



## APPEARANCES:

On Behalf of the Petitioner:

J. TIMOTHY HOBBS, ESQ.  
K&L Gates LLP  
501 Commerce Street  
Suite 1500  
Nashville, TN 37203  
(615) 780-6700  
tim.hobbs@klgates.com

On Behalf of the Environmental  
Protection Agency:

DESEAN GARNETT, ESQ.  
Environmental Protection Agency  
Office of Regional Counsel  
Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
(415) 972-3046  
garnett.desean@epa.gov

## ALSO PRESENT:

EMILIO CORTES, Clerk of the Board  
NIVEA BERRIOS-COLON, Senior Counsel to the Board  
GRANT MACINTYRE, Senior Counsel to the Board

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

2 (1:30 p.m.)

3 MR. CORTES: May I have your  
4 attention, please. No recordings of these  
5 proceedings is allowed. A transcript will be  
6 prepared by the court reporter and will be posted  
7 on the docket for this matter on the  
8 Environmental Appeals Board website.

9 The Environmental Appeals Board of the  
10 United States Environmental Protection Agency is  
11 now in session.

12 Today, we will hear oral argument in  
13 the matter of Panoche Energy LLC, Permit Number  
14 R9UIC-CA1-FY17-2R, UIC Appeal Number 22-01.

15 The Honorable Judges, Mary Kay Lynch,  
16 Wendy L. Blake, and Kathie A. Stein, now are  
17 presiding.

18 JUDGE LYNCH: Thank you, and good  
19 afternoon, everyone. This is Judge Lynch. The  
20 Environmental Appeals Board is hearing argument  
21 today on a petition for review of the Underground  
22 Injection Control Permit, or otherwise known as

1 UIC Permit, issued by EPA Region 9 to Panoche  
2 Energy Center LLC. The permit authorizes  
3 injection of industrial wastewater into four  
4 existing, and two potential, Class I, non-  
5 hazardous injection wells. Panoche seeks review  
6 of the Ambient Monitoring provisions in Part  
7 roman numeral II.E.2 of the permit and requested  
8 oral argument.

9 The argument will follow the Board's  
10 February 22, 2023 order. The Board has allocated  
11 60 minutes for oral argument, and we will proceed  
12 as follows: First, we will hear from Petitioner,  
13 Panoche Energy Center, LLC. Panoche has been  
14 allocated a total of 30 minutes, and they may  
15 reserve up to ten minutes of their allocated time  
16 for rebuttal. Next, we will hear from EPA Region  
17 9. Region 9 has been allocated a total of 30  
18 minutes. Finally, if Petitioner opts to reserve  
19 time for rebuttal out of the 30 minute total, we  
20 will hear that rebuttal.

21 The Clerk of the Board will keep track  
22 of the time.

1           And before we begin, I want to thank  
2 everyone for your cooperation, as we conduct the  
3 argument in a virtual environment. It's  
4 critically important that the court reporter  
5 capture the argument. So, we will ask those  
6 presenting to speak directly into your  
7 microphone, and try to avoid speaking over  
8 others. But I will tell you that it is inevitable  
9 that we will step on each other's words. And if  
10 that happens, or if there are any technical  
11 difficulties affecting audio, please let us know  
12 immediately, so we can repeat things, or fix any  
13 issues. I would particularly ask the court  
14 reporter to alert us if you cannot hear what  
15 people are saying. Also, if there are any other  
16 technical issues, please let us know immediately.

17           I also want to emphasize that we are  
18 very pleased that so many people have been able  
19 to join us remotely to observe the oral argument.  
20 The Board is committed to the transparency of  
21 these proceedings. As the Clerk of the Board has  
22 noted, a transcript of the argument will be

1 posted to the docket for this matter on our  
2 website at a later date.

3 Let me also say that this is an  
4 important case. And the Board very much  
5 appreciates the time and effort that each of the  
6 parties has expended in preparation for the  
7 argument. You should assume that we have read the  
8 briefs and all of your submissions. And,  
9 therefore, we will ask questions that will assist  
10 us in our deliberations. We ask that you think of  
11 today as an opportunity to have a dialogue with  
12 us about the issues in the case.

13 You should not assume that the Judges  
14 have made any decisions concerning any of the  
15 issues in the case. And simply because we may ask  
16 a difficult question, does not mean that we have  
17 made up our minds on any issue for one party or  
18 another. But rather, we're going to use this  
19 opportunity to listen, to probe the contours of  
20 your legal positions, and to be sure we  
21 understand your position and the legal and record  
22 support on which the permit decision in your case

1 is based. We find this dialogue most helpful to  
2 our deliberations.

3 I would now like to call on the  
4 attorney presenting for each party to introduce  
5 themselves for the record, and who they  
6 represent. And when you are speaking, please turn  
7 on your microphone and your camera, and when you  
8 are finished speaking, please turn off your  
9 camera and your microphone. I would ask that we  
10 begin with Panoche LLC, followed by EPA Region 9.  
11 So, let's start with counsel for Panoche, and  
12 please indicate for the record whether you are  
13 reserving time for rebuttal.

14 MR. HOBBS: Thank you, Your Honor.  
15 And thank you, members of the Board. My name is  
16 Tim Hobbs. I'm with the law firm of K&L Gates  
17 LLP, and I'm here representing Panoche Energy  
18 Center, and I would like to reserve ten minutes  
19 for rebuttal, please.

20 JUDGE LYNCH: Thank you very much.  
21 Counsel for EPA Region 9?

22 MR. GARNETT: Good afternoon. DeSean

1 Garnett, representing EPA Region 9.

2 JUDGE LYNCH: Thank you, counsel.

3 With that, let's begin. Counsel Hobbs?

4 MR. HOBBS: Thank you, Your Honor.

5 Good afternoon, may it please the Board. I am  
6 Tim Hobbs with K&L Gates, appearing for Panoche  
7 Energy Center.

8 This case is about two things, the  
9 lack of factual support for EPA's decision, and  
10 the existence of a record evidence undercutting  
11 EPA's decision, that EPA ignored.

12 Both are independent grounds to find  
13 that EPA clearly erred, and to remand this case.

14 PEC challenges just one condition of  
15 an underground injection permit issued to it by  
16 EPA. The one condition PEC challenges is Section  
17 II.E.2, the Ambient Monitoring requirement.

18 PEC takes no issue with the remaining  
19 conditions in the permit. PEC agrees that the  
20 other conditions, including all of the other  
21 monitoring requirements, are appropriate.

22 Section II.E.2, however, is different.

1 That section would require PEC to drill a well to  
2 monitor the quality of underground drinking  
3 water.

4 EPA required this monitoring well  
5 because of a stated concern about the age of muds  
6 used to plug some abandoned wells near PEC's  
7 facility.

8 All of these wells were properly  
9 plugged and abandoned with certificates from  
10 California regulators.

11 JUDGE LYNCH: Counsel, can I pause you  
12 there?

13 MR. HOBBS: Yes, Your Honor.

14 JUDGE LYNCH: When you say properly  
15 plugged, how are you defining properly plugged?

16 MR. HOBBS: We're defining properly  
17 plugged by evidence that the abandoned well has a  
18 certificate from a California State agency. Now,  
19 it's referred to as CalGEM. It previously had a  
20 different name.

21 Each one of these wells has a  
22 certificate. It lists who the regulatory agent

1 was that observed the plugging of the well. They  
2 took notes, such as the amount of cement poured  
3 into the well at various places --

4 JUDGE LYNCH: Yes, counsel, can I  
5 pause you? I'm looking at the certificate for  
6 the Silver Creek #18 well, which is the well of  
7 most concern to the region, and the one that's  
8 addressed in the final permit. And it's  
9 Attachment 4 to your Reply Brief, you supplied  
10 that information.

11 MR. HOBBS: Yes, Your Honor.

12 JUDGE LYNCH: And it's from the  
13 California Division of Oil and Gas, and it's  
14 dated June 19, 1974, and it indicates that the  
15 well was plugged April 5, 1974.

16 Isn't this before the Safe Drinking  
17 Water Act was passed in November of 1974?

18 MR. HOBBS: It is indeed, Your Honor.

19 JUDGE LYNCH: And, counsel, it's six  
20 years before the 1980 UIC program regulations.  
21 So, my question then is, what standards were used  
22 to plug these wells?

1 MR. HOBBS: Yeah, the standards were  
2 those that were in existence at the time that  
3 these wells were --

4 JUDGE LYNCH: Which is prior to the  
5 Safe Drinking Water Act or the UIC program regs.

6 MR. HOBBS: That is correct, Your  
7 Honor.

8 JUDGE LYNCH: And these same records  
9 show that there was no long string casing used,  
10 no cement plugs at the base of the USDW, is that  
11 correct?

12 MR. HOBBS: That is correct, Your  
13 Honor. There are cement plugs in that well.

14 JUDGE LYNCH: Right.

15 MR. HOBBS: Not at the base of the  
16 USDW.

17 JUDGE LYNCH: So, is your position  
18 that EPA Region 9 has to accept those  
19 certificates as the final word that the well was  
20 properly plugged, and that's the end of their  
21 inquiry?

22 MR. HOBBS: Yes, Your Honor. The

1 plugging certificates are an indication from the  
2 agency that the proper procedures were followed  
3 at that time.

4 JUDGE LYNCH: 1974. You know, the  
5 public records show that states had well programs  
6 in the 1930s. So, your position would be that if  
7 EPA Region 9 had a certificate from 1934, that  
8 they could not make further inquiry into the  
9 condition of that well and the muds used to plug  
10 the well?

11 MR. HOBBS: Your Honor, I think EPA  
12 can always make further inquiry. I think what  
13 the certificate is, is there's a presumption that  
14 proper procedures were followed.

15 That presumption can be overcome, but  
16 there needs to be some kind of evidence to  
17 suggest why things have changed.

18 JUDGE STEIN: But can I interrupt.  
19 Let me interject for a second here. Am I correct  
20 in understanding, Mr. Hobbs, that in the  
21 company's permit application, it was indicated  
22 that there is a potential for fluid movement from

1 Silver Creek #18 into the underground source of  
2 drinking water? Am I correct in that  
3 understanding?

4 MR. HOBBS: The application said that,  
5 Your Honor. But what was meant by that is that  
6 if under certain circumstances conditions could  
7 arise that would cause the movement of fluid, but  
8 after the modeling that PEC undertook, they  
9 demonstrated that there was no risk of  
10 endangerment --

11 JUDGE STEIN: Right, I understand your  
12 position. But you're not disputing that there is  
13 the potential for fluid movement. Your argument  
14 instead is that there are other facts and  
15 circumstances that minimize that concern.

16 But clearly, from the perspective of  
17 the underground injection control regulations,  
18 there is that potential. Am I correct?

19 MR. HOBBS: Well, I think that is why  
20 the regulations require an assessment of the  
21 wells within the area of review.

22 Those wells present a potential risk

1 of endangerment, but the purpose of the modeling  
2 that's undertaken is to determine whether or not  
3 that potential is real or not.

4 And so, here, PEC undertook modeling  
5 based on site-specific data that it gathered from  
6 the injection point, and determined that the  
7 pressure buildup from its injection activities  
8 would not be sufficient to displace the column of  
9 muds and cement plugs in the wellbores.

10 And so, therefore, there was no  
11 potential. And in fact, Your Honor, EPA removed  
12 any corrective actions from the permit after PEC  
13 made that showing.

14 JUDGE STEIN: I'm not seeing where  
15 there is no potential. I understand your point  
16 that you've done some modeling. But I don't know  
17 that the modeling removes the potential that the  
18 company disclosed in its permit application.

19 Is there empirical data about the  
20 condition, other than modeling, that you have  
21 that would support your position?

22 I mean, I understand this is a

1 dispute, in part, about your company's wanting to  
2 rely on its modeling, and EPA feeling that  
3 empirical data is needed.

4 MR. HOBBS: Yes, Your Honor. I would  
5 point the Board to EPA's rulemaking from 1998.  
6 And the citation for this is 53 Fed. Reg. 28126  
7 to 28127. And EPA addressed this very concern.

8 Some commentators thought that  
9 modeling was not going to be sufficient. EPA  
10 rejected those comments, and it stated that  
11 modeling was its preferred approach.

12 And they said that the final approach  
13 for these regulation relies upon conservative  
14 modeling techniques to evaluate the potential for  
15 migration of fluids from the injection zone.

16 And EPA found that under the no-  
17 migration standard -- meaning under the standard  
18 under which it did not want any migration from  
19 the injection zone outside of the injection zone  
20 -- a demonstration, with modeling, need not show  
21 exactly what will occur, but rather, what  
22 conditions will not occur.

1                   And that is the burden that PEC met in  
2 this case, Your Honor, to show that the  
3 conditions, the necessary pressure that would be  
4 needed to displace the column of muds in the well  
5 bore, would not occur.

6                   And so, modeling is the approach that  
7 EPA has chosen to evaluate whether underground  
8 sources of drinking water are endangered.  
9 Modeling is what PEC demonstrated here.

10                   JUDGE LYNCH: Are you arguing that the  
11 region has to show endangerment before they can  
12 require ambient monitoring?

13                   MR. HOBBS: Not necessarily, Your  
14 Honor. We think that there could be situations  
15 where the agency expresses some concern that  
16 maybe the modeling -- sure, the modeling says  
17 this, but maybe the agency has a concern about  
18 something else.

19                   Maybe there's something site-specific  
20 that the agency is concerned about. The problem  
21 here is that the one concern that the agency came  
22 forward with lacks any justification in the

1 record.

2 So, the concern that the agency came  
3 forward with is that, well, sure, these wells  
4 were plugged back in the '70s, or maybe even  
5 earlier, and maybe the mud that was used to plug  
6 those wells has changed over time in some way  
7 that modifies its ability to act as a plugging  
8 agent. Okay?

9 So, EPA stated a concern. The problem  
10 we have, and what this whole case comes down to,  
11 is that there is no evidence in the record that  
12 these muds deteriorate with age.

13 JUDGE BLAKE: But --

14 JUDGE LYNCH: Well, counsel --

15 JUDGE BLAKE: I'm sorry --

16 JUDGE LYNCH: Go ahead, Judge Blake.

17 JUDGE BLAKE: -- for a moment,  
18 counsel. So, dating back to June of 2019 and  
19 December of 2019 and your communications with the  
20 region, the region was very clear, given the  
21 overpressured formation, that it wanted you to  
22 explore and to get site-specific empirical data

1 on the mud conditions and the pressure, so it  
2 could evaluate the efficacy of whether that mud  
3 would prevent fluid from migrating into the USDW.

4 And without that empirical evidence  
5 about the abandoned wells to withstand that  
6 pressure, there was concern, given all the  
7 various site-specific parameters identified in  
8 their response to comments, of fluid migration.

9 And so, it is -- is it correct under  
10 the regulations, that it is your burden to show  
11 that the injection activities will not cause  
12 fluid movement that will endanger the USDW? You  
13 agree with that, correct?

14 MR. HOBBS: It is the applicant's  
15 burden to make that showing. And PEC made that  
16 showing here, Your Honor. And that is  
17 demonstrated by the fact that the agency removed  
18 all corrective actions from the permit.

19 JUDGE BLAKE: But is your argument  
20 that if there's no endangerment and no corrective  
21 action, ergo, the agency cannot in any way impose  
22 any ambient monitoring?

1                   Because the Ambient Monitoring  
2 provisions talk about a potential for fluid  
3 movement. So, I'm just trying to suss out a  
4 little bit more what exactly your argument is  
5 with regard to EPA's flexibility under the  
6 Ambient Monitoring provisions.

7                   MR. HOBBS: Yes. Thank you, Your  
8 Honor. Good question. It is not our position  
9 that a finding of no endangerment therefore  
10 precludes EPA from undertaking any additional  
11 monitoring requirements. There's a two-prong  
12 test for imposing Ambient Monitoring in the  
13 regulations.

14                   The problem here is that EPA failed to  
15 meet either prong. And so, EPA stated a concern  
16 about --

17                   JUDGE LYNCH: How do you describe the  
18 prong, please? The two prongs.

19                   MR. HOBBS: Yes, so these are  
20 regulations at 40 C.F.R. 146.13(d)(1).

21                   Excuse me for one second and let me  
22 turn my lights back on. Pardon me, Your Honors.

1           So, these regulations provide that for  
2 EPA to impose Ambient Monitoring, it must do two  
3 things.

4           It must make a site-specific  
5 assessment of the potential for fluid movement  
6 from the injection zone. That's the first prong.

7           And the second prong is that EPA must  
8 make a determination of the value of the  
9 monitoring wells to determine such a movement.

10          JUDGE LYNCH: Counsel? You left out  
11 the word potential before value. It says,  
12 potential for fluid movement, and the potential  
13 value.

14          MR. HOBBS: Excuse me, Your Honor, you  
15 are correct. I apologize.

16          JUDGE LYNCH: Well, I think that's  
17 important for the case. And in terms of the  
18 site-specific assessment, you've alleged that the  
19 region failed to do that, and you talk about  
20 their one reason.

21          But when I look at the record, I see  
22 the region identifying a number of site-specific

1 factors that they assessed. The over-pressured  
2 condition of the Panoche formation, the existence  
3 of the several decades-old abandoned wells, the  
4 lightness of the mud used in those wells, the  
5 lack of long string casing and cement plugs at  
6 the base of the USDW -- in particular, Silver  
7 Creek #18, which is only 1.25 miles from your  
8 injection wells -- and your statement in your  
9 application that there is the potential for fluid  
10 movement.

11 How are those not site-specific  
12 factors that the region relied on in this case?

13 MR. HOBBS: Well, Your Honor, in the  
14 petition, we explained why each of those factors  
15 is not relevant here, because they do not arise.

16 So, with respect to the age of the  
17 muds, EPA did not cite one specific example of  
18 older plugging muds failing to serve their  
19 intended purpose.

20 There are hundreds of thousands of  
21 these wells across the country. If these muds  
22 fail, presumably EPA would have evidence of it.

1 It did not cite one concrete example of this  
2 happening anywhere.

3 That's the point, Your Honor. The  
4 over-pressured formation was taken into account  
5 in the modeling that PEC did. So, when PEC was  
6 projecting the change in underground pressures,  
7 it started with the ambient pressure of this  
8 formation.

9 And so, the fact that it's over-  
10 pressured is not relevant because the pressure  
11 differential was taken --

12 JUDGE LYNCH: And these were estimated  
13 in modeling that the region's technical experts  
14 disagreed with. They couldn't replicate them.  
15 Correct?

16 MR. HOBBS: I do not think that's  
17 correct, Your Honor. My understanding is that  
18 the region accepted the modeling, and that is why  
19 they removed the corrective actions from the  
20 permit after some back-and-forth with PEC.

21 JUDGE LYNCH: Well, they actually have  
22 a corrective action provision still in the permit

1 -- II.C.2 -- that indicates that depending on the  
2 Ambient Monitoring, you may well have to  
3 institute corrective action for Silver Creek #18  
4 and others.

5 And they continued to express their  
6 concern about the potential for fluid movement  
7 and the site-specific factors. Isn't that clear  
8 in their response to comments?

9 MR. HOBBS: But Your Honor, but when  
10 we're looking at what the monitoring requirement  
11 does, what EPA is requiring is PEC to sample the  
12 reservoir of underground drinking water over a  
13 mile from PEC's site.

14 The analogy would be to a facility  
15 that dumps stormwater into a river, and making  
16 that facility test the river water quality a mile  
17 away, and if any change is detected, then maybe  
18 the facility needs to shut down.

