1	WURTSMITH RESTORATION ADVISORY BOARD (RAB)
2	WEDNESDAY, NOVEMBER 16, 2022 5:00 P.M.
3	Transcript of the proceedings regarding the former Wurtsmith Air Force Base
4	being held via video teleconference technology and in-person.
5	APPEARANCES:
6	TIM CHELTENEUCC Colon Driggol
7	TIM SUELTENFUSS, Galen Driscol PAULA BOND, Aerostar
8	COMMUNITY RAB:
9	MARK HENRY, Co-Chair WILLIAM GAINES
10	DANIEL STOCK DAVID WINN
11	CATHY WUSTERBARTH ARNIE LERICHE
12	GREG SCHULZ
13	REX VAUGHN (VIA TELECONFERENCE)
14	GOVERNMENT RAB:
15	STEVEN WILLIS, Co-Chair ERIC STRAYER, Au Sable Township
16	PUNEET VIJ, MDHHS (VIA TELECONFERENCE)
17	BETH PLACE, EGLE MICHAEL MUNSON, OWAA
18	TIM CUMMINGS, Oscoda Township BILL PALMER, Au Sable Township
19	
20	REPORTED BY: Quentina R. Snowden, (CSR-5519)
21	Certified Shorthand Reporter & Notary Public
22	
23	
24	
25	

1	MEMBERS	OF	THE	PUBLIC	ADDRESSING	THE	BOARD:	
2	ANTHONY	SPA	NTOT	· , A				
3	7111 111011	017	111 1 0 1	717				
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

1	(Call to order at or about 5:00 p.m.)
2	MR. SUELTENFUSS: Welcome, everybody.
3	My name is Tim Sueltenfuss. (Inaudible).
4	MR. WILLIS: Welcome everyone. I see
5	a few new faces tonight. It's always good to have
6	(inaudible).
7	MR. SUELTENFUSS: (Inaudible) Mark
8	Henry.
9	CO-CHAIR HENRY: Hello, everyone
10	(inaudible).
11	THE COURT REPORTER: I'm sorry, Tim,
12	we're not able to hear anyone.
13	MR. SUELTENFUSS: Thank you, Quentina.
14	Are you able to hear me?
15	THE COURT REPORTER: Yes.
16	CO-CHAIR HENRY: Are you able to hear
17	me?
18	UNKNOWN SPEAKER: Speak up.
19	CO-CHAIR HENRY: Are you able to hear
20	me?
21	THE COURT REPORTER: Now I can, yes.
22	CO-CHAIR HENRY: Okay. I'd like to
23	thank everyone for showing up. I'd also like to
24	thank the Air Force (inaudible) in the technical
25	meeting prior to this meeting so that we could go

over a few of the (inaudible) related to the Community (inaudible) Air Force has the (inaudible).

MR. SUELTENFUSS: Thank you, Mark.

Again, Mark is the Community Co-Chair. Steve Willis
is the Air Force Co-Chair. My role is to serve as
facilitator for the meeting. Galen Driscol
(inaudible).

Let's see. Let's move to slide number three, if we could. Slide number three. Okay. So, we do have a full agenda tonight. We'll start off with some brief updates from our RAB members. We're going to talking about some RAB business items, so those are action items from our previous meetings. Also, we'll have a Community Co-Chair election. After that, we'll move into an update about the remedial investigation and interim remedial actions.

The next topic is going to be new actions, including the interim remedial action at the alert aircraft area, and the pilot study of the Three Pipes Ditch. We've reserved, as we often do, a significant amount of time towards the end of the meeting to address RAB member questions as well.

So, all those (inaudible) the agenda are for the RAB members here at the table, and the RAB members who are connected virtually.

Let's see. Thereafter, we'll have an opportunity for public input. So, you'll have the opportunity, members of the public, to come up and provide comment at this microphone up here at the head of the table for three minutes. We'll do, first, those who are in person, and then we'll do those who are remote as well.

During the technical presentations,

I'd just ask that you please hold your questions

until the end of the presentation, and then we'll

address those. And we'll often address questions

from those RAB members who are here in person first,

and then I'll turn to those who are connected

remotely. Arnie?

MEMBER LERICHE: Rex Vaughn just texted us that he's not seeing the slide, the current slide, and the audio feed is not working.

MR. SUELTENFUSS: Okay. Let me just do a quick sound check with Rex Vaughn. Rex, are you able to hear us?

And Quentina, let me just turn to you. Are you able to hear me?

THE COURT REPORTER: Yes, I can.

MR. SUELTENFUSS: Okay. Thank you. So, I'll turn to our Aerostar colleagues to work the

1 issue to get Rex connected. 2 Arnie, please let me know if you get 3 any further updates from him real quick. 4 Okav. And we plan to conclude about 5 8:00 Eastern tonight, as we typically do, as well. 6 Let's move to slide four, the RAB 7 ground rules, and I'll review these. And then, RAB 8 members, just let me know if these need adjustment, 9 or if you have questions about these. 10 Number one, respect one another and maintain an atmosphere of open dialogue and exchange 11 of ideas. 12 13 Two, use our time together efficiently, wisely, and respectfully. 14 15 Three, speak clearly and succinctly, 16 one person at a time. Avoid interrupting others. 17 And I'll just pause to say that's the Quentina 18 Snowden rule, she's our Court Reporter, so her job will be much easier if we speak one at a time. 19 20 Number four, listen and remain open to differing points of view. 21 22 Five, maintain a propensity for 23 Prepare, discuss, document and move 24 forward. 25 Six, share information early, openly,

1	and honestly.
2	Seven, accurately and objectively
3	relay to others the discussions that occur at Board
4	meetings.
5	Any discussion among the RAB members
6	about those ground rules?
7	MEMBER VAUGHN: I can see you, Tim. I
8	got kicked out.
9	MR. SUELTENFUSS: Okay. All right.
10	And was that Rex?
11	MEMBER VAUGHN: That's correct. The
12	screen is not updating. All we're seeing is the
13	(inaudible). None of the slides that you've gone
14	through have shown up.
15	MR. SUELTENFUSS: Okay. Thanks, Rex.
16	We've got some AV folks in the back of the room
17	working on that right now.
18	Okay. If we could move to slide five,
19	please.
20	MEMBER VAUGHN: Now the audio is
21	horrible, Tim.
22	MR. SUELTENFUSS: Okay. And Rex, are
23	you able to hear me right now?
24	And just a quick check
25	THE COURT REPORTER: (Inaudible).

1 MR. SUELTENFUSS: Quentina, let me 2 just check in with you to see if you're able to hear 3 me. 4 THE COURT REPORTER: (Inaudible). 5 Please stand by. MR. SUELTENFUSS: 6 THE COURT REPORTER: We're not seeing 7 the video at all. 8 MR. SUELTENFUSS: And a quick sound 9 Quentina, are you able to hear me? check. 10 THE COURT REPORTER: I can hear you, we just can't see the room. We see the MiCTV airing 11 and that's it. 12 13 MR. SUELTENFUSS: Understood. A11 So, let me suggest this: Please just carry 14 right. 15 on listening to this audio. We're going to try to 16 work this as best we can. For the RAB members, 17 Steven Willis sent out a version of the agenda, 18 which you might be able to follow along with, but 19 for now, let's just press forward. We've got some 20 folks working that issue. 21 Let's see. Okay. Ironically, we are 22 at the checklist for virtual participation. 23 So, we are having this meeting occur both in person 24 and online. We have a Court Reporter online to 25 capture a verbatim transcript of the meeting, and

we're also recording the meeting.

So, RAB members who are here in person, if you have a question throughout the evening, please just raise your commands. RAB members who are joining by computer, please let us know if you have a question by raising your hand electronically. I'll call on you to pose your question. Please do mute your microphones when not speaking just to minimize any background noise. RAB members who are joining by telephone, you can raise your hand by pressing star 9 and lower it by pressing star 9 again. You can mute and un-mute yourself with star 6.

Okay. You saw also on the presentation, we have an acronym list just for reference. Let me just run through now and ensure that we have a quorum of RAB members present.

Okay. Do we have William Gaines?
MEMBER GAINES: Present.

MR. SUELTENFUSS: All right. Thank you, sir. Arnie Leriche?

MEMBER LERICHE: Here.

MR. SUELTENFUSS: Do we have Scott

Lingo?

Okay. And just a quick check to see

1	if we have Scott Lingo connected virtually?
2	I believe Joe Maxwell was not able to
3	make it tonight.
4	Do we have Greg Schulz?
5	MEMBER SCHULZ: Here.
6	MR. SUELTENFUSS: And Daniel Stock?
7	MEMBER STOCK: Present.
8	MR. SUELTENFUSS: Thank you. I
9	believe we have Rex Vaughn on the line. Rex, are
10	you with us?
11	MEMBER VAUGHN: Present.
12	MR. SUELTENFUSS: Thank you, Rex.
13	David Winn?
14	MEMBER WINN: Yes, I am.
15	MR. SUELTENFUSS: And Cathy
16	Wusterbarth?
17	MEMBER WUSTERBARTH: Here.
18	MR. SUELTENFUSS: Thank you. Those
19	are the Community RAB members, and I'll now move to
20	the Government RAB members.
21	Steven Willis with the Air Force?
22	CO-CHAIR WILLIS: Here.
23	MR. SUELTENFUSS: Eric Strayer of Au
24	Sable Township?
25	MEMBER STRAYER: Here.

1	MR. SUELTENFUSS: Denise Bryan,
2	District Health Department 2?
3	And do we have representation from
4	District Health Department 2 virtual?
5	Okay. How about Puneet Vij with
6	Michigan Department of Health and Human Services?
7	(Puneet Vij present via video
8	teleconference.)
9	MR. SUELTENFUSS: And do we have any
10	others from MDHHS connected virtually?
11	Beth Place, Michigan Department of
12	Environment, Great Lakes and Energy?
13	MS. PLACE: Here.
14	MR. SUELTENFUSS: Tim Cummings of
15	Oscoda Township?
16	MR. CUMMINGS: Here.
17	MR. SUELTENFUSS: Michael Munson,
18	Oscoda Wurtsmith Airport Authority?
19	MR. MUNSON: Here.
20	MR. SUELTENFUSS: And Jessie
21	Stuntebeck, USDA Forest Service? Do we have Jessie
22	or other Forest Service representatives on the line?
23	Okay. Well, we do have a quorum per
24	section 2.4.8 of the operating procedures, so we are
25	able to move forward. Just for awareness, a quorum

1 is important tonight, because we will be doing a 2 vote for the Community Co-Chair, so we do have that 3 quorum and can proceed. 4 Let's see. Okay. We also have had a 5 sign-in sheet passed around, so if you have not 6 signed in, please do make sure that you have the 7 opportunity to have that right over here. 8 And let's see. Then, let's move to 9 slide seven, if we could. This is a site map. 10 just for orientation, a map of the former Wurtsmith 11 Air Force Base. And we also have maps in the 12 background here with a bit more detail for questions 13 during the break and so on. Arnie? 14 MEMBER LERICHE: Is there a 15 possibility for the audience, and the rest of us, to dim the lights a little bit? 16 Yeah, we'll check on 17 MR. SUELTENFUSS: 18 That's not working. that. Oh, it's the other 19 MEMBER LERICHE: 20 way around. 21 MR. SUELTENFUSS: Other way around, 22 JD. 23 MEMBER LERICHE: Okay. 24 MR. SUELTENFUSS: Yep. There you go. 25 MEMBER LERICHE: Thank you.

1	MR. SUELTENFUSS: Okay. Let me just
2	do a quick check. Paula, are we good to go in terms
3	of the display?
4	MS. BOND: Yes (inaudible).
5	MR. SUELTENFUSS: Okay. Rex, can you
6	just let me know if you're able to see this site
7	map?
8	MEMBER VAUGHN: The only thing that's
9	showing is the intro page on somebody's computer in
10	PowerPoint. You know, they're not being advanced
11	and it's not a selection of (inaudible) but we're
12	seeing, you know, the full not just selections,
13	the PowerPoint (inaudible) on the slides.
14	MR. SUELTENFUSS: Okay.
15	MEMBER VAUGHN: The site map is up.
16	MR. SUELTENFUSS: Okay. All right.
17	Well, that was easy.
18	Let's move, if we could, to the the
19	next topic on the agenda, stakeholder updates.
20	We're on slide eight. And we're now entering the
21	stakeholder updates portion of the agenda.
22	This topic is for the RAB members to
23	provide some brief updates since our last meeting,
24	and we'll have the opportunity for a more detailed
25	discussion and presentation during later portions of

the agenda.

We'll start with an Air Force update, if we could. And so I'll turn to Steven Willis.

MR. WILLIS: Okay. Again, it's good to see everyone here tonight. Since the last RAB meeting, the Air Force did host a tour of the IRAs we've constructed here at Wurtsmith. We also did have a technical workshop, that was on the 26th and 27th of October.

MR. SUELTENFUSS: Excuse me one second. And next slide, please.

CO-CHAIR WILLIS: We did have a great turnout for that event. We are seeking input from RAB members in the community on additional workshops in the future. Some more to come on that.

Next, we've got an action item for the RAB regarding four IRA areas that the RAB has identified for evaluation by the Air Force. And so, I'll talk about the DRMO area, the LF -- the landfill, it's LF030 and '31, as well as the wastewater in the dune and seepage beds. And then, Paula Bond from Aerostar will talk about the Three Pipes Ditch. We've actually got a pilot study that we're going to be doing next year at that location.

And again, I want to remind everybody

of the CERCLA process and how it works. We (inaudible) as a whole, and based on that, we'll take the data and we'll do a feasibility study to look at alternatives, and select the final remedies for these sites -- for the PFAS sites. The objective is not to (inaudible) cleanup by IRA. We need (inaudible) for hotspots for areas that are causing significant risk of human or ecological receptors.

But IRAs are not the way to clean up a site. We have to look at the site as a whole. We incorporation those IRAs into the final remedy to the maximum extent possible, but, the end result is not to go (inaudible) IRA (inaudible), clean up the site as a whole. So, we incorporate those as a part of the cleanup process.

As we've seen (inaudible) at the RAB meetings, the IRA CERCLA process includes the RI; the FS, which is the feasibility study, and that's where we'll identify and evaluate alternatives; the proposed plan where we'll identify the preferred alternative for each of the sites, and then arrive when that final remedy is selected for implementation.

The other thing that I want to talk

about, it's come up at previous RAB meetings, is the Harrisville tank farm plant, which is to the north of here. And -- just to give you a little background on that. And we do have some documents that I'll have copied and placed in the library or IR, information repository, so that anyone that's interested can go look at those as a basis for what I'm presenting tonight.

So this next slide, for everyone, is the DRMO area. We talked some about this in the technical workshop earlier. But the -- you can see the plume coming out of the DRMO area along the map there. Kind of the reddish area is the hotspot. That actually is based on the sample taken during the SI a number of years back.

For the RI, we've actually sampled around that to try to delineate that hotspot, and the results were a magnitude lower. So, we resampled the well, and we could not replicate that high concentration from the SI at that location either.

So, we're still in the process of evaluating if we could see it on the right side of that plume, the blue -- it's a dashed (inaudible) so we still have a data gap down in that end of it as

1 to how far it extends. So, we've got more data to 2 collect there as well. So, we're still not 3 completely done here (inaudible) but the current data does indicate this area needs IRA (inaudible). 4 5 Next slide, 11, this is the LF030, 6 '031 site. It's two former landfills. (Inaudible) 7 concentration of the plume appears to be coming from the landfill (inaudible). 8 9 MR. SUELTENFUSS: Yeah, go ahead, Cathy, please. 10 11 MEMBER WUSTERBARTH: (Inaudible). 12 CO-CHAIR WILLIS: So, it's not a 13 priority list, it's based on the concentrations of 14 the contamination as well as the (inaudible). 15 our focus has been on trying to cut off the (inaudible) going into Clark's Marsh (inaudible). 16 MEMBER WUSTERBARTH: 17 Just that 18 process, is that something (inaudible) documentation that (inaudible). 19 20 CO-CHAIR WILLIS: We don't have a 2.1 formal documented checklist or anything like that 22 that we use, it's just based on a team evaluation of 23 the data. We talked about the technical workshop, 24 and in the future RAB meetings for the

post-recession, we'll add what data we can

25

(inaudible). Private property information is not 1 2 releasable without the consent of the owner, so we 3 won't be able to show that on the maps, but we will 4 be able to show you the actual sample locations and 5 contractions to support (inaudible). 6 MEMBER WUSTERBARTH: Is that something 7 that would have been (inaudible). CO-CHAIR WILLIS: We have not 8 9 discussed these IRAs in recent (inaudible). 10 MEMBER WUSTERBARTH: (Inaudible). 11 CO-CHAIR WILLIS: I knew you were At the break, I'll pull up 12 going to ask me that. 13 the minutes from that, and we have not finalized those minutes, but as soon as they are, I'll 14 15 distribute them. But I'll look back at the content of that. 16 17 MEMBER WUSTERBARTH: When was it, what 18 month? 19 CO-CHAIR WILLIS: September. 20 MR. SUELTENFUSS: All right. Okay. And let's see. David? 21 22 MEMBER WINN: Yeah, the list that I 23 currently (inaudible) groundwater plumes are not 24 impacted (inaudible) Van Etten Lake (inaudible) I 25 mean, the plume, you can see the 8,000 parts per

trillion (inaudible). 1 2 CO-CHAIR WILLIS: Based on the data we 3 have now, it does not appear that -- it is a data 4 gap, we do need to collect more data. 5 MR. SUELTENFUSS: Okay. 6 CO-CHAIR WILLIS: So, we are not done. 7 We are not writing this site off by any means. We're still evaluating it. 8 9 When you say "current MEMBER WINN: data" doesn't warrant an IRA, that's based on what 10 you currently have? 11 CO-CHAIR WILLIS: 12 Correct. 13 MEMBER WINN: When you're collecting the data in the spring, that may be a different 14 story. 15 CO-CHAIR WILLIS: That is correct. 16 Wе will reevaluate --17 (Inaudible - no audio feed; according 18 19 to the actions seen on the video provided from 20 YouTube, a break was taken to address the issue.) 21 MEMBER PALMER: So it's not, in any 22 case, a deterrent to people actually doing something 23 harmful to themselves. So, hunters and trespassers 24 are not sure how that'll correlate in the language, 25 but, in my view, the only thing that will prevent

hunting and fishing in Clark's Marsh is a fence around it. And I'd like, at some point in time, for some consideration for that to be part of the plan going forward.

