<b>speculate</b> 22:25 108:24 122:16 149:6,14 150:1, 9,25
<b>skip</b> 42:2 45:12 129:14	<b>soul</b> 155:22	<b>speculating</b> 32:20
<b>slight</b> 97:5	<b>souls</b> 159:13	<b>speculation</b> 45:7 60:5, 17 61:9 89:3 129:10 134:18
<b>slightly</b> 39:10	<b>sounds</b> 24:12 91:7	<b>spill</b> 81:6,18 110:17 121:10
<b>slimes</b> 43:1	<b>source</b> 14:3 53:23 55:11 58:10 67:16 70:15 82:10 91:24 92:3 94:16 97:15, 18,24 98:15 100:21 117:18	<b>spilled</b> 112:20,23
<b>slimes-drain</b> 42:6,23 43:7	<b>sources</b> 18:12 40:25 63:10 141:7,8,11	<b>spills</b> 79:11 81:14 110:23,24 112:18 113:3
<b>slope</b> 26:11	<b>south</b> 65:19 95:20 151:12 156:13 158:23	<b>split</b> 71:3
<b>sloped</b> 25:11 26:8	<b>southeast</b> 25:10 65:4 92:11,13,20 93:17 94:2, 8	<b>spray</b> 46:4 144:23
<b>slopes</b> 18:2,5	<b>southeasterly</b> 64:8,11 68:4 91:4	<b>Springs</b> 153:20
<b>sludge</b> 74:18,25 75:3 110:17	<b>southerly</b> 64:22	<b>square</b> 54:6,9 74:11
<b>small</b> 26:23 27:14,15,18 40:1 43:7 131:8 153:18 154:19	<b>southern</b> 65:19	<b>squared</b> 56:8 122:25
<b>smart</b> 155:20	<b>southwest</b> 92:9,14,16 93:13,19,20,25 94:1,10	<b>stability</b> 57:8 58:19
<b>smirk</b> 160:11	<b>southwesterly</b> 65:20	<b>stabilizing</b> 64:24 97:10
<b>social</b> 48:10	<b>SPCC</b> 81:7,10,16,17	<b>stable</b> 95:21,24
<b>Society</b> 41:1 114:24	<b>speak</b> 26:22 126:10 148:14 153:4,8 156:8	<b>stack</b> 14:3
<b>soil</b> 30:3 46:8 48:14 53:8	<b>spec</b> 44:12	<b>staff</b> 5:16 17:5 23:17 110:21,22 113:17,22,23 114:3
<b>soils</b> 77:9 81:14,20	<b>special</b> 114:17 145:14	<b>staff's</b> 17:14
<b>solely</b> 109:6	<b>specific</b> 32:14 35:13 76:2 103:11 105:19 134:11 143:17 145:13, 18 150:22	<b>stage</b> 41:4
<b>Solomon</b> 62:23		<b>stand</b> 150:19 160:13 164:17
<b>solution</b> 21:20,21,23 27:17 69:8 82:13 88:11 99:8 138:19 160:9		<b>standalone</b> 92:3
<b>solutions</b> 100:17		<b>standard</b> 33:14 50:2
<b>somebody's</b> 36:3		
<b>sons</b> 159:23		
<b>SOP</b> 118:11,21 145:22		

56:6 59:25 60:22 112:11  
121:8,17 122:12 123:1,2  
143:13

**standards** 20:25 21:3  
32:9 33:14 48:15,17  
59:21 60:12 61:13 66:13  
71:22 103:20 127:15,16,  
20,24 128:2 140:10,11,  
12

**standing** 164:15

**standpipes** 72:16

**start** 28:10 57:1 58:2  
104:15 112:12 123:24,  
25 140:9 146:20 147:9  
158:6 160:15

**started** 4:5 61:23 105:21  
110:2 114:5

**state** 8:4 11:6 17:2,20  
18:4,13 40:12,13,18,24  
47:1,6 86:18,22 91:15  
100:1 101:25 102:23  
114:23 115:18 125:11  
126:11,16,17,19 129:18,  
22 130:3,13 143:10  
146:17 148:5 152:6