19 There is no causal connection there.  
20 That is the problem with this monitoring  
21 requirement. And EPA acknowledged that whatever  
22 changes might be detected, may or not be

1       attributable to the underground injection  
2       activities.

3                   JUDGE BLAKE:  Counsel, I have two  
4       questions for you.  One, just what site-specific  
5       data did you provide to the region about the  
6       current condition of the wells?

7                   Not modeling.  Just what site-specific  
8       data?  Because, again, I'm citing back to that  
9       June 2019 letter, and that's where EPA explained  
10      that while your client relies on studies and  
11      literature, empirical site-specific data would  
12      thus demonstrate that the wells will not permit  
13      fluid movement.

14                  And they talk in there about their  
15      concerns about the properties of the mud, and  
16      whether it's retained the properties they had  
17      when they were abandoned, etc.

18                  So, my very long-winded question is,  
19      what specific data did you provide to the region  
20      about the abandoned wells?

21                  MR. HOBBS:  We provided data about the  
22      closed reports from the wells, the geologic

1 formations in which these wells are located, that  
2 have two confining layers, and a buffer aquifer  
3 between them that would absorb any fluid  
4 migrating upward, all of which EPA completely  
5 ignored and did not respond to at all --

6 JUDGE BLAKE: Can I stop you there for  
7 a minute? Can you show me where in the May 11,  
8 2021, comment letter, the argument that you just  
9 made about the confining level layers and the  
10 buffer aquifer is?

11 Because in your brief, in your  
12 petition, you mentioned that these confining  
13 layers and the buffer aquifer add additive  
14 benefits, and they would arrest or absorb  
15 migration of fluids. But I couldn't find it in  
16 your comment letter. So, do you have a cite for  
17 that?

18 MR. HOBBS: I do not have a cite  
19 offhand, Your Honor, but I can certainly get one.  
20 My understanding is that the chart that appears  
21 on page 9 in our opening brief, my understanding  
22 is that that was in a submission that was

1 provided to EPA.

2 We can certainly dig that out. But  
3 that chart shows that two confining layers, show  
4 the buffer aquifer in between, and the location  
5 of the USDW.

6 And another point I would make, Your  
7 Honor, is that what EPA was asking for was the  
8 condition of the muds four thousand feet down in  
9 an abandoned well that had been plugged and had  
10 not been disturbed for forty, fifty years.

11 Undertaking an operation to drill down  
12 four thousand feet to make a new penetration into  
13 the underground source of drinking water, in  
14 order to come up with a sample of the muds that  
15 are there --

16 JUDGE LYNCH: Well, counsel, that's  
17 not what's required in the final permit.

18 MR. HOBBS: No, but that's what EPA  
19 was asking for. And they said, well, you didn't  
20 provide us with any empirical evidence that the  
21 muds that are still down there are still serving  
22 --

1 JUDGE LYNCH: Well, they're data  
2 requests.

3 MR. HOBBS: Correct. But getting that  
4 data would require drilling down four thousand  
5 feet to get that mud --

6 JUDGE LYNCH: Well, that's not what  
7 they requested at the end of the day, and that's  
8 not what's requested in the final permit that  
9 you're challenging.

10 So, time is up. I had one other  
11 question, and the other judges may have others.  
12 I mean, you make this broad attack on the Ambient  
13 Monitoring provision. Is there any Ambient  
14 Monitoring provision that would be acceptable to  
15 Panoche?

16 MR. HOBBS: Yes, Your Honor. Well,  
17 here's what I would say, is there are other  
18 potential permit requirements that --

19 JUDGE LYNCH: No, I'm asking  
20 specifically about the Ambient Monitoring, as  
21 contemplated in 146.13(d).

22 MR. HOBBS: Well, based on the

1 evidence that EPA has come forward with to date,  
2 we do not think they have met their burden to  
3 have a rational basis for requiring any kind of  
4 an Ambient Monitoring requirement.

5 JUDGE LYNCH: Is there any scenario  
6 where Panoche believes Ambient Monitoring would  
7 be warranted?

8 MR. HOBBS: Yes, Your Honor. There  
9 may be circumstances where EPA has expressed a  
10 concern that is supported by factual evidence to  
11 show that that concern is legitimate. And in  
12 that case, Ambient Monitoring would be  
13 appropriate.

14 JUDGE LYNCH: And by factual evidence,  
15 what do you mean?

16 MR. HOBBS: So, in this case, evidence  
17 that suggests that drilling muds -- or, sorry,  
18 excuse me - muds to plug a well actually fail  
19 with age. There is not one single example of  
20 that. These muds are intentionally formulated --

21 JUDGE LYNCH: Well, they actually did  
22 provide some information on that that you

1 disagree with.

2 MR. HOBBS: There's only one study  
3 that EPA cites. It's the study from --

4 JUDGE LYNCH: I thought you said there  
5 were none a second ago. I mean, can we be --

6 MR. HOBBS: I'm just telling you what  
7 EPA has pointed to.

8 JUDGE LYNCH: Right.

9 MR. HOBBS: That study did not find  
10 any example of muds actually failing in a well.  
11 That study merely speculated about some potential  
12 causes, as to why an aquifer was becoming more  
13 saline.

14 JUDGE LYNCH: And one of --

15 JUDGE STEIN: It strikes me, counsel  
16 --

17 JUDGE LYNCH: Go ahead.

18 JUDGE STEIN: -- that you're flipping  
19 the burden of proof here, that you're saying, if  
20 I understand it, that because EPA can't prove  
21 these muds -- leaving aside the lighter mud that  
22 may be at your facility -- haven't failed, that

1 because it's never happened, we have to wait  
2 until it happens.

3 But the UIC program doesn't work that  
4 way. I mean, the UIC program is a preventative  
5 program where EPA is charged with determining  
6 whether or not an operation can go forward.

7 And what I see in the record here, is  
8 EPA having had a number of discussions and  
9 meetings with your client; productive discussions  
10 in which EPA, after discussion, agreed not to go  
11 forward with certain corrective action, but they  
12 remain concerned about the potential for fluid  
13 movement, which you acknowledge.

14 You acknowledge it's your burden, and  
15 they have cited site-specific information as to  
16 why they remain concerned. They have cited what  
17 the value of the monitoring would be, and I think  
18 you're asking them to prove a negative on land  
19 for which there is empirical data lacking.

20 So, that's my overall concern here, is  
21 that what you're seeking is really beyond what is  
22 called for, in order for EPA -- I mean, EPA

1 responded to your technical comments, EPA  
2 reviewed your technical comments, their response  
3 to comments is replete with information  
4 addressing the concerns you've raised.

5 But at the end of the day, I believe  
6 it's the burden of your client to establish to  
7 overcome what EPA has said. And I'm not sure  
8 that without that empirical data, that's where  
9 you're positioned.

10 MR. HOBBS: We do not see it as  
11 flipping the burden of proof, Your Honor. EPA's  
12 burden here is very low, but it does need a  
13 rational basis for its decision.

14 Here, we are saying that there is no  
15 record support for its stated concern about older  
16 drilling muds stopping to serve their intended  
17 purpose.

18 There is not one example of that  
19 happening anywhere in the world. And there are  
20 hundreds of thousands of these wells in this  
21 country alone.

22 So, there is no factual support

1 underlying EPA's primary stated concern. That is  
2 why this case must be remanded. Because PEC made  
3 its showing that there would be no endangerment  
4 to USDW. Then, EPA removed the monitoring well  
5 as a corrective action, and then reimposed it as  
6 an Ambient Monitoring requirement.

7 When it did that, it was required to  
8 have a rational basis for its actions. And here,  
9 that rational basis is lacking.

10 EPA also ignored the geologic  
11 information I just talked about, and never  
12 assessed why those geologic formations would not  
13 address its stated concern.

14 JUDGE LYNCH: Counsel, do you agree  
15 that the Panoche formation is over-pressured?

16 MR. HOBBS: It is over-pressured. But  
17 I think what that means is that there is simply  
18 greater pressure there than higher towards the  
19 surface, and so fluids naturally would migrate.

20 JUDGE LYNCH: And, counsel, just on  
21 the USGS Utah study on page 58, it specifically  
22 expresses a concern about older muds that may be

1       compromised over time.

2                   MR. HOBBS:   Respectfully, Your Honor,  
3       the study there was speculating about potential  
4       causes.  It did not actually point to an example  
5       in that study where one specific well, where the  
6       --

7                   JUDGE LYNCH:  But you acknowledge that  
8       it expressed concern.

9                   MR. HOBBS:  It uses those words.

10                  JUDGE LYNCH:  Yes.

11                  MR. HOBBS:  But where that comes from  
12       is unclear.  There's no citation for that, and  
13       there's no example given in the study itself.

14                  JUDGE LYNCH:  And I have one last  
15       thing that I wanted to ask you.  Are you arguing  
16       that the region actually needed to identify fluid  
17       movement in the field?

18                  MR. HOBBS:  No, Your Honor.  We think  
19       that the region could have met its burden by  
20       having some factual support for its stated  
21       concerns.

22                  Here, we're saying that that is

1 lacking. That doesn't necessarily mean the  
2 agency could never meet that burden. Certainly,  
3 it could. Here, it just has not.

4 JUDGE BLAKE: I have just a few  
5 remaining questions concerning page 7 of your  
6 Reply Brief, and your argument with respect to  
7 your Title V air operating permit.

8 MR. HOBBS: Yes.

9 JUDGE BLAKE: So, I have a couple of  
10 background points, and then a few follow-up  
11 questions.

12 So, in the 2019 permit application,  
13 that application lists the maximum daily  
14 injection values for each of the four wells, and  
15 those range from 144,000 to up to 172,000. And  
16 those volumes occurred between 2013 and 2014, and  
17 the 2022 final permit authorizes those volumes.

18 And so, what I wanted to touch base on  
19 is, in your permit application, as I read the  
20 application, you mention that these maximum daily  
21 injection values, as seen in 2013 and 2014, may  
22 occur when the enhanced wastewater system

1 maintenance is down -- taking the enhanced  
2 wastewater system down for maintenance -- and  
3 during high electricity demand, you could see  
4 those sorts of high values.

5 And I believe you proposed  
6 specifically that you asked EPA to utilize those  
7 same volumes moving forward. And it did, in  
8 fact, authorize those volumes.

9 So, I just wanted to make sure that I  
10 was correctly reading the application with regard  
11 to your request for the 2013-2014 maximum daily  
12 injection values.

13 MR. HOBBS: That is an accurate read  
14 of the application, Your Honor. I think the  
15 point that we were trying to make on page 7 of  
16 our Reply Brief, was that after the enhanced  
17 wastewater system went online, in reality, the  
18 total volume of water used, and therefore, the  
19 total volume of water needed to be injected,  
20 decreased substantially.

21 And yes, there may be times where it's  
22 down for cleaning or whatever, but those would be

1 temporary, short-term time frames. In general,  
2 there would be a much reduced volume of  
3 wastewater requiring injection.

4 JUDGE BLAKE: But just to clarify,  
5 just so I understand the application, in your  
6 application you did ask for the maximum daily  
7 injection volume for those four operating wells.  
8 And if you multiply all that out, it does equate  
9 to 232 million gallons per year. Is that  
10 correct?

11 MR. HOBBS: That's my understanding  
12 that it does add up to that, Your Honor. Yes.

13 JUDGE BLAKE: That's really helpful.  
14 So, a couple more questions. So, in the reply  
15 brief, you mention that there's no scenario where  
16 the facility would produce 232 million gallons of  
17 wastewater in a given year, because of the  
18 constraint of the operating permit. Talking  
19 about the operating permit which allows only 500  
20 hours per year, per generator.

21 Can you point me to where in your May  
22 20, 2021, comment letter this argument is made?

1 MR. HOBBS: I cannot offhand, Your  
2 Honor. We can certainly look for that and try to  
3 provide you with --

4 JUDGE BLAKE: That's perfect.

5 MR. HOBBS: -- with it.

6 JUDGE BLAKE: Okay, no worries. So,  
7 also on page 7, you reference 84 million gallons.  
8 And you derive that by noting that between 2016,  
9 I think, and 2022, the facility produced between  
10 2,800 and 4,200 gallons of water per engine-fired  
11 hour. That's a mouthful.

12 And so, you derive the \$84 million  
13 figure by taking the 4,200 gallons-per-EFH from  
14 2022, and multiplying it by 20,000. Did I do the  
15 math correctly there? Is that how you derived  
16 that figure? Okay.

17 MR. HOBBS: Yes, Your Honor.

18 JUDGE BLAKE: Okay, thank you. But  
19 isn't that 84 million gallon figure dependent  
20 upon the amount of water produced per engine-  
21 fired hour?

22 MR. HOBBS: Yes, it is, Your Honor.

1 But we calculated that as the maximum that would  
2 have been allowed under the air operating permit.

3 JUDGE BLAKE: So, does the Title V  
4 permit specify a limit on the amount of water the  
5 facility can produce?

6 MR. HOBBS: It does not specify a  
7 limit, Your Honor. It's strictly an air permit,  
8 but it does put limits on operating hours.

9 JUDGE BLAKE: Okay.

10 MR. HOBBS: So, our attempt here was  
11 to show that because the air permit does  
12 effectively limit the amount of time that the  
13 facility can operate, that therefore reduces the  
14 maximum water that could possibly be generated by  
15 the facility.

16 JUDGE BLAKE: Okay. So, just once  
17 again, going back to the Reply Brief where you  
18 said there simply is no scenario where PEC would  
19 produce 232 million gallons of wastewater on a  
20 given year, as EPA assumes, so I'm still puzzled  
21 though. If that was your request, yet now you're  
22 saying you're not going to have any more than 84

1 million, did you at any point during the multi-  
2 year proceedings seek an annual injection volume  
3 restriction?

4 MR. HOBBS: We did not, Your Honor.  
5 But I would point the Board to footnote 4 in this  
6 Reply Brief, where we indicate that that type of  
7 a response would have been a rational response to  
8 the concerns that EPA was articulating at the  
9 time.

10 JUDGE BLAKE: But isn't there a little  
11 bit of a tension there with the fact that you're  
12 asking the permitting authority to authorize the  
13 232 million gallons. So, it's just a bit of a  
14 tension there. Okay, thank you for your  
15 indulgence, Judge Lynch.

16 JUDGE LYNCH: No, of course. Two  
17 quick things. One, on volume, in the response to  
18 comments, the region indicated -- the response to  
19 comments at thirteen -- that the year following  
20 the enhanced wastewater treatment systems volumes  
21 did decrease, but then after that they increased  
22 again. And I don't see that Panoche responded to

1 that at all.

2 MR. HOBBS: Well, Your Honor, there's  
3 a chart that is in our opening brief on page 15.  
4 This shows the effect of the enhanced wastewater  
5 system on the volume of water being generated.

6 And so, while there's some variation  
7 after implementation of this enhanced wastewater  
8 system, it is still significantly below what was  
9 observed prior to its implementation.

10 JUDGE BLAKE: And I had one final  
11 question, counsel. You argue -- this was with  
12 regard to your modeling -- you argue that the  
13 pressure would need to increase by about four  
14 times the current pressure, to displace the  
15 weight and gel strength of the drilling muds and  
16 create fluid movement.

17 Where did you make this argument --  
18 this four times argument -- in the 2021 comment?  
19 If you could help me with that, that would be  
20 great.

21 MR. HOBBS: Again, I don't have a  
22 citation offhand, but we can certainly provide

1 one to you.

2 JUDGE LYNCH: Well, so let me just say  
3 now, we're not going to be looking for any  
4 supplemental briefing or filings following this  
5 oral argument.

6 MR. HOBBS: Understood, Your Honor.

7 JUDGE LYNCH: Okay.

8 MR. HOBBS: If I had any time left for  
9 rebuttal, maybe I could provide it at that time.

10 JUDGE LYNCH: Well, we were the ones  
11 asking a lot of questions, so we can add time.  
12 If the Clerk of the Board could let us know how  
13 much additional time we used right now.

14 MR. CORTES: Your Honor, an additional  
15 16 minutes have elapsed. Thank you.

16 JUDGE LYNCH: One, six? Sixteen?

17 MR. CORTES: One, six, correct.

18 JUDGE LYNCH: All right. Well, we  
19 will add that to the region's time if they need  
20 it. And counsel, you can have your ten minutes  
21 of rebuttal time, if you need that.

22 MR. HOBBS: Thank you, Your Honor.

1 JUDGE LYNCH: We appreciate the  
2 discussion.

3 MR. HOBBS: Likewise. Thank you.

4 JUDGE LYNCH: All right, any other  
5 questions from the Judges? All right, thank you  
6 very much. So now we will turn to counsel for  
7 Region 9.

8 MR. GARNETT: Good afternoon, DeSean  
9 Garnett representing Region 9.

10 This case is truly about one thing,  
11 preventing injection activities from endangering  
12 underground sources of drinking water.

13 And this is Congress's intent. As in  
14 Part C of the Safe Drinking Water Act, Congress's  
15 intent was prevention.

16 The UIC program has several safeguards  
17 to prevent injection activities from endangering  
18 USDWs.

19 And one of the most important  
20 safeguards is monitoring, because it ensures that  
21 injection fluids, or formation fluids, do not  
22 migrate from the wells into USDWs. And a well-

1 known pathway for fluid migration is through  
2 abandoned wells. Especially, those abandoned  
3 decades ago, and not in accordance with today's  
4 best practices, and especially abandoned wells  
5 that penetrate through injection formations in  
6 which such formations are over-pressured.

7 JUDGE LYNCH: So, counsel, if I could  
8 pause you there. So, what changed, or was there  
9 any new information that Region 9 received  
10 between the last permit, and then when these  
11 renewal discussions began in the 2017 time frame?

12 MR. GARNETT: Yes, it was off the 2011  
13 quarter four monitoring report that was required  
14 under Panoche's previous permit. You know, when  
15 the first facility first began, it wasn't  
16 injecting any fluids. When we first issued the  
17 permit, Panoche wasn't injecting any fluids.

18 But as the years went on, like the  
19 more millions of gallons that Panoche injected  
20 into the Panoche formations meant that pressure  
21 was increasing in that formation.

22 Therefore, based off the monitoring

1 results, the region noticed that there's a  
2 potential for potential fluid displacement in the  
3 formation.

4 Therefore, when the renewal  
5 application was received, the additional AoR that  
6 applied in the previous permit, which was only  
7 one quarter-mile, didn't apply to this permit  
8 because of the concern of the abandoned wells in  
9 the area of review. That's why the region asked  
10 PEC to recalculate the zone of endangering  
11 influence.

12 And when we see the permit renewal  
13 application in March 2019, the modeling had one  
14 fundamental flaw, is that it relied on gel  
15 strength estimates in the abandoned wellbores  
16 that cannot be confirmed with empirical evidence,  
17 because if the mud had deteriorated since the  
18 1950s, '60s and '70s, then the mud would be less  
19 resistant to potential fluid movement than it  
20 would be if they were as strong as it was when  
21 these abandoned wells were originally plugged --

22 JUDGE BLAKE: Counsel --

1                   JUDGE LYNCH: Well, counsel -- go  
2 ahead, Judge Blake.

3                   JUDGE BLAKE: Thank you, Judge Lynch.  
4 How do you respond to Panoche's argument that the  
5 pressure change in the injection zone would have  
6 to increase four times the pressure resulting  
7 from PEC's injection activities, to displace the  
8 mud.

9                   That was one of the last questions I  
10 asked Panoche's counsel. And I'm just curious,  
11 what is the region's response to that?