MR. SUELTENFUSS: Okay. Thank you, Bill. Let's turn to Arnie Leriche.

MEMBER LERICHE: I would just like to add to that, as Bill just stated, and ask the Air Force, does the Air Force consider the PFAS in and under Clark's Marsh, or any other off property -- Air Force property, as a secondary source, because it's been sitting there for over 40 years (inaudible).

CO-CHAIR WILLIS: So, we will look at Clark's Marsh as part of the RI. Obviously, because it is a large -- it's going to be difficult to get in there and do a lot of investigation. But, yeah, we have yet to do any RI work in Clark's Marsh. So, that's on our list for next field season.

MEMBER LERICHE: But I have never seen a secondary source listed in any of your documents that (inaudible) conceptual site models. And it is something in the CERCLA UVA guides that primaries and secondary sources be identified early on in the CERCLA process so that the SI and the ESI identifies

1	some of the impact potential impact of the
2	secondary sources. That's the best practice
3	(inaudible).
4	CO-CHAIR WILLIS: Okay.
5	MEMBER LERICHE: It would be an action
6	them.
7	CO-CHAIR WILLIS: We'll look into
8	that.
9	MR. SUELTENFUSS: Okay. And I've
10	captured that, Arnie. I'm keeping a list of what I
11	hear as potential action items. I'll share those
12	with the Co-Chairs, who typically meet after these
13	meetings and assemble them into action items.
14	MEMBER LERICHE: Thank you.
15	MR. SUELTENFUSS: Okay. Let's go to
16	Greg Schulz. Greg, any updates?
17	MEMBER SCHULZ: No, not at this time.
18	MR. SUELTENFUSS: Okay. All right.
19	Thank you, Greg. How about to Dan Stock?
20	MR. STOCK: Nothing.
21	MR. SUELTENFUSS: Thank you, sir. And
22	Rex Vaughn was not with us because of technical
23	glitches. David Winn?
24	MEMBER WINN: I have nothing at this
25	time.

1 MR. SUELTENFUSS: Okay. And Cathy 2 Wusterbarth? 3 MEMBER WUSTERBARTH: Yeah, I have a 4 couple of things. The NOW Group continues to meet 5 with their technical experts with EGLE on a 6 quarterly basis to discuss progress with -- with the 7 issues here. 8 We also had an election last week, 9 right, we all did, and our area, just for those Air 10 Force -- or, you know, personnel that are not from 11 our area, we have had a change up of our U.S. 12 Congressman. We -- actually, the State of Michigan 13 was redistricted. So, we do have a new Congressman. 14 Congressman Kilde will no longer be our Congressman. 15 And then, we also have a new State 16 Senator and a State House rep. So, you might be seeing some different names in terms of if there is 17 18 any involvement with them, so --19 CO-CHAIR WILLIS: I'll need to get 20 their information so that we can add them to the RAB 21 distribution. 22 MEMBER WUSTERBARTH: Oh, yes. 23 good. 24 And we have met with the new U.S. 25 Congressman, Jack Bergman, last year just to give

him sort of an introduction to the issues and sort of where we stand on those.

In terms of the work that you're doing with the Township, I mentioned that the FNB had presented a report of the PFAS summary of the wastewater treatment plant and the lines. And I've asked that -- that that issue be placed on the Township agenda for their twice a month meeting so that the community members and the Board can keep up on those and share information.

And also, just as a reminder, maybe, or as an update, the sliplining of the storm sewers agreement has -- is moving forward, I understand.

And just -- maybe as a reminder to community members that might be listening, it was the expectation from my understanding that all of the storm sewers that were impacted on the former Base were going to be sliplined, but only -- I think a portion of them were.

So, I just wanted to make sure that that was clear to the people that were interested in that.

MR. SUELTENFUSS: Okay. Thanks, Cathy.

MEMBER WUSTERBARTH: That's it. Thank

you.

MR. SUELTENFUSS: All right. Well, continuing on with our stakeholder updates, let's move to the Government RAB members, the remaining Government RAB members. Let's turn to Beth Place with Michigan Department of Environment, Great Lakes and Energy.

MS. PLACE: Sure. Beth Place with EGLE.

And so for our updates, I wanted the RAB to be aware that we did receive a response -- a comprehensive response from Air Force last Thursday, November 10th, on the unresolved RI comments for the PFAS remedial investigation.

So, currently, EGLE is reviewing those responses and determining our next steps. I also think this will be something that we'll talk about in our December meeting, as we look at data gaps -- the data, data gaps, and potentially next steps with the remedial investigation.

I also wanted the RAB to know that some of this data that has been presented here and discussed, and so some of the conclusions that are being made on the interim remedial actions, EGLE hasn't had the opportunity yet to go through the

last field season of data. So, we did receive a spreadsheet of a portion of the remedial investigation data, but, really, the next opportunity that we'll have to do that is in December when we meet, and whatever we receive before that meeting.

So, we're not necessarily concurring with Air Force's take on this right now, but, we're also not -- we're also not concurring, where we're holding, you know, until we review the data.

I did want to remind the RAB that we -- that EGLE did -- in the past, when Mike Neller, our RRD division director came on board, we did write a letter recommending some interim remedial actions at Wurtsmith. One of those was associated with the former wastewater treatment plant. And after we do review the data from this last field season, EGLE will potentially be making another recommendation on interim remedial actions from our perspective. But again, we have to wait and review that data.

The other update I had was on the Harrisville tank farm, just that that compliance communication was sent to the -- to the property owner, and I will share that letter with the RAB.

Thank you.

MR. SUELTENFUSS: Thank you, Beth. Mike Munson, let's go to Wurtsmith Airport Authority.

MEMBER MUNSON: Thank you. The
Airport Authority is getting involved with business
opportunities and moving ahead. Say that we're
cruising along at high (inaudible). That's it.

MR. SUELTENFUSS: All right. Thank you. Let's cruise on to Tim Cummings with Oscoda. Go ahead.

MEMBER CUMMINGS: So, to follow up on one of the points that Cathy Wusterbarth previously mentioned at the Oscoda Township Board meeting on November 14th, this past Monday, we did vote to authorize Rick Freeman, our Township engineer, to work with ROWE engineering to pursue the RFP for the sliplining.

The question of how much sliplining will be -- that will occur in that section of Mission and 8th Street on the old Base is part of the RFP itself, so we don't have a distance known at this point. But to the general point -- although that's progress, the general point is that sliplining has been a question -- or a topic of

discussion with the Air Force for roughly four years now, being concerned with storm sewer usage, high volume usage that the storm sewer was never intended for, and this general topic that we showed some progress, we still have more to go.

MR. SUELTENFUSS: Thank you. Mr. Strayer, did you have any updates?

CO-CHAIR HENRY: I had a question.

MR. SUELTENFUSS: Go ahead.

Township in discussion for both sliplining the storm sewer, or maintenance, whatever you want to call it, from the central treatment plant, and also the Mission Drive treatment plant; or is it one or the other?

MEMBER CUMMINGS: I cannot answer that. I don't know. That may be a question for Steve. He's actually broached that subject.

agreement is that we will slipline the damaged portions of the line that the Mission Street system discharges to, to eliminate the flooding problems and any kind of root intrusion and that type of stuff. We are not planning to do any preventative maintenance in terms of sliplining the whole system

1 when, the last inspection that was done both by the 2 Air Force and by the Township, it doesn't indicate 3 that there's any problems. CO-CHAIR HENRY: For the central 4 5 treatment --6 CO-CHAIR WILLIS: For central or for 7 the remaining portions of the Mission Street 8 conveyance line. We'll continue to monitor that, 9 work with the Township in the areas that are 10 In the future, where continual 11 discharge has caused problems, then we'll look at it 12 with them to see what we can do. 13 CO-CHAIR HENRY: Thank you. And Arnie, you had a 14 MR. SUELTENFUSS: 15 question? MEMBER LERICHE: Question for EGLE 16 (inaudible) the Air Force, this is Arnie Leriche. 17 18 Has there been, in recent years, and 19 is there planned to be any sampling of the outlets 20 of those two storm sewer water (inaudible) because 21 there used to be (inaudible) about five years ago. 22 CO-CHAIR WILLIS: Yeah, I believe we 23 do have some sampling of the (inaudible) in the RI, 24 and for the Three Pipes, we're also doing sampling 25 there, which is not discharged from either of those

1	systems, but another discharge off the Base that
2	we're sampling and evaluating.
3	MEMBER LERICHE: Is that routine
4	sampling where (inaudible); or is that just a grab
5	sample?
6	CO-CHAIR WILLIS: At this point, it's
7	a grab sample.
8	MEMBER LERICHE: And does the State
9	(inaudible) know when the last routine sampling
10	might have been done?
11	MS. PLACE: I'd really have to look up
12	when we completed the last sampling of Three Pipes.
13	I do not believe we do that on a routine basis. Is
14	that what you're asking?
15	MEMBER LERICHE: Did Cathy want to say
16	something?
17	MEMBER WUSTERBARTH: The Van Etten
18	Creek out effluent also, right, that's
19	that's
20	MEMBER LERICHE: It's both.
21	MS. PLACE: Oh, it's both.
22	MEMBER LERICHE: Yeah.
23	MS. PLACE: So, the outflows that are
24	routinely sampled are the ones that the have the
25	discharges from the systems operating at Wurtsmith,

but, as far as the other outfalls, I'm not sure if they're routinely sampled. I can check in with our water resources department and get back to you on if they are sampled routinely, but I do not believe Three Pipes is.

MEMBER LERICHE: Okay. Because one thing that can happen, because the Township, I don't believe, has an industrial discharge permit requirement by companies on the Base, so there's always a chance, plus flooding that then leads to

always a chance, plus flooding that then leads to
the level of storm sewers, illegal connections and

12 stuff like that. So, that sampling at the outlet of

the treatment plants may not be the whole picture of

14 PFAS.

1

2

3

4

5

6

7

8

9

15

16

17

18

19

20

21

22

23

24

25

MS. PLACE: So, I want to make sure that I understand. So basically, you want to know when those outflows were last sampled, and then if there is a routine plan in place to sample them?

MEMBER LERICHE: Or will there be

sampling?

MS. PLACE: Okay.

MEMBER LERICHE: Thank you.

MR. SUELTENFUSS: Okay. I apologize,

Eric, I got myself confused. Did you have any --

MEMBER STRAYER: Yeah, I actually do.

My understanding is there's been more money given to the C2R2 grant, which Oscoda received a year ago. Our Township has reapplied to the C2R2 grant, which will provide funds to hook up a couple of the spots that have PFAS indications in wells so they'll be able to be hooked up to municipal water supply. We've reapplied in hopes that the C2R2 grant will come through. The other thing is, we have had -- I have had quite a few comments from residents on the testing -- PFAS testing that's been going on, blood testing, and I do appreciate Au Sable Township being added to the list. That's it. MEMBER WUSTERBARTH: I have a question for --MR. SUELTENFUSS: Go ahead, Cathy. Hi, MEMBER WUSTERBARTH: -- for Eric. Eric. Cathy Wusterbarth. The new sewage lines that were placed in Au Sable, those are functional right now; is that right? MEMBER STRAYER: Yes. MEMBER WUSTERBARTH: And about when did that system start up, or when did those new lines start up?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MEMBER STRAYER: It started up in phases. The first phase was -- which was a section from Johnson Road north started, actually, last December -- at the end of last December. The other phases, I believe, started up about the same time, which I believe was the end of September.

MEMBER WUSTERBARTH: Okay. And the reason that I ask is that that increased volume going into the wastewater treatment plant that is on the former Base is impacting -- as Mark explained to ups in his presentations to all of us, that it's impacting that -- that plume that's near that wastewater treatment plant. So, I just wanted to make sure that that was on the record of when those started. So, thanks.

MEMBER STRAYER: Oh, you're welcome.

MR. SUELTENFUSS: Okay. If we could,

let's move to that next slide, so we're in the RAB

business portion of the agenda. We want to start

off -- if we could move to the next slide -- with

action items.

So, just for awareness, the Co-Chairs have a standard practice by which they meet approximately every two weeks -- or approximately two weeks after each RAB meeting. So, the Co-Chairs

met following our last RAB meeting, reviewed action items. I sent out the latest copy of the action item tracker to all the RAB members prior to the meeting tonight.

There were three action items that were closed since our last RAB meeting, and four action items were established as a result of our discussions during the last RAB meeting. We have a total of 12 action items that are either open or ongoing at the moment, and the plan is for the Co-Chairs to meet again following this meeting -- I think December 12th is what we put on the calendar -- to review action items and just any other topics of discussion as well. So, that's a brief update there.

Let me roll into the Community

Co-Chair --

MEMBER WUSTERBARTH: Tim, I'm sorry, I have a question about the action items, if I could.

MR. SUELTENFUSS: Yes, go ahead.

MEMBER WUSTERBARTH: Okay. I -- the action items are not included in the RAB packet, right, you know, the presentation, but, they really are the items that are of concern for the RAB members. You know, we submit these -- like, you

know, as an example, someone said if we'd like to have that be an action item, and that's what gets added to this list that -- that Tim is referring to.

I would like to see maybe those items somehow be highlighted in a way -- I mean, this -- I understand you're saying there's three closed items and that sort of thing, but, as a reminder for us who write things on the list, or suggested things for the list, if we could just reflect a little bit during the RAB meeting on what those items are.

MR. SUELTENFUSS: Okay.

MEMBER WUSTERBARTH: And I'm ready to do that right now. For the three closed items, if I could mention, that the chart that's going to be on this -- in the next few slides -- what kind of chart is that called?

CO-CHAIR HENRY: Gantt.

MEMBER WUSTERBARTH: A Gantt chart is very helpful. So, that was an item that Mark had requested, and so that item is closed.

The technical meeting that we requested was an action item, and that's another one that was closed.

And then the question about the ability of the Air Force to give us a budget for

these projects, those items were closed, because it's -- they're available somewhere.

So, those -- those were the three items that were closed. I would request that -- that the -- oh, gosh -- the comments and resolutions in the action item spreadsheet, if that could get expanded. Right now, there's -- it's -- there's very minimal information in there. If we could -- if we could add some more information in that so it was a little more descriptive, that would be great.

Let's see. Did I have another one? Oh, yes.

There were two action items, 92 and 98, those were ones that I submitted, but, I'd like to clarify that the -- this -- the one that was submitted, number 98 for May 18th, it says, "Respond to the letter that NOW (Need Our Water) sent to the Air Force in November." That's actually a repeat of item 92.

So, we -- it's the NOW report that we're being -- that I'm asking for a response on. So, you can eliminate 98.

MR. SUELTENFUSS: Okay. Well, thank you.

MEMBER WUSTERBARTH: All right. Yes.

Thank you.

MR. SUELTENFUSS: I appreciate that, Cathy.

Let's also talk about the Community Co-Chair election. So, this is one that we've discussed before. Just a few notes.

So, Mark Henry's term as Community RAB member is ongoing until the 11th of September of 2023, but his term as Community Co-Chair has expired. The Community Co-Chair term is a one-year term.

Operating procedures section 2.3.1 says the RAB Community Co-Chair shall be selected by majority vote of Community members. The Board Community Co-Chair shall serve a 12-month term. Community Co-Chair may serve two or more terms if approved by the Board Community members.

So, I contacted all of the Community

RAB members on the 13th of September to see if they

were interested in running for that open position.

Only Mark expressed interest in doing that, so thank

you, Mark, for your willingness to serve.

Let me just check in right now with those Community RAB members who are here present tonight. Is there any Community RAB member who

would like to be considered for the Community

Co-Chair position, other than Mark Henry, who is

already interested? If so, just please raise your

hand.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Seeing no hands raised, then Okay. we'll now do the simplest of simple votes. Community RAB members, in front of you, you have a ballot. As a reminder, this vote is only open to the Community RAB members and not the Government RAB And Community RAB members, please use that paper ballot. If you would like to support Mark's candidacy to continue as our Community Co-Chair, please just indicate with an X. If you would like to write in a name, then you may do that, provided that they are an existing Community RAB member who has expressed interest in serving, and there is no (inaudible). So (inaudible) those here (inaudible) reveal at the results party later.

Okay. So, that takes us through RAB business. Let me just turn to the Co-Chairs.