**State's** 126:21

**stated** 12:11,12 49:9  
50:5 90:21 103:13,20  
104:1 119:9 122:7  
128:22

**statement** 7:13,16 48:8  
61:19 100:4 103:15  
106:12 151:1

**statements** 6:25 70:6

**states** 5:2 12:5 13:3,4,5,  
7 91:17 104:21,23  
131:16

**station** 53:12 83:21

**stations** 53:8

**statues** 82:5

**status** 97:19 114:17

**statute** 125:8

**statutes** 125:11,17

**stay** 46:21

**steel** 83:24

**step** 9:17

**stipulated** 65:6 107:14,  
19

**Stipulation** 19:21 20:16  
22:1 23:3,6 25:3

**stock** 155:6

**stockpiles** 25:22

**stop** 159:2

**storage** 46:13 84:9  
144:12,17,25

**stored** 144:9

**stricken** 36:6

**strip** 34:14

**structural** 84:18

**studied** 158:1

**studies** 49:1 103:8,22

**study** 30:8 34:19 63:1,18  
64:1,3 68:14 73:8,11  
91:12 92:2,13,14,20  
93:19 94:10 99:1,25  
103:18 158:3,10

**stuff** 42:3 149:19 151:12  
155:4 158:9 161:12

**stuffy** 163:5

**stupid** 154:23

**subject** 101:7

**submit** 7:25 9:17 22:14  
32:2 53:6 123:14 145:2  
146:18 149:9

**submittal** 9:5 37:3 39:4,  
7

**submittals** 107:9

**submitted** 5:11,25 6:8  
7:3,11 9:19,24 12:8 21:9  
37:6 62:24 70:1 86:17  
100:15 115:5 119:6,8,15  
138:20

**submitting** 124:6

**Subpart** 87:4,5,25 88:12  
122:23 123:24 127:15

**subparts** 24:25

**substance** 105:9

**substances** 77:16

**substantial** 70:4

**substantially** 32:8

**subtitle** 101:8

**success** 17:19

**successful** 122:12

**sudden** 63:21

**sufficient** 7:19 23:25  
61:20 73:22 90:14

**sufficiently** 55:21

**suit** 155:19

**suitable** 87:20

**suated** 103:23

**suits** 155:14

**sulfate** 96:21 97:2,9  
98:14 99:13

**summarize** 43:20

**summarizing** 31:10

<b>summary</b> 62:19		160:2,12
<b>summer</b> 54:2		
<b>Summerville</b> 67:10		
<b>Super</b> 45:18,25 144:20		
<b>superior</b> 21:20,24		
<b>superseded</b> 114:22		
<b>supply</b> 83:11,22		
<b>support</b> 22:22 63:4 92:10 97:18,23 99:3		
<b>supporting</b> 70:6		
<b>suppose</b> 42:18 109:18		
<b>supposed</b> 25:9 109:14 123:14 124:4		
<b>surcharge</b> 57:4		
<b>surety</b> 35:16 36:19,22, 24 37:4,13 38:4,23,24, 25 39:13,14,23 40:18,22 41:21 61:17,20 62:3 73:18,22 74:1		
<b>surface</b> 42:24 48:14 83:23,25 84:1		
<b>surrounding</b> 10:3 48:4 78:8		
<b>survey</b> 115:9 117:4		
<b>survive</b> 161:1,3		
<b>suspended</b> 123:23		
<b>Sustained</b> 13:20		
<b>system</b> 17:15 18:2 20:14,17 21:6 22:7,21 23:10 26:25 29:19 54:16 55:2 58:20 90:6 91:20 145:22		
<b>systems</b> 21:4 26:18 71:19 72:2,9 76:19		
	<b>T</b>	
<b>table</b> 9:17 33:2,9,12 51:11 63:7 132:10,11, 12,25 133:5 146:16		
<b>tail</b> 119:7		
<b>tailing</b> 27:12 43:2 46:15 47:20 54:14 57:8 59:15 61:3 63:1,4 65:3,5 66:3 68:9,25 69:8,10 71:18, 25 72:15 76:18 77:10 81:22 82:24 87:18,25 88:3,5,6,14,15,19,22,23 89:1,8,12 92:17 94:7 96:23 98:8,20 100:8,17 107:2,5 117:3 122:8,11 128:1		
<b>tailings</b> 27:10,20 28:5 29:5,25 42:11 43:11 54:24 55:17,18,20 57:5, 14 58:13,19,22 59:12 63:6 68:15,22 69:5 70:20 73:13 84:21 87:7, 8 88:2,8,16,19,21,22 89:7 90:3,7,10 92:9 95:3 100:20 106:23 132:16 133:2,3 135:1 137:3 138:19 139:12 141:13 150:7		
<b>takes</b> 26:25 38:15 55:18, 20 56:1 62:6		
<b>taking</b> 17:6 44:12 52:22 64:6 65:23 67:1,25 73:2		
<b>talk</b> 6:23 127:6 160:11 162:10,25 165:2		
<b>talked</b> 107:14 141:16 143:15		
<b>talking</b> 7:1 30:23 46:3 61:23 105:20 116:6 131:5 135:17 148:11		
		<b>talks</b> 118:17 131:1
		<b>tasks</b> 38:1,16 39:14,17 40:7
		<b>taste</b> 164:4
		<b>taxes</b> 102:24 103:4
		<b>tea</b> 163:4
		<b>tears</b> 72:10
		<b>technical</b> 17:12 21:3 25:5,6 33:2 42:17 51:9 62:17 71:7 92:19,21 93:8 106:10,11 107:16, 17 160:8
		<b>technically</b> 63:18 109:13
		<b>techno</b> 51:9
		<b>technology</b> 71:21,22 72:5,8,13
		<b>telling</b> 162:16
		<b>tells</b> 118:16
		<b>temporary</b> 26:24
		<b>ten</b> 39:15 49:19,25 104:4
		<b>Ten-minute</b> 85:8,9
		<b>tenth</b> 33:1
		<b>term</b> 70:8 128:25 129:1 160:8
		<b>terminology</b> 67:7
		<b>terms</b> 10:25 11:25 20:19 23:8 136:12
		<b>test</b> 19:18 25:7,8,16,22 26:2 30:14,16,19,21 31:3,5 85:16 107:15 117:19
		<b>tested</b> 21:23 74:14,20,23
		<b>testimony</b> 135:23,24 136:2