12                  MR. GARNETT: There's two parts. One,  
13 again, this assumption is based off of limited  
14 information. And, in particular, their  
15 assumption is based on the condition of the mud  
16 being strong enough as it was back in the '70s to  
17 withstand potential pressure increases in the  
18 formation containing injection fluids.

19                  And as indicated in the Barker paper  
20 at A.R. 430, gel strength varies based off mud  
21 type and the condition of the mud, meaning that  
22 it's hard to accurately estimate the exact gel

1 strength of abandoned well bore, and that lower-  
2 end gel strength estimates like Panoche's are  
3 based off professional judgment, and not  
4 empirical data.

5 And then the second reason is that EPA  
6 disagrees that the Panoche formation is  
7 decreasing, because any additional injection  
8 fluids will cause pressure increases in the  
9 Panoche formation.

10 As we saw in their May, or the  
11 September 2020 pre-publication comments on the  
12 draft permit, is that after installation of the  
13 enhanced wastewater system, volumes decreased by  
14 80 percent, but in the next year slowly  
15 increased, and today is averaging about 20  
16 million gallons of industrial waste that's being  
17 injected into the Panoche formation, meaning that  
18 any additional fluid injection will cause  
19 pressure increases.

20 Especially this year, the summer in  
21 California, where the weather's going to be warm  
22 and there's going to be increase in electricity

1 demand.

2 That means that the enhanced  
3 wastewater system and the facilities will be  
4 producing more energy, injecting more industrial  
5 waste, to make sure that they can provide  
6 electricity to PG&E.

7 And if the enhanced wastewater system  
8 goes down or is out at maintenance, then that  
9 means that the facility won't be able to reuse  
10 some of the wastewater, and instead will inject  
11 that directly into the injection -

12 JUDGE LYNCH: So, counsel, if I could  
13 -- thank you. If I could interrupt you, one of  
14 Panoche's concerns kind of keys off of some of  
15 what you said, and that is, well, if Region 9  
16 requires Ambient Monitoring here based on the  
17 factors that you relied on, then you're going to  
18 be requiring Ambient Monitoring for any field  
19 that's over-pressured. And there are old  
20 abandoned wells onsite. So, how do you address  
21 that concern?

22 MR. GARNETT: Yes, so as the UIC Class

1 I Regulations made clear, that any monitoring  
2 requirement has to be decided on a case-by-case  
3 basis, looking at the site-specific factors, and  
4 determining whether or not the facility's  
5 injecting into a formation that's over-pressured,  
6 and whether or not the abandoned wellbores have a  
7 potential to prevent fluid movement.

8 So, in situations where the injection  
9 formation is over-pressured, but there are either  
10 no abandoned wells, or the abandoned wells have  
11 cement plugs to isolate the base of the USDW from  
12 the top of the injection formation, then that  
13 could warrant reduced monitoring or no  
14 monitoring.

15 But in a situation where the abandoned  
16 wellbores have no plug to isolate the base of the  
17 USDW from the top of the injection zone, and the  
18 condition of the muds are unknown, and abandoned  
19 wells that lack long string casing, that would be  
20 a consideration where EPA has a concern, going  
21 back to the preventative nature, of the Safe  
22 Drinking Water Act, where monitoring is necessary

1 to prevent any injection fluids or formation  
2 fluids from entering the USDW.

3 JUDGE LYNCH: Well --

4 JUDGE STEIN: I have a couple --

5 JUDGE LYNCH: Go ahead, Judge Stein.

6 JUDGE STEIN: I have two questions.

7 Can you explain to me the significance of what's  
8 referred to as, I think, the lighter muds, or  
9 lighter weight muds?

10 I saw a reference to that in the  
11 response to comments, and I wasn't sure what the  
12 significance of that was. And that's question  
13 one.

14 And then my second question was, is  
15 there any modeling that would be sufficient for  
16 EPA to determine that there is no risk to an  
17 underground source of drinking water here?

18 And I say that because the company has  
19 pointed to what they say is the excessive cost of  
20 the well, given the monitoring wells. So, if you  
21 could answer those two questions for me, I would  
22 appreciate it.

1 MR. GARNETT: Yes, so the significance  
2 of the lighter-weight mud is important here,  
3 because lighter-weight mud is less resistant to  
4 potential fluid movement than heavier mud.

5 And that's precisely why the  
6 monitoring requirement is at Silver Creek #18,  
7 rather than England #1-31, because Silver Creek  
8 #18 was abandoned with lighter-weight mud than  
9 the next closest abandoned well, England #1-31.  
10 So, that's why lighter-weight mud is concerning.

11 And then regards to what type of  
12 modeling would have been sufficient in this case  
13 to warrant removing the monitoring requirement,  
14 the modeling that would be necessary would be  
15 based on knowing the actual conditions of the mud  
16 in these abandoned wellbores, and not the  
17 conditions of the mud in the '50s, '60s and '70s.

18 So, modeling that's based off of  
19 complete information that rises to the level of  
20 the USDW protection, would be the type of  
21 modeling that would be sufficient to satisfy and  
22 resolve the region's concerns.

1                   JUDGE BLAKE: Counsel, I have  
2 questions again on the modeling. So, Panoche  
3 mentions several times in their brief that they  
4 did very conservative modeling, in their view,  
5 and that the region accepted the modeling for  
6 aspects of its permit evaluation, but it claims  
7 rejected it for others.

8                   And can you respond to this as an  
9 argument they make on page 19 to 20 of their  
10 Reply Brief? If you could just explain why the  
11 modeling that they did was not appropriate, or  
12 was not dispositive, for the region, with regard  
13 to the Ambient Monitoring requirement imposed?

14                   MR. GARNETT: Yes, you know Panoche  
15 makes the argument that their modeling was  
16 conservative. But we disagreed.

17                   Because if the modeling was  
18 conservative, then it would have provided actual  
19 empirical data about the condition of the wells  
20 in the area of review.

21                   Because their modeling was based off  
22 of limited information, there is uncertainty in

1 regards to potential for the injection fluids to  
2 migrate from the injection wells, or even the  
3 formation fluids, and into the USDW, that's  
4 located only a mile-and-a-quarter away.

5 JUDGE LYNCH: Can I ask a follow-up  
6 question on that, Judge Blake? Are you finished  
7 with that question?

8 Well, why was modeling -- I think  
9 partly what Panoche's also saying is, why was  
10 modeling sufficient to determine the area of  
11 review in the zone of endangering influence, but  
12 not sufficient in terms of fluid movement --  
13 potential for fluid movement? Why did you need  
14 Ambient Monitoring?

15 MR. GARNETT: Yes, so monitoring will  
16 confirm whether or not Panoche's modeling efforts  
17 were correct and their approach to calculating  
18 the zone of endangering influence.

19 The regulations for zone of  
20 endangering influence are kind of broad. They  
21 give the agency and the permittee discretion on  
22 how to calculate the potential for fluid

1 migration from the facility into abandoned wells  
2 nearby.

3 And the problem is that modeling is  
4 based off the assumption that mud is sufficiently  
5 strong, to this day, to resist any potential  
6 fluid migration.

7 And because of our concerns, we need  
8 Panoche to monitor the USDW for pressure changes  
9 and groundwater quality changes, to assure the  
10 Agency that its modeling is correct.

11 JUDGE LYNCH: And how do you respond  
12 to -- Panoche says that Region 9 has absolutely  
13 no facts. They -- reluctantly, I'll say --  
14 acknowledge the existence of the USGS Utah study,  
15 but they dispute its relevance to this case.

16 What else does the region have to rely  
17 on, besides the USGS Utah study, to support your  
18 requiring Ambient Monitoring?

19 MR. GARNETT: Yeah, I would rely on  
20 the Barker study, 43o, that was provided to us  
21 during the technical review period. And even  
22 that cite provided cautions that there are some

1 concerns of determining the exact gel strength of  
2 any given muds, and that typically the condition  
3 of the muds in abandoned wellbores is usually  
4 unknown.

5 And as Barker indicates, that  
6 determining the exact gel strength is difficult  
7 because gel strength varies with the type of mud  
8 and the condition of the mud, and that the lower-  
9 end gel strength estimates like Panoche's are  
10 based off professional judgment, and not  
11 empirical data.

12 And then I would also point to another  
13 paper by Johnson, A.R. 43aa, where it says that  
14 gel strength could be sometimes strong when its  
15 initially installed into the well bore, but that  
16 rates levels fall off, and that gel strength  
17 isn't a conclusive determination of whether or  
18 not mud could be sufficiently strong to prevent  
19 any upward fluid movement.

20 And then I also go back to the UIC  
21 Class I monitoring regulations at 40 C.F.R.  
22 Section 146.13(d), that authorizes the region to

1 require monitoring based off their potential for  
2 fluid migration into wells, and the potential  
3 value of the monitoring wells to detect such  
4 movement.

5 JUDGE LYNCH: So, how are you defining  
6 potential? Is it any risk?

7 MR. GARNETT: Any risk that arises to  
8 a level of concern to the USDW. And the region  
9 has identified several risks at this site that  
10 warrant monitoring.

11 First, the injection formation is  
12 over-pressured. So, that means that any  
13 additional injection activity is going to  
14 displace the injection plume and allow it to  
15 migrate laterally to the abandoned wells. And --

16 JUDGE LYNCH: Well, can I stop you  
17 there? So, are you saying that over-  
18 pressurization of a formation, in itself, is  
19 sufficient to warrant Ambient Monitoring?  
20 Because any additional injection will cause a  
21 problem. That's what I'm hearing.

22 MR. GARNETT: Yes, Your Honor. In

1 some cases it may be. But the region needs to  
2 look at the totality of the situation, and not  
3 just one factor.

4 The over-pressurization is  
5 significant. But what's more significant is the  
6 artificial penetrations the twenty abandoned  
7 wellbores within a three-mile radius of the  
8 facility, that could serve as potential conduits  
9 for fluid migration into the USDW.

10 So, the USDW is located about 3,500  
11 feet below ground surface. There's a chart  
12 that's pretty helpful in PEC's permit renewal  
13 application, figure D-3.

14 And the problem with the cement plugs  
15 at Silver Creek #18 is that the lowest one is  
16 placed at 1,740 feet out to 1,400 feet to 1,700  
17 feet. And that's significantly higher than the  
18 lower-most USDW.

19 So the cement plug, because there's  
20 not one at the base of the USDW, which the UIC  
21 program is intended to protect, that causes  
22 concern that any potential fluid migration --

1 especially if the mud is deteriorated since the  
2 1970s, when Silver Creek was initially plugged --  
3 would not prevent migration into the lower-most  
4 USDW.

5 JUDGE LYNCH: Well, what's your view  
6 on the fact that Panoche provided the region with  
7 an apparently valid certificate saying that the  
8 wells were plugged in accordance with the state's  
9 procedures, regulations, at the time?

10 MR. GARNETT: So, the plugging  
11 certificates are not dispositive. For example,  
12 Silver Creek #18, it may provide evidence that  
13 proper procedures were followed at the time in  
14 1974, but it provides no information about  
15 today's standards about whether or not that plug  
16 is sufficiently strong to prevent upward fluid  
17 migration.

18 And then, for context, it's important  
19 to know that the California state requirements at  
20 the time were intended to protect fresh saltwater  
21 interfaces, which is defined as protecting  
22 aquifers that contain 3,000mg per liter or less

1 of total dissolved solids.

2 But the UIC program's aim is to  
3 protect aquifers that contain 10,000mg or less of  
4 total dissolved solids.

5 So, the state requirements might not  
6 necessarily be protective of the UIC program's  
7 requirements.

8 As we indicated in our comment letter  
9 to Panoche in December 2019, is that the UIC  
10 program's a bit more broad, in that California's  
11 requirements at the time were not necessarily  
12 protective enough of USDWs, but have, since then,  
13 been protective of USDWs, but those requirements  
14 haven't been applied retroactively.

15 JUDGE LYNCH: So --

16 JUDGE STEIN: I have --

17 JUDGE LYNCH: Go ahead, Judge Stein.

18 JUDGE STEIN: I have a couple of  
19 questions. Mr. Hobbs in his argument talked  
20 about the two prongs of the regulations, which  
21 EPA, it alleges, must follow in order to impose  
22 Ambient Monitoring.

1           And one of them is the value of the  
2 Ambient Monitoring. What, in EPA's view, is the  
3 value of the Ambient Monitoring, that the other  
4 monitoring provisions will not provide?

5           And I have two other questions, but  
6 I'll let you answer that one first.

7           MR. GARNETT: The monitoring at the  
8 facility will only inform about pressure  
9 increases in the injection formation, and it  
10 won't provide information about any potential  
11 water quality changes in the USDWs that's located  
12 near Silver Creek #18, which is over a mile away  
13 from the facility.

14           So, the Ambient Monitoring at Silver  
15 Creek #18 property is necessary because it will  
16 provide direct information about any pressure  
17 increases in the formations contained in the  
18 USDW, as well as any potential groundwater  
19 quality changes that are occurring there.

20           And if there are other reasons why  
21 pressure is increasing or groundwater quality is  
22 changing -- say, for example, surface activities

1 from agriculture, that pesticides somehow make  
2 their way into the lower-most USDW -- then EPA  
3 and the permits can review the monitoring reports  
4 and determine the root cause of any changes in  
5 groundwater quality, or pressure increases.

6 So, it has value, because it'll  
7 provide direct empirical evidence that's lacking  
8 because Panoche does not want to reenter old  
9 abandoned wells and provide mud samples that  
10 would confirm their modeling approach.

11 JUDGE STEIN: So, to follow up on  
12 that, am I correct in understanding that this is  
13 not the first time that the region has imposed a  
14 monitoring provision in the context of a UIC  
15 permit?

16 MR. GARNETT: Correct.

17 JUDGE STEIN: I mean the Ambient  
18 Monitoring provision.

19 MR. GARNETT: Yes, that's correct.  
20 Hilmar Cheese is a relevant example, because  
21 that's a cheese production facility, but they  
22 inject industrial waste into an over-pressured

1 formation in the central valley of California, in  
2 an area that had many abandoned wellbores from  
3 previous oil and gas activity.

4 And these abandoned wellbores could be  
5 potential conduits for fluid migration. So, in  
6 Hilmar Cheese, the Agency required installation  
7 of monitoring wells to ensure that its injections  
8 into an over-pressured formation would not cause  
9 any potential fluid migration into any abandoned  
10 wellbores and into USDWs.

11 And the Region has issued permits that  
12 don't require monitoring, based off site-specific  
13 factors. Maybe no over-pressured formation or  
14 lack of abandoned wellbores that would serve as  
15 conduits.

16 So, really, our assessment in each of  
17 these permits is based off site-specific  
18 information on whether or not there's a risk to  
19 the USDW.

20 JUDGE STEIN: So, my final question,  
21 Mr. Hobbs articulated that in order to justify a  
22 monitoring well, EPA would have to prove that

1 there had been a failure somewhere. That the  
2 muds had failed.

3 And I was wondering if you could  
4 comment on EPA's review as whether that's the  
5 proper way we should be evaluating whether EPA  
6 has met the requirements of the regulations with  
7 respect to authorizing Ambient Monitoring?

8 MR. GARNETT: It seems that PEC is  
9 trying to shift their burden under 40 C.F.R.  
10 144.12(a), is to demonstrate that their injection  
11 activities will not result in a violation of the  
12 Safe Drinking Water Act, which means that it's  
13 upon Panoche, not the Region, to provide  
14 information about the mud samples, or about the  
15 condition of the abandoned wellbores, to ensure  
16 that there's no potential for fluid migration  
17 into USDWs.

18 And they also cited in the Utah study,  
19 the researchers observed that old abandoned  
20 wellbores could be a potential for fluid  
21 migration, especially when the condition of the  
22 mud has deteriorated, or the integrity of the

1 cement plugs have worsened over time.

2 So, this means that when we're  
3 assessing whether or not there's potential for  
4 fluid migration, we need to look at the site-  
5 specific factors.

6 And it's not EPA's burden to  
7 demonstrate potential endangerment, because that  
8 would make monitoring useless.

9 If we had evidence that this mud was  
10 going to fail at the Silver Creek 18 property,  
11 then we'd require corrective action. Because  
12 monitoring could be useful in determining  
13 potential fluid migration, but it wouldn't  
14 address the actual risks at the abandoned  
15 wellbores.

16 So, the monitoring requirement takes  
17 us a step back and asks, or provides evidence  
18 that PEC's injection activities would either not  
19 result in fluid migration through the abandoned  
20 wellbores, or if it does and requires corrective  
21 action under Part II.C.2, the permit.

22 JUDGE STEIN: Thank you.

1                   JUDGE BLAKE: Counsel, I had a  
2 question relating to -- Panoche talks a lot about  
3 all the other monitoring provisions in the  
4 permit, and says that those are sufficient. We  
5 don't need Ambient Monitoring adjacent to Silver  
6 Creek #18.

7                   And I wanted to explore Panoche's  
8 argument a little bit. So, one of the things  
9 they say in their Reply Brief at 18, is that what  
10 you really want to do is monitor the pressure.  
11 And isn't the best place to do that -- right? --  
12 at the point of injection, where the pressure  
13 will be the highest?

14                   So, yet I heard you say we need to do  
15 it near Silver Creek #18, because we need the  
16 pressure there and the water quality.

17                   But if you could just help me  
18 understand a little bit the differences between  
19 those monitoring requirements, and why, in the  
20 region's perspective, the monitoring is not  
21 duplicative, but is necessary, to achieve your  
22 ends.

1 MR. GARNETT: Yes. So, the monitoring  
2 of the injection formation at the site is not  
3 unimportant. That information needs to be viewed  
4 in conjunction with the USDW monitoring salts.

5 So, for example, like injection  
6 formation monitoring won't alert to any  
7 groundwater quality changes in the lower-most  
8 USDW.

9 Monitoring for pressure is different  
10 from monitoring for groundwater qualities.  
11 There's different parameters, pressure is  
12 required to be monitored daily, whereas  
13 groundwater quality monitoring is more  
14 significant.

15 It requires monthly monitoring during  
16 the first year, and then it's quarterly  
17 thereafter.

18 But it's really the distance away from  
19 the facility. That's the main issue. The  
20 monitoring at the facility will only give results  
21 about potential issues that's happening at the  
22 facility in regards to whether or not there's

1 issues in the injection formation at the  
2 facility.

3 But if the fluids have migrated away  
4 from the facility, then there will be no results  
5 about any potential migration through the  
6 abandoned wellbores into the USDW.

7 So, these monitoring requirements  
8 aren't duplicative. Because both are needed to  
9 ensure that what's happening at the facility is  
10 informed, and then any potential fluid movement  
11 at the abandoned wellbores is also taken into  
12 account.

13 And so, for example, let's say that  
14 there was no USDW monitoring requirement in the  
15 permit and we only relied on injection formation  
16 monitoring at the facility.

17 Then, those results would be  
18 inconclusive about whether there's any potential  
19 contamination in the USDW.

20 And based off of our discussions with  
21 Panoche, we find it like very hard to convince  
22 PEC to address any issues occurring through the

1 abandoned wellbores.

2 We need direct evidence, they would  
3 say. We need direct evidence that there's  
4 potential groundwater quality changes in the  
5 lower-most USDW, or pressure increases.

6 So, this monitoring requirement gives  
7 us and Panoche empirical evidence that both the  
8 agency and the permittee need to ensure that its  
9 injection activities aren't endangering USDWs,  
10 thereby meeting Panoche's burden under the Safe  
11 Drinking Water Act and UIC regulations, to  
12 demonstrate that they're not injecting into the  
13 USDW.