Co-Chairs, any further RAB business that you would like to discuss?

 $\label{eq:co-chair willis: I don't have anything.} \\$

CO-CHAIR HENRY: I do not either.

1 MR. SUELTENFUSS: Okay. All right. 2 So, let's move to slide 18, if we could. We'll now 3 move into the first Air Force technical 4 presentation, the remedial investigation/interim 5 remedial actions update with Ms. Paula Bond of 6 Aerostar. So, Paula. 7 MS. BOND: Can you guys hear me? Not 8 really? 9 CO-CHAIR WILLIS: Try again. 10 MS. BOND: Is it on now? 11 Sorry. All right. Steve, you want to -- okay. 12 you want to go to the next slide. So, this is a slide that we added to 13 14 the presentation a couple of RABs ago just to kind 15 of give everybody an update on what the CERCLA 16 process is. And Steve went over this already a 17 little bit, so I'm not going to spend a lot of time 18 on this. But it just kind of goes through the full 19 CERCLA process and then where we are currently, 20 beginning with the site identification and initial 21 sampling. That's already been completed in the PASI. 22 23 Now, we are in the remedial 24 investigation of the detailed study phase of the 25 project, and the RI began in July 2021. Once the RI is complete, we'll move into the feasibility study, which evaluates alternatives based on recommendations made in remedial investigation. And then, we will move through to the proposed plan and record of decision, which are the decision documents for the remedies that are evaluated in the feasibility study.

2.1

And then, we'll move on through site cleanup, and then the site cleanup process -progress evaluations with the remedial actions and the long-term monitoring. We've kind of already been through this process a couple of times now with the IRAs in an expedited fashion, but, we still had to go through the PPROD remedial design, remedial action operation, and now we're in the monitoring phase of those IRAs. So, we've already done that a couple of times, but just to kind of refresh everybody's memory.

Next slide, piece. Sorry.

MEMBER LERICHE: Before you -- quick question. Can either Paula or Steve indicate where in this process there's official public comment review and comment, that's part A. And number two, future slides, if you could put an asteric with that sub-comment in there for all of the whole CERCLA

process, I think the public would benefit greatly to know when that is in the process.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. BOND: Sure. Under CERCLA, the primary community involvement comes under the proposed plan. In the public meetings that we usually have for the proposed plan, there's a 30-day comment on that. That is the formal community involvement process in CERCLA. We don't typically do that with any of the other -- other processes that we go through. And then the comments that are received on the proposed plan are responded to in the remedial decision. So, that's where your comments get responded to, in that part of the phase. But that's the -- under CERCLA, those are the primary community involvement. Of course, the RABs are also part of that process to support community involvement, but with documents themselves (inaudible).

MR. SUELTENFUSS: And we'll turn to Steven Willis. Were you going to make a comment?

CO-CHAIR WILLIS: No.

MR. SUELTENFUSS: Okay. Mark?

CO-CHAIR HENRY: The long-term

monitoring of the IRAs, where is that -- where is there a document that I can find that describes the

frequency of your sampling, indicates where the sampling points are, et cetera, et cetera?

MS. BOND: So, there is, for the long-term monitoring of the IRAs, a preliminary opening (inaudible) is in the remedial action work plans, which are on the AOR. So, those have now (inaudible) we've sampled the extraction wells, we've installed our performance monitoring wells, so those will then be added into others (inaudible) that we're working on right now that's under Air Force review. So, that additional information will be (inaudible) but you can look at the remedial action work plans.

CO-CHAIR HENRY: Okay. Thank you.

MS. BOND: Yeah, Dave?

MEMBER WINN: You mentioned a few weeks ago that once you get through the concept phase then you really (inaudible) approval process (inaudible) in our technical review meeting that we had on October 26th and 27th stated (inaudible) the addendum comes out for the RI for the east side of the lake, the public is going to get (inaudible). Is that true or not true?

CO-CHAIR WILLIS: Yes, that is true for the RI work plans, that we will provide those

1 for concurrent review when they go to EGLE. 2 MEMBER WINN: So, the public will 3 (inaudible). 4 MS. BOND: Right, yeah. 5 SUELTENFUSS: Okay. And just 6 circling back to Arnie's point, Arnie, I think one 7 of the points you were making was that in -- in 8 documents displaying the CERCLA process, it would be 9 helpful to indicate those opportunities for public comment and involvement, correct? 10 11 MEMBER LERICHE: Right. 12 MR. SUELTENFUSS: Okay. So --13 MEMBER LERICHE: And the only other 14 question that I had to that is, the five-year plans, 15 that's just -- you publish it and there's no public opportunity for comment? 16 CO-CHAIR WILLIS: 17 Correct. 18 MS. BOND: Let me back up. 19 five-year reviews, there is an announcement that's 20 placed in the paper, so the public is offered the 21 opportunity to go to the AR and look at information 22 for the five-year reviews. And then once that 23 five-year review is closed out, there's another 24 notice that's placed. There can be, if there is

needed, a public meeting for that five-year review.

25

But I don't have that listed on here. That's part of the long-term management. I didn't have five-year reviews on here, but, there are some community involvement things associated with the five-year review.

MR. SUELTENFUSS: And just for awareness also, I mentioned that the Co-Chairs get together after the RAB meetings, I pull together a summary of that meeting. Steven sent that summary of the recent meeting out. And so one of the topics that's been discussed is the idea of coming up with a meeting standards document, and something like that suggestion would, I think, tie in very -- very nicely with the meeting standards, kind of how we run these RAB meetings. So, I've taken notes to suggest incorporation of that.

Let's go ahead and turn to Paula. And if you have crucial questions related to a specific slide, we can pause and address those. If you have something more over overarching, let's get through this presentation, then we'll take questions.

MS. BOND: So, next slide. So, this is the PFAS RI progress that we've had -- this slide here -- since we started the RI. This just kind of gives everybody an update on where we are in the RI

process. And the blue is complete and gray is ongoing, so you can see the field data collection is gray. So, that is ongoing. We're not complete with that portion yet. So, that's kind of where we are with the RI.

Next slide.

And this slide is the same concept,
but for the two IRAs that were -- we were working
on. So, as you can see, all of these are blue and
complete. So, both IRAs at FT002 at Clark's Marsh
and at Van Etten Lake at Ken Ratliff Memorial Park.
Both of those are now complete. Both of those
systems are up and running.

Next slide, please.

So, just a quick update on the RI. No new RI data has been collected since the last RAB meeting, so we don't have any additional data to present or talk about. The data that we had collected was put together in a presentation, and that was presented to the public in a technical workshop on October the 22nd. We're going to continue the field investigation for the RI this spring, and it will include areas to the east of Van Etten Lake for PFAS impacts that may be attributable to the former Wurtsmith Air Force Base. Sorry.

We are going to do an SPP, or systematic progress planning meeting with EGLE in December to go over all of the data that we've collected in the RI, present to them, discuss our next steps and path forward based on the data that we have collected.

One thing to note is the data that we have collected.

One thing to note is the data that we have collected so far to date has not materially changed the CSM, and this information, like I said, was presented in the technical workshop a couple of weeks ago. So, it really kind of affirmed the CSM that we had before. Nothing really significantly has changed anything there.

And then just to add, the risk assessment begins when RI data collection is complete. I know there's been a couple of questions on the risk assessment, but, we have to collect all of the data in the RI before that process actually takes place.

MR. SUELTENFUSS: (Inaudible) go ahead.

MEMBER WINN: Paula, you put under data (inaudible) material change CSM?

MS. BOND: Correct.

MEMBER WINN: And that CSM was

initially put together based on data from the State, and we were told that there was not enough RI data. So now that you guys have the RI data, it should change the status of the (inaudible). So, how can it not --

2.1

MS. BOND: Not necessarily. So, when we developed the initial CSM that was presented in the work plan, so, that was based on EGLE data, that was based on data that the Air Force collected during the SI and the ESI. So what we -- our assumptions that we had made for that CSM, the data that we have collected so far really just backs up those assumptions.

We're not saying there's not still data gaps left and we have to fill those, but, we didn't -- we haven't found anything that materially changes the CSM, that the groundwater plume is moving to the left when we thought it was moving to the right, or it's going in a different direction. There's faded transport components that are different than what we had assumed when we did the initial CSM.

So, there's different -- the plume is bigger. We know that. But that's not really a material change to the CSM. So, we're still

1	tracking that out, but the subsurface information
2	that we had, the data that we've collected supports
3	the CSM. So, it's added to, but it hasn't really
4	materially changed the CSM, if that makes sense.
5	MEMBER WINN: Can we (inaudible)
6	doesn't make sense.
7	MR. SUELTENFUSS: Steven?
8	CO-CHAIR WILLIS: I was just going to
9	say, we haven't collected any new information that
10	changes our understanding of the geology in the
11	area.
12	MS. BOND: Right.
13	MEMBER WINN: (Inaudible).
14	MS. BOND: I'm sorry. I did a poor
15	job of explaining that.
16	MR. SUELTENFUSS: Arnie, question?
17	MEMBER LERICHE: That SPP, what does
18	it stand for again, that
19	MS. BOND: Systematic project
20	planning.
21	MEMBER LERICHE: Okay. So, I assume
22	that that meeting will include the bullet before
23	that, which is the Van Etten Lake on the other side
24	of the lake?
25	MS. BOND: Correct.

1	MEMBER LERICHE: Okay.
2	CO-CHAIR WILLIS: That's the meeting
3	where we talked about meeting with EGLE to go
4	through all of the data and plan next year's field
5	activities.
6	MEMBER LERICHE: Okay. That
7	scheduling of that meeting, how does it relate to
8	our next RAB meeting, which would be February?
9	UNKNOWN SPEAKER: It's February.
10	Yeah, February.
11	MS. BOND: Uh-huh. So
12	MEMBER LERICHE: It will be before the
13	RAB meeting, or
14	MS. BOND: Yeah, this is in December.
15	The SPP meeting is scheduled for December the 6th
16	and the 7th.
17	MEMBER LERICHE: Got you. And will we
18	have after that meeting, how soon would the RAB
19	have technical or some view of that sampling map,
20	and that was decided or needs to be (inaudible).
21	CO-CHAIR WILLIS: We would not,
22	probably, have anything that we could present to the
23	RAB probably until the next RAB meeting. Because
24	anything we put together, remember, we've got, you
25	know, Thanksgiving and Christmas holidays coming up.

You know, contractor is going to have to put together that work plan addendum, the Air Force is going to have to review it before we have it ready to send out for EGLE and public comment.

So, it's going to be at least the next RAB meeting before we have that available, probably later than that. Not to say at the next RAB, we couldn't talk about what we're planning, but, it -- at that point, you know, it wouldn't have been vetted through EGLE or the public, so --

MEMBER LERICHE: Do you have any -- I hate to be a negative slant to this question, but, do you have any major contract changes or negotiations potential in this period of going to the end of the RI?

CO-CHAIR WILLIS: No. That's actually
-- I was talking with some people before the
meeting. I think maybe there was a misconception on
the roles of the team for Wurtsmith moving forward.

This is the last meeting that Aerostar is hosting under their contract, but Aerostar is not going away. They still -- they still got to finish the RI, so they will continue to support RAB meetings, but, they won't be the host. They'll just be providing updates on the work that they're doing.

Our contractor, WSP, is teamed with

Lota and CTI. They're under our BECOS contract

doing all the O and M work for all the treatment

systems at Wurtsmith, and their contract is going to

pick up responsibility for hosting the RAB meetings

beginning in February. So, you'll see a new team

hosting meetings going forward. And their contract

runs for another -- I believe it's almost eight

years. So, they'll be around for quite a while.

We have our two local on site Cherokee Nation contract support person -- personnel, Andrea and Ryan, who I'm sure most of you have seen in the local area for years. They've worked for Legacy contractors on various phases of work out here, but, they're now under a direct support contract at AFCAT. So, they are the Air Force's eyes and ears on the ground here.

So, I know the FND report was provided to Ryan with the hope that he would share it with the Air Force. Yes, they work for the Air Force, they are our extension here on the ground, so we're in daily communication with them on stuff. So, they're a conduit to us if you've got information. You know, if there's something out on the site, we work fairly frequently with the airport in their

1 redevelopment activities. 2 You know, if there's a concern in the 3 local area, you need somebody to look at it, you can 4 reach out to Ryan and Andrea and have them come out 5 and look at it, take pictures, talk with us, and we 6 can work through, you know, what activities we can 7 take to address a concern. So, there is not going 8 to be a change in the team supporting Wurtsmith. 9 Okay. But that new MEMBER LERICHE: 10 contractor, WSP, ATI, something or other --11 CO-CHAIR WILLIS: And they're 12 actually --13 MEMBER LERICHE: -- does that include 14 the facilitator --15 CO-CHAIR WILLIS: Yes. 16 MEMBER LERICHE: So, that will 17 continue; or that is a new contract (inaudible). CO-CHAIR WILLIS: 18 It's a new contract, 19 but it's not going to change the team. 20 already contracted with Galen Driscol to retain Tim as our facilitator, so there won't be a change 21 22 there. 23 MEMBER LERICHE: Thank you. 24 Year's Eve surprises then? 25 CO-CHAIR WILLIS: Nope. Nope.

1 MEMBER LERICHE: Okay. 2 CO-CHAIR WILLIS: And WSP has actually 3 been doing work at Wurtsmith for about a year --4 almost a year and a half now. They briefed on the 5 BECOS contract when it started, they've done at 6 least one update since then, so, you know, they're 7 not a new team member by any means. 8 MEMBER LERICHE: Okay. 9 MR. SUELTENFUSS: Thanks, Arnie. Τо Paula. 10 11 MS. BOND: Next slide, please. 12 So, I'll give you a quick update on the IRAs. First, we'll start with FT002 at Clark's 13 14 As I briefed at the last RAB, this treatment 15 system was started up in August, and it's been running since that time. We did do a tour of the 16 17 treatment system when we did the technical workshop. This was done on the October 26th. 18 19 The treatment system is currently 20 treating around 387 gallons per minute, or around 21 550,000 gallons per day. Just some information 22 there just (inaudible) but we've already briefed 23 this. 24 Next slide, please. 25 What's new since the last RAB is we've

gotten the Van Etten Lake at Ken Ratliff Memorial
Park IRA up and running. That started in October,
it's been running continuously since then. That
treatment system combined is treating around 590
gallons per minute, so around 700,000 gallons per
day. So, that is also some great news. So, that
system -- that new site is up and running. And this
was also included in the tour that we did on the
26th.

Some new information -- Steve has mentioned this a little bit, and I think he mentioned it at the last RAB, too, there is a new IRA that's going to be undertaken, and a pilot study. And we just have kind of a figure here just to kind of orient everybody. I know it's hard to see on the slide. The new IRA will be taking place up at the alert aircraft area to the northeast where that plume is there. And then the pilot study will be taking place down at Three Pipes Ditch down to the southwest there.

Next slide, please.

So, the purpose of the new IRA is similar to the IRAs that we've already done. It's to hydraulically control the highest concentrations of PFAS moving toward -- migrating toward Van Etten

Lake. And we're going to be using, again, pump and treat, regular activated (inaudible) similar to the IRAs (inaudible). The initial treatment draining capacity will be up to 500 gallons per minute, and it will allow for future expansion.

This treatment -- this new IRA will be very similar to the existing central treatment system. When that system was built with the larger building, it had room for expansion on the other side, and that's what we're now pumping water from the Van Etten Lake/Ken Ratliff Memorial Park area. So, that has been put into the new CTS. So, this will be almost an identical system to what is already out there at CTS, it will just be up to the alert aircraft area.

The plan is to treat the water, like I said, with gap, and then that will be returned to the aquifer via infiltration. And that, again, is pending discussions with EGLE, similar to what we're doing with FT002.

MEMBER LERICHE: Question.

MS. BOND: Yes?

MEMBER LERICHE: So, the infiltration trenches will be downstream from the intake just like FT002, correct?

MS. BOND: Yeah, that is the current I do want to caveat this that these plans are plan. still -- they haven't been final design yet, so they are still in the conceptual phase, but, that is the plan currently, but that could change, so --MEMBER LERICHE: Has there been any --MR. SUELTENFUSS: That last question was from Arnie Leriche, Community RAB member. ahead, Arnie. MEMBER LERICHE: Okay. Has there ever been a discussion about a potential for a high contraction plume to put the infiltration upstream from the intake so you've got a recycling --MS. BOND: Absolutely, yeah. We have looked at that to try to do -- I mean, we've looked at it both ways. And we have done a lot of groundwater modeling runs to look at different ways of doing that, and then at the alert aircraft area. So like I said, we're still in the planning phase for this IRA, so I don't want to go into a whole lot of detail, because it's just -nothing has been finalized yet. But we have looked at that to do a recirculation, absolutely, yeah. MEMBER LERICHE: Yeah. And if you've looked at other Bases, if you could just share that

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1	with us, that'd be great.
2	MS. BOND: Okay.
3	MEMBER LERICHE: Thank you.
4	MS. BOND: Yes, Mark?
5	CO-CHAIR HENRY: So, could you please
6	put up the map that shows the (inaudible). It looks
7	like this plume has moved off Base over here. And
8	actually, I don't know which compound is being shown
9	here, but, there's a whole other lobe of this plume
10	that's off in this direction.
11	MS. BOND: Right. Right. And
12	there
13	CO-CHAIR HENRY: (Inaudible) point.
14	MS. BOND: Right.
15	CO-CHAIR HENRY: Are you going to
16	install the extraction system on the Base and let
17	whatever is beyond the capture of that bent into the
18	lake; or are you going to be working near the lake,
19	and capture as much as you can, and prevent it from
20	going into the lake?
21	MS. BOND: So the plan, currently, for
22	this IRA is to install the extraction wells on the
23	airport property. And the reason for that is, once
24	you go across, this is all private property on other
25	side, which presents challenges for installing

extraction wells, piping, and all of that across the way. So, we are going to plan to stay on airport property for the extraction wells, but get as close to, as we can, F41 over there by the fence.