**testing** 23:23 24:9,22  
 32:17 41:1 54:5 74:21  
 75:7,12 98:23 99:2,7  
**Thelma** 162:8  
**theoretically** 95:23  
**theory** 95:24  
**therefrom** 134:5  
**thick** 30:2  
**thin** 90:10  
**thing** 54:20 105:7 123:8  
 132:9 138:25 157:2  
 159:1  
**things** 6:4 19:5 33:10,15  
 39:25 43:9 56:15 62:2  
 95:22 107:12 115:13  
 137:9 144:7 150:18,20  
 151:18 161:10  
**thinking** 161:8  
**thinks** 25:16  
**thorium** 53:11 74:24  
 76:17 145:24 146:1  
**thorium-230** 75:23 76:4  
**thorium-232** 75:24 76:4  
**thoroughfares** 80:7  
**thought** 47:8  
**Thursday** 146:25  
**time** 4:7 6:12 7:1,19 17:6  
 38:13 39:16,18 45:11,25  
 49:6 52:19 55:18,20  
 56:9 58:5 59:11 61:15  
 69:24 77:25 85:5,10  
 104:18 106:3,4 110:6  
 113:10 114:8 115:13,15  
 116:4,8,11 119:14  
 120:17,19,21 122:19  
 124:21 125:24 131:7  
 133:1 140:16 142:16  
 144:6,8,18,25 146:10,  
 13,17 147:1,6 148:12  
 151:11 152:14 153:6  
 157:12 158:3,13 165:15  
**timeline** 60:4 86:2,5  
**times** 33:25 39:4,5 61:20  
 73:22 116:9 120:12  
**timetable** 6:5 55:5,25  
**timewise** 47:8  
**tiny** 161:20  
**Title** 10:16 12:5,11,19  
 13:4 15:7  
**today** 5:21 6:6 7:20 17:6  
 47:9 85:23 102:10  
 135:13 142:24 146:9  
 147:7 157:15,18,19  
**today's** 5:13,23  
**told** 82:19  
**Tom** 8:21 153:22  
**tomorrow** 39:11,19  
**tonnages** 134:25  
**top** 18:6 25:12 42:11,12,  
 24 43:17 84:1 149:2  
 151:9 158:9  
**Topham** 8:19 17:17  
 18:22 19:1,7,13,22  
 20:13 21:2,16,25 22:9,  
 22 23:5 25:19 26:14,20  
 30:1,18,24 31:7 35:24  
 36:10,12,21 37:9,20,23  
 38:7,21 39:22 40:10,23  
 41:10,15,23 42:9,18,25  
 43:10 53:25 56:3 57:17  
 60:16 61:12,19 73:21  
 85:20 86:15 89:17,22  
 90:20 119:9,25 153:23  
**topic** 105:2  
**topsoil** 25:12,13,24,25  
 26:11  
**total** 49:19 74:20,24  
 131:8 136:12 137:20  
 138:11 141:5,6,9,10,12  
**totally** 36:6 86:1  
**touched** 91:6  
**town** 164:6  
**toxic** 149:19  
**toxicity** 74:21  
**tracer** 99:22 100:7  
**track** 135:14  
**training** 145:14,18  
**transcribed** 6:19  
**transcript** 6:19 108:9,14  
**transport** 28:12,17,24  
 99:4,20 100:10,23  
 130:11  
**transportation** 78:5,24,  
 25 79:25 130:4,15,23  
**transported** 63:6 130:1,  
 2,13  
**travel** 130:19  
**traveled** 78:7  
**treat** 123:3,4  
**tree** 77:14  
**trend** 64:8 97:4,5,10  
 98:5  
**trends** 63:14  
**tribal** 15:11 16:1,7,10,15  
 130:9,10,11 157:14,16,  
 19 159:5 162:8 163:18  
 164:5  
**tribe** 6:15,17 13:12  
 15:15,17,21 47:4 70:2,5