14 JUDGE LYNCH: Well, counsel, on page  
15 20 of the Petition, Panoche says that the Region  
16 in fact found that there was no endangerment,  
17 that's why you removed the corrective action  
18 requirements.

19 And the fact that you removed the  
20 corrective action requirement undermines any,  
21 both authority and rationale, to require Ambient  
22 Monitoring. So, can you tell us if you have any

1 response to those arguments that Panoche makes?

2 MR. GARNETT: Yes, Panoche  
3 misconstrues the basis of why the Region removed  
4 the corrective action requirement. And really,  
5 the key information that Panoche submitted was in  
6 its pre-publication comments to the draft permit,  
7 which is A.R. 12.

8 And a useful picture in this is Figure  
9 6, and it shows that there will be, based off  
10 their projected injection volume, because of the  
11 installation of enhanced wastewater system, that  
12 the area of review will be reduced from 2.6  
13 miles, as it is now, to two miles in 2030.

14 Therefore, the Souza Creek -- sorry,  
15 the Souza #2 abandoned wellbore -- will be  
16 outside of the smaller AoR. And then, you know,  
17 because the enhanced wastewater system is  
18 expected to improve over time and reduce the  
19 volume of injected fluids, that there may not be  
20 as much of a concern about Souza #2.

21 And we also eliminated the requirement  
22 to monitor England #1-31 because the monitoring

1 at Silver Creek #18 will provide more than enough  
2 information whether or not there's any potential  
3 endangerment.

4 So, it's not necessarily that EPA said  
5 that there's no endangerment, but that EPA said  
6 that this monitoring will confirm whether or not  
7 PEC's methodology for calculating the zone of  
8 endangering influence is sufficient for USDW  
9 protection.

10 JUDGE LYNCH: Well, why was the Region  
11 agreeable to narrowing or reducing the size of  
12 the AoR and eliminating any corrective action or  
13 monitoring near Souza #2?

14 MR. GARNETT: Yes, because -- so due  
15 to the reduced volume of injection fluids  
16 associated with the enhanced wastewater system,  
17 Souza #2 will likely not be a concern towards the  
18 end of the permit term because, based off of  
19 PEC's estimates, the injection fluids will be  
20 unlikely to migrate to Souza #2.

21 And additionally, plugging of Souza #2  
22 doesn't inform the agency of whether or not

1 there's potential fluid migration from the  
2 injection wells to the abandoned wellbores and to  
3 the USDW. Monitoring provides only information  
4 about any potential fluid movement.

5 JUDGE BLAKE: Counsel, I had a quick  
6 question for you. Panoche argues that there are  
7 two confining layers and a buffer aquifer that  
8 they allege would arrest or absorb migration of  
9 the fluids, if there were fluids.

10 Did the Region respond to this point?  
11 And if so, where, in the response to comments?

12 MR. GARNETT: I'm not sure that we  
13 directly addressed the buffer aquifer and  
14 confining layers. But it's part of our response  
15 to comment number one, back to artificial  
16 penetrations, in the area of review, will serve  
17 as conduits for potential fluid migration.

18 Because the benefits of the confining  
19 layer and the aquifer are weakened by these  
20 artificial penetrations, like poking holes in the  
21 ground. That's lost once these wells are  
22 installed, the abandoned wellbores.

1           Yeah, the Region doesn't view that  
2 evidence as dispositive in whether or not there's  
3 any lack of potential fluid migration to the  
4 abandoned wellbores.

5           JUDGE BLAKE: Thank you.

6           MR. GARNETT: And throughout the  
7 permit renewal process, as evidenced in the  
8 record, it's clear that the agency solicited  
9 Panoche's feedback on what would be the most  
10 appropriate way for PEC to meet its burden to  
11 demonstrate that there's no potential of its  
12 injection activities of endangering USDW in the  
13 area of review near the abandoned wellbores.

14           And after feedback incorporated it  
15 into the final permit that was issued, and  
16 determined that the last remaining safeguard that  
17 EPA needs to ensure that there's no violation of  
18 the Safe Drinking Water Act is to require  
19 monitoring in the USDW, so that there's no  
20 potential for fluid migration.

21           And we addressed Panoche's concerns  
22 thoroughly in the response to comments. And

1 Panoche is unable to provide a rationale for why  
2 our response to comments constitutes clear error.  
3 Therefore, it's like there's another reason for  
4 the Board to deny petitioner review, is the fact  
5 that the Region adequately responded to comments.

6 Furthermore, the Region has regulatory  
7 authority, as I mentioned earlier, in regards to  
8 monitoring for Class I wells, under 40 C.F.R.  
9 146.13(d)(1), based off of site-specific factors  
10 that we've discussed during oral argument, about  
11 the over-pressured formation, the eight abandoned  
12 wellbores in the area of review that lack cement  
13 plugs, which would have been an effective barrier  
14 against contamination in the lower-most USDW, as  
15 well as the lack of long string casing that could  
16 prevent lateral migration of fluids from the  
17 injection of wells and formation into the USDW,  
18 as you know as well, and other site-specific  
19 concerns that we addressed in our response brief.

20 And it's based on the potential for  
21 any of these factors to be a risk, not on direct  
22 evidence that any of these factors actually exist

1 in these abandoned wellbores.

2 And as cited, the studies, and even in  
3 the studies that we reviewed, caution that there  
4 are laboratory studies cannot be fully applied to  
5 field settings.

6 So, in this case there is some concern  
7 that condition of the muds may not be strong  
8 today, as they were in '50s, '60s and '70s, when  
9 the abandoned wells were initially plugged.

10 JUDGE LYNCH: Well, how do you respond  
11 to Panoche's argument earlier that EPA  
12 regulations actually express a preference for  
13 modeling?

14 MR. GARNETT: Modeling is not  
15 necessarily inherently bad. It's when modeling  
16 is based off of limited information, that the  
17 agency needs to institute a safeguard, like USDW  
18 monitoring, to ensure that Panoche's injection  
19 activities do not cause migration fluids into the  
20 USDW.

21 The monitoring requirement is not  
22 punitive. It's just a safeguard that's necessary

1 to ensure USDW protection.

2 JUDGE LYNCH: Why isn't the zone of  
3 endangering influence reassessment they have to  
4 do, why isn't that sufficient?

5 MR. GARNETT: Because it won't provide  
6 any information about pressure increases in the  
7 USDW that's located over a mile away from the  
8 facility, as well as any potential groundwater  
9 quality changes.

10 So, the zone of endangering influence  
11 recalculation, in conjunction with the injection  
12 formation monitoring at the site, as well as the  
13 USDW monitoring, all three of these factors are  
14 needed to determine whether or not there's any  
15 potential fluid migration into the USDW that's  
16 offsite.

17 JUDGE LYNCH: Does Region 9 have an  
18 age range for the wells you consider problematic?  
19 Is it the 1970s? 1980? I mean, what's your  
20 consideration?

21 MR. GARNETT: There is no specific age  
22 range. It's not required by the regulations.

1 But I'd say, typically in older abandoned  
2 wellbores prior to the enactment of the Safe  
3 Drinking Water Act, those typically are of more  
4 concern than the newer abandoned wells that, with  
5 updated technology and stricter state  
6 requirements touching California, in regards to  
7 aquifer protection, that the older wells that  
8 predate a lot of the UIC regulatory programs, are  
9 more concerning than today's wells.

10 JUDGE LYNCH: Well, let me ask you  
11 this. When you were talking to Panoche about  
12 plugging Souza #2, were you requiring long string  
13 casing? Or what were your requirements, in terms  
14 of mud and closing it in, that you were going to  
15 require?

16 MR. GARNETT: The main requirement  
17 would be the installation of a cement plug at the  
18 base of the USDW, on top of the injection zone.  
19 Because that's typically a best-practice and what  
20 the state of California requires in abandoned  
21 wellbores, to ensure that there's no fluid  
22 movement in the abandoned well.

1                   And so, the base of the USDW, like  
2 Silver Creek, is that 3,500 feet below ground  
3 surface, which may not have been a concern in the  
4 '70s for the oil and gas companies that were  
5 drilling and identifying oil, but it is a concern  
6 to EPA, who has a regulatory requirement to  
7 protect the deeper, lower-most USDW in this  
8 matter.

9                   JUDGE LYNCH: All right, thank you.  
10 Do any of the Judges have additional questions?

11                   All right, thank you, counsel. Now,  
12 we'll turn to Panoche for rebuttal. Mr. Hobbs?

13                   MR. HOBBS: Thank you, Your Honor.  
14 I'd like to address a few issues.

15                   First of all, PEC does not own the  
16 land that Silver Creek #18 is located on. So,  
17 what EPA is asking is something that PEC may not  
18 have the ability to do. It lacks the legal  
19 authority to go onto somebody else's property and  
20 drill a well that is 4,000 feet deep, through  
21 muds, through cement plugs, to get the sample  
22 that EPA was asking for, or to drill the

1 monitoring well that EPA required under the  
2 permit.

3 JUDGE LYNCH: Counsel, have you made  
4 any attempts to negotiate access with the  
5 property owner?

6 MR. HOBBS: I'm not aware of any  
7 attempts that have been made or not, Your Honor.

8 JUDGE LYNCH: All right.

9 MR. HOBBS: But in PEC's view,  
10 drilling this monitoring well -- disturbing a  
11 well that, according to regulators in California,  
12 was properly plugged and abandoned, and creating  
13 a new penetration into underground sources of  
14 drinking water, is itself risky.

15 Doing this on somebody else's land  
16 could have untold liabilities. What if something  
17 goes wrong?

18 And without a factual basis that would  
19 suggest that the muds down there actually could  
20 deteriorate somehow over time, it seemed reckless  
21 to do that, to enter and to drill that deep,  
22 creating a new penetration.

1 JUDGE LYNCH: Counsel, are you saying  
2 that your modeling is as efficacious as the  
3 Ambient Monitoring data that would be provided?

4 MR. HOBBS: Yes, Your Honor. I think  
5 the modeling that PEC did and continues to do  
6 every single year, is in fact more indicative of  
7 what is happening at the injection zone.

8 PEC does monitor every year. Counsel  
9 for the Government stated that as you --

10 JUDGE LYNCH: No, the Ambient  
11 Monitoring I'm talking about.

12 MR. HOBBS: Right, I mean --

13 JUDGE LYNCH: You're saying your  
14 modeling would produce --

15 MR. HOBBS: Is superior to that,  
16 because it's telling --

17 JUDGE LYNCH: Superior to actual data  
18 from the field.

19 MR. HOBBS: Correct, Your Honor.

20 JUDGE LYNCH: Okay, thank you.

21 MR. HOBBS: Because the modeling  
22 measures pressure, and the model is calibrated

1 every single year.

2 So, what the regulations require is  
3 what's called fall-off testing.

4 JUDGE LYNCH: And it's based on your  
5 -- I'm talking about the modeling that you did  
6 that was based on estimates and literature  
7 searches.

8 MR. HOBBS: Correct, Your Honor. But  
9 that modeling also used the data from the actual  
10 injection well itself.

11 JUDGE LYNCH: Which is where the  
12 injection's happening. It's not near the  
13 abandoned wells, or the USDW.

14 MR. HOBBS: That's correct, but that's  
15 where the pressure is the greatest. Right? The  
16 point at which the injection is occurring is  
17 where the pressure is greatest.

18 And so, the fall-off testing indicates  
19 how the pressure deteriorates once injection  
20 activities cease. That allows modeling to  
21 project the effect of the injection within the  
22 area of review.

1                   That modeling is done every year. And  
2 every year it has shown that the modeling has  
3 essentially correctly predicted the pressure  
4 differentials that are occurring underground.

5                   JUDGE LYNCH: So, your argument is  
6 that the FOT and the ZEI are sufficient.

7                   MR. HOBBS: Well that's -- that is a  
8 check on -

9                   JUDGE LYNCH: Or superior.

10                  MR. HOBBS: That is a check to make  
11 sure that the modeling that was done at the  
12 outset still holds true. Right?

13                  And the pressure is the critical  
14 measurement. It's the pressure by which the  
15 column of muds and cement plugs in the wellbores  
16 could be moved upward. And this modeling every  
17 year shows that PEC is well under those risk  
18 zones.

19                  JUDGE STEIN: So, why isn't this, or  
20 couldn't this be looked at as simply a dispute  
21 between experts? EPA's technical experts who  
22 have the expertise in implementing this program,

1 believe that an Ambient well is appropriate.

2 They put their information to the record.

3           The company's experts disagree. Under  
4 Board precedent, to establish clear error, you  
5 need to do more than show that there's a dispute  
6 between the experts.

7           In this case, EPA's looked at the  
8 information, they've given a response. So, how,  
9 under your theory of the case, do you establish  
10 clear error, if what we have is a disagreement  
11 among experts?

12           MR. HOBBS: So, respectfully, Your  
13 Honor, we disagree that this just is a dispute  
14 between experts.

15           We think this is a case where, one,  
16 EPA lacked any scientific foundation for its  
17 primary stated concern, and, as counsel for the  
18 Government just acknowledged, EPA did not address  
19 the geology that also undercuts EPA's stated  
20 concerns.

21           So, it's two things: a lack of  
22 evidence, and ignoring other evidence in the

1 record.

2 JUDGE STEIN: I'm not sure I heard EPA  
3 say it quite that way. I thought EPA pointed us  
4 to response to comment 1 for where they dealt  
5 with those issues. I mean, I haven't  
6 independently reviewed that during the course of  
7 the hearing, but I didn't hear them say that they  
8 did not respond to that at all.

9 MR. HOBBS: So, my understanding of  
10 what that comment said, or the response there, is  
11 that there could be a confining layer, but  
12 nevertheless, there could be pressure that could  
13 force fluids through that confining layer if  
14 there are cracks, or whatever else.

15 This is a different situation. The  
16 geology here is unique. There is a confining  
17 layer immediately above the injection zone.  
18 Above that is a buffer aquifer, which EPA'S own  
19 regulators acknowledge can absorb fluids  
20 migrating upward. And then above --

21 JUDGE STEIN: Counsel, Judge Lynch has  
22 a question.

1                   JUDGE LYNCH: Counsel, can you show us  
2 now where that particular argument is in your May  
3 11, 2021 comment letter? Your comment letter  
4 discusses pressure and the pressure issue.

5                   MR. HOBBS: Yes, Your Honor. So, in  
6 PEC's May 11, 2021, comment letter, question 14  
7 said, given that there are thousands of feet of  
8 confining layers between the USDW and the  
9 injection zone, with intervening bleed-off zones,  
10 how will EPA account for that decrease in  
11 pressure, with a proposed monitoring condition --

12                   JUDGE LYNCH: Yes, the focus is on  
13 pressure, which -- thank you. So, I just want to  
14 be clear that that's what you're relying on.

15                   MR. HOBBS: Right. But it's the  
16 decrease in pressure that results from the buffer  
17 aquifer. And so, EPA has never explained how it  
18 is possible that fluid could migrate through one  
19 confining layer, through a buffer aquifer that  
20 EPA says is a bleed-off zone, and then yet  
21 penetrate a second confining layer, to get into  
22 the underground sources of drinking water. They

1 have never explained how that is possible in this  
2 case.

3 JUDGE LYNCH: So, your argument is  
4 there is no potential for fluid movement here.

5 MR. HOBBS: Well, the geology suggests  
6 that it is not -- I mean, I can't say it would  
7 never happen, but it would take a tremendous  
8 amount of pressure to force fluids through one  
9 confining layer, through a buffer aquifer, and  
10 yet through a second confining layer.

11 And so, the geology here tempers EPA's  
12 concerns. And that is something that they never  
13 squarely addressed, Your Honor.

14 With respect to the Hilmar Cheese  
15 case, that was distinguishable. In that case,  
16 the company was subject to a number of different  
17 enforcement actions, and they didn't actually  
18 challenge the conditions that EPA imposed in  
19 their permit.

20 So, it was not a litigated example of  
21 the Board upholding the monitoring conditions in  
22 that case.

1                   JUDGE BLAKE: But I thought counsel's  
2 point was that the Region had required Ambient  
3 Monitoring in another permit in the Region 9  
4 area. I thought that was the point they were  
5 making.

6                   MR. HOBBS: Yeah, that's correct, Your  
7 Honor. And our only point is that that case is  
8 distinguishable from this case for those reasons.

9                   JUDGE BLAKE: Because it wasn't  
10 challenged?

11                  MR. HOBBS: Well, the company was  
12 subject to multiple enforcement actions, which is  
13 not the case here.

14                  JUDGE BLAKE: Correct.

15                  MR. HOBBS: PEC complied with its  
16 permit. And, correct, I mean, the company  
17 elected not to challenge its permit. So, I'm not  
18 sure that that served as a helpful precedent with  
19 respect to upholding the Board's decision in this  
20 case.

21                  JUDGE BLAKE: Yeah, I thought that  
22 your client made an argument that the Region had

1 never done it before. And the Region pointed out  
2 that, no, in fact, it has.

3 MR. HOBBS: Understood, Your Honor.

4 JUDGE BLAKE: Factually, you agree.  
5 Correct? That in fact, there is another permit  
6 that includes a similar requirement.

7 MR. HOBBS: I guess that's my  
8 understanding of the Hilmar Cheese case, Your  
9 Honor. Finally, I would like to end on the point  
10 that Judge Lynch was making, which is if this is  
11 EPA's new standard, that older drilling muds  
12 fail, what is the cutoff? Is it five years? Ten  
13 years? What is the difference between muds that  
14 were used to plug wells back in the '70s, or even  
15 the '50s, versus the muds that we're using today?

16 There is no material distinction.  
17 These are engineered fluids that are designed to  
18 be durable and resist fluid movement. That is  
19 what was put into these wells.

20 All of the science indicates that they  
21 do not deteriorate over time. We pointed to  
22 several studies in the record showing even a well

1 that was reentered thirty years after being  
2 plugged. The muds were still there, with the  
3 same properties that they had initially.

4 So, this case comes down to there  
5 being no scientific evidence supporting EPA's  
6 stated concern about the age of the drilling  
7 muds. Thank you, Your Honors.

8 JUDGE LYNCH: Thank you very much.  
9 And thank you to both parties in this case. It  
10 really was quite helpful to have the discussion.  
11 And it really informs our deliberations. So, we  
12 very much appreciate it, and we appreciate the  
13 effort and the spirit in which you entertained  
14 the questions and the discussion. So, thank you  
15 again.

16 And with that, I will turn it back  
17 over to the Clerk of the Board to close the  
18 proceedings.

19 MR. CORTES: Thank you, Your Honor.  
20 May I have your attention, please? This session  
21 of the Environmental Appeals Board now stands  
22 adjourned.

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(Whereupon, the above-entitled matter  
went off the record at 3:05 p.m.)