So, that is plan to do that. But we really think it -- logistically, it's going to be a lot simpler to stay on Base than try to do that off Base. Yeah.

CO-CHAIR HENRY: Are you going to try to capture both plumes, or just that one?

MS. BOND: Just this one. And that's why this is drawn this way, is this is just the -- this is the area that we'll be looking at.

CO-CHAIR HENRY: Thank you.

MR. SUELTENFUSS: Thank you, Mark.

MS. BOND: All right.

MR. SUELTENFUSS: Paula?

MS. BOND: Next slide. Okay.

So, quickly, a brief on the pilot study at Three Pipes Ditch. Again, this is in the same phase as the IRA. This is still conceptual. The plans have not been finalized for this yet. But the purpose will be to evaluate the effectiveness of an organoclay material to sort PFAS in surface water and groundwater. And then -- so we are looking at

the effectiveness of that.

So, with the pilot study, we're not actually treating, we are not cleaning up, we are evaluating that technology for its effectiveness.

So, does it work? Can we use it at other places if it does? Maybe it doesn't work. So, the answer coming out of a pilot study can be that this didn't work. We hope that's not the case, but, the goal —the purpose of this, I want to make really clear, is we're not treating or cleaning up, we're evaluating that technology for future applications on site.

But we're looking at organoclays and we're looking at sorbent mats to evaluate PFAS removal in groundwater, and that is where groundwater is coming into the ditch. So, mats will be laid in the base of the ditch. As the groundwater comes up, it will go through that to absorb a little bit of those clays.

And then, we're also looking at a flow-through barrier for the surface water to flow through in the ditch. So, that will capture the surface water. So again, just looking at the application, do those applications -- are they effective, and is the material effective here? Yes?

MR. SUELTENFUSS: Mark?

CO-CHAIR HENRY: Can you please show the Base map again?

In this ditch along here, the Three Pipes Ditch, it is a gaining flow of water -- I'm not going to follow the stream, but, it's gaining over the majority of its course. It only really starts not gaining about right there. At least, I've looked at that ditch extensively in the past.

MS. BOND: Yeah.

that if this -- these flow-through clay mats that would be treating venting groundwater are effective, that you would then implement those over the course of that ditch where the groundwater is venting; and if so, are you going to be delegating, during the RI, that portion of the ditch that is venting groundwater?

MS. BOND: Okay. So, multiple questions. So, I'll start first. So, it's too soon to tell what we can do with that information, right, so if it works, it could possibly be deployed -- you know, that's something that's a future decision that needs to be made. So, I can't really answer that question.

CO-CHAIR WILLIS: Okay. And that will

be evaluated in the feasibility study? 1 2 MS. BOND: Right. So, as far as 3 looking at those areas where it is venting, we are 4 looking at that with the RI, is to try to identify 5 those areas where it is coming up. We've got some 6 monitoring wells over there now, we're looking at 7 some additional (inaudible) to see where that 8 venting may be occurring over there. So yes, we are 9 looking at that. 10 CO-CHAIR HENRY: Thank you. 11 CO-CHAIR WILLIS: We hope that the 12 pilot study will demonstrate effectiveness, and we 13 may be able to take that technology and apply it 14 somewhere in Clark's Marsh, so, you know, it's data 15 we're very interested in gathering and seeing whether it's effective. 16 17 MR. SUELTENFUSS: Thanks, Steven. 18 MEMBER WINN: I've got a question. 19 MS. BOND: Yes? 20 MR. SUELTENFUSS: Go ahead. 21 MEMBER WINN: Paula, the question I 22 have is that you just mentioned this pilot study is 23 not -- is to research technology (inaudible) 24 technology versus using it as an IRA.

Right. Right.

MS. BOND:

25

MEMBER WINN: As I understand -correct me if I'm wrong -- but there's a vast amount
of four-foot pipe in at area that's releasing a lot
of discharge, and it's heading down towards the Au
Sable River, right?

MS. BOND: Yeah.

MEMBER WINN: Okay. So, nothing -- so this pilot study is nothing more than -- it's not an IRA, it's not going to fix that problem, it's going to basically (inaudible).

MS. BOND: Right. It's not going to affect the discharge that's coming down the storm water that's discharging into Three Pipes. It's not going to address that. Yes, Mark?

CO-CHAIR HENRY: But it could. The water that's coming from the flight line that's coming out of that four-foot pipe is immediately directed into an oil water separator, there's an outflow from that.

MS. BOND: Right.

CO-CHAIR HENRY: And you said that part of the -- the potential use of these clay mats is as a filter, if you will, for water to go through. So, the water that's coming out of that oil water separator could be, actually, very easily

directed through those mats, such that once it's passed through those mats and there's the ditch, it would be much cleaner than it started.

MS. BOND: Right. So we -- we looked at doing work at the oil water separator outfall. We've looked at doing things more closer down to the river to try to capture more of the groundwater and the surface water before it goes (inaudible) because we know that (inaudible). We've looked at all of those scenarios. And for the pilot study, we've identified a stretch -- because again, you have to think about contact time with these materials. So, we found a stretch that's long enough, that's straight enough where we don't have to do a whole lot of manipulation to put the clay mats in and to do the barriers.

When we looked closer down to the river, you could see, when you walked down there, there's a lot of debris that gets washed down. And if you're putting in -- I'm just -- this is not the way this (inaudible) is described, it's -- you know, somebody called it putting tea bags in the material, you know, across. But with all the debris, everything comes down, those can get clogged. They can back up the ditch, they can alter the flow. It

just makes it very difficult to maintain and get your flow-through and keep the water from moving around.

So, we looked at both of those, but, we settled on, like I said, an area that's kind of, really, upstream from the Au Sable River kind of almost half in the middle there, that it's (inaudible), we can get access to it without having to -- there's a trail already down there -- not having to go through a bunch of steps.

So we looked at all those options, and we kind of settled on this area again. I won't say "settled", because nothing is done until it's designed.

So, it's still in the conceptual phase, but that's kind of what we're looking at right now. That was one of the reasons we did move up there, was because of the work that we have to do in that area, and then the link that would have to come down to get the contact (inaudible) that we needed with that, so -- but we're still looking at that.

MR. SUELTENFUSS: Let's go to David Winn real quick and then to Tim Cummings. Go ahead, Dave.

So, this isn't going to 1 MEMBER WINN: 2 do anything to eliminate or restrict any discharge 3 going out of the Three Pipes Ditch to Au Sable 4 River, correct? 5 MS. BOND: Well, it will. So, when 6 you put the flow-through that we were talking about, 7 it will go across. So, where that is in the ditch 8 there, anything that's upstream of that will come 9 down through that area. Anything that's downstream 10 of that, it will not. So it will treat, even though 11 that's not the goal, is to treat that discharge. 12 will, just by evaluating the technology treatment 13 that's going to go through that --So, let me just go 14 MR. SUELTENFUSS: 15 to Tim Cummings real quick and then to Mark. ahead, Tim Cummings. 16 17 MEMBER CUMMINGS: Yeah, thank you, It's two, but I think short answers. 18 sir. 19 The question -- first one here is, 20 what is the water through put rate for organoclay? Are you looking at gallons per hour, or is it 21 22 seepage? 23 MS. BOND: I don't have those numbers 24 for you. I could get them for you. 25 MEMBER CUMMINGS: No worries.

1 MS. BOND: Sorry. 2 MEMBER CUMMINGS: That's okay. That's 3 okay. I'm just trying to get a concept of 4 understanding of what's the ordinance of magnitude 5 of flow that we're talking about here; are we 6 talking about drops or gallons or --7 MS. BOND: No, it's gallons. MEMBER PALMER: It's significant, 8 9 yeah. 10 MS. BOND: Yeah. Because remember, 11 we're not cutting off the flow. We are just flowing 12 the water through, so --13 CO-CHAIR WILLIS: We're basically 14 putting filters in the stream to try to pull up the 15 PFAS. MS. BOND: Yeah. And (inaudible) 16 17 gravel, so you can get more flow through there. So, 18 it's not just a solid barrier. It will still be 19 gallons per minute so that we don't restrict the 20 flow. 21 MEMBER CUMMINGS: But the reason for 22 my question was that it -- you were saying that 23 (inaudible) about potentially restricting the flow, 24 causing the water to reroute, at which point then, 25 it became a concern about what's the flow rate in

this solution. So, that's why --

MS. BOND: Yeah.

MEMBER CUMMINGS: The second question was -- what was my second question? The second question, I wondered about -- I forgot it. I'm sorry.

MS. BOND: We'll come back.

MR. SUELTENFUSS: Mr. Mark Henry real quick. Go ahead, Mark.

wrong, but, Tucker Swamp is just across the Three Pipes Ditch. And in my understanding of groundwater flow in that area, there's a certain amount of groundwater that's discharging to the creek -- or to Three Pipes Ditch, the creek performs in there, and there's also a certain amount that underflows that ditch and actually goes through the swamp on its way to the Au Sable River. I did not see anywhere within the work plan where Tucker Swamp is being investigated, for one thing.

But the root of my question is, if
these maps are laying down -- let's say we have a
full implementation of those, the soils that this
ditch were dug in, are -- is the aquifer material at
Wurtsmith, which is very transmissive. If you lay

anything on there that brings that hydraulic conductivity from, say, 10 to the minus 1 to 10 to the minus 3, the underflow of that ditch increases dramatically, and the PFAS -- the, probably, PFOA, because that seems to be the largest mass of stuff there -- that that would not necessarily go through the mats, and it may just take a course underneath it and join the rest of the groundwater going into Tucker Swamp.

MS. BOND: Well -- and that's part of the evaluation.

CO-CHAIR HENRY: I get that.

MS. BOND: All right. So, those are things that we don't have the answers to, and that's what the pilot study is for.

CO-CHAIR HENRY: Well, it would be very good to be able to evaluate the flux that is underflowing that ditch and figure out, somehow, to evaluate that after the pads are in there, to see if you are actually forcing more mass out into the swamp by laying an impediment on the ditch surface.

MS. BOND: Yeah. So as part of the pilot study, I know we have some work to do down there before we get this in. I know we're going to install some (inaudible) on both sides, and we're

going to install some flow meters, we're installing 1 2 some other equipment down there. So, you know, 3 again, all of that is part of the pilot study to get 4 the answers that we need. So -- but good 5 information. Thank you. 6 CO-CHAIR HENRY: 7 MR. SUELTENFUSS: While I'm trying to 8 (inaudible), we'll turn to Tim Cummings. 9 MEMBER CUMMINGS: Because he remembered his second question. 10 11 And so what do we know about the 12 removal of the organoclay when it becomes saturated 13 with whatever you're filtering, and therefore, I 14 would imagine its absorption through it would be 15 reduced. So, how do you get it out? MS. BOND: So, it's -- it has a 16 17 geotextile fabric on the top and the bottom, so 18 they'll just be taken out. And then the bags, or 19 the flow-through barrier, the same thing. 20 within the geotextile fabric, so they will just be 21 removed. 22 MEMBER CUMMINGS: I see. So, it's 23 relatively easy, not disturbing a lot of the 24 groundwater? 25 MS. BOND: Yeah. Well, again, that's

why we selected the location that we did so we can easily get in there to do it. I mean, we expect that, you know, there could be a major storm event that, you know, manipulates the area and we have to come in and do some repositioning again to access there. So, we do expect it to be fairly simple to go in and remove them and replace them, if we need to, and take them out for disposable.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MEMBER CUMMINGS: Thank you.

CO-CHAIR WILLIS: And just to elaborate on your earlier question -- this is Steve Willis -- on the flow rates, we did do some real simplified data collection on flow coming out of the storm water -- I mean out of the oil water separator that Mark mentioned up at the head of the stream, and then also at the end right before it goes into the Au Sable, and use that -- the flow information as part of the basis for the design in terms of flow rates that need to go through those barriers. that -- that determines how much material we put into the -- it's almost like a sock across the stream with this material, the sorbent material, and then gravel. The gravel is there, primarily, to keep it from floating away.

But we needed to know what the flow

rates would be and how much of that sorbent material we need to put, and also control the dwell time, because that's critical to getting the PFAS to absorb to this material. It's the same when we use GAC in the treatment systems. It's got to be in contact with it for long enough to absorb to it.

Otherwise, it just passes right through, if we don't have enough material and enough dwell time.

MEMBER CUMMINGS: Thank you, Steve.

MR. SUELTENFUSS: All right. Paula?

MS. BOND: Next slide, please.

So, we added a couple of these chart

-- like, schedules in here just to give everybody an

update, and we're going to continue to add these.

These will be added every -- for every RAB.

This is a one-year outlook of kind of the things that are upcoming over the next year.

Like Steve mentioned earlier, the RI work plan addendum, that's going to take place over the winter, and that's the document that you guys will get an opportunity to look at. And it start back at the RI field work in April. That will continue on out through October.

I did highlight on here for the IRA and the alert aircraft area, that's what the AAA

stands for. The proposed plan for the public meeting -- or the public meeting for the proposed plan, I've got that as starting in March. That document hasn't been submitted to the Air Force yet, but, we hope that will get through the Air Force and EGLE review, and we'll have that public meeting in the March timeframe. So, we don't have an exact date yet, but we're hoping.

But I wanted to make sure everybody who saw that is aware of that, so there will be a public meeting coming up some time in the spring. And then we'll follow through with the ROD after that, just like we've done with the other ones in the remedial design and remedial work plan through October.

The pilot study work plan is underway currently, and that will run through January. And then the pilot study implementation of monitoring started (inaudible) through the fall.

MR. SUELTENFUSS: That was quick.

Let's go to David and then to Beth. David Winn?

MEMBER WINN: I know we talked about this earlier today, but I'm going to ask the question again.

MS. BOND: That's okay.

MEMBER WINN: You guys have a lot of step-outs, you have a lot of -- there's some data you need to collect through the RI and the east side of Van Etten Lake. So right now, you're anticipating doing all of that, getting everything done through the landscape, all the data done and everything else, in seven months? MS. BOND: Yes. That's the plan for the RI field work, is to be done. Do you really think --MEMBER WINN: and I'm (inaudible) -- is this schedule realistic? Or the -- is it --MS. BOND: Based on what I know right now, yes, I think it's realistic. CO-CHAIR WILLIS: And factoring into that, we've got two seasons of field work that we've done, and know kind of the production rates for the team's drilling and collecting samples and so forth. So, we're not basing this on no background information. We've got two years of first-hand experience doing the work here at Wurtsmith. MR. SUELTENFUSS: Great. MEMBER WINN: That's good. MR. SUELTENFUSS: Thank you. Let's go to Beth Place with Michigan EGLE.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 MS. PLACE: Sure. So, Beth Place. 2 We -- here at EGLE, we just want to 3 make sure that it hasn't been lost that on the 4 original RI QAPP or work plan, that we are still --5 have back and forth correspondence with several comments that remain unresolved. 6 7 And so we hope that those can be 8 resolved at our December meeting and find a path 9 forward on those. But I just -- we expect that they 10 will be resolved in some fashion. So, I do want to 11 state that. 12 CO-CHAIR WILLIS: And in conjunction 13 with that -- this is Steve Willis -- our expectation 14 would be that any changes to the original QAPP, 15 which has been finalized, would be incorporated into the RI work plan addendum, which is up on the slide 16 there. 17 So, this is Beth Place 18 MS. PLACE: 19 again. 20 So, we will just have to work out, 21 then, how those unresolved issues from when -- that 22 were not resolved when the first RI work plan was 23 finalized, how those will be incorporated into that. 24 MR. SUELTENFUSS: Thank you, Beth. 25 MS. PLACE: I had another question.

Sorry.

MR. SUELTENFUSS: Yes, go ahead.

MS. PLACE: And this one is on the IRA. So, Beth Place again.

I just wanted to mention that -- I mean, Air Force is aware that we do have -- EGLE, as an agency, has reservations that the current plan for the aircraft alert area IRA may exacerbate contamination. We don't know yet if it will or not, but that is a concern that our agency has.

And based on what we've heard from

Steve, the plan is that, in January, we will receive
a package of remediation division and then our water
resources division on this plan, and the modeling or
information on if it will or will not exacerbate
contamination, and then have a scoping meeting or
discussion on this, because I just want folks to
know that this is the most information -- I mean,
Steve's kept us informed, and this is common, but,
this is the most information we've received on it.