77:19 80:11,23 95:21 157:17 164:16	<b>ultimately</b> 20:8 22:16 31:6	<b>updated</b> 39:5 81:8,9 114:25 116:2,9 117:6 118:15
<b>Tribes</b> 69:23	<b>UMTRCA</b> 127:8	<b>updates</b> 114:25
<b>triggered</b> 52:13	<b>uncle</b> 158:25	<b>upgradient</b> 68:12 70:23, 24 83:17,19 94:25
<b>truck</b> 46:4 90:12 112:21	<b>uncontrolled</b> 77:1	<b>upper</b> 137:17
<b>trucking</b> 110:4 131:11	<b>underlying</b> 67:15	<b>uranium</b> 4:14 6:17 8:13 10:12 11:8 13:10 27:5, 21 45:10 47:18 50:15 52:4 62:22 74:14,24 96:21 97:2,4 98:4,5,6, 14,19 99:16,20 100:7 102:15,17 105:3 121:8, 11 127:16 128:3 151:7 154:22
<b>truckloads</b> 131:18	<b>understand</b> 22:21 25:8 29:9 32:15,25 33:3 39:8 41:18 42:6 43:23 44:2,6 70:7 120:18 127:1 132:22 156:15 159:25 161:6,9 163:1,16	<b>URS</b> 8:25 9:3 43:21 86:13,16,17,21
<b>trucks</b> 90:23 130:16,17, 20 131:2,3,6,9,12,13,16, 17 161:9	<b>understanding</b> 20:11 22:13 24:15 31:11 41:22 44:17 108:13 109:3 128:18	<b>USA</b> 62:21 102:22
<b>true</b> 159:12	<b>understood</b> 18:18 19:3 20:4 26:6 29:3 30:13 62:7	<b>USGS</b> 51:20,25 52:8,24 53:5
<b>Trust</b> 6:10,11 17:1,5	<b>undertake</b> 104:23	<b>Utah</b> 4:9 5:6 8:7,10 10:15,20 13:2,7 47:6 62:22,24,25 63:5 64:1 66:13,20 68:14 73:7,11 86:18,22 91:12,14,17 92:2 94:13 102:17 104:23,24 126:12 129:19 159:10
<b>Tso</b> 153:17,18	<b>uneducated</b> 155:17	<b>Ute</b> 6:14,15,16 10:2 13:11 15:12,15 16:2 46:23 67:7 69:22,23 70:2,5 77:13,18 80:11, 23 129:23 130:9 153:3,4 156:13 157:17
<b>tubing</b> 83:24	<b>United</b> 12:5,11 13:2,4,6	<b>Utes</b> 6:15,16 46:23
<b>turn</b> 40:12	<b>University</b> 62:24,25 63:5 64:1 68:14 73:7,11 91:12,14,16 92:2	<b>utilized</b> 57:1
<b>turned</b> 40:2 42:7	<b>unnatural</b> 69:3	<b>utilizes</b> 145:22
<b>turning</b> 160:18	<b>unresolved</b> 17:16	
<b>TV</b> 154:16	<b>unsatisfied</b> 20:8 22:16	
<b>type</b> 7:15 34:6 52:24 71:8,9 72:7 80:22 112:3 117:17 118:18	<b>unsaturated</b> 92:15 99:7	
<b>types</b> 28:13 48:13 151:18	<b>unstable</b> 90:11	
<b>typical</b> 145:24	<b>unusual</b> 4:22 24:10 68:1 70:15	
<b>typically</b> 62:3,10 97:15 131:23	<b>unusually</b> 69:3	
<b>typo</b> 100:15	<b>update</b> 36:18,22 37:4 116:12	
<hr/> <b>U</b> <hr/>		
<b>U.S.</b> 78:24 79:25		
<b>U.S.C.</b> 104:12		
<b>UAC</b> 104:25		
<b>Uh-huh</b> 22:8		