**A**

**A.R** 45:20 54:13 68:7  
**abandoned** 9:6,9,17  
 18:5 21:3 24:17,20  
 26:9 43:2,2,4 44:8,15  
 44:21 46:1 47:20 48:6  
 48:10,10,15,18 50:8,9  
 50:16 53:1 54:3 55:15  
 56:6 60:9 61:2,4,9,14  
 62:15,19 63:14,19  
 66:6,11 67:1 68:15  
 70:2,22 71:4,13 72:11  
 73:1,9 75:1,4,20,22  
 77:12 79:13  
**ability** 17:7 76:18  
**able** 5:18 47:9  
**above-entitled** 1:13  
 88:1  
**absolutely** 53:12  
**absorb** 25:3,14 70:8  
 82:19  
**accept** 11:18  
**acceptable** 27:14  
**accepted** 22:18 51:5  
**access** 77:4  
**account** 22:4 66:12  
 83:10  
**accurate** 35:13  
**accurately** 45:22  
**achieve** 64:21  
**acknowledge** 30:13,14  
 33:7 53:14 82:19  
**acknowledged** 23:21  
 81:18  
**act** 10:17 11:5 17:7  
 42:14 48:22 62:12  
 67:11 71:18 75:3  
**action** 18:21 22:22 23:3  
 30:11 32:5 63:11,21  
 67:17,20 68:4 69:12  
**actions** 14:12 18:18  
 22:19 32:8 84:17  
 85:12  
**activities** 14:7 18:11  
 24:2 42:11,17 45:7  
 59:22 62:11 63:18  
 67:9 71:12 73:19  
 79:20  
**activity** 55:13 61:3  
**actual** 50:15 51:18  
 63:14 78:17 79:9  
**add** 25:13 36:12 41:11  
 41:19  
**additional** 19:10 41:13  
 41:14 44:5 46:7,18  
 55:13,20 76:10  
**additionally** 69:21  
**additive** 25:13

**address** 32:13 47:20  
 63:14 66:22 76:14  
 81:18  
**addressed** 10:8 15:7  
 70:13 71:21 72:19  
 84:13  
**addressing** 31:4  
**adequately** 72:5  
**adjacent** 64:5  
**adjourned** 87:22  
**afternoon** 3:19 7:22 8:5  
 42:8  
**age** 9:5 17:12 21:16  
 28:19 74:18,21 87:6  
**agency** 1:2 2:7,9 3:10  
 9:18 12:2 16:15,17,20  
 16:21 17:2 18:17,21  
 34:2 52:21 53:10 61:6  
 67:8 69:22 71:8 73:17  
**agent** 9:22 17:8  
**ago** 29:5 43:3  
**agree** 18:13 32:14 86:4  
**agreeable** 69:11  
**agreed** 30:10  
**agrees** 8:19  
**agriculture** 60:1  
**ahead** 17:16 29:17 45:2  
 49:5 58:17  
**aim** 58:2  
**air** 34:7 38:2,7,11  
**alert** 5:14 65:6  
**allege** 70:8  
**alleged** 20:18  
**alleges** 58:21  
**allocated** 4:10,14,15,17  
**allow** 55:14  
**allowed** 3:5 38:2  
**allows** 36:19 79:20  
**ambient** 4:6 8:17 16:12  
 18:22 19:1,6,12 20:2  
 22:7 23:2 27:12,13,20  
 28:4,6,12 32:6 47:16  
 47:18 51:13 52:14  
 53:18 55:19 58:22  
 59:2,3,14 60:17 62:7  
 64:5 67:21 78:3,10  
 81:1 85:2  
**amount** 10:2 37:20 38:4  
 38:12 84:8  
**analogy** 23:14  
**annual** 39:2  
**answer** 49:21 59:6  
**AoR** 44:5 68:16 69:12  
**apologize** 20:15  
**apparently** 57:7  
**Appeal** 1:8 3:14  
**Appeals** 1:1,18 3:8,9,20  
 87:21

**APPEARANCES** 2:1  
**appearing** 8:6  
**appears** 25:20  
**applicant's** 18:14  
**application** 12:21 13:4  
 14:18 21:9 34:12,13  
 34:19,20 35:10,14  
 36:5,6 44:5,13 56:13  
**applied** 44:6 58:14 73:4  
**apply** 44:7  
**appreciate** 42:1 49:22  
 87:12,12  
**appreciates** 6:5  
**approach** 15:11,12 16:6  
 52:17 60:10  
**appropriate** 8:21 28:13  
 51:11 71:10 81:1  
**April** 10:15  
**aquifer** 25:2,10,13 26:4  
 29:12 70:7,13,19 75:7  
 82:18 83:17,19 84:9  
**aquifers** 57:22 58:3  
**area** 13:21 44:9 51:20  
 52:10 61:2 68:12  
 70:16 71:13 72:12  
 79:22 85:4  
**argue** 40:11,12  
**argues** 70:6  
**arguing** 16:10 33:15  
**argument** 1:4 3:12,20  
 4:8,9,11 5:3,5,19,22  
 6:7 13:13 18:19 19:4  
 25:8 34:6 36:22 40:17  
 40:18 41:5 45:4 51:9  
 51:15 58:19 64:8  
 72:10 73:11 80:5 83:2  
 84:3 85:22  
**arguments** 68:1  
**arises** 55:7  
**arrest** 25:14 70:8  
**articulated** 61:21  
**articulating** 39:8  
**artificial** 56:6 70:15,20  
**aside** 29:21  
**asked** 35:6 44:9 45:10  
**asking** 26:7,19 27:19  
 30:18 39:12 41:11  
 76:17,22  
**asks** 63:17  
**aspects** 51:6  
**assessed** 21:1 32:12  
**assessing** 63:3  
**assessment** 13:20 20:5  
 20:18 61:16  
**assist** 6:9  
**associated** 69:16  
**assume** 6:7,13  
**assumes** 38:20

**assumption** 45:13,15  
 53:4  
**assure** 53:9  
**Attachment** 10:9  
**attack** 27:12  
**attempt** 38:10  
**attempts** 77:4,7  
**attention** 3:4 87:20  
**attorney** 7:4  
**attributable** 24:1  
**audio** 5:11  
**authority** 39:12 67:21  
 72:7 76:19  
**authorize** 35:8 39:12  
**authorizes** 4:2 34:17  
 54:22  
**authorizing** 62:7  
**averaging** 46:15  
**avoid** 5:7  
**aware** 77:6

**B**

**back** 17:4,18 19:22 24:8  
 38:17 45:16 48:21  
 54:20 63:17 70:15  
 86:14 87:16  
**back-and-forth** 22:20  
**background** 34:10  
**bad** 73:15  
**Barker** 45:19 53:20  
 54:5  
**barrier** 72:13  
**base** 11:10,15 21:6  
 34:18 48:11,16 56:20  
 75:18 76:1  
**based** 7:1 14:5 27:22  
 43:22 45:13,15,20  
 46:3 47:16 50:15,18  
 51:21 53:4 54:10 55:1  
 61:12,17 66:20 68:9  
 69:18 72:9,20 73:16  
 79:4,6  
**basis** 28:3 31:13 32:8,9  
 48:3 68:3 77:18  
**becoming** 29:12  
**began** 43:11,15  
**Behalf** 2:2,7  
**believe** 31:5 35:5 81:1  
**believes** 28:6  
**benefits** 25:14 70:18  
**BERRIOS-COLON** 2:15  
**best** 43:4 64:11  
**best-practice** 75:19  
**beyond** 30:21  
**bit** 19:4 39:11,13 58:10  
 64:8,18  
**Blake** 1:18 3:16 17:13  
 17:15,16,17 18:19

24:3 25:6 34:4,9 36:4  
36:13 37:4,6,18 38:3  
38:9,16 39:10 40:10  
44:22 45:2,3 51:1  
52:6 64:1 70:5 71:5  
85:1,9,14,21 86:4  
**bleed-off** 83:9,20  
**Board** 1:1 2:15,15,16  
3:8,9,20 4:10,21 5:20  
5:21 6:4 7:15 8:5 15:5  
39:5 41:12 72:4 81:4  
84:21 87:17,21  
**Board's** 4:9 85:19  
**bore** 16:5 46:1 54:15  
**brief** 10:9 25:11,21 34:6  
35:16 36:15 38:17  
39:6 40:3 51:3,10  
64:9 72:19  
**briefing** 41:4  
**briefs** 6:8  
**broad** 27:12 52:20  
58:10  
**buffer** 25:2,10,13 26:4  
70:7,13 82:18 83:16  
83:19 84:9  
**buildup** 14:7  
**burden** 16:1 18:10,15  
28:2 29:19 30:14 31:6  
31:11,12 33:19 34:2  
62:9 63:6 67:10 71:10

## C

**C** 42:14  
**C.F.R** 19:20 54:21 62:9  
72:8  
**CA** 2:11  
**calculate** 52:22  
**calculated** 38:1  
**calculating** 52:17 69:7  
**CalGEM** 9:19  
**calibrated** 78:22  
**California** 9:10,18  
10:13 46:21 57:19  
61:1 75:6,20 77:11  
**California's** 58:10  
**call** 7:3  
**called** 30:22 79:3  
**camera** 7:7,9  
**capture** 5:5  
**case** 6:4,12,15,22 8:8  
8:13 16:2 17:10 20:17  
21:12 28:12,16 32:2  
42:10 50:12 53:15  
73:6 81:7,9,15 84:2  
84:15,15,22 85:7,8,13  
85:20 86:8 87:4,9  
**case-by-case** 48:2  
**cases** 56:1

**casings** 11:9 21:5 48:19  
72:15 75:13  
**causal** 23:19  
**cause** 13:7 18:11 46:8  
46:18 55:20 60:4 61:8  
73:19  
**causes** 29:12 33:4  
56:21  
**caution** 73:3  
**cautions** 53:22  
**cease** 79:20  
**cement** 10:2 11:10,13  
14:9 21:5 48:11 56:14  
56:19 63:1 72:12  
75:17 76:21 80:15  
**Center** 1:7 4:2,13 7:18  
8:7  
**central** 61:1  
**certain** 13:6 30:11  
**certainly** 25:19 26:2  
34:2 37:2 40:22  
**certificate** 9:18,22 10:5  
12:7,13 57:7  
**certificates** 9:9 11:19  
12:1 57:11  
**challenge** 84:18 85:17  
**challenged** 85:10  
**challenges** 8:14,16  
**challenging** 27:9  
**change** 22:6 23:17 45:5  
**changed** 12:17 17:6  
43:8  
**changes** 23:22 53:8,9  
59:11,19 60:4 65:7  
67:4 74:9  
**changing** 59:22  
**charged** 30:5  
**chart** 25:20 26:3 40:3  
56:11  
**check** 80:8,10  
**cheese** 60:20,21 61:6  
84:14 86:8  
**chosen** 16:7  
**circumstances** 13:6,15  
28:9  
**citation** 15:6 33:12  
40:22  
**cite** 21:17 22:1 25:16,18  
53:22  
**cited** 30:15,16 62:18  
73:2  
**cites** 29:3  
**citing** 24:8  
**claims** 51:6  
**clarify** 36:4  
**Class** 4:4 47:22 54:21  
72:8  
**cleaning** 35:22

**clear** 17:20 23:7 48:1  
71:8 72:2 81:4,10  
83:14  
**clearly** 8:13 13:16  
**Clerk** 2:15 4:21 5:21  
41:12 87:17  
**client** 24:10 30:9 31:6  
85:22  
**close** 87:17  
**closed** 24:22  
**closest** 50:9  
**closing** 75:14  
**column** 14:8 16:4 80:15  
**come** 26:14 28:1  
**comes** 17:10 33:11  
87:4  
**comment** 25:8,16 36:22  
40:18 58:8 62:4 70:15  
82:4,10 83:3,3,6  
**commentators** 15:8  
**comments** 15:10 18:8  
23:8 31:1,2,3 39:18  
39:19 46:11 49:11  
68:6 70:11 71:22 72:2  
72:5  
**Commerce** 2:4  
**committed** 5:20  
**communications** 17:19  
**companies** 76:4  
**company** 14:18 49:18  
84:16 85:11,16  
**company's** 12:21 15:1  
81:3  
**complete** 50:19  
**completely** 25:4  
**complied** 85:15  
**compromised** 33:1  
**concern** 9:5 10:7 13:15  
15:7 16:15,17,21 17:2  
17:9 18:6 19:15 23:6  
28:10,11 30:20 31:15  
32:1,13,22 33:8 44:8  
47:21 48:20 55:8  
56:22 68:20 69:17  
73:6 75:4 76:3,5  
81:17 87:6  
**concerned** 16:20 30:12  
30:16  
**concerning** 6:14 34:5  
50:10 75:9  
**concerns** 24:15 31:4  
33:21 39:8 47:14  
50:22 53:7 54:1 71:21  
72:19 81:20 84:12  
**conclusive** 54:17  
**concrete** 22:1  
**condition** 8:14,16 12:9  
14:20 21:2 24:6 26:8

45:15,21 48:18 51:19  
54:2,8 62:15,21 73:7  
83:11  
**conditions** 8:19,20 13:6  
15:22 16:3 18:1 50:15  
50:17 84:18,21  
**conduct** 5:2  
**conduits** 56:8 61:5,15  
70:17  
**confining** 25:2,9,12  
26:3 70:7,14,18 82:11  
82:13,16 83:8,19,21  
84:9,10  
**confirm** 52:16 60:10  
69:6  
**confirmed** 44:16  
**Congress's** 42:13,14  
**conjunction** 65:4 74:11  
**connection** 23:19  
**conservative** 15:13  
51:4,16,18  
**consider** 74:18  
**consideration** 48:20  
74:20  
**constitutes** 72:2  
**constraint** 36:18  
**contain** 57:22 58:3  
**contained** 59:17  
**containing** 45:18  
**contamination** 66:19  
72:14  
**contemplated** 27:21  
**context** 57:18 60:14  
**continued** 23:5  
**continues** 78:5  
**contours** 6:19  
**control** 3:22 13:17  
**convince** 66:21  
**cooperation** 5:2  
**correct** 11:6,11,12  
12:19 13:2,18 18:9,13  
20:15 22:15,17 27:3  
36:10 41:17 52:17  
53:10 60:12,16,19  
78:19 79:8,14 85:6,14  
85:16 86:5  
**corrective** 14:12 18:18  
18:20 22:19,22 23:3  
30:11 32:5 63:11,20  
67:17,20 68:4 69:12  
**correctly** 35:10 37:15  
80:3  
**CORTES** 2:15 3:3 41:14  
41:17 87:19  
**cost** 49:19  
**counsel** 2:9,15,16 7:11  
7:21 8:2,3 9:11 10:4  
10:19 17:14,18 20:10

24:3 26:16 29:15  
 32:14,20 40:11 41:20  
 42:6 43:7 44:22 45:1  
 45:10 47:12 51:1 64:1  
 67:14 70:5 76:11 77:3  
 78:1,8 81:17 82:21  
 83:1  
**counsel's** 85:1  
**country** 21:21 31:21  
**couple** 34:9 36:14 49:4  
 58:18  
**course** 39:16 82:6  
**court** 3:6 5:4,13  
**cracks** 82:14  
**create** 40:16  
**creating** 77:12,22  
**Creek** 10:6 13:1 21:7  
 23:3 50:6,7 56:15  
 57:2,12 59:12,15  
 63:10 64:6,15 68:14  
 69:1 76:2,16  
**critical** 80:13  
**critically** 5:4  
**curious** 45:10  
**current** 24:6 40:14  
**cutoff** 86:12

---

**D**


---

**D-3** 56:13  
**D.C** 1:2  
**daily** 34:13,20 35:11  
 36:6 65:12  
**data** 14:5,19 15:3 17:22  
 24:5,8,11,19,21 27:1  
 27:4 30:19 31:8 46:4  
 51:19 54:11 78:3,17  
 79:9  
**date** 6:2 28:1  
**dated** 10:14  
**dating** 17:18  
**day** 27:7 31:5 53:5  
**dealt** 82:4  
**decades** 43:3  
**decades-old** 21:3  
**December** 17:19 58:9  
**decided** 48:2  
**decision** 6:22 8:9,11  
 31:13 85:19  
**decisions** 6:14  
**decrease** 39:21 83:10  
 83:16  
**decreased** 35:20 46:13  
**decreasing** 46:7  
**deep** 76:20 77:21  
**deeper** 76:7  
**defined** 57:21  
**defining** 9:15,16 55:5  
**deliberations** 6:10 7:2

87:11  
**demand** 35:3 47:1  
**demonstrate** 24:12  
 62:10 63:7 67:12  
 71:11  
**demonstrated** 13:9  
 16:9 18:17  
**demonstration** 15:20  
**deny** 72:4  
**dependent** 37:19  
**depending** 23:1  
**derive** 37:8,12  
**derived** 37:15  
**describe** 19:17  
**DeSean** 2:8 7:22 42:8  
**designed** 86:17  
**detect** 55:3  
**detected** 23:17,22  
**deteriorate** 17:12 77:20  
 86:21  
**deteriorated** 44:17 57:1  
 62:22  
**deteriorates** 79:19  
**determination** 20:8  
 54:17  
**determine** 14:2 20:9  
 49:16 52:10 60:4  
 74:14  
**determined** 14:6 71:16  
**determining** 30:5 48:4  
 54:1,6 63:12  
**dialogue** 6:11 7:1  
**difference** 86:13  
**differences** 64:18  
**different** 8:22 9:20 65:9  
 65:11 82:15 84:16  
**differential** 22:11  
**differentials** 80:4  
**difficult** 6:16 54:6  
**difficulties** 5:11  
**dig** 26:2  
**direct** 59:16 60:7 67:2,3  
 72:21  
**directly** 5:6 47:11 70:13  
**disagree** 29:1 81:3,13  
**disagreed** 22:14 51:16  
**disagreement** 81:10  
**disagrees** 46:6  
**disclosed** 14:18  
**discretion** 52:21  
**discussed** 72:10  
**discusses** 83:4  
**discussion** 30:10 42:2  
 87:10,14  
**discussions** 30:8,9  
 43:11 66:20  
**displace** 14:8 16:4  
 40:14 45:7 55:14

**displacement** 44:2  
**dispositive** 51:12 57:11  
 71:2  
**dispute** 15:1 53:15  
 80:20 81:5,13  
**disputing** 13:12  
**dissolved** 58:1,4  
**distance** 65:18  
**distinction** 86:16  
**distinguishable** 84:15  
 85:8  
**disturbed** 26:10  
**disturbing** 77:10  
**Division** 10:13  
**docket** 3:7 6:1  
**Doing** 77:15  
**draft** 46:12 68:6  
**drill** 9:1 26:11 76:20,22  
 77:21  
**drilling** 27:4 28:17  
 31:16 40:15 76:5  
 77:10 86:11 87:6  
**drinking** 9:2 10:16 11:5  
 13:2 16:8 23:12 26:13  
 42:12,14 48:22 49:17  
 62:12 67:11 71:18  
 75:3 77:14 83:22  
**due** 69:14  
**.dumps** 23:15  
**duplicative** 64:21 66:8  
**durable** 86:18

---

**E**


---

**earlier** 17:5 72:7 73:11  
**EDT** 1:14  
**effect** 40:4 79:21  
**effective** 72:13  
**effectively** 38:12  
**efficacious** 78:2  
**efficacy** 18:2  
**effort** 6:5 87:13  
**efforts** 52:16  
**eight** 72:11  
**either** 19:15 48:9 63:18  
**elapsed** 41:15  
**elected** 85:17  
**electricity** 35:3 46:22  
 47:6  
**eliminated** 68:21  
**eliminating** 69:12  
**else's** 76:19 77:15  
**EMILIO** 2:15  
**emphasize** 5:17  
**empirical** 14:19 15:3  
 17:22 18:4 24:11  
 26:20 30:19 31:8  
 44:16 46:4 51:19  
 54:11 60:7 67:7