So, we're receiving this information real-time as well. So, when I'm looking at the schedule, and we're hoping for the proposed plan public meeting in March, but yet, we don't think that we'll be meeting until January on, potentially,

a significant issue with the design, I guess, I just 1 2 want to bring that up that that makes me concerned 3 on the timeline. CO-CHAIR WILLIS: And Beth didn't 4 5 indicate, but, the concern EGLE has with the system 6 is the infiltration galleries of --7 MS. PLACE: Thank you. I'm sorry. CO-CHAIR WILLIS: Yeah. 8 Yeah. Their 9 concern is that using an infiltration gallery versus 10 a surface discharge to another location is going to 11 make the plume worse, or the contamination worse. 12 And that's some of the modeling that Aerostar is 13 doing, and we plan to meet with EGLE and go through 14 that to demonstrate that, in fact, it doesn't make 15 the contamination worse. 16 MR. SUELTENFUSS: Thank you. Arnie? Will you evaluate not 17 MEMBER LERICHE: 18 only that, that you just stated, but also 19 incorporate, at the same time, the potential option 20 of an upgrading discharge to compare the effect --21 CO-CHAIR WILLIS: That's part of the 22 modeling that we'll have, yeah. 23 MEMBER LERICHE: Okay. 24 MR. SUELTENFUSS: Okay. Thanks, 25 Arnie.

Paula, anything else to say about -
MS. BOND: Yeah. Just to add, along
the bottom, all of the upcoming RAB meetings, so you
guys can see the dates there to plan for the future.
And then I've got the SPP meeting there with EGLE on
the 6th and 7th of December.

So again, we'll update this every time -- every RAB, so we'll push it out to the next meeting, and November '23 will be on there. So, just so everybody can keep track and plan.

MR. SUELTENFUSS: And let me just note, this was one of the items that the Co-Chairs discussed in their Co-Chairs meeting following the last RAB. It's part of the draft meeting standards document to include these Gantt charts as standard updates with any (inaudible) meetings, both at a short-term just one-year outlook, and a longer term as well, investigate major investigation remediation projects, and just kind of keep that 50,000-foot picture of where we are as well. So, just for those purposes. Yes?

MEMBER LERICHE: You just mentioned that standards document a second time. Has that been shared with the RAB?

MR. SUELTENFUSS: The Co-Chairs are

1	reviewing that right now, I believe. It has not yet
2	been shared with the full RAB.
3	MEMBER LERICHE: None of the drafts?
4	CO-CHAIR WILLIS: We're just looking
5	at the drafts now, so
6	MEMBER LERICHE: Because we used to
7	have a document called that.
8	MR. SUELTENFUSS: Yeah, there was one,
9	I think, around 2017 or so, right? Yeah. So, this
10	is an update of that to include additional items,
11	some of which were action items that Co-Chairs
12	looked at and said these could be kind of standard
13	practices and should be incorporated. So, I drafted
14	that document incorporating some of those items for
15	review.
16	MEMBER LERICHE: Okay.
17	MR. SUELTENFUSS: Sorry, Paula, go
18	ahead.
19	MS. BOND: That's okay. And that's
20	all I have on this slide. Next slide, please.
21	UNKNOWN SPEAKER: I'm trying.
22	MS. BOND: That's okay.
23	So then, we added in a chart for the
24	five-year outlook. So now, we're getting out a
25	little bit. So you can see, we've already talked

about the RI, the date. This is the RI report continued. And I've got this broken down by quarters and years. So, we have the RI report followed by the feasibility study, the proposed plan, the ROD, remedial design, and then the remedial action. And this is for the (inaudible). Yes?

MEMBER WINN: So if, for some reason, something happens, the RI field work has to move out. It looks like there's an overlap that, you know, they report. I guess my question is, the RI work flow goes out, there's a whole plan where it move out --

MS. BOND: Everything gets pushed to the right, yeah. If the RI field work gets pushed out, everything else gets pushed out. Is that what you're asking?

MEMBER WINN: Yeah, that's what I'm asking. But by question is, you have the field work, and then you have the RI report. You've got almost three quarters, you know, nine months --

MS. BOND: Right.

MEMBER WINN: -- that you guys can still continue to do that work and finish the report. Is that true?

MS. BOND: Right. Yeah. So, the overlap between the field work and the -- because obviously, we're going to start running the report before we're finished. We have a lot of data right now, right? So, we're pulling that together kind of as we go.

So we're -- the RI report will actually start before the data is -- data collection is ended. And we'll just move that out - So, if we

actually start before the data is -- data collection is ended. And we'll just move that out. So, if we don't get -- so, I guess it will all be pushed out, but we're going to start before we're done with the report.

MEMBER WINN: (Inaudible).

MS. BOND: Yep. Yeah.

MEMBER WINN: I guess my whole reason for asking this question is, again, the final remedy will be moved out further, further, further, further, further, okay? And this has been going on for, what, 30 years? More than that?

So, my concern is, is that the RI work moves out, everything moves out, and here we are getting another year, another year, another year.

It's all a continuation.

MS. BOND: Right. If something -- in any one of those steps -- and you know this better

1 than a lot, but, any one of these steps gets held up 2 for whatever reason, the remedial action -- that's 3 the last one on the list -- it's going to --4 everything is going to get pushed farther --5 MEMBER WINN: (Inaudible) a whole lot 6 of stuff. 7 Well, and we're -- we've MS. BOND: 8 got the alert aircraft area too --9 MEMBER WINN: But at this point (inaudible). 10 11 MS. BOND: Yeah. But -- yeah. 12 MEMBER WINN: I'm just concerned --13 I'm just concerned that we're going to move it out 14 again. 15 MS. BOND: Well, yeah. This is the 16 plan based on the data that we have right now, and 17 the way we understand the conceptual site model, and what we have -- we believe we have left to do. 18 This 19 is where we are. 20 MR. SUELTENFUSS: Okay. 21 MS. BOND: So anyway, this is kind of 22 the five-year outlook. We've got the IRA on there, 23 the pilot study, implementation of monitoring. 24 That's going to finish that. And then we have the 25 five-year review on here so you'll know when the

next five-year review is coming.

2.1

MR. SUELTENFUSS: Moving to the next slide -- and I'll address this -- but, first, I wanted to just share an e-mail that Rex Vaughn sent. Subject 11.16.22, RAB meeting total failure of the remote access system, and it states, "I wanted to go on the record with my extreme displeasure of the performance of the audio/visual system for tonight's RAB meeting. I consider the performance of the system to be a total failure."

So, Quentina, we'll record back in the (inaudible) the verbatim transcript of the meeting. I wanted to make sure that because Rex was unable to say that, Rex -- we all know Rex. Rex would not have held back and decided not to say that, he would say it with extreme vigor. So, I wanted to make sure to pass that on in a transparent fashion as well.

Now, the slide that we have in front of us, it's just a reminder to us that restoration advisory boards are structured to address questions about environmental restoration and cleanup. But Steve Willis has prepared some contact and any questions that may have come up about health matters as well, because they're sometimes intertwined. But

1 again, our focus here is on environmental 2 restoration. 3 We will be moving next into the RAB 4 member questions and public comment portion of the 5 agenda, but let me suggest that we take a ten-minute 6 break. Does that work, Co-Chairs? 7 CO-CHAIR WILLIS: Yeah. 8 MR. SUELTENFUSS: So, it's about 9 7 o'clock now. Let's take a break until 7:10, and we will start up promptly at 7:10. 10 11 (Recess taken.) MR. SUELTENFUSS: And as we come back 12 13 off the break, let me just do a quick sound check 14 and see if anyone who's connected virtually can hear 15 me right now. And I understand from Cathy 16 Wusterbarth that folks can hear us virtually. 17 18 me just try to get a sound check from anyone who is connected virtually. 19 20 And just again, one more sound check. I'm not hearing anything currently. Do we have 21 22 anyone connected virtually who can hear me? 23 Stand by while we're making some 24 adjustments. And thank you for your patience. 25 Let me just do one other quick sound

check. Can anyone who's connected virtually hear me?

You may be tiring of that question, so I won't ask it again. But I understand, from communications that Cathy's received, that some folks, at least, are hearing us virtually. But let's go ahead and move forward, if we could. And let's go ahead and dim those lights once again, please.

So, we are at the RAB members'
questions portion of the meeting. Let's see. This
is now for our RAB members to ask questions just to
engage in some continued discussion. If you have
questions, please just raise your hand and make sure
you say your name as well. And we'll then, after a
bit of discussion among the only the RAB members -stand by, please.

Yes, stand by, please.

Okay. And let me just do a quick sound check with Rex Vaughn. Rex, I hear you. Can you hear me?

Okay. So, adjust that sound so it's not disruptive in the room. We'll proceed.

After a while, we'll open it up to the public comment portion of the agenda, but, let's

start with RAB members' questions and discussion, just further the conversation. What other comments/questions do you have?

Tim Cummings first, and then Cathy.

MEMBER CUMMINGS: Sure. Thank you.

Tim Cummings here from Oscoda.

So I wanted to clarify, Paula's report, she said that we were focusing, of course, on the contamination currently located on the old Base, and the question that was asked was, what are we doing about the contamination that has found its way off the Base? And the response was that we weren't doing anything, because this now residing on private property. Did I hear that correctly, Steve?

CO-CHAIR WILLIS: No, definitely not.

We've already started an investigation on private

property wherever we can get access. We have plans
to do an investigation down in Clark's Marsh, which

belongs to the Forest Service. We've also worked

with the State Department of Natural Resources for

access to do some sampling on their property, south

end, north of the former Air Force Base property.

So yes, we are definitely moving off of the former Air Force Base onto private or other agency-owned property.

1 MEMBER CUMMINGS: All right. In what 2 year did the Air Force transition the Clark's Marsh 3 property to the Forestry Service? 4 CO-CHAIR WILLIS: My understanding is 5 it's always belonged to them. The Air Force never 6 owned that. 7 MEMBER CUMMINGS: It was my 8 understanding, from when I started on this, what, 9 roughly six years ago, that the property line was 10 different then, and that that property that was 11 Clark's Marsh became property of the Forestry Service. It was a donations, a gift, or whatever it 12 13 was, but, at that point, it's reasonable to believe 14 that it was already contaminated. That's what I 15 understood from six years ago. 16 CO-CHAIR WILLIS: Okay. I'm not -don't have that information. I'll have to get back 17 18 to you on it. All right. 19 MEMBER CUMMINGS: Fair 20 enough. 21 CO-CHAIR WILLIS: I don't believe 22 that's the case, but yeah, I'll verify that. 23 MEMBER CUMMINGS: Please do, yeah. 24 This has been discussed in prior RAB meetings, by 25 the way.

CO-CHAIR HENRY: This is Mark.

My understanding of the boundaries of Clark's Marsh is that Clark's Marsh, at least as I -- the 30 years that I've been involved, has belonged to the Forest Service. They -- the Forest Service also owned up to almost the northern edge of the fire training area. But there was a -- a transfer of lands.

MEMBER CUMMINGS: Right.

the Oscoda Wurtsmith Airport Authority picked up the fire training area, and the boundary for the Forest Service property went south to right around where the new infiltration system is, there's an east/west line there. But as far as I know, the majority of Clark's Marsh has been owned by the Forest Service for at least 30 years.

MEMBER CUMMINGS: Going back, because I don't know when that date was, I just was told that there was a transfer date, so it may be the prior years that I'm interested in. I don't know what the date is, just that there had been some change there. That was it. Thank you.

MR. SUELTENFUSS: Thank you, Tim. Cathy Wusterbarth?

1	MEMBER WUSTERBARTH: I do have a
2	question. We think maybe because of the virtual
3	issues, we didn't receive a report from DHHS.
4	Wondering if there's a way to get that. I think
5	Puneet has been on the line, but
6	MR. SUELTENFUSS: Yes. And actually,
7	that's a timely question. Puneet just e-mailed me
8	and he
9	MEMBER WUSTERBARTH: Okay, good.
10	MR. SUELTENFUSS: he has an update,
11	and certainly I can read that off now.
12	MEMBER WUSTERBARTH: That would be
13	great.
14	MR. SUELTENFUSS: So, this is the
15	stakeholder update from Puneet Vij, Michigan
16	Department of Health and Human Services updates.
17	"MDHHS finished round three of
18	resampling residential wells in the area. A total
19	of 245 homes were sampled. Out of those, we
20	received results from 126. 119 results are still
21	pending. Of the 126 results, there are 77
22	non-detects and 49 detections. Out of the 49
23	detections, there are six detections that exceed the
24	MDHHS comparison values.
25	With firearm hunting season now

underway, MDHHS and DNR issued a press release yesterday reminding hunters not to eat venison from deer taken within three miles of Clark's Marsh.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Exposure assessment. MDHHS started the recruitment in September of 2022 and started clinics. The Oscoda area exposure assessment is actively enrolling participants."

That's it. Thank you for the segue.

MEMBER WUSTERBARTH: Sure. If I could expand?

MR. SUELTENFUSS: Please.

MEMBER WUSTERBARTH: The exposure assessment that Puneet is referring to is for PFAS blood testing. It also includes, actually, a total of 195 contaminants through the MiChEM program that is starting through the State of Michigan. So the, you know, residents here. And like Eric had mentioned, both Oscoda and Au Sable residents are eligible over the age of 12. And this project will be going through until there's a lack of interest, or until there's no more enrollees. So, people will have a chance to enroll in this testing through next year, at least.

MR. SUELTENFUSS: Thank you, Cathy. What other questions are there, or comments? David

Winn?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MEMBER WINN: Yes, Dave Winn. I have You mentioned earlier about the -a question. underneath (inaudible). Steve, I know you sent this letter out to the RAB members. You know, I appreciate you sending that out, but, the letter pretty much outlines your response to that from EGLE, okay? But the question or the concern I have is that basically, you know -- I'm paraphrasing -the letter pretty much says EGLE, you had your chance and, you know, within the limited time, we'll get whatever we can resolved. If not, we move forward. That concerns me, number one.

Number two -- and the reason I say that is because there are seven items on the unresolved comments that are particularly associated with the east side of Van Etten Lake. You need to get that included with that addendum.

And Mark, I think you also had an issue with the vertical aquifer sampling.

CO-CHAIR HENRY: Well, yeah. Vertical aquifer sampling is kind of the key investigative tool that's being used at Wurtsmith to define these plumes. The monitoring wells that are out there, the majority of them are 40 or 50 years old. I --

we can have discussions about how valid some of that data is, since they were put in -- stabbed into the ground and not given the benefit of vertical aquifer sampling.

But vertical aquifer sampling is the best way that I know of to do a groundwater investigation to delineate the contamination from the top to the bottom of the aquifer. And the Air Force has been -- has moved ahead with the RI, and has been doing vertical aquifer sampling, or VAS, and the State has offered objections to the procedure. And it would seem like -- since that is one of the more fundamental tools being used to gather data here, that it should be resolved in all haste. You would almost drive the RI to a standstill, because without concurrence, you can poke holes in the data.

And so, I -- I don't know the full nature of why the State has -- has some issues with the way the Air Force has proposed to do VAS, but it really should be resolved. And sooner than later.

MEMBER WINN: My point in this whole question is that right now, you had mentioned that on the 6th and the 7th, you're going to meet (inaudible) all right? And the question is, I would

believe that most of the time is going to be set up to review data, and not necessarily unresolved issues. So, if unresolved issues are going to go by the wayside again, then we're not going to move forward again.

And my question is, Steve, is it

possible that maybe a separate meeting can be

scheduled between you and Beth and whoever needs to

be, so we can get these issues -- unresolved issues

taken care of so that we all feel better that we're

all moving in the right direction?

CO-CHAIR WILLIS: Yeah, certainly we can meet with EGLE once they've had an opportunity to review that and provide feedback to us. If we need to get together and talk, we can.

MEMBER WINN: Okay. So, the door is still open, these aren't -- these aren't -- I mean, I read the letter, it was kind of -- this is kind of becoming a closed issue.

CO-CHAIR WILLIS: Yeah. Okay. That was not the intent of the letter, but yes. We can still -- we can still revisit stuff.

MEMBER WINN: Do you agree with that, Beth?

MS. PLACE: Yeah, I think that's -- I

think that's great.

MEMBER WINN: Thank you. So, my opinion would be is if you guys haven't (inaudible) 6th and 7th, I don't think is the right place for it. That's something you guys can (inaudible).

MR. SUELTENFUSS: Thank you, David.

UNKNOWN SPEAKER: (Inaudible) give me a second (inaudible) and find out who the (inaudible) because I can't see (inaudible) so, if you're going to answer the question, just throw your hand up for me so I can count the mics and un-mute them. We'll avoid that problem, okay?

MR. SUELTENFUSS: Understood.

So, it sounds like we do have a capacity to receive questions from those who are connected virtually. I'm going to go through the list, any questions we have here in person first, and then I'll turn to those RAB members who are connected virtually.

Arnie Leriche?

MEMBER LERICHE: A quick one. In the discussion, I've heard -- Arnie Leriche -- the word "unresolved" a number of times. We went through over three years of a dispute resolution. Is there any kind of a dispute at this time, even informal?

CO-CHAIR WILLIS: Not to my knowledge.

MS. PLACE: Not at the moment. We did have some informal dispute discussions on the Van Etten Creek investigation, and the investigation on the east side of Van Etten Lake, but, it looks like Air Force is moving forward with those now.

MEMBER LERICHE: Okay. Well, thank you for the honesty. Great.

MR. SUELTENFUSS: Thank you, Arnie. Yes, sir?

MEMBER GAINES: Bill Gaines. A question I brought up several times, and I have seen no changes in the conceptual site model or the direction of the investigation to address the issue. Helen Lake at this -- just south of the north end of the runway has had a do not eat fish warning for as long as I've been part of the RAB, and that do not eat fish warning on Forest Service land is for the components of the AFFF.