<b>V</b>	<p><b>valid</b> 63:19 64:2</p> <p><b>values</b> 74:6 98:16,17</p> <p><b>vanadium</b> 52:10</p> <p><b>variability</b> 33:1,3,8 34:5, 7 69:24 70:4,8 131:22</p> <p><b>variables</b> 150:12</p> <p><b>varies</b> 4:22</p> <p><b>vary</b> 55:25</p> <p><b>varying</b> 33:6</p> <p><b>vast</b> 25:15</p> <p><b>vegetation</b> 18:19,23 19:6,10 48:15</p> <p><b>vegetative</b> 17:21,24 53:9</p> <p><b>veins</b> 164:1</p> <p><b>Verification</b> 63:11</p> <p><b>verified</b> 73:7,13 91:21</p> <p><b>verify</b> 93:6 117:20</p> <p><b>verifying</b> 76:14</p> <p><b>version</b> 31:11,13,21 32:3</p> <p><b>versus</b> 44:13 50:2 150:4</p> <p><b>vertical</b> 30:25 67:11</p> <p><b>vetted</b> 21:7 22:11</p> <p><b>VI</b> 12:5,11,19 13:4 15:7</p> <p><b>vice</b> 9:10</p> <p><b>vicinity</b> 92:4 120:5</p> <p><b>view</b> 19:22 28:3</p> <p><b>violated</b> 25:2</p> <p><b>virtually</b> 69:23 70:8 105:8,14</p>	<p><b>volume</b> 41:12,18 71:17 74:10 84:23 141:13</p> <p><b>volumes</b> 134:25</p> <p><b>volunteer</b> 109:19</p> <hr/> <p style="text-align: center;"><b>W</b></p> <hr/> <p><b>W.R.</b> 143:1</p> <p><b>wait</b> 7:6 54:24,25 55:3 56:11 121:13</p> <p><b>waiting</b> 121:9</p> <p><b>wanted</b> 24:13 35:10 42:19 51:3 104:13 109:9 110:1 127:18 128:11</p> <p><b>warranted</b> 68:20 69:16 73:15 91:24</p> <p><b>waste</b> 4:9 8:14 27:11,15 43:23,25 44:2,4,7,19 79:18,20 88:17,20 89:10,21 90:12 110:14 111:12,14 117:15 118:2, 13 119:5,23 124:13,14, 17,23 127:20,24,25 129:18 130:22 132:13 133:12 135:6,25 137:23 138:1,2,3,5,7 139:6,9 141:25 142:12,13,20,22 144:9 145:11 160:6,7 161:10</p> <p><b>wastes</b> 27:18 44:1 87:7, 9 89:16 90:19 138:4</p> <p><b>wastewater</b> 63:7 68:15 70:21 73:14 95:3 100:21 138:21 140:3,21</p> <p><b>watch</b> 6:17 102:15,17 105:4 122:19</p> <p><b>water</b> 4:13 10:15 17:23 42:14,24 43:16 45:16,20 46:1,3,4,5 48:14 54:21 56:15 57:19 60:19,21,25 61:2 63:7 66:3 67:17,20 68:16 71:5,8,13,15,17, 24 73:9,12 74:23 82:9, 12 83:7,11,14,22 84:23, 24 109:2,4,10,17,22,23 110:4,6 129:4 144:22,23 158:14 163:24,25 164:3, 4,5,6,7,8,9,11</p> <p><b>watered</b> 42:22</p> <p><b>waters</b> 155:8,9,11</p> <p><b>ways</b> 21:3 30:11 60:24 95:9 107:11 111:2 136:9,24</p> <p><b>weather</b> 150:13,15,16 151:10</p> <p><b>weathering</b> 52:9</p> <p><b>Weber</b> 148:1,2</p> <p><b>website</b> 107:7,20</p> <p><b>week</b> 146:25</p> <p><b>weeks</b> 131:7,17 158:13</p> <p><b>weight</b> 117:18</p> <p><b>well-by-well</b> 95:16</p> <p><b>wells</b> 63:12 64:13,14,15, 16,17 65:1,2,8 66:15,16, 18 68:11 69:9,23 70:3,9, 14,18,22,24 72:14 83:7, 11,15,22 84:5,21 91:20 93:10,12 94:3,6,17,24 95:21 96:1,7,11,12,14 97:7 139:2</p> <p><b>west</b> 70:2</p> <p><b>wet</b> 94:4</p> <p><b>whatnot</b> 157:11,23</p> <p><b>whatsoever</b> 14:12 25:4</p> <p><b>Whiskers</b> 162:7,8 165:14,17</p>
----------	---	--