**enactment** 75:2  
**endanger** 18:12  
**endangered** 16:8  
**endangering** 42:11,17  
 44:10 52:11,18,20  
 67:9 69:8 71:12 74:3  
 74:10  
**endangerment** 13:10  
 14:1 16:11 18:20 19:9  
 32:3 63:7 67:16 69:3  
 69:5  
**ends** 64:22  
**energy** 1:7 3:13 4:2,13  
 7:17 8:7 47:4  
**enforcement** 84:17  
 85:12  
**engine-** 37:20  
**engine-fired** 37:10  
**engineered** 86:17  
**England** 50:7,9 68:22  
**enhanced** 34:22 35:1  
 35:16 39:20 40:4,7  
 46:13 47:2,7 68:11,17  
 69:16  
**ensure** 61:7 62:15 66:9  
 67:8 71:17 73:18 74:1  
 75:21  
**ensures** 42:20  
**enter** 77:21  
**entering** 49:2  
**entertained** 87:13  
**environment** 5:3  
**Environmental** 1:1,2,18  
 2:7,9 3:8,9,10,20  
 87:21  
**EPA** 4:1,16 7:10,21 8:1  
 8:11,13,16 9:4 11:18  
 12:7,11 14:11 15:2,7  
 15:9,16 16:7 17:9  
 19:10,14,15 20:2,7  
 21:17,22 23:11,21  
 24:9 25:4 26:1,7,18  
 28:1,9 29:3,7,20 30:5  
 30:8,10,22,22 31:1,7  
 32:4,10 35:6 38:20  
 39:8 46:5 48:20 49:16  
 58:21 60:2 61:22 62:5  
 69:4,5 71:17 73:11  
 76:6,17,22 77:1 81:16  
 81:18 82:2,3 83:10,17  
 83:20 84:18  
**EPA's** 8:9,11 15:5 19:5  
 31:11 32:1 59:2 62:4  
 63:6 80:21 81:7,19  
 82:18 84:11 86:11  
 87:5  
**equate** 36:8  
**ergo** 18:21

**erred** 8:13  
**error** 72:2 81:4,10  
**especially** 43:2,4 46:20  
 57:1 62:21  
**ESQ** 2:3,8  
**essentially** 80:3  
**establish** 31:6 81:4,9  
**estimate** 45:22  
**estimated** 22:12  
**estimates** 44:15 46:2  
 54:9 69:19 79:6  
**evaluate** 15:14 16:7  
 18:2  
**evaluating** 62:5  
**evaluation** 51:6  
**evidence** 8:10 9:17  
 12:16 17:11 18:4  
 21:22 26:20 28:1,10  
 28:14,16 44:16 57:12  
 60:7 63:9,17 67:2,3,7  
 71:2 72:22 81:22,22  
 87:5  
**evidenced** 71:7  
**exact** 45:22 54:1,6  
**exactly** 15:21 19:4  
**example** 21:17 22:1  
 28:19 29:10 31:18  
 33:4,13 57:11 59:22  
 60:20 65:5 66:13  
 84:20  
**excessive** 49:19  
**excuse** 19:21 20:14  
 28:18  
**exist** 72:22  
**existence** 8:10 11:2  
 21:2 53:14  
**existing** 4:4  
**expected** 68:18  
**expended** 6:6  
**expertise** 80:22  
**experts** 22:13 80:21,21  
 81:3,6,11,14  
**explain** 49:7 51:10  
**explained** 21:14 24:9  
 83:17 84:1  
**explore** 17:22 64:7  
**express** 23:5 73:12  
**expressed** 28:9 33:8  
**expresses** 16:15 32:22

---

**F**


---

**facilities** 47:3  
**facility** 9:7 23:14,16,18  
 29:22 36:16 37:9 38:5  
 38:13,15 43:15 47:9  
 53:1 56:8 59:8,13  
 60:21 65:19,20,22  
 66:2,4,9,16 74:8

**facility's** 48:4  
**fact** 14:11 18:17 22:9  
 35:8 39:11 57:6 67:16  
 67:19 72:4 78:6 86:2  
 86:5  
**factor** 56:3  
**factors** 21:1,12,14 23:7  
 47:17 48:3 61:13 63:5  
 72:9,21,22 74:13  
**facts** 13:14 53:13  
**factual** 8:9 28:10,14  
 31:22 33:20 77:18  
**Factually** 86:4  
**fail** 21:22 28:18 63:10  
 86:12  
**failed** 19:14 20:19  
 29:22 62:2  
**failing** 21:18 29:10  
**failure** 62:1  
**fall** 54:16  
**fall-off** 79:3,18  
**February** 4:10  
**Fed** 15:6  
**feedback** 71:9,14  
**feeling** 15:2  
**feet** 26:8,12 27:5 56:11  
 56:16,16,17 76:2,20  
 83:7  
**field** 33:17 47:18 73:5  
 78:18  
**fifty** 26:10  
**figure** 37:13,16,19  
 56:13 68:8  
**filings** 41:4  
**final** 10:8 11:19 15:12  
 26:17 27:8 34:17  
 40:10 61:20 71:15  
**Finally** 4:18 86:9  
**find** 7:1 8:12 25:15 29:9  
 66:21  
**finding** 19:9  
**finished** 7:8 52:6  
**fired** 37:21  
**firm** 7:16  
**first** 4:12 20:6 43:15,15  
 43:16 55:11 59:6  
 60:13 65:16 76:15  
**five** 86:12  
**fix** 5:12  
**flaw** 44:14  
**flexibility** 19:5  
**flipping** 29:18 31:11  
**fluid** 12:22 13:7,13 18:3  
 18:8,12 19:2 20:5,12  
 21:9 23:6 24:13 25:3  
 30:12 33:16 40:16  
 43:1 44:2,19 46:18  
 48:7 50:4 52:12,13,22

53:6 54:19 55:2 56:9  
 56:22 57:16 61:5,9  
 62:16,20 63:4,13,19  
 66:10 70:1,4,17 71:3  
 71:20 74:15 75:21  
 83:18 84:4 86:18  
**fluids** 15:15 25:15  
 32:19 42:21,21 43:16  
 43:17 45:18 46:8 49:1  
 49:2 52:1,3 66:3  
 68:19 69:15,19 70:9,9  
 72:16 73:19 82:13,19  
 84:8 86:17  
**focus** 83:12  
**follow** 4:9 58:21 60:11  
**follow-up** 34:10 52:5  
**followed** 7:10 12:2,14  
 57:13  
**following** 39:19 41:4  
**follows** 4:12  
**footnote** 39:5  
**force** 82:13 84:8  
**formation** 17:21 21:2  
 22:4,8 32:15 42:21  
 43:21 44:3 45:18 46:6  
 46:9,17 48:5,9,12  
 49:1 52:3 55:11,18  
 59:9 61:1,8,13 65:2,6  
 66:1,15 72:11,17  
 74:12  
**formations** 25:1 32:12  
 43:5,6,20 59:17  
**formulated** 28:20  
**forty** 26:10  
**forward** 16:22 17:3 28:1  
 30:6,11 35:7  
**FOT** 80:6  
**found** 15:16 67:16  
**foundation** 81:16  
**four** 4:3 26:8,12 27:4  
 34:14 36:7 40:13,18  
 43:13 45:6  
**frame** 43:11  
**frames** 36:1  
**Francisco** 2:11  
**fresh** 57:20  
**fully** 73:4  
**fundamental** 44:14  
**further** 12:8,12  
**Furthermore** 72:6

---

**G**


---

**gallon** 37:19  
**gallons** 36:9,16 37:7,10  
 38:19 39:13 43:19  
 46:16  
**gallons-per-EFH** 37:13  
**Garnett** 2:8 7:22 8:1

42:8,9 43:12 45:12  
 47:22 50:1 51:14  
 52:15 53:19 55:7,22  
 57:10 59:7 60:16,19  
 62:8 65:1 68:2 69:14  
 70:12 71:6 73:14 74:5  
 74:21 75:16  
**garnett.desean@epa...**  
 2:12  
**gas** 10:13 61:3 76:4  
**Gates** 2:3 7:16 8:6  
**gathered** 14:5  
**gel** 40:15 44:14 45:20  
 45:22 46:2 54:1,6,7,9  
 54:14,16  
**general** 36:1  
**generated** 38:14 40:5  
**generator** 36:20  
**geologic** 24:22 32:10  
 32:12  
**geology** 81:19 82:16  
 84:5,11  
**getting** 27:3  
**give** 52:21 65:20  
**given** 17:20 18:6 33:13  
 36:17 38:20 49:20  
 54:2 81:8 83:7  
**gives** 67:6  
**go** 17:16 29:17 30:6,10  
 45:1 49:5 54:20 58:17  
 76:19  
**goes** 47:8 77:17  
**going** 6:18 15:9 38:17  
 38:22 41:3 46:21,22  
 47:17 48:20 55:13  
 63:10 75:14  
**good** 3:18 7:22 8:5 19:8  
 42:8  
**Government** 78:9 81:18  
**GRANT** 2:16  
**great** 40:20  
**greater** 32:18  
**greatest** 79:15,17  
**ground** 56:11 70:21  
 76:2  
**grounds** 8:12  
**groundwater** 53:9  
 59:18,21 60:5 65:7,10  
 65:13 67:4 74:8  
**guess** 86:7

---

**H**


---

**happen** 84:7  
**happened** 30:1  
**happening** 22:2 31:19  
 65:21 66:9 78:7 79:12  
**happens** 5:10 30:2  
**hard** 45:22 66:21

**Hawthorne** 2:10  
**hazardous** 4:5  
**hear** 3:12 4:12,16,20  
 5:14 82:7  
**heard** 64:14 82:2  
**hearing** 1:14 3:20 55:21  
 82:7  
**heavier** 50:4  
**help** 40:19 64:17  
**helpful** 7:1 36:13 56:12  
 85:18 87:10  
**high** 35:3,4  
**higher** 32:18 56:17  
**highest** 64:13  
**Hilmar** 60:20 61:6 84:14  
 86:8  
**Hobbs** 2:3 7:14,16 8:3,4  
 8:6 9:13,16 10:11,18  
 11:1,6,12,15,22 12:11  
 12:20 13:4,19 15:4  
 16:13 18:14 19:7,19  
 20:14 21:13 22:16  
 23:9 24:21 25:18  
 26:18 27:3,16,22 28:8  
 28:16 29:2,6,9 31:10  
 32:16 33:2,9,11,18  
 34:8 35:13 36:11 37:1  
 37:5,17,22 38:6,10  
 39:4 40:2,21 41:6,8  
 41:22 42:3 58:19  
 61:21 76:12,13 77:6,9  
 78:4,12,15,19,21 79:8  
 79:14 80:7,10 81:12  
 82:9 83:5,15 84:5  
 85:6,11,15 86:3,7  
**holds** 80:12  
**holes** 70:20  
**Honor** 7:14 8:4 9:13  
 10:11,18 11:7,13,22  
 12:11 13:5 14:11 15:4  
 16:2,14 18:16 19:8  
 20:14 21:13 22:3,17  
 23:9 25:19 26:7 27:16  
 28:8 31:11 33:2,18  
 35:14 36:12 37:2,17  
 37:22 38:7 39:4 40:2  
 41:6,14,22 55:22  
 76:13 77:7 78:4,19  
 79:8 81:13 83:5 84:13  
 85:7 86:3,9 87:19  
**Honorable** 1:16,17,18  
 3:15  
**Honors** 19:22 87:7  
**hour** 37:11,21  
**hours** 36:20 38:8  
**hundreds** 21:20 31:20

I

**identified** 18:7 55:9  
**identify** 33:16  
**identifying** 20:22 76:5  
**ignored** 8:11 25:5 32:10  
**ignoring** 81:22  
**II.C.2** 23:1 63:21  
**II.E.2** 4:7 8:17,22  
**immediately** 5:12,16  
 82:17  
**implementation** 40:7,9  
**implementing** 80:22  
**important** 5:4 6:4 20:17  
 42:19 50:2 57:18  
**impose** 18:21 20:2  
 58:21  
**imposed** 51:13 60:13  
 84:18  
**imposing** 19:12  
**improve** 68:18  
**includes** 86:6  
**including** 8:20  
**inconclusive** 66:18  
**incorporated** 71:14  
**increase** 40:13 45:6  
 46:22  
**increased** 39:21 46:15  
**increases** 45:17 46:8  
 46:19 59:9,17 60:5  
 67:5 74:6  
**increasing** 43:21 59:21  
**independent** 8:12  
**independently** 82:6  
**indicate** 7:12 39:6  
**indicated** 12:21 39:18  
 45:19 58:8  
**indicates** 10:14 23:1  
 54:5 79:18 86:20  
**indication** 12:1  
**indicative** 78:6  
**indulgence** 39:15  
**industrial** 4:3 46:16  
 47:4 60:22  
**inevitable** 5:8  
**influence** 44:11 52:11  
 52:18,20 69:8 74:3,10  
**inform** 59:8 69:22  
**information** 10:10  
 28:22 30:15 31:3  
 32:11 43:9 45:14  
 50:19 51:22 57:14  
 59:10,16 61:18 62:14  
 65:3 68:5 69:2 70:3  
 73:16 74:6 81:2,8  
**informed** 66:10  
**informs** 87:11  
**inherently** 73:15  
**initially** 54:15 57:2 73:9  
 87:3

**inject** 47:10 60:22  
**injected** 35:19 43:19  
 46:17 68:19  
**injecting** 43:16,17 47:4  
 48:5 67:12  
**injection** 3:22 4:3,5  
 8:15 13:17 14:6,7  
 15:15,19,19 18:11  
 20:6 21:8 24:1 34:14  
 34:21 35:12 36:3,7  
 39:2 42:11,17,21 43:5  
 45:5,7,18 46:7,18  
 47:11 48:8,12,17 49:1  
 52:1,2 55:11,13,14,20  
 59:9 62:10 63:18  
 64:12 65:2,5 66:1,15  
 67:9 68:10 69:15,19  
 70:2 71:12 72:17  
 73:18 74:11 75:18  
 78:7 79:10,16,19,21  
 82:17 83:9  
**injection's** 79:12  
**injections** 61:7  
**inquiry** 11:21 12:8,12  
**installation** 46:12 61:6  
 68:11 75:17  
**installed** 54:15 70:22  
**institute** 23:3 73:17  
**integrity** 62:22  
**intended** 21:19 31:16  
 56:21 57:20  
**intent** 42:13,15  
**intentionally** 28:20  
**interfaces** 57:21  
**interject** 12:19  
**interrupt** 12:18 47:13  
**intervening** 83:9  
**introduce** 7:4  
**isolate** 48:11,16  
**issue** 6:17 8:18 65:19  
 83:4  
**issued** 4:1 8:15 43:16  
 61:11 71:15  
**issues** 5:13,16 6:12,15  
 65:21 66:1,22 76:14  
 82:5  
**it'll** 60:6

J

**J** 2:3  
**Johnson** 54:13  
**join** 5:19  
**Judge** 3:18,19 7:20 8:2  
 9:11,14 10:4,12,19  
 11:4,8,14,17 12:4,18  
 13:11 14:14 16:10  
 17:13,14,15,16,16,17  
 18:19 19:17 20:10,16

22:12,21 24:3 25:6  
 26:16 27:1,6,19 28:5  
 28:14,21 29:4,8,14,15  
 29:17,18 32:14,20  
 33:7,10,14 34:4,9  
 36:4,13 37:4,6,18  
 38:3,9,16 39:10,15,16  
 40:10 41:2,7,10,16,18  
 42:1,4 43:7 44:22  
 45:1,2,3,3 47:12 49:3  
 49:4,5,5,6 51:1 52:5,6  
 53:11 55:5,16 57:5  
 58:15,16,17,17,18  
 60:11,17 61:20 63:22  
 64:1 67:14 69:10 70:5  
 71:5 73:10 74:2,17  
 75:10 76:9 77:3,8  
 78:1,10,13,17,20 79:4  
 79:11 80:5,9,19 82:2  
 82:21,21 83:1,12 84:3  
 85:1,9,14,21 86:4,10  
 87:8  
**judges** 1:18 3:15 6:13  
 27:11 42:5 76:10  
**judgment** 46:3 54:10  
**June** 10:14 17:18 24:9  
**justification** 16:22  
**justify** 61:21

K

**K&L** 2:3 7:16 8:6  
**Kathie** 1:17 3:16  
**Kay** 1:16 3:15  
**keep** 4:21  
**key** 68:5  
**keys** 47:14  
**kind** 12:16 28:3 47:14  
 52:20  
**know** 5:11,16 12:4  
 14:16 41:12 43:14  
 51:14 57:19 68:16  
 72:18  
**knowing** 50:15  
**known** 3:22 43:1

L

**L** 1:18 3:16  
**laboratory** 73:4  
**lack** 8:9 21:5 48:19  
 61:14 71:3 72:12,15  
 81:21  
**lacked** 81:16  
**lacking** 30:19 32:9 34:1  
 60:7  
**lacks** 16:22 76:18  
**land** 30:18 76:16 77:15  
**lateral** 72:16  
**laterally** 55:15

**law** 7:16  
**layer** 70:19 82:11,13,17  
 83:19,21 84:9,10  
**layers** 25:2,9,13 26:3  
 70:7,14 83:8  
**leaving** 29:21  
**left** 20:10 41:8  
**legal** 6:20,21 76:18  
**legitimate** 28:11  
**let's** 7:11 8:3 66:13  
**letter** 24:9 25:8,16  
 36:22 58:8 83:3,3,6  
**level** 25:9 50:19 55:8  
**levels** 54:16  
**liabilities** 77:16  
**lighter** 29:21 49:8,9  
**lighter-weight** 50:2,3,8  
 50:10  
**lightness** 21:4  
**lights** 19:22  
**Likewise** 42:3  
**limit** 38:4,7,12  
**limited** 45:13 51:22  
 73:16  
**limits** 38:8  
**listen** 6:19  
**lists** 9:22 34:13  
**liter** 57:22  
**literature** 24:11 79:6  
**litigated** 84:20  
**little** 19:4 39:10 64:8,18  
**LLC** 1:7 3:13 4:2,13  
 7:10  
**LLP** 2:3 7:17  
**located** 25:1 52:4 56:10  
 59:11 74:7 76:16  
**location** 26:4  
**long** 11:9 21:5 48:19  
 72:15 75:12  
**long-winded** 24:18  
**look** 20:21 37:2 56:2  
 63:4  
**looked** 80:20 81:7  
**looking** 10:5 23:10 41:3  
 48:3  
**lost** 70:21  
**lot** 41:11 64:2 75:8  
**low** 31:12  
**lower-** 46:1 54:8  
**lower-most** 56:18 57:3  
 60:2 65:7 67:5 72:14  
 76:7  
**lowest** 56:15  
**Lynch** 1:16 3:15,18,19  
 7:20 8:2 9:11,14 10:4  
 10:12,19 11:4,8,14,17  
 12:4 16:10 17:14,16  
 19:17 20:10,16 22:12

22:21 26:16 27:1,6,19  
 28:5,14,21 29:4,8,14  
 29:17 32:14,20 33:7  
 33:10,14 39:15,16  
 41:2,7,10,16,18 42:1  
 42:4 43:7 45:1,3  
 47:12 49:3,5 52:5  
 53:11 55:5,16 57:5  
 58:15,17 67:14 69:10  
 73:10 74:2,17 75:10  
 76:9 77:3,8 78:1,10  
 78:13,17,20 79:4,11  
 80:5,9 82:21 83:1,12  
 84:3 86:10 87:8