Now, the conceptual site model does not really allow for water to go that direction.

The model says it would go south, not -- not to the west, yet, there's a biota sampling that says it has gone that way, and I see nothing in your investigation to find out why. And again, on that,

there's biota there that's considerably out of the schema of Clark's Marsh, and your sampling plan for the ecological risk doesn't address that.

2.1

So, could you do something to get that known contamination level included in your investigation?

CO-CHAIR WILLIS: We'll go back and look at it, but if the conceptual site model doesn't support groundwater flowing in that direction, then there's nothing to support that it's coming from the Air Force. But we can go back and look at that.

MEMBER GAINES: I would say, sir, that the Forest Service land has no other possible source. And I don't know what the geologists say, but, I do know that we have a time in 1970 that these chemicals came into use. There has been no reason out there for that to have come from any other source, and no possible other source is there. So, your denial sounds like stonewalling to me.

CO-CHAIR HENRY: This is Mark, if I can add something to that.

It's very possible that the contamination that is there may not have gotten there by groundwater. It could have gotten there by atmospheric deposition. Plume travels in the wind.

1	CO-CHAIR WILLIS: Okay. Like I said,
2	we can go back and look at that again, and if the
3	data supports the need to investigate that
4	attributable to the Air Force at Wurtsmith, then we
5	can pursue that.
6	MR. SUELTENFUSS: Okay. Arnie
7	Leriche?
8	MEMBER LERICHE: Has the Air Force
9	ever sampled the unofficial or I'm not sure
10	landfill that's at the end of the runway, which is
11	just basically almost north of Helen Lake, upstream?
12	CO-CHAIR HENRY: You're talking about
13	the sand pit that's there that's used as a shooting
14	range?
15	MEMBER LERICHE: (Inaudible) but that
16	has been sort of other dropping of items and stuff
17	in there.
18	CO-CHAIR HENRY: (Inaudible).
19	MEMBER LERICHE: But I mean, has there
20	ever been the thought looking at the do not eat
21	the fish there, anyone in the Air Force scratch
22	their heads and say well, where do they come from,
23	and do any sampling outside upstream of the
24	CO-CHAIR WILLIS: We can go back and
25	relook at that area.

MEMBER LERICHE: Pardon me?

CO-CHAIR WILLIS: I said we can go

back and relook at that area.

MEMBER LERICHE: Okay. In other words, don't just believe the geologic hydro -- geologic that was -- I don't know how old.

MR. SUELTENFUSS: Okay. Looks like Paula may have a comment to share as well.

MS. BOND: Sorry. We are looking at Allen Lake in the RI. So, if you guys have looked at the figures -- the sampling figures in there, we're looking at the surface water that's coming off the end of the airport that runs into the lake, and then the water that's coming out both. So, we are looking at Allen Lake. Sorry I didn't get up here quicker.

MEMBER LERICHE: Before you leave, can you talk about the risk assessment plan with regard to Allen Lake and the do not eat fish?

MS. BOND: I don't have information specific to the risk assessment for Allen Lake off the top of my head. I can get that information for you. The risk -- the biological -- just to remind everybody, too, the biota sampling plan was added the AR a few weeks ago, and so was the risk

1	assessment work plans. I don't know exactly what
2	the risk assessment work plan was for Allen Lake,
3	but I can get that for you. But I do know for just
4	the nature and extent portion of the RI, we are
5	looking at surface water sampling at Allen Lake.
6	MR. SUELTENFUSS: Thanks, Paula.
7	MS. BOND: You're welcome.
8	MR. SUELTENFUSS: Okay. Let me just
9	do a quick sound check, and I will turn next to see
10	if there are first of all, if I have
11	communication with those who are connected
12	virtually. Am I good to ask that question?
13	Okay. And let me just do a quick
14	sound check for anyone who is connected virtually.
15	Are you able to hear me?
16	You can. Okay. I think that was a
17	yes, we can. Is that right, Rex? (Inaudible).
18	Okay. All right. We're going to move
19	forward. Take us back to the oh, okay. All
20	right. Rex, can you hear me?
21	Let me just let me just check in to
22	see if you have any comments you would like to share
23	with the RAB right now, Rex?
24	MEMBER VAUGHN: (Inaudible).
25	MR. SUELTENFUSS: Rex, we are not

hearing you right now. (Inaudible) the sound techs (inaudible) and take us back to the (inaudible) in person meeting, or we could do that sound setting. Any of the sound settings, really, any of them. So, let me pull us back with Okay. that -- that ominous noise, and just continue on with any RAB member questions while AV folks make sure we are still recording this now. So, any other questions/discussion among the RAB members before we move to public comment? Yes? MEMBER SCHULZ: Has the Air Force started doing any so-called fingerprinting of some of the PFAS contaminants in this area? CO-CHAIR WILLIS: We have not started That will be part of next summer's field that. work. MEMBER SCHULZ: When that happens, is there going to be a way -- an easy way to -- for the public to see what the results of that are? Are you going to have that so we can see those tests?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CO-CHAIR WILLIS: Because it's private drinking water wells, I'm not sure how -- what we'll be able to share, but, you know, we'll come up with some way to at least convey information.

MEMBER CUMMINGS: I have

clarification -- this is Tim Cummings -- for that question on your answer, Steve.

So, the question here is about fingerprinting the contaminants. I remember we were doing that years ago under a different program manager here, identifying the different types of chemicals and the likely sources, because they're not all the same. Different chemicals came from different manufacturers, and came from different, greater compounds that were used. So, what do you mean by fingerprinting is now just coming up? I don't understand.

analysis for PFAS -- and this is Steve Willis -- for PFAS that looks at several hundred compounds and breaks it down into, you know, PFOA and PFAS, so the stuff that was in the original AFFF, as well as the newer versions of AFFF, as well as commercial sources of PFAS, which can include your popcorn -- microwave popcorn bag. I read an article recently, it's in dog and cat food bags. So, it's everywhere.

So, this will look at -- it's in carpets and so forth. This will look at those other potential sources for PFAS compounds that are not

associated with AFFF to give us an indication of whether sources may be from something other than the Air Force. It's not going to be a definitive smoking gun, absolute this is yes or no, but, it is another line of evidence that we can use in the evaluation.

MS. PLACE: And this is Beth Place with EGLE. And so we've -- Steve and I have already had this conversation that one of our concerns with this process is that not all of the sources have been investigated at Wurtsmith, so outside of AFFF, not all of them have been investigated yet as part of the RI. And so that's really a concern that we have with using this -- this type of method for fingerprinting. And so, you know, we'll looking at that as we move forward.

MEMBER CUMMINGS: This is Tim

Cummings. Just a comment then. It sounds like it's an expanded version of what we were doing before, what we were calling fingerprinting, and it's a laundry list of more sources. So, thank you for that.

MR. SUELTENFUSS: All right. Arnie Leriche?

MEMBER LERICHE: Regarding the

fingerprinting and the methods used, can you give us

-- send us -- maybe this will be an AI, action

item -- but, where it's been used in the Air Force

and DoD?

CO-CHAIR WILLIS: Sure. I can find out that information and provide it. I can also provide you a link to the contractor's website with information on it.

MEMBER LERICHE: Okay.

MR. SUELTENFUSS: Okay. I do want to make sure that we reserve some time for public comment, that's always an important element of any RAB meeting. But before turning to public comment, let me just see if there are any further questions/discussion among the RAB members who are here. Yes, Mark?

CO-CHAIR HENRY: I have one additional question. I've gone through the RI work plan and looked at -- I looked at it from various aspects.

One of the things that concerns me a little bit is the analysis that is being done. I do not see -- and please correct me if I'm wrong -- but, the Air Force is not doing total organic flourine, and thus, it is impossible to determine if the precursors to PFAS and PFOA are present or not.

My understanding of the original AFFF formulation was the PFOA and PFAS were functional groups; they were essentially little arms sticking off of a much larger molecule, and those arms break off, and those arms are the ones that we're looking at right now. But the major molecule, the original one that those arms were connected to, has the -- it's not being analyzed. And because of that, you don't know how much of it is resident within the aquifer that is not being analyzed, and those little arms, those little eight carbon arms, can still break off of that precursor and generate more PFAS

So my question is, why are not -- or at least correct me if I'm wrong, but, I do not see a total organic flourine being analyzed for in the work plan to determine if there is a future source that is not being anticipated.

and PFOA in the groundwater.

MS. BOND: Paula Bond. You are correct, we're not analyzing for that in the RI.

And I don't have any additional information on that.

We can get back to you on looking at that and seeing if that's appropriate, or something that we may want to look at. But currently, we're not analyzing for that.

1 CO-CHAIR HENRY: I'd just hate to 2 leave a lot of stuff behind that has not been looked 3 It could be a problem in the future for remediation. 4 5 MR. SUELTENFUSS: I've captured that 6 as one of the items that I'll pull together and send 7 to the Co-Chairs, and try to go through all of them 8 and see which ones might need to be action items, 9 and which might be addressed --10 MEMBER CUMMINGS: I was going to say, 11 should this be an action item? 12 MR. SUELTENFUSS: I've captured that 13 as a possible action item, yep. 14 Okay. Any further discussion among 15 the RAB members before we move on to public comment? Okay. Let's see. If we could move to 16 our next slide. 17 18 So now, again, we're in this Okay. 19 public comment portion. We have, as an important 20 element of all of our RAB agendas and RAB meetings, we've previously had discussion among the RAB 21 22 members, and now we're opening it up to members of 23 the public who don't happen to be RAB members, but 24 have comments they'd like to share, questions maybe

for the RAB members as well.

25

1 So, if you do have a question, have 2 comments, and you're here in person, please do come 3 up to this microphone right up here at the head of 4 the table, and we'll just go through have an 5 opportunity for three-minute public comments. 6 Go on. And a lot of this Yep. 7 indicates kind of process. But essentially, for 8 those who are in person -- and we are working in 9 person only right now -- please just come on up and 10 I'll turn to you, and you can say your piece for 11 three minutes, and we'll see if there's any brief 12 response that maybe the RAB members have. 13 So, are there any members of the 14 public who would like to make any comment at this 15 time? Just check in one more time. 16 Okay. 17 Okay. All right. MEMBER WUSTERBARTH: Tim, I do --18 there is someone online that would like to make a 19 20 comment that is unable to, so I don't know if you 21 were going to attempt to try to do that, or if you 22 want us to --23 MR. SUELTENFUSS: Yeah, let's give 24 that one more shot. 25 UNKNOWN SPEAKER: Everyone cross your

fingers.

Thank you.

begin.

2

1

(No audio.)

3 4 5

6

7

Thank you very much MR. SUELTENFUSS: for your patience. We're going to try this out, Tony, for you to speak here in just a minute. that does not work, then I believe Cathy has the text, and so she'll read that off. But let's turn to Tony Spaniola.

8 9

MR. SPANIOLA (through cellphone.):

10

Thank you. Can you hear me okay?

The Air Force decisions announced tonight

11

MEMBER WUSTERBARTH:

12 13 MR. SPANIOLA: Okay. So, let me

14

are most disappointing. Four requested interim

15

remedial actions, the IRAs have been recommended by

16

highly respected technical experts who have more

17

experience at Wurtsmith than anyone on the Air

18

Force's team. The Air Force's summary denial of all

19

four IRAs is yet another example of its ongoing lack

20

21

of commitment to protect public health or the

22

environment. We have heard the data gap excuse in

the past from the Air Force only to have the Air

23

Force do a complete reversal when political pressure

24

25

was brought to bear.

I urge the Air Force to immediately

reconsider and to take steps to implement the four requested IRAs without further delay. The Air Force's decision to slipline only damaged portions of the storm sewer line is not just a reversal of prior commitments, it is yet another example of short-sighted and gross mismanagement on the part of the Air Force. With massive amounts of water pouring through the storm sewer, it is poor stewardship to wait until the next damage occurs before taking action.

It is also beyond disappointing to see the Air Force continuing to use computer-generated plume maps. The Air Force promised to stop using those maps at a Senate appeal hearing in August.

Tonight is the third time that this commitment has been violated in just over three months.

Finally, I ask the Air Force a simple question: DoD rules require that the EPA be a member -- an active member of the Base closure team. Why has the Air Force been excluded -- why has the Air Force excluded the EPA from involvement at Wurtsmith? Thank you.

MR. SUELTENFUSS: Okay. Mr. Anthony Spaniola, thank you very much for your comment there.

1 And let me just turn to the RAB. 2 brief response, or any commentary based on Mr. 3 Spaniola's comments? 4 CO-CHAIR WILLIS: Yeah, this is Steve Willis with the Air Force. 5 6 In regards to EPA participation in the 7 BCT process, the EPA has elected not to participate. 8 They have no official regulatory role under CERCLA 9 for Wurtsmith, and they bowed out of the BCT in 10 writing to the Air Force in, I believe, 2014, and 11 they've reiterated that in a letter to the Air Force 12 this summer. So, the EPA has elected not to 13 participate. 14 Now, instead of participating in the 15 BCT, EGLE and the Air Force and the EPA are doing 16 quarterly check-ins to talk about the activities at 17 Wurtsmith, and we'll continue to do so, and leverage 18 each other's experience, and bring to bear what we 19 can outside of the normal team to apply at 20 Wurtsmith. 21 Thank you, Steve. MR. SULTENFUSS: 22 Appreciate that. 23 And again, Mr. Spaniola, thank 24 you for your patience there. 25 Let me just see if there are any

further members of the public in person tonight who would like to share any comments -- further comments.

And RAB members, are you aware of anyone else who (inaudible) other than Mr. Spaniola?

Okay. Again, thank you very much for your patience here. Let's move to that next slide, if we could. I think it's our final slide. Yep, looks like our final slide.

Okay. Well -- so, before turning to the Co-Chairs for any closing remarks you may have, I wanted to thank Paula and her team for not only technical support to the Air Force, but also the logistical support for tonight. And let me just turn to our Co-Chairs for any closing remarks you may have. Mr. Mark Henry?

CO-CHAIR HENRY: I'd like to thank everyone who attended and I heard some good questions this evening. Hopefully, it will lead to discussions to help further this process.

MR. SUELTENFUSS: Steve, I think -one thing I neglected to do was report the results
of the big election. The results of the big
election are unanimous agreement that Mark should
continue to act as Community Co-Chair.

Thank you, Mark. 1 MEMBER WUSTERBARTH: 2 MR. SUELTENFUSS: And then over to 3 Steven Willis, then, for closing comments. CO-CHAIR WILLIS: I just wanted to 4 5 thank everyone for coming and participating this 6 evening. It's unfortunate that our remote 7 participation was fairly limited tonight. We'll continue to work on that and try and resolve that 8 9 for future meetings. But again, thanks for coming out, and thanks for everyone's input. 10 11 MR. SUELTENFUSS: All right. 12 thank you all to the RAB members. Thank you to the 13 members of the public who have joined in. We are 14 adjourned. Have a good night. Thank you. (Meeting adjourned.) 15 Minutes certified by: 16 17 18 19 20 /s/ Quentina Rochelle Snowden, CSR-5519 QRS Court Reporting, LLC 21 800.308.0068, 810.691.4226 Dated: December 16, 2022 22 23 2.4