**White** 4:14 10:2,11  
 13:10,11,16 15:12 16:2,  
 11 27:6,21 28:5 47:13  
 49:5 50:1,13 51:19  
 52:23 59:8 62:22 64:8  
 71:6 73:19 75:25 76:24  
 77:13 78:3,7,12,13  
 79:18,22 80:4,7 83:8,17  
 89:20 101:10 103:12  
 104:2,9 109:11 111:25  
 112:18 115:5 130:18,20  
 133:19 141:23 142:14  
 148:9 149:23,24 151:15  
 152:23 153:2,4,19  
 154:5,19 155:9,10  
 156:12 162:9,10,12,23,  
 24 163:17 164:5

**wide** 34:4 112:24

**wildlife** 63:17 64:22,25  
 65:12 68:23 73:6,9,12  
 82:1,6,9

**wildly** 47:19

**wind** 17:22 46:12 54:21  
 151:11,14,15

**winter** 163:12

**wisdom** 161:2

**wise** 6:12 61:10

**withdrawn** 57:19

**wives** 159:23

**wondered** 112:16 113:1  
 114:21,24 119:8 120:11  
 122:5 129:23 132:18  
 133:11 134:19 141:18  
 142:11 145:11

**wondering** 12:3 15:3  
 17:16 45:19 131:15,19

**words** 10:5 123:3

**work** 30:11 36:2,5,14

39:22 40:1 49:25 61:21  
 62:19 72:21 74:1,3  
 92:17 99:3 106:5 115:17  
 145:21

**worker** 49:16 50:1 104:2

**workers** 48:25 103:11,  
 21,24 145:14,18

**working** 122:18 149:19  
 151:5,6

**worth** 31:22 57:17

**wrap** 6:4

**writing** 12:8 152:11

**written** 5:11 6:8 7:22 8:1  
 104:23 148:24 165:25

**wrong** 49:18

**wrote** 32:24

**WW-2** 83:18

**WW-4** 83:16

**WW-5** 83:19

---

## Y

---

**year** 31:12 33:24 34:8,10  
 35:1 36:18 37:4,7,18  
 38:9 39:2 48:23 49:14,  
 16 54:3 110:8 112:9  
 120:12

**year-to-year** 33:19

**yearly** 122:5

**years** 24:1 31:18,23  
 34:2,3 35:4 38:18,24  
 39:3,15,24 40:23 48:5  
 49:19,25 70:1 84:14  
 85:18 104:4 162:13,20,  
 21,24 163:2

**yellowcake** 44:3,12

**Yolanda** 156:3,10

**you-all** 35:22 39:12  
 109:19

**young** 163:19 164:16

---

## Z

---

**zip** 157:25

**Zody** 9:6 13:18 45:6  
 87:11 109:20,21 125:20  
 126:2,15 129:9 134:17  
 135:20 147:11,14,17  
 153:22

**zone** 148:13,14 149:7  
 151:22 152:3 154:12