---

**M**


---

**MACINTYRE** 2:16  
**main** 65:19 75:16  
**maintenance** 35:1,2  
 47:8  
**making** 23:15 85:5  
 86:10  
**March** 1:11 44:13  
**Mary** 1:16 3:15  
**material** 86:16  
**math** 37:15  
**matter** 1:6,13 3:7,13 6:1  
 76:8 88:1  
**maximum** 34:13,20  
 35:11 36:6 38:1,14  
**mean** 6:16 14:22 27:12  
 28:15 29:5 30:4,22  
 34:1 60:17 74:19  
 78:12 82:5 84:6 85:16  
**meaning** 15:17 45:21  
 46:17  
**means** 32:17 47:2,9  
 55:12 62:12 63:2  
**meant** 13:5 43:20  
**measurement** 80:14  
**measures** 78:22  
**meet** 19:15 34:2 71:10  
**meeting** 67:10  
**meetings** 30:9  
**members** 7:15  
**mention** 34:20 36:15  
**mentioned** 25:12 72:7  
**mentions** 51:3  
**merely** 29:11  
**met** 16:1 28:2 33:19  
 62:6  
**methodology** 69:7  
**microphone** 5:7 7:7,9  
**migrate** 32:19 42:22  
 52:2 55:15 69:20  
 83:18  
**migrated** 66:3  
**migrating** 18:3 25:4

82:20  
**migration** 15:15,17,18  
 18:8 25:15 43:1 53:1  
 53:6 55:2 56:9,22  
 57:3,17 61:5,9 62:16  
 62:21 63:4,13,19 66:5  
 70:1,8,17 71:3,20  
 72:16 73:19 74:15  
**mile** 23:13,16 59:12  
 74:7  
**mile-and-a-quarter**  
 52:4  
**miles** 21:7 68:13,13  
**million** 36:9,16 37:7,12  
 37:19 38:19 39:1,13  
 46:16  
**millions** 43:19  
**minds** 6:17  
**minimize** 13:15  
**minute** 4:19 25:7  
**minutes** 4:11,14,15,18  
 7:18 41:15,20  
**misconstrues** 68:3  
**model** 78:22  
**modeling** 13:8 14:1,4  
 14:16,17,20 15:2,9,11  
 15:14,20 16:6,9,16,16  
 22:5,13,18 24:7 40:12  
 44:13 49:15 50:12,14  
 50:18,21 51:2,4,5,11  
 51:15,17,21 52:8,10  
 52:16 53:3,10 60:10  
 73:13,14,15 78:2,5,14  
 78:21 79:5,9,20 80:1  
 80:2,11,16  
**modifies** 17:7  
**moment** 17:17  
**monitor** 9:2 53:8 64:10  
 68:22 78:8  
**monitored** 65:12  
**monitoring** 4:6 8:17,21  
 9:4 16:12 18:22 19:1  
 19:6,11,12 20:2,9  
 23:2,10,20 27:13,14  
 27:20 28:4,6,12 30:17  
 32:4,6 42:20 43:13,22  
 47:16,18 48:1,13,14  
 48:22 49:20 50:6,13  
 51:13 52:14,15 53:18  
 54:21 55:1,3,10,19  
 58:22 59:2,3,4,7,14  
 60:3,14,18 61:7,12,22  
 62:7 63:8,12,16 64:3  
 64:5,19,20 65:1,4,6,9  
 65:10,13,15,20 66:7  
 66:14,16 67:6,22  
 68:22 69:6,13 70:3  
 71:19 72:8 73:18,21

74:12,13 77:1,10 78:3  
 78:11 83:11 84:21  
 85:3  
**monthly** 65:15  
**mouthful** 37:11  
**moved** 80:16  
**movement** 12:22 13:7  
 13:13 18:12 19:3 20:5  
 20:9,12 21:10 23:6  
 24:13 30:13 33:17  
 40:16 44:19 48:7 50:4  
 52:12,13 54:19 55:4  
 66:10 70:4 75:22 84:4  
 86:18  
**moving** 35:7  
**mud** 17:5 18:1,2 21:4  
 24:15 27:5 29:21  
 44:17,18 45:8,15,20  
 45:21 50:2,3,4,8,10  
 50:15,17 53:4 54:7,8  
 54:18 57:1 60:9 62:14  
 62:22 63:9 75:14  
**muds** 9:5 12:9 14:9  
 16:4 17:12 21:17,18  
 21:21 26:8,14,21  
 28:17,18,20 29:10,21  
 31:16 32:22 40:15  
 48:18 49:8,9 54:2,3  
 62:2 73:7 76:21 77:19  
 80:15 86:11,13,15  
 87:2,7  
**multi-** 39:1  
**multiple** 85:12  
**multiply** 36:8  
**multiplying** 37:14

---

**N**


---

**name** 7:15 9:20  
**narrowing** 69:11  
**Nashville** 2:5  
**naturally** 32:19  
**nature** 48:21  
**near** 9:6 59:12 64:15  
 69:13 71:13 79:12  
**nearby** 53:2  
**necessarily** 16:13 34:1  
 58:6,11 69:4 73:15  
**necessary** 16:3 48:22  
 50:14 59:15 64:21  
 73:22  
**need** 15:20 31:12 40:13  
 41:19,21 52:13 53:7  
 63:4 64:5,14,15 67:2  
 67:3,8 81:5  
**needed** 15:3 16:4 33:16  
 35:19 66:8 74:14  
**needs** 12:16 23:18 56:1  
 65:3 71:17 73:17

**negative** 30:18  
**negotiate** 77:4  
**never** 30:1 32:11 34:2  
 83:17 84:1,7,12 86:1  
**nevertheless** 82:12  
**new** 26:12 43:9 77:13  
 77:22 86:11  
**newer** 75:4  
**NIVEA** 2:15  
**no-** 15:16  
**non-** 4:4  
**noted** 5:22  
**notes** 10:2  
**notice** 1:14  
**noticed** 44:1  
**noting** 37:8  
**November** 10:17  
**number** 3:13,14 20:22  
 30:8 70:15 84:16  
**numeral** 4:7

---

**O**


---

**observe** 5:19  
**observed** 10:1 40:9  
 62:19  
**occur** 15:21,22 16:5  
 34:22  
**occurred** 34:16  
**occurring** 59:19 66:22  
 79:16 80:4  
**offhand** 25:19 37:1  
 40:22  
**Office** 2:9  
**offsite** 74:16  
**oil** 10:13 61:3 76:4,5  
**Okay** 17:8 37:6,16,18  
 38:9,16 39:14 41:7  
 78:20  
**old** 47:19 60:8 62:19  
**older** 21:18 31:15 32:22  
 75:1,7 86:11  
**once** 38:16 70:21 79:19  
**ones** 41:10  
**online** 35:17  
**onsite** 47:20  
**opening** 25:21 40:3  
**operate** 38:13  
**operating** 34:7 36:7,18  
 36:19 38:2,8  
**operation** 26:11 30:6  
**opportunity** 6:11,19  
**opts** 4:18  
**oral** 1:4 3:12 4:8,11  
 5:19 41:5 72:10  
**order** 4:10 26:14 30:22  
 58:21 61:21  
**originally** 44:21  
**other's** 5:9

**outset** 80:12  
**outside** 15:19 68:16  
**over-** 22:9 55:17  
**over-pressured** 21:1  
 22:4 32:15,16 43:6  
 47:19 48:5,9 55:12  
 60:22 61:8,13 72:11  
**over-pressurization**  
 56:4  
**overall** 30:20  
**overcome** 12:15 31:7  
**overpressured** 17:21  
**owner** 77:5

---

**P**


---

**P-R-O-C-E-E-D-I-N-G-S**

3:1  
**p.m** 1:14 3:2 88:2  
**page** 25:21 32:21 34:5  
 35:15 37:7 40:3 51:9  
 67:14  
**Panoche** 1:7 3:13 4:1,5  
 4:13,13 7:10,11,17  
 8:6 21:2 27:15 28:6  
 32:15 39:22 43:17,19  
 43:20 46:6,9,17 51:2  
 51:14 53:8,12 57:6  
 58:9 60:8 62:13 64:2  
 66:21 67:7,15 68:1,2  
 68:5 70:6 72:1 75:11  
 76:12  
**Panoche's** 43:14 45:4  
 45:10 46:2 47:14 52:9  
 52:16 54:9 64:7 67:10  
 71:9,21 73:11,18  
**paper** 45:19 54:13  
**parameters** 18:7 65:11  
**Pardon** 19:22  
**part** 4:6 15:1 42:14  
 63:21 70:14  
**particular** 21:6 45:14  
 83:2  
**particularly** 5:13  
**parties** 6:6 87:9  
**partly** 52:9  
**parts** 45:12  
**party** 6:17 7:4  
**passed** 10:17  
**pathway** 43:1  
**pause** 9:11 10:5 43:8  
**PEC** 8:14,16,18,19 9:1  
 13:8 14:4,12 16:1,9  
 18:15 22:5,5,20 23:11  
 32:2 38:18 44:10 62:8  
 66:22 71:10 76:15,17  
 78:5,8 80:17 85:15  
**PEC's** 9:6 23:13 45:7  
 56:12 63:18 69:7,19

77:9 83:6  
**penetrate** 43:5 83:21  
**penetration** 26:12  
 77:13,22  
**penetrations** 56:6  
 70:16,20  
**people** 5:15,18  
**percent** 46:14  
**perfect** 37:4  
**period** 53:21  
**permit** 1:9 3:13,22 4:1,2  
 4:7 6:22 8:15,19 10:8  
 12:21 14:12,18 18:18  
 22:20,22 24:12 26:17  
 27:8,18 34:7,12,17,19  
 36:18,19 38:2,4,7,11  
 43:10,14,17 44:6,7,12  
 46:12 51:6 56:12  
 60:15 63:21 64:4  
 66:15 68:6 69:18 71:7  
 71:15 77:2 84:19 85:3  
 85:16,17 86:5  
**permits** 60:3 61:11,17  
**permittee** 52:21 67:8  
**permitting** 39:12  
**perspective** 13:16  
 64:20  
**pesticides** 60:1  
**petition** 3:21 21:14  
 25:12 67:15  
**petitioner** 2:2 4:12,18  
 72:4  
**PG&E** 47:6  
**picture** 68:8  
**place** 64:11  
**placed** 56:16  
**places** 10:3  
**please** 3:4 5:11,16 7:6,8  
 7:12,19 8:5 19:18  
 87:20  
**pleased** 5:18  
**plug** 9:6 10:22 12:9  
 17:5 28:18 48:16  
 56:19 57:15 75:17  
 86:14  
**plugged** 9:9,15,15,17  
 10:15 11:20 17:4 26:9  
 44:21 57:2,8 73:9  
 77:12 87:2  
**plugging** 10:1 12:1 17:7  
 21:18 57:10 69:21  
 75:12  
**plugs** 11:10,13 14:9  
 21:5 48:11 56:14 63:1  
 72:13 76:21 80:15  
**plume** 55:14  
**point** 14:6,15 15:5 22:3  
 26:6 33:4 35:15 36:21

39:1,5 54:12 64:12  
 70:10 79:16 85:2,4,7  
 86:9  
**pointed** 29:7 49:19 82:3  
 86:1,21  
**points** 34:10  
**poking** 70:20  
**position** 6:21 11:17  
 12:6 13:12 14:21 19:8  
**positioned** 31:9  
**positions** 6:20  
**possible** 83:18 84:1  
**possibly** 38:14  
**posted** 3:6 6:1  
**potential** 4:4 12:22  
 13:13,18,22 14:3,11  
 14:15,17 15:14 19:2  
 20:5,11,12,12 21:9  
 23:6 27:18 29:11  
 30:12 33:3 44:2,2,19  
 45:17 48:7 50:4 52:1  
 52:13,22 53:5 55:1,2  
 55:6 56:8,22 59:10,18  
 61:5,9 62:16,20 63:3  
 63:7,13 65:21 66:5,10  
 66:18 67:4 69:2 70:1  
 70:4,17 71:3,11,20  
 72:20 74:8,15 84:4  
**poured** 10:2  
**practices** 43:4  
**pre-publication** 46:11  
 68:6  
**precedent** 81:4 85:18  
**precisely** 50:5  
**precludes** 19:10  
**predate** 75:8  
**predicted** 80:3  
**preference** 73:12  
**preferred** 15:11  
**preparation** 6:6  
**prepared** 3:6  
**present** 2:14 13:22  
**presenting** 5:6 7:4  
**presiding** 3:17  
**pressure** 14:7 16:3 18:1  
 18:6 22:7,10 32:18  
 40:13,14 43:20 45:5,6  
 45:17 46:8,19 53:8  
 59:8,16,21 60:5 64:10  
 64:12,16 65:9,11 67:5  
 74:6 78:22 79:15,17  
 79:19 80:3,13,14  
 82:12 83:4,4,11,13,16  
 84:8  
**pressured** 22:10  
**pressures** 22:6  
**pressurization** 55:18  
**presumably** 21:22

**presumption** 12:13,15  
**pretty** 56:12  
**prevent** 18:3 42:17 48:7  
 49:1 54:18 57:3,16  
 72:16  
**preventative** 30:4 48:21  
**preventing** 42:11  
**prevention** 42:15  
**previous** 43:14 44:6  
 61:3  
**previously** 9:19  
**primary** 32:1 81:17  
**prior** 11:4 40:9 75:2  
**probe** 6:19  
**problem** 16:20 17:9  
 19:14 23:20 53:3  
 55:21 56:14  
**problematic** 74:18  
**procedures** 12:2,14  
 57:9,13  
**proceed** 4:11  
**proceedings** 3:5 5:21  
 39:2 87:18  
**process** 71:7  
**produce** 36:16 38:5,19  
 78:14  
**produced** 37:9,20  
**producing** 47:4  
**production** 60:21  
**productive** 30:9  
**professional** 46:3  
 54:10  
**program** 10:20 11:5  
 30:3,4,5 42:16 56:21  
 80:22  
**program's** 58:2,6,10  
**programs** 12:5 75:8  
**project** 79:21  
**projected** 68:10  
**projecting** 22:6  
**prong** 19:15,18 20:6,7  
**prongs** 19:18 58:20  
**proof** 29:19 31:11  
**proper** 12:2,14 57:13  
 62:5  
**properly** 9:8,14,15,16  
 11:20 77:12  
**properties** 24:15,16  
 87:3  
**property** 59:15 63:10  
 76:19 77:5  
**proposed** 35:5 83:11  
**protect** 56:21 57:20  
 58:3 76:7  
**protecting** 57:21  
**protection** 1:2 2:7,9  
 3:10 50:20 69:9 74:1  
 75:7

**protective** 58:6,12,13  
**prove** 29:20 30:18  
 61:22  
**provide** 20:1 24:5,19  
 26:20 28:22 37:3  
 40:22 41:9 47:5 57:12  
 59:4,10,16 60:7,9  
 62:13 69:1 72:1 74:5  
**provided** 24:21 26:1  
 51:18 53:20,22 57:6  
 78:3  
**provides** 57:14 63:17  
 70:3  
**provision** 22:22 27:13  
 27:14 60:14,18  
**provisions** 4:6 19:2,6  
 59:4 64:3  
**public** 12:5  
**punitive** 73:22  
**purpose** 14:1 21:19  
 31:17  
**pursuant** 1:14  
**put** 38:8 81:2 86:19  
**puzzled** 38:20

---

**Q**


---

**qualities** 65:10  
**quality** 9:2 23:16 53:9  
 59:11,19,21 60:5  
 64:16 65:7,13 67:4  
 74:9  
**quarter** 43:13  
**quarter-mile** 44:7  
**quarterly** 65:16  
**question** 6:16 10:21  
 19:8 24:18 27:11  
 40:11 49:12,14 52:6,7  
 61:20 64:2 70:6 82:22  
 83:6  
**questions** 6:9 24:4 34:5  
 34:11 36:14 41:11  
 42:5 45:9 49:6,21  
 51:2 58:19 59:5 76:10  
 87:14  
**quick** 39:17 70:5  
**quite** 82:3 87:10

---

**R**


---

**R9UIC-CA1-FY17-2R**  
 1:9 3:14  
**radius** 56:7  
**raised** 31:4  
**range** 34:15 74:18,22  
**rates** 54:16  
**rational** 28:3 31:13 32:8  
 32:9 39:7  
**rationale** 67:21 72:1  
**read** 6:7 34:19 35:13

**reading** 35:10  
**real** 14:3  
**reality** 35:17  
**really** 30:21 36:13  
 61:16 64:10 65:18  
 68:4 87:10,11  
**reason** 20:20 46:5 72:3  
**reasons** 59:20 85:8  
**reassessment** 74:3  
**rebuttal** 4:16,19,20 7:13  
 7:19 41:9,21 76:12  
**recalculate** 44:10  
**recalculation** 74:11  
**received** 43:9 44:5  
**reckless** 77:20  
**record** 6:21 7:5,12 8:10  
 17:1,11 20:21 30:7  
 31:15 71:8 81:2 82:1  
 86:22 88:2  
**recordings** 3:4  
**records** 11:8 12:5  
**reduce** 68:18  
**reduced** 36:2 48:13  
 68:12 69:15  
**reduces** 38:13  
**reducing** 69:11  
**reenter** 60:8  
**reentered** 87:1  
**reference** 37:7 49:10  
**referred** 9:19 49:8  
**Reg** 15:6  
**regard** 19:5 35:10 40:12  
 51:12  
**regards** 50:11 52:1  
 65:22 72:7 75:6  
**region** 2:10 4:1,16,17  
 7:10,21 8:1 10:7  
 11:18 12:7 16:11  
 17:20,20 20:19,22  
 21:12 22:18 24:5,19  
 33:16,19 39:18 42:7,9  
 43:9 44:1,9 47:15  
 51:5,12 53:12,16  
 54:22 55:8 56:1 57:6  
 60:13 61:11 62:13  
 67:15 68:3 69:10  
 70:10 71:1 72:5,6  
 74:17 85:2,3,22 86:1  
**region's** 22:13 41:19  
 45:11 50:22 64:20  
**Regional** 2:9  
**regs** 11:5  
**regulation** 15:13  
**regulations** 10:20  
 13:17,20 18:10 19:13  
 19:20 20:1 48:1 52:19  
 54:21 57:9 58:20 62:6  
 67:11 73:12 74:22

79:2  
**regulators** 9:10 77:11  
 82:19  
**regulatory** 9:22 72:6  
 75:8 76:6  
**reimposed** 32:5  
**rejected** 15:10 51:7  
**relating** 64:2  
**relevance** 53:15  
**relevant** 21:15 22:10  
 60:20  
**relied** 21:12 44:14  
 47:17 66:15  
**relies** 15:13 24:10  
**reluctantly** 53:13  
**rely** 15:2 53:16,19  
**relying** 83:14  
**remain** 30:12,16  
**remaining** 8:18 34:5  
 71:16  
**remand** 8:13  
**remanded** 32:2  
**remotely** 5:19  
**removed** 14:11 18:17  
 22:19 32:4 67:17,19  
 68:3  
**removes** 14:17  
**removing** 50:13  
**renewal** 43:11 44:4,12  
 56:12 71:7  
**repeat** 5:12  
**replete** 31:3  
**replicate** 22:14  
**reply** 10:9 34:6 35:16  
 36:14 38:17 39:6  
 51:10 64:9  
**report** 43:13  
**reporter** 3:6 5:4,14  
**reports** 24:22 60:3  
**represent** 7:6  
**representing** 7:17 8:1  
 42:9  
**request** 35:11 38:21  
**requested** 4:7 27:7,8  
**requests** 27:2  
**require** 9:1 13:20 16:12  
 27:4 55:1 61:12 63:11  
 67:21 71:18 75:15  
 79:2  
**required** 9:4 26:17 32:7  
 43:13 61:6 65:12  
 74:22 77:1 85:2  
**requirement** 8:17 23:10  
 23:21 28:4 32:6 48:2  
 50:6,13 51:13 63:16  
 66:14 67:6,20 68:4,21  
 73:21 75:16 76:6 86:6  
**requirements** 8:21