25

,	5	84:21	AFCAT [1] - 50:16	26:3, 26:6, 86:11
		according [1] - 19:18	affect [1] - 61:12	airport [4] - 50:25,
'031 [1] - 17:6	50 [1] - 89:25	accurately [1] - 7:2	AFFF [6] - 93:19,	56:23, 57:2, 96:13
'23 [1] - 76:9	50,000-foot [1] - 76:19	acronym [1] - 9:15	99:18, 99:19, 100:1,	alert [7] - 4:19, 53:17,
'31 [1] - 14:20	500 [1] - 54:4	act [1] - 108:25	100:11, 102:1	54:15, 55:18, 70:25,
	550,000 [1] - 52:21	action [30] - 4:13,	affirmed [1] - 45:11	74:8, 80:8
1	590 [1] - 53:4	4:18, 14:16, 21:5,	age [1] - 88:19	Allen [6] - 96:10,
	5:00 [2] - 1:2, 3:1	21:11, 21:13, 32:21,	agency [3] - 74:7,	96:15, 96:19, 96:21,
/ s [1] - 109:19		33:1, 33:2, 33:5,	74:10, 84:25	97:2, 97:5
	6	33:7, 33:9, 33:13,	agency-owned [1] -	allow [2] - 54:5, 93:21
1		33:19, 33:22, 34:2,	84:25	almost [9] - 50:8,
1 [1] - 67:2	6 [1] - 9:13	34:22, 35:6, 35:13,	agenda [10] - 4:10,	52:4, 54:13, 63:7,
10 [2] - 67:2	6th [4] - 48:15, 76:6,	39:15, 41:5, 41:13,	4:23, 8:17, 13:19,	69:21, 78:21, 86:6,
10 [2] - 67.2 10th [1] - 24:13	90:24, 92:4	77:11, 78:6, 80:2,	13:21, 14:1, 23:8,	90:15, 95:11
11 [1] - 17:5	_	101:2, 103:8, 103:11, 103:13,	32:19, 82:5, 83:25	alter [1] - 62:25 alternative [1] - 15:22
11.16.22 [1] - 81:5	7	106:10	agendas [1] - 103:20	
11.10.22 [1] = 01.3	7 _[1] - 82:9	actions [9] - 4:16,	ago [9] - 28:21, 31:2, 38:14, 41:17, 45:11,	alternatives [3] - 15:4, 15:20, 39:2
11th [1] - 36:8	700,000 [1] - 53:5	4:18, 19:19, 24:24,	85:9, 85:15, 96:25,	amount [4] - 4:21,
12 [2] - 33:9, 88:19	77 [1] - 87:21	25:15, 25:19, 38:5,	99:6	61:2, 66:13, 66:16
12-month [1] - 36:15	7:10 [2] - 82:9, 82:10	39:10, 105:15	agree [1] - 91:23	amounts [1] - 106:7
126 [2] - 87:20, 87:21	7th [4] - 48:16, 76:6,	activated [1] - 54:2	agreement [3] - 23:13,	analysis [2] - 99:15,
12th [1] - 33:12	90:24, 92:4	active [1] - 106:19	27:20, 108:24	101:21
13th [1] - 36:19		actively [1] - 88:7	ahead [18] - 17:9,	analyzed [3] - 102:8,
14th [1] - 26:15	8	activities [4] - 48:5,	26:7, 26:11, 27:9,	102:10, 102:16
16 [2] - 1:1, 109:20		51:1, 51:6, 107:16	31:16, 33:20, 43:17,	analyzing [2] - 102:20,
18 [1] - 38:2	8,000 [1] - 18:25	actual [1] - 18:4	45:21, 55:9, 60:20,	102:24
18th [1] - 35:16	800.308.0068 [1] -	add [8] - 17:25, 20:8,	63:24, 64:16, 66:9,	Andrea [2] - 50:11,
195 [1] - 88:15	109:20	22:20, 35:9, 45:14,	74:2, 77:18, 83:7,	51:4
1970 [1] - 94:15	810.691.4226 [1] -	70:14, 76:2, 94:21	83:8, 90:9	announced [1] -
	109:20	added [9] - 31:13,	Al [1] - 101:2	105:13
2	8:00 [1] - 6:5	34:3, 38:13, 41:9,	Air [64] - 1:3, 3:24, 4:2,	announcement [1] -
0 44.0.44.4	8th [1] - 26:21	47:3, 70:12, 70:15,	4:5, 10:21, 12:11,	42:19
2 [2] - 11:2, 11:4	9	77:23, 96:24 addendum [5] - 41:21,	14:2, 14:6, 14:18,	answer [5] - 27:16,
2.3.1 [1] - 36:12 2.4.8 [1] - 11:24	9	49:2, 70:19, 73:16,	20:8, 20:9, 20:11, 22:9, 24:12, 25:8,	58:6, 59:23, 92:10, 99:3
2014 [1] - 107:10	9 [2] - 9:11, 9:12	89:18	27:1, 28:2, 28:17,	answers [3] - 64:18,
2017 [1] - 77:9	92 [2] - 35:13, 35:19	additional [7] - 14:14,	34:25, 35:18, 38:3,	67:14, 68:4
2017 [1] - 77.9 2021 [1] - 38:25	98 [3] - 35:14, 35:16,	41:11, 44:17, 60:7,	41:10, 44:25, 46:9,	Anthony [1] - 106:23
2021 [1] = 30.23 2022 [3] = 1:1, 88:5,	35:22	77:10, 101:17,	49:2, 50:16, 50:20,	ANTHONY [1] - 2:2
109:20		102:21	71:4, 71:5, 74:6,	anticipate [1] - 59:10
2023 [1] - 36:9	Α	address [11] - 4:22,	84:22, 84:24, 85:2,	anticipated [1] -
22nd [1] - 44:21	444 70.0-	5:11, 19:20, 43:19,	85:5, 90:8, 90:20,	102:18
245 [1] - 87:19	AAA [1] - 70:25	51:7, 61:14, 81:3,	93:6, 94:11, 95:4,	anticipating [1] - 72:5
26th [4] - 14:8, 41:20,	ability [1] - 34:25	81:21, 93:14, 94:3	95:8, 95:21, 98:12,	anyway [1] - 80:21
52:18, 53:9	able [20] - 3:12, 3:14,	addressed [1] - 103:9	100:3, 101:3,	AOR [1] - 41:6
27th [2] - 14:9, 41:20	3:16, 3:19, 5:20, 5:22, 7:23, 8:2, 8:9,	ADDRESSING [1] -	101:22, 105:13,	apologize [1] - 30:23
	8:18, 10:2, 11:25,	2:1	105:17, 105:18,	appeal [1] - 106:14
3	13:6, 18:3, 18:4,	adjourned [2] -	105:22, 105:25,	appear [1] - 19:3
	31:6, 60:13, 67:17,	109:14, 109:15	106:2, 106:7, 106:12, 106:13,	APPEARANCES [1] -
3 [1] - 67:3	97:15, 98:24	adjust [1] - 83:22	106:17, 106:20,	1:5
30 [3] - 79:19, 86:4,	absolute [1] - 100:4	adjustment [1] - 6:8	106:21, 107:5,	application [1] - 58:23
86:17	absolutely [2] - 55:14,	adjustments [1] - 82:24	107:10, 107:11,	applications [2] -
30-day [1] - 40:6 387 [1] - 52:20	55:23	advanced [1] - 13:10	107:15, 108:13	58:11, 58:23
301 [1] - 32.20	absorb [3] - 58:18,	advisory [1] - 81:21	aircraft [7] - 4:19,	apply [2] - 60:13,
4	70:4, 70:6	ADVISORY [1] - 1:1	53:17, 54:15, 55:18,	107:19
4	absorption [1] - 68:14	Aerostar [7] - 1:7,	70:25, 74:8, 80:8	appreciate [4] - 31:12,
40 [2] - 20:12, 89:25	access [5] - 63:8,	5:25, 14:22, 38:6,	airing [1] - 8:11	36:2, 89:6, 107:22
49 [2] - 87:22	69:5, 81:6, 84:17,	49:20, 49:21, 75:12	Airport [4] - 11:18,	appropriate [1] - 102:23
				102.20

approval [1] - 41:18 approved [1] - 36:17 April [1] - 70:22 aquifer [9] - 54:18, 66:24, 89:20, 89:22, 90:3, 90:5, 90:8, 90:10. 102:10 **AR** [2] - 42:21, 96:25 area [33] - 4:19, 14:19, 16:10, 16:12, 16:13, 17:4, 22:9, 22:11, 47:11, 50:13, 51:3, 53:17, 54:11, 54:15, 55:18, 57:13, 61:3, 63:5, 63:12, 63:19, 64:9, 66:13, 69:4, 70:25, 74:8, 80:8, 86:7, 86:12, 87:18, 88:6, 95:25, 96:3, 98:14 areas [6] - 14:17, 15:7, 28:9, 44:23, 60:3, 60:5 arms [6] - 102:3, 102:4, 102:5, 102:7, 102:11 Arnie [20] - 5:14, 6:2, 9:21, 12:13, 20:6, 21:10, 28:14, 28:17, 42:6, 47:16, 52:9, 55:8, 55:9, 75:16, 75:25, 92:20, 92:22, 93:9, 95:6, 100:23 **ARNIE** [1] - 1:11 Arnie's [1] - 42:6 arrive [1] - 15:22 article [1] - 99:21 aspects [1] - 101:19 assemble [1] - 21:13 assessment [9] -45:15, 45:17, 88:4, 88:6, 88:13, 96:18, 96:21, 97:1, 97:2 associated [4] -25:15, 43:4, 89:16, 100:1 assume [1] - 47:21 assumed [1] - 46:21 assumptions [2] -46:11, 46:13 asteric [1] - 39:24 ATI [1] - 51:10 atmosphere [1] - 6:11 atmospheric [1] -94:25 attempt [1] - 104:21 attended [1] - 108:18 attributable [2] -44:24, 95:4

Au [11] - 1:15, 1:18,

10:23, 31:12, 31:20, 61:4, 63:6, 64:3, 66:18, 69:17, 88:18 audience [1] - 12:15 audio [5] - 5:17, 7:20, 8:15, 19:18, 105:2 audio/visual [1] - 81:8 August [2] - 52:15, 106:14 Authority [4] - 11:18, 26:4, 26:6, 86:11 authorize [1] - 26:16 AV [2] - 7:16, 98:7 available [2] - 35:2, 49:6 avoid [2] - 6:16, 92:12 aware [4] - 24:11, 71:10, 74:6, 108:4 awareness [3] - 11:25, 32:22, 43:7

В

background [4] - 9:9. 12:12, 16:4, 72:19 backs [1] - 46:12 bag [1] - 99:21 bags [3] - 62:22, 68:18, 99:22 ballot [2] - 37:8, 37:11 barrier [3] - 58:20, 65:18, 68:19 barriers [2] - 62:16, 69:19 Base [18] - 1:3, 12:11, 23:17, 26:21, 29:1, 30:9, 32:10, 44:25, 56:7, 56:16, 57:7, 57:8, 59:2, 84:10, 84:12, 84:22, 84:24, 106:19 base [1] - 58:16 based [15] - 15:2, 16:14, 17:13, 17:22, 19:2, 19:10, 39:2, 45:5, 46:1, 46:8, 46:9, 72:13, 74:11, 80:16, 107:2 Bases [1] - 55:25 basing [1] - 72:19 basis [4] - 16:7, 22:6, 29:13, 69:18 Battelle [1] - 99:14 **BCT**[3] - 107:7, 107:9, 107:15 bear [2] - 105:24, 107:18 became [2] - 65:25, 85:11

becomes [1] - 68:12

began [1] - 38:25 begin [1] - 105:13 beginning [2] - 38:20, 50.6 begins [1] - 45:15 behind [1] - 103:2 belonged [2] - 85:5, 86:5 belongs [1] - 84:19 benefit [2] - 40:1, 90:3 bent [1] - 56:17 Bergman [1] - 22:25 best [3] - 8:16, 21:2, 90:6 Beth [14] - 11:11, 24:5, 24:8, 26:2, 71:21, 72:25, 73:1, 73:18, 73:24, 74:4, 75:4, 91:8, 91:24, 100:7 **BETH** [1] - 1:16 better [2] - 79:25, 91.10 between [2] - 79:2, 91:8 beyond [2] - 56:17, 106:11 big [2] - 108:23 bigger [1] - 46:24 BILL [1] - 1:18 **bill** [1] - 93:11 Bill [2] - 20:6, 20:8 biological [1] - 96:23 biota [3] - 93:23, 94:1, 96:24 bit [9] - 12:12, 12:16, 34:9, 38:17, 53:11, 58:18, 77:25, 83:16, 101:20 blood [2] - 31:11, 88:14 blue [3] - 16:24, 44:1, 44:9 board [1] - 25:13 **BOARD** [2] - 1:1, 2:1 Board [5] - 7:3, 23:9, 26:14, 36:14, 36:17 boards [1] - 81:21 Bond [3] - 14:22, 38:5, 102:19 BOND [72] - 1:7, 13:4, 38:7, 38:10, 40:3, 41:3, 41:15, 42:4, 42:18, 43:22, 45:24,

becoming [1] - 91:19

BECOS [2] - 50:2,

beds [1] - 14:21

52:5

55:1, 55:14, 56:2, 56:4, 56:11, 56:14, 56:21, 57:11, 57:16, 57:18, 59:9, 59:18, 60:2, 60:19, 60:25, 61:6, 61:11, 61:20, 62:4, 64:5, 64:23, 65:1, 65:7, 65:10, 65:16, 66:2, 66:7, 67:10, 67:13, 67:22, 68:16, 68:25, 70:11, 71:25, 72:8, 72:13, 76:2, 77:19, 77:22, 78:14, 78:22, 79:1, 79:14, 79:24, 80:7, 80:11, 80:15, 80:21, 96:9, 96:20, 97:7, 102:19 **bottom** [3] - 68:17, 76:3, 90:8 boundaries [1] - 86:2 **boundary** [1] - 86:12 bowed [1] - 107:9 break [8] - 12:13, 18:12, 19:20, 82:6, 82:9, 82:13, 102:4, 102:12 breaks [1] - 99:17 brief [6] - 4:11, 13:23, 33:15, 57:19, 104:11, 107:2 briefed [3] - 52:4, 52:14, 52:22 bring [2] - 75:2, 107:18 **brings** [1] - 67:1 broached [1] - 27:18 broken [1] - 78:2 brought [2] - 93:12, 105:24 Bryan [1] - 11:1 budget [1] - 34:25 $\pmb{\text{building}}~\texttt{[1]} \textbf{-} 54:9$ built [1] - 54:8 bullet [1] - 47:22 bunch [1] - 63:10 business [5] - 4:12, 26:6, 32:19, 37:20, 37:21 **BY** [1] - 1:19

C

C2R2 [3] - 31:2, 31:3, 31:7 calendar [1] - 33:13 candidacy [1] - 37:12 cannot [1] - 27:16 capacity [2] - 54:4, 92:15 capture [6] - 8:25, 56:17, 56:19, 57:10, 58:21, 62:7 captured [3] - 21:10, 103:5, 103:12 carbon [1] - 102:11 care [1] - 91:10 carpets [1] - 99:24 carry [1] - 8:14 case [3] - 19:22, 58:8, 85:22 cat [1] - 99:22 Cathy [14] - 10:15, 17:10. 22:1. 23:24. 26:13, 29:15, 31:16, 31:18, 36:3, 82:16, 84:4, 86:25, 88:24, 105:6 **CATHY** [1] - 1:11 Cathy's [1] - 83:5 caused [1] - 28:11 causing [2] - 15:8, 65:24 caveat [1] - 55:2 cellphone [1] - 105:9 central [4] - 27:13, 28:4, 28:6, 54:7 CERCLA [12] - 15:1, 15:18, 20:23, 20:25, 38:15, 38:19, 39:25, 40:3, 40:8, 40:14, 42:8, 107:8 certain [2] - 66:13, 66:16 certainly [2] - 87:11, 91:12 Certified [1] - 1:20 certified [1] - 109:16 cetera [2] - 41:2 Chair [16] - 1:9, 1:15, 4:4, 4:5, 4:14, 12:2, 33:17, 36:5, 36:9, 36:10, 36:13, 36:15, 36:16, 37:2, 37:12, 108:25 CHAIR [96] - 3:9, 3:16, 3:19, 3:22, 10:22, 14:12, 17:12, 17:20, 18:8, 18:11, 18:19,

19:2, 19:6, 19:12,

21:7, 22:19, 27:8,

27:10, 27:19, 28:4,

28:6, 28:13, 28:22,

29:6, 34:17, 37:23,

37:25, 38:9, 40:21,

40:23, 41:14, 41:24,

48:21, 49:16, 51:11,

51:15, 51:18, 51:25,

42:17, 47:8, 48:2,

19:16, 20:14, 21:4,

46:6, 47:12, 47:14,

47:19, 47:25, 48:11,

48:14, 52:11, 54:22,

52:2, 56:5, 56:13, 56:15, 57:9, 57:14, 59:1, 59:10, 59:25, 60:10, 60:11, 61:15, 61:21, 65:13, 66:10, 67:12, 67:16, 68:6, 69:10, 72:15, 73:12, 75:4, 75:8, 75:21, 77:4, 82:7, 84:15, 85:4, 85:16, 85:21, 86:1, 86:10, 89:21, 91:12, 91:20, 93:1, 94:7, 94:20, 95:1, 95:12, 95:18, 95:24, 96:2, 98:15, 98:22, 99:14, 101:5, 101:17, 103:1, 107:4, 108:17, 109:4 Chairs [15] - 21:12, 32:22, 32:25, 33:11, 37:20, 37:21, 43:7, 76:12, 76:13, 76:25, 77:11, 82:6, 103:7, 108:11, 108:15 **challenges** [1] - 56:25 chance [3] - 30:10, 88:22, 89:11 change [9] - 22:11, 45:23, 46:4, 46:25, 51:8, 51:19, 51:21, 55:5, 86:23 changed [3] - 45:9, 45:13, 47:4 changes [5] - 46:17, 47:10, 49:13, 73:14, 93:13 chart [5] - 34:14, 34:15, 34:18, 70:12, 77:23 charts [1] - 76:15 check [19] - 5:19, 7:24, 8:2, 8:9, 9:25, 12:17, 13:2, 30:2, 36:23, 82:13, 82:18, 82:20, 83:1, 83:20, 97:9, 97:14, 97:21, 104:16, 107:16 check-ins [1] - 107:16 checklist [2] - 8:22, 17:21 chemicals [3] - 94:16, 99:8, 99:9 Cherokee [1] - 50:10 Christmas [1] - 48:25 circling [1] - 42:6 clarification [1] - 99:2 clarify [2] - 35:15, 84:7 Clark's [16] - 17:16, 20:1, 20:10, 20:15, 20:18, 44:10, 52:13,