19:11 27:18 57:19  
 58:5,7,11,13 62:6  
 64:19 66:7 67:18 75:6  
 75:13  
**requires** 47:16 63:20  
 65:15 75:20  
**requiring** 23:11 28:3  
 36:3 47:18 53:18  
 75:12  
**researchers** 62:19  
**reserve** 4:15,18 7:18  
**reserving** 7:13  
**reservoir** 23:12  
**resist** 53:5 86:18  
**resistant** 44:19 50:3  
**resolve** 50:22  
**respect** 21:16 34:6 62:7  
 84:14 85:19  
**respectfully** 33:2 81:12  
**respond** 25:5 45:4 51:8  
 53:11 70:10 73:10  
 82:8  
**responded** 31:1 39:22  
 72:5  
**response** 18:8 23:8  
 31:2 39:7,7,17,18  
 45:11 49:11 68:1  
 70:11,14 71:22 72:2  
 72:19 81:8 82:4,10  
**restriction** 39:3  
**result** 62:11 63:19  
**resulting** 45:6  
**results** 44:1 65:20 66:4  
 66:17 83:16  
**retained** 24:16  
**retroactively** 58:14  
**reuse** 47:9  
**review** 3:21 4:5 13:21  
 44:9 51:20 52:11  
 53:21 60:3 62:4 68:12  
 70:16 71:13 72:4,12  
 79:22  
**reviewed** 31:2 73:3  
 82:6  
**right** 11:14 13:11 29:8  
 41:13,18 42:4,5 64:11  
 76:9,11 77:8 78:12  
 79:15 80:12 83:15  
**rises** 50:19  
**risk** 13:9,22 49:16 55:6  
 55:7 61:18 72:21  
 80:17  
**risks** 55:9 63:14  
**risky** 77:14  
**river** 23:15,16  
**roman** 4:7  
**root** 60:4  
**rulemaking** 15:5

---

**S**


---

**Safe** 10:16 11:5 42:14  
 48:21 62:12 67:10  
 71:18 75:2  
**safeguard** 71:16 73:17  
 73:22  
**safeguards** 42:16,20  
**saline** 29:13  
**salts** 65:4  
**saltwater** 57:20  
**sample** 23:11 26:14  
 76:21  
**samples** 60:9 62:14  
**San** 2:11  
**satisfy** 50:21  
**saw** 46:10 49:10  
**saying** 5:15 29:19  
 31:14 33:22 38:22  
 52:9 55:17 57:7 78:1  
 78:13  
**says** 16:16 20:11 53:12  
 54:13 64:4 67:15  
 83:20  
**scenario** 28:5 36:15  
 38:18  
**science** 86:20  
**scientific** 81:16 87:5  
**searches** 79:7  
**second** 12:19 19:21  
 20:7 29:5 46:5 49:14  
 83:21 84:10  
**section** 8:16,22 9:1  
 54:22  
**see** 20:21 30:7 31:10  
 35:3 39:22 44:12  
**seeing** 14:14  
**seek** 39:2  
**seeking** 30:21  
**seeks** 4:5  
**seen** 34:21  
**Senior** 2:15,16  
**September** 46:11  
**serve** 21:18 31:16 56:8  
 61:14 70:16  
**served** 85:18  
**serving** 26:21  
**session** 3:11 87:20  
**settings** 73:5  
**shift** 62:9  
**short-term** 36:1  
**show** 11:9 12:5 15:20  
 16:2,11 18:10 25:7  
 26:3 28:11 38:11 81:5  
 83:1  
**showing** 14:13 18:15  
 18:16 32:3 86:22  
**shown** 80:2  
**shows** 26:3 40:4 68:9

80:17  
**shut** 23:18  
**significance** 49:7,12  
 50:1  
**significant** 56:5,5 65:14  
**significantly** 40:8 56:17  
**Silver** 10:6 13:1 21:6  
 23:3 50:6,7 56:15  
 57:2,12 59:12,14  
 63:10 64:5,15 69:1  
 76:2,16  
**similar** 86:6  
**simply** 6:15 32:17  
 38:18 80:20  
**single** 28:19 78:6 79:1  
**site** 23:13 55:9 65:2  
 74:12  
**site-** 63:4  
**site-specific** 14:5 16:19  
 17:22 18:7 20:4,18,22  
 21:11 23:7 24:4,7,11  
 30:15 48:3 61:12,17  
 72:9,18  
**situation** 48:15 56:2  
 82:15  
**situations** 16:14 48:8  
**six** 10:19 41:16,17  
**Sixteen** 41:16  
**size** 69:11  
**slowly** 46:14  
**smaller** 68:16  
**solicited** 71:8  
**solids** 58:1,4  
**somebody** 76:19 77:15  
**sorry** 17:15 28:17 68:14  
**sorts** 35:4  
**source** 13:1 26:13  
 49:17  
**sources** 16:8 42:12  
 77:13 83:22  
**Souza** 68:14,15,20  
 69:13,17,20,21 75:12  
**speak** 5:6  
**speaking** 5:7 7:6,8  
**specific** 21:17 24:19  
 33:5 63:5 74:21  
**specifically** 27:20  
 32:21 35:6  
**specify** 38:4,6  
**speculated** 29:11  
**speculating** 33:3  
**spirit** 87:13  
**squarely** 84:13  
**standard** 15:17,17  
 86:11  
**standards** 10:21 11:1  
 57:15  
**stands** 87:21

**start** 7:11  
**started** 22:7  
**state** 9:18 57:19 58:5  
 75:5,20  
**state's** 57:8  
**stated** 9:5 15:10 17:9  
 19:15 31:15 32:1,13  
 33:20 78:9 81:17,19  
 87:6  
**statement** 21:8  
**states** 3:10 12:5  
**Stein** 1:17 3:16 12:18  
 13:11 14:14 29:15,18  
 49:4,5,6 58:16,17,18  
 60:11,17 61:20 63:22  
 80:19 82:2,21  
**step** 5:9 63:17  
**stop** 25:6 55:16  
**stopping** 31:16  
**stormwater** 23:15  
**Street** 2:4,10  
**strength** 40:15 44:15  
 45:20 46:1,2 54:1,6,7  
 54:9,14,16  
**stricter** 75:5  
**strictly** 38:7  
**strikes** 29:15  
**string** 11:9 21:5 48:19  
 72:15 75:12  
**strong** 44:20 45:16 53:5  
 54:14,18 57:16 73:7  
**studies** 24:10 73:2,3,4  
 86:22  
**study** 29:2,3,9,11 32:21  
 33:3,5,13 53:14,17,20  
 62:18  
**subject** 84:16 85:12  
**submission** 25:22  
**submissions** 6:8  
**submitted** 68:5  
**substantially** 35:20  
**sufficiently** 14:8 15:9  
 49:15 50:12,21 52:10  
 52:12 55:19 64:4 69:8  
 74:4 80:6  
**sufficiently** 53:4 54:18  
 57:16  
**suggest** 12:17 77:19  
**suggests** 28:17 84:5  
**Suite** 2:4  
**summer** 46:20  
**superior** 78:15,17 80:9  
**supplemental** 41:4  
**supplied** 10:9  
**support** 6:22 8:9 14:21  
 31:15,22 33:20 53:17  
**supported** 28:10  
**supporting** 87:5

**sure** 6:20 16:16 17:3  
 31:7 35:9 47:5 49:11  
 70:12 80:11 82:2  
 85:18  
**surface** 32:19 56:11  
 59:22 76:3  
**suss** 19:3  
**system** 34:22 35:2,17  
 40:5,8 46:13 47:3,7  
 68:11,17 69:16  
**systems** 39:20

**T**

**take** 84:7  
**taken** 22:4,11 66:11  
**takes** 8:18 63:16  
**talk** 19:2 20:19 24:14  
**talked** 32:11 58:19  
**talking** 36:18 75:11  
 78:11 79:5  
**talks** 64:2  
**technical** 5:10,16 22:13  
 31:1,2 53:21 80:21  
**techniques** 15:14  
**technology** 75:5  
**tell** 5:8 67:22  
**telling** 29:6 78:16  
**tempers** 84:11  
**temporary** 36:1  
**ten** 4:15 7:18 41:20  
 86:12  
**tension** 39:11,14  
**term** 69:18  
**terms** 20:17 52:12  
 75:13  
**test** 19:12 23:16  
**testing** 79:3,18  
**thank** 3:18 5:1 7:14,15  
 7:20 8:2,4 19:7 37:18  
 39:14 41:15,22 42:3,5  
 45:3 47:13 63:22 71:5  
 76:9,11,13 78:20  
 83:13 87:7,8,9,14,19  
**theory** 81:9  
**thing** 33:15 42:10  
**things** 5:12 8:8 12:17  
 20:3 39:17 64:8 81:21  
**think** 6:10 12:11,12  
 13:19 16:14 20:16  
 22:16 28:2 30:17  
 32:17 33:18 35:14  
 37:9 49:8 52:8 78:4  
 81:15  
**thirteen** 39:19  
**thirty** 87:1  
**thoroughly** 71:22  
**thought** 15:8 29:4 82:3  
 85:1,4,21

**thousand** 26:8,12 27:4  
**thousands** 21:20 31:20  
 83:7  
**three** 74:13  
**three-mile** 56:7  
**Thursday** 1:11  
**Tim** 7:16 8:6  
**tim.hobbs@klgates.c...**  
 2:6  
**time** 4:15,19,22 6:5  
 7:13 11:2 12:3 17:6  
 27:10 33:1 36:1 38:12  
 39:9 41:8,9,11,13,19  
 41:21 43:11 57:9,13  
 57:20 58:11 60:13  
 63:1 68:18 77:20  
 86:21  
**times** 35:21 40:14,18  
 45:6 51:3  
**TIMOTHY** 2:3  
**Title** 34:7 38:3  
**TN** 2:5  
**today** 3:12,21 6:11  
 46:15 73:8 86:15  
**today's** 43:3 57:15 75:9  
**top** 48:12,17 75:18  
**total** 4:14,17,19 35:18  
 35:19 58:1,4  
**totality** 56:2  
**touch** 34:18  
**touching** 75:6  
**track** 4:21  
**transcript** 3:5 5:22  
**transparency** 5:20  
**treatment** 39:20  
**tremendous** 84:7  
**true** 80:12  
**truly** 42:10  
**try** 5:7 37:2  
**trying** 19:3 35:15 62:9  
**turn** 7:6,8 19:22 42:6  
 76:12 87:16  
**twenty** 56:6  
**two** 4:4 8:8 19:18 20:2  
 24:3 25:2 26:3 39:16  
 45:12 49:6,21 58:20  
 59:5 68:13 70:7 81:21  
**two-prong** 19:11  
**type** 39:6 45:21 50:11  
 50:20 54:7  
**typically** 54:2 75:1,3,19

**U**

**U.S** 1:2  
**UIC** 1:8,9 3:14 4:1 10:20  
 11:5 30:3,4 42:16  
 47:22 54:20 56:20  
 58:2,6,9 60:14 67:11

75:8  
**unable** 72:1  
**uncertainty** 51:22  
**unclear** 33:12  
**undercuts** 81:19  
**undercutting** 8:10  
**underground** 3:21 8:15  
 9:2 13:1,17 16:7 22:6  
 23:12 24:1 26:13  
 42:12 49:17 77:13  
 80:4 83:22  
**underlying** 32:1  
**undermines** 67:20  
**understand** 6:21 13:11  
 14:15,22 29:20 36:5  
 64:18  
**understanding** 12:20  
 13:3 22:17 25:20,21  
 36:11 60:12 82:9 86:8  
**Understood** 41:6 86:3  
**undertaken** 14:2  
**undertaking** 19:10  
 26:11  
**undertook** 13:8 14:4  
**unimportant** 65:3  
**unique** 82:16  
**United** 3:10  
**unknown** 48:18 54:4  
**untold** 77:16  
**updated** 75:5  
**upholding** 84:21 85:19  
**upward** 25:4 54:19  
 57:16 80:16 82:20  
**USDW** 11:10,16 18:3,12  
 21:6 26:5 32:4 48:11  
 48:17 49:2 50:20 52:3  
 53:8 55:8 56:9,10,18  
 56:20 57:4 59:18 60:2  
 61:19 65:4,8 66:6,14  
 66:19 67:5,13 69:8  
 70:3 71:12,19 72:14  
 72:17 73:17,20 74:1,7  
 74:13,15 75:18 76:1,7  
 79:13 83:8  
**USDWs** 42:18,22 58:12  
 58:13 59:11 61:10  
 62:17 67:9  
**use** 6:18  
**useful** 63:12 68:8  
**useless** 63:8  
**uses** 33:9  
**USGS** 32:21 53:14,17  
**usually** 54:3  
**Utah** 32:21 53:14,17  
 62:18  
**utilize** 35:6

**V**

**V** 34:7 38:3  
**valid** 57:7  
**valley** 61:1  
**value** 20:8,11,13 30:17  
 55:3 59:1,3 60:6  
**values** 34:14,21 35:4,12  
**variation** 40:6  
**varies** 45:20 54:7  
**various** 10:3 18:7  
**versus** 86:15  
**Videoconference** 1:12  
**view** 51:4 57:5 59:2  
 71:1 77:9  
**viewed** 65:3  
**violation** 62:11 71:17  
**virtual** 5:3  
**volume** 35:18,19 36:2,7  
 39:2,17 40:5 68:10,19  
 69:15  
**volumes** 34:16,17 35:7  
 35:8 39:20 46:13

**W**

**wait** 30:1  
**want** 5:1,17 15:18 60:8  
 64:10 83:13  
**wanted** 17:21 33:15  
 34:18 35:9 64:7  
**wanting** 15:1  
**warm** 46:21  
**warrant** 48:13 50:13  
 55:10,19  
**warranted** 28:7  
**WASHINGTON** 1:2  
**wasn't** 43:15,17 49:11  
 85:9  
**waste** 46:16 47:5 60:22  
**wastewater** 4:3 34:22  
 35:2,17 36:3,17 38:19  
 39:20 40:4,7 46:13  
 47:3,7,10 68:11,17  
 69:16  
**water** 9:3 10:17 11:5  
 13:2 16:8 23:12,16  
 26:13 35:18,19 37:10  
 37:20 38:4,14 40:5  
 42:12,14 48:22 49:17  
 59:11 62:12 64:16  
 67:11 71:18 75:3  
 77:14 83:22  
**way** 17:6 18:21 30:4  
 60:2 62:5 71:10 82:3  
**we'll** 76:12  
**we're** 6:18 9:16 23:10  
 33:22 41:3 63:2 86:15  
**we've** 72:10  
**weakened** 70:19  
**weather's** 46:21

**website** 3:8 6:2  
**weight** 40:15 49:9  
**well-** 42:22  
**wellbore** 68:15  
**wellbores** 14:9 44:15  
 48:6,16 50:16 54:3  
 56:7 61:2,4,10,14  
 62:15,20 63:15,20  
 66:6,11 67:1 70:2,22  
 71:4,13 72:12 73:1  
 75:2,21 80:15  
**wells** 4:5 9:6,8,21 10:22  
 11:3 13:21,22 17:3,6  
 18:5 20:9 21:3,4,8,21  
 24:6,12,20,22 25:1  
 31:20 34:14 36:7  
 42:22 43:2,4 44:8,21  
 47:20 48:10,10,19  
 49:20 51:19 52:2 53:1  
 55:2,3,15 57:8 60:9  
 61:7 70:2,21 72:8,17  
 73:9 74:18 75:4,7,9  
 79:13 86:14,19  
**Wendy** 1:18 3:16  
**went** 35:17 43:18 88:2  
**withstand** 18:5 45:17  
**wondering** 62:3  
**word** 11:19 20:11  
**words** 5:9 33:9  
**work** 30:3  
**world** 31:19  
**worries** 37:6  
**worsened** 63:1  
**wouldn't** 63:13  
**wrong** 77:17

**X**

**Y**

**Yeah** 11:1 53:19 71:1  
 85:6,21  
**year** 36:9,17,20 38:20  
 39:2,19 46:14,20  
 65:16 78:6,8 79:1  
 80:1,2,17  
**years** 10:20 26:10  
 43:18 86:12,13 87:1

**Z**

**ZEI** 80:6  
**zone** 15:15,19,19 20:6  
 44:10 45:5 48:17  
 52:11,18,19 69:7 74:2  
 74:10 75:18 78:7  
 82:17 83:9,20  
**zones** 80:18 83:9

**0**

**1**

1 82:4  
**1-31** 50:7,9 68:22  
**1,400** 56:16  
**1,700** 56:16  
**1,740** 56:16  
**1.25** 21:7  
**1:30** 1:14 3:2  
**10,000mg** 58:3  
**11** 25:7 83:3,6  
**12** 68:7  
**14** 83:6  
**144,000** 34:15  
**144.12(a)** 62:10  
**146.13(d)** 27:21 54:22  
**146.13(d)(1)** 19:20 72:9  
**15** 40:3  
**1500** 2:4  
**16** 41:15  
**172,000** 34:15  
**18** 10:6 13:1 21:7 23:3  
 50:6,8 56:15 57:12  
 59:12,15 63:10 64:6,9  
 64:15 69:1 76:16  
**19** 10:14 51:9  
**1930s** 12:6  
**1934** 12:7  
**1950s** 44:18  
**1970s** 57:2 74:19  
**1974** 10:14,15,17 12:4  
 57:14  
**1980** 10:20 74:19  
**1998** 15:5

**2**

**2** 68:15,20 69:13,17,20  
 69:21 75:12  
**2,800** 37:10  
**2.6** 68:12  
**20** 36:22 46:15 51:9  
 67:15  
**20,000** 37:14  
**2011** 43:12  
**2013** 34:16,21  
**2013-2014** 35:11  
**2014** 34:16,21  
**2016** 37:8  
**2017** 43:11  
**2019** 17:18,19 24:9  
 34:12 44:13 58:9  
**2020** 46:11  
**2021** 25:8 36:22 40:18  
 83:3,6  
**2022** 34:17 37:9,14  
**2023** 1:11 4:10  
**2030** 68:13  
**22** 4:10  
**22-01** 1:8 3:14

**232** 36:9,16 38:19 39:13  
**28126** 15:6  
**28127** 15:7

**3**

**3,000mg** 57:22  
**3,500** 56:10 76:2  
**3:05** 88:2  
**30** 1:11 4:14,17,19  
**37203** 2:5

**4**

**4** 10:9 39:5  
**4,000** 76:20  
**4,200** 37:10,13  
**40** 19:20 54:21 62:9  
 72:8  
**415** 2:11  
**43aa** 54:13  
**43o** 45:20 53:20

**5**

**5** 10:15  
**500** 36:19  
**501** 2:4  
**50s** 50:17 73:8 86:15  
**53** 15:6  
**58** 32:21

**6**

**6** 68:9  
**60** 4:11  
**60s** 44:18 50:17 73:8  
**615** 2:5

**7**

**7** 34:5 35:15 37:7  
**70s** 17:4 44:18 45:16  
 50:17 73:8 76:4 86:14  
**75** 2:10  
**780-6700** 2:5

**8**

**80** 46:14  
**84** 37:7,12,19 38:22

**9**

**9** 2:10 4:1,17,17 7:10,21  
 8:1 11:18 12:7 25:21  
 42:7,9 43:9 47:15  
 53:12 74:17 85:3  
**94105** 2:11  
**972-3046** 2:11

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In the matter of: Panoche Energy Center, LLC

Before: US EPA

Date: 03-30-23

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Court Reporter

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