60:14, 84:18, 85:2, 85:11, 86:3, 86:16, 88:3, 94:2 clay [3] - 59:11, 61:22, 62:15 clays [1] - 58:18 clean [2] - 15:10, 15:14 cleaner [1] - 62:3 cleaning [2] - 58:3, 58:10 cleanup [5] - 15:6, 15:16, 39:9, 81:22 clear [2] - 23:21, 58:9 clearly [1] - 6:15 clinics [1] - 88:6 clogged [1] - 62:24 close [1] - 57:3 closed [9] - 33:6, 34:6, 34:13, 34:20, 34:23, 35:1, 35:4, 42:23, 91:19 closer [2] - 62:6, 62:17 closing [3] - 108:11, 108:15, 109:3 closure [1] - 106:19 **CO** [96] - 3:9, 3:16, 3:19, 3:22, 10:22, 14:12. 17:12. 17:20. 18:8, 18:11, 18:19, 19:2, 19:6, 19:12, 19:16, 20:14, 21:4, 21:7, 22:19, 27:8, 27:10, 27:19, 28:4, 28:6, 28:13, 28:22, 29:6, 34:17, 37:23, 37:25, 38:9, 40:21, 40:23, 41:14, 41:24, 42:17, 47:8, 48:2, 48:21, 49:16, 51:11, 51:15, 51:18, 51:25, 52:2, 56:5, 56:13, 56:15, 57:9, 57:14, 59:1, 59:10, 59:25, 60:10, 60:11, 61:15, 61:21, 65:13, 66:10, 67:12, 67:16, 68:6, 69:10, 72:15, 73:12, 75:4, 75:8, 75:21, 77:4, 82:7, 84:15, 85:4, 85:16, 85:21, 86:1, 86:10, 89:21, 91:12, 91:20, 93:1, 94:7, 94:20, 95:1, 95:12, 95:18, 95:24, 96:2, 98:15, 98:22, 99:14, 101:5, 101:17, 103:1, 107:4, 108:17, 109:4

Co [31] - 1:9, 1:15, 4:4, 4:5, 4:14, 12:2, 21:12, 32:22, 32:25, 33:11, 33:17, 36:5, 36:9, 36:10, 36:13, 36:15, 36:16, 37:2, 37:12. 37:20. 37:21. 43:7. 76:12. 76:13. 76:25, 77:11, 82:6, 103:7, 108:11, 108:15, 108:25 CO-CHAIR [96] - 3:9, 3:16, 3:19, 3:22. 10:22, 14:12, 17:12, 17:20, 18:8, 18:11, 18:19, 19:2, 19:6, 19:12, 19:16, 20:14, 21:4, 21:7, 22:19, 27:8, 27:10, 27:19, 28:4, 28:6, 28:13, 28:22, 29:6, 34:17, 37:23, 37:25, 38:9, 40:21, 40:23, 41:14, 41:24, 42:17, 47:8, 48:2, 48:21, 49:16, 51:11, 51:15, 51:18, 51:25, 52:2, 56:5, 56:13, 56:15, 57:9, 57:14, 59:1, 59:10, 59:25, 60:10, 60:11, 61:15, 61:21, 65:13, 66:10, 67:12, 67:16, 68:6, 69:10, 72:15, 73:12, 75:4, 75:8, 75:21, 77:4, 82:7, 84:15, 85:4, 85:16, 85:21, 86:1, 86:10, 89:21, 91:12, 91:20, 93:1, 94:7, 94:20, 95:1, 95:12, 95:18, 95:24, 96:2, 98:15, 98:22, 99:14, 101:5, 101:17, 103:1, 107:4, 108:17, 109:4 Co-Chair [16] - 1:9, 1:15, 4:4, 4:5, 4:14, 12:2, 33:17, 36:5, 36:9, 36:10, 36:13, 36:15, 36:16, 37:2, 37:12, 108:25 Co-Chairs [15] -21:12. 32:22. 32:25. 33:11, 37:20, 37:21, 43:7, 76:12, 76:13, 76:25, 77:11, 82:6, 103:7, 108:11, 108:15 colleagues [1] - 5:25 collect [4] - 17:2, 19:4, 45:17, 72:3

collected [9] - 44:16, 44:19, 45:4, 45:6, 45:8, 46:9, 46:12, 47:2, 47:9 collecting [2] - 19:13, 72:18 collection [4] - 44:2, 45:15, 69:13, 79:8 $\textbf{combined} \ [1] \textbf{ - } 53\text{:}4$ coming [20] - 16:12, 17:7, 43:11, 48:25, 58:7, 58:15, 60:5, 61:12, 61:16, 61:17, 61:24, 69:13, 71:11, 81:1, 94:10, 96:12, 96:14, 99:12, 109:5, 109:9 commands [1] - 9:4 comment [21] - 5:4, 39:22, 39:23, 39:25, 40:7, 40:20, 42:10, 42:16, 49:4, 82:4, 83:25, 96:8, 98:11, 100:18, 101:12, 101:13, 103:15, 103:19, 104:14, 104:20. 106:24 commentary [1] -107:2 comments [16] -24:13, 31:10, 35:5, 40:10, 40:13, 73:6, 88:25, 89:16, 97:22, 103:24, 104:2, 104:5, 107:3, 108:2, 108:3, 109:3 comments/ questions [1] - 84:3 commercial [1] -99:19 commitment [2] -105:20, 106:15 commitments [1] -106:5 common [1] - 74:19 communication [3] -25:24, 50:22, 97:11 communications [1] -83:5 **COMMUNITY** [1] - 1:8 community [8] -14:14, 23:9, 23:14, 40:4, 40:7, 40:15, 40:17, 43:4 Community [26] - 4:2, 4:4, 4:14, 10:19, 12:2, 33:16, 36:4, 36:7, 36:9, 36:10, 36:13, 36:14, 36:15,

36:16, 36:17, 36:18,

36:24, 36:25, 37:1, 37:7, 37:9, 37:10, 37:12, 37:15, 55:8, 108:25 companies [1] - 30:9 compare [1] - 75:20 comparison [1] -87.24 complete [7] - 39:1, 44:1, 44:3, 44:10, 44:12, 45:16, 105:23 completed [2] - 29:12, 38:21 completely [1] - 17:3 compliance [1] -25:23 components [2] -46:20, 93:19 compound [1] - 56:8 compounds [3] -99:11, 99:16, 99:25 comprehensive [1] -24:12 computer [3] - 9:5, 13:9, 106:12 computer-generated [1] - 106:12 concentration [2] -16:20, 17:7 concentrations [2] -17:13, 53:24 concept [3] - 41:17, 44:7, 65:3 conceptual [8] -20:22, 55:4, 57:21, 63:15, 80:17, 93:13, 93:20, 94:8 concern [10] - 33:24, 51:2, 51:7, 65:25, 74:10, 75:5, 75:9, 79:20, 89:8, 100:13 concerned [4] - 27:2, 75:2, 80:12, 80:13 concerns [3] - 89:13, 100:9, 101:20 conclude [1] - 6:4 conclusions [1] -24:23 concurrence [1] -90:16 concurrent [1] - 42:1 concurring [2] - 25:7, 25:9 conductivity [1] - 67:2 conduit [1] - 50:23 confused [1] - 30:24 Congressman [5] -22:12, 22:13, 22:14, 22:25 conjunction [1] -

73:12 connected [14] - 4:25, 5:13, 6:1, 10:1, 11:10, 82:14, 82:19, 82:22, 83:1, 92:16, 92:19, 97:11, 97:14, 102.7 connections [1] -30:11 consent [1] - 18:2 consider [2] - 20:9, 81:9 considerably [1] -94:1 consideration [1] -20:3 considered [1] - 37:1 constructed [1] - 14:7 contact [4] - 62:12, 63:20, 70:6, 81:23 contacted [1] - 36:18 contaminants [3] -88:15, 98:14, 99:5 contaminated [1] -85:14 contamination [10] -17:14, 74:9, 74:16, 75:11, 75:15, 84:9, 84:11, 90:7, 94:5, 94:23 content [1] - 18:15 continual [1] - 28:10 continuation [1] -79:23 continue [12] - 28:8, 37:12, 44:22, 49:23, 51:17, 70:14, 70:22, 78:24, 98:6, 107:17, 108:25, 109:8 continued [2] - 78:2, 83:13 continues [1] - 22:4 continuing [2] - 24:3, 106:12 continuously [1] contract [10] - 49:13, 49:21, 50:2, 50:4, 50:7. 50:11. 50:15. 51:17, 51:18, 52:5 contracted [1] - 51:20 contraction [1] -55:12 contractions [1] -18:5 contractor [3] - 49:1, 50:1, 51:10 contractor's [1] -101:7 contractors [1] -

50:14 control [2] - 53:24, 70.2 conversation [2] -84:2. 100:9 convey [1] - 98:25 conveyance [1] - 28:8 copied [1] - 16:5 copy [1] - 33:2 correct [14] - 7:11, 19:12, 19:16, 42:10, 42:17, 45:24, 47:25, 54:25, 61:2, 64:4, 66:10, 101:22, 102:15, 102:20 correctly [1] - 84:14 correlate [1] - 19:24 correspondence [1] -73:5 count [1] - 92:11 couple [8] - 22:4, 31:4, 38:14, 39:12, 39:17, 45:10, 45:16, 70:12 course [5] - 40:15, 59:6, 59:13, 67:7, 84:8 Court [3] - 6:18, 8:24, 109.19 COURT [8] - 3:11, 3:15, 3:21, 5:23, 7:25. 8:4. 8:6. 8:10 Creek [2] - 29:18, 93:4 creek [2] - 66:14, 66:15 critical [1] - 70:3 cross [1] - 104:25 crucial [1] - 43:18 cruise [1] - 26:10 cruising [1] - 26:8 **CSM** [11] - 45:9, 45:11, 45:23, 45:25, 46:7, 46:11, 46:17, 46:22, 46:25, 47:3, 47:4 CSR-5519 [2] - 1:20, 109:19 CTI [1] - 50:2 CTS [2] - 54:12, 54:14 CUMMINGS [23] -1:17, 11:16, 26:12, 27:16, 64:17, 64:25, 65:2, 65:21, 66:3, 68:9, 68:22, 69:9, 70:9, 84:5, 85:1, 85:7, 85:19, 85:23, 86:9, 86:18, 99:1, 100:17, 103:10 Cummings [10] -

11:14, 26:10, 63:24,

64:15, 64:16, 68:8,

84:4, 84:6, 99:2, 100:18 current [5] - 5:17, 17:3, 19:9, 55:1, 74:7 cut [1] - 17:15 cutting [1] - 65:11 D daily [1] - 50:22 damage [1] - 106:9 damaged [2] - 27:20, 106:3 **Dan** [1] - 21:19 **Daniel** [1] - 10:6 **DANIEL** [1] - 1:10 dashed [1] - 16:24 data [53] - 15:3, 16:25,

17:1, 17:4, 17:23, 17:25, 19:2, 19:3, 19:4, 19:10, 19:14, 24:18, 24:19, 24:22, 25:1. 25:3. 25:10. 25:17, 25:21, 44:2, 44:16. 44:17. 44:18. 45:3. 45:5. 45:7. 45:15, 45:18, 45:23, 46:1, 46:2, 46:3, 46:8, 46:9, 46:11, 46:15, 47:2, 48:4, 60:14, 69:13, 72:2, 72:6, 79:4, 79:8, 80:16, 90:2, 90:14, 90:17, 91:2, 95:3, 105:21 date [6] - 45:8, 71:8, 78:1, 86:19, 86:20, 86:22 dated [1] - 109:20 dates [1] - 76:4 Dave [3] - 41:15, 63:25, 89:2 David [6] - 18:21, 21:23, 63:23, 71:21, 88:25, 92:6 david [2] - 10:13, 71:21 **DAVID** [1] - 1:10 debris [2] - 62:19, 62:23 December [11] -24:18, 25:5, 32:4, 33:12, 45:3, 48:14, 48:15, 73:8, 76:6, 109:20 decided [2] - 48:20, 81:15 decision [5] - 39:5, 40:12, 59:22, 106:3

decisions [1] - 105:13 deer [1] - 88:3 define [1] - 89:23 definitely [2] - 84:15, 84.23 **definitive** [1] - 100:3 delay [1] - 106:2 delegating [1] - 59:15 delineate [2] - 16:17, demonstrate [2] -60:12, 75:14 denial [2] - 94:19, 105:18 Denise [1] - 11:1 department [1] - 30:3 **Department** [7] - 11:2, 11:4, 11:6, 11:11, 24:6, 84:20, 87:16 deployed [1] - 59:21 deposition [1] - 94:25 described [1] - 62:21 describes [1] - 40:25 **descriptive** [1] - 35:10 design [6] - 39:14, 55:3, 69:18, 71:14, 75:1, 78:5 designed [1] - 63:14 detail [2] - 12:12, 55:21 detailed [2] - 13:24, 38:24 detections [3] - 87:22, 87:23 detects [1] - 87:22 determine [2] -101:24, 102:17 determines [1] - 69:20 determining [1] -24:16 deterrent [1] - 19:22 developed [1] - 46:7 **DHHS** [1] - 87:3 dialogue [1] - 6:11 different [12] - 19:14. 22:17, 46:19, 46:21, 46:23, 55:17, 85:10, 99:6, 99:7, 99:9, 99.10 differing [1] - 6:21 difficult [2] - 20:16, 63:1 dim [2] - 12:16, 83:8 direct [1] - 50:15 directed [2] - 61:18,

disappointing [2] -105:14, 106:11 discharge [9] - 28:11, 29:1. 30:8. 61:4. 61:12, 64:2, 64:11, 75:10. 75:20 discharged [1] - 28:25 discharges [2] -27:22, 29:25 discharging [2] -61:13, 66:14 discuss [4] - 6:23, 22:6, 37:22, 45:4 discussed [6] - 18:9, 24:23, 36:6, 43:11, 76:13, 85:24 discussion [13] - 7:5, 13:25, 27:1, 27:11, 33:14, 55:11, 74:17, 83:13, 83:16, 84:1, 92:22, 103:14, 103:21 discussions [6] - 7:3, 33:8, 54:19, 90:1, 93:3, 108:20 display [1] - 13:3 displaying [1] - 42:8 displeasure [1] - 81:7 disposable [1] - 69:8 dispute [3] - 92:24, 92:25, 93:3 disruptive [1] - 83:23 distance [1] - 26:22 **distribute** [1] - 18:15 distribution [1] -22:21 District [2] - 11:2, 11:4 disturbing [1] - 68:23 Ditch [8] - 4:20, 14:23, 53:19, 57:20, 59:4, 64:3, 66:12, 66:15 ditch [15] - 58:15, 58:16, 58:21, 59:3, 59:8, 59:14, 59:16, 62:2, 62:25, 64:7, 66:17, 66:24, 67:3, 67:18, 67:21 division [3] - 25:13, 74:13, 74:14 **DNR** [1] - 88:1 document [9] - 6:23, 40:25, 43:12, 70:20, 71:4, 76:15, 76:23, 77:7, 77:14 documentation [1] -17:18 documented [1] -17:21 documents [5] - 16:4, 20:21, 39:5, 40:17,

62:1

direction [6] - 46:19,

director [1] - 25:13

93:21, 94:9

56:10, 91:11, 93:14,

41:16, 96:25

42:8 **DoD** [2] - 101:4, 106:18 dog [1] - 99:22 donations [1] - 85:12 done [17] - 17:3, 19:6, 28:1, 29:10, 39:16, 52:5, 52:18, 53:23, 55:16, 63:13, 71:13, 72:6, 72:9, 72:17, 79:11, 101:21 door [1] - 91:16 down [19] - 16:25, 53:19, 61:4, 61:12, 62:6, 62:17, 62:18, 62:19, 62:24, 63:9, 63:20, 64:9, 66:22, 67:23, 68:2, 78:2, 84:18, 99:17 downstream [2] -54:24, 64:9 draft [1] - 76:14 drafted [1] - 77:13 drafts [2] - 77:3, 77:5 draining [1] - 54:3 dramatically [1] - 67:4 drawn [1] - 57:12 drilling [1] - 72:18 drinking [1] - 98:23 **Driscol** [3] - 1:6, 4:6, 51:20 drive [1] - 90:15 **Drive** [1] - 27:14 **DRMO**[3] - 14:19, 16:10, 16:12 dropping [1] - 95:16 drops [1] - 65:6 dug [1] - 66:24 dune [1] - 14:21 during [8] - 5:8, 12:13, 13:25, 16:14, 33:8, 34:10, 46:10, 59:15 dwell [2] - 70:2, 70:8

Ε

e-mail [1] - 81:4
e-mailed [1] - 87:7
early [2] - 6:25, 20:24
ears [1] - 50:16
easier [1] - 6:19
easily [2] - 61:25, 69:2
east [5] - 41:21, 44:23, 72:3, 89:17, 93:5
east/west [1] - 86:14
Eastern [1] - 6:5
easy [3] - 13:17, 68:23, 98:19
eat [5] - 88:2, 93:16, 93:18, 95:20, 96:19

edge [1] - 86:6 effect [1] - 75:20 effective [4] - 58:24, 59:12, 60:16 effectiveness [4] -57:23, 58:1, 58:4, 60:12 efficiently [1] - 6:14 effluent [1] - 29:18 **EGLE** [27] - 1:16, 22:5, 24:9, 24:15, 24:24, 25:12, 25:18, 28:16, 42:1, 45:2, 46:8, 48:3, 49:4, 49:10, 54:19, 71:6, 72:25, 73:2, 74:6, 75:5, 75:13, 76:5, 89:8, 89:10, 91:13, 100:8, 107:15 eight [3] - 13:20, 50:8, 102:11 either [5] - 16:21, 28:25, 33:9, 37:25, 39.21 elaborate [1] - 69:11 elected [2] - 107:7, 107:12 election [5] - 4:14, 22:8, 36:5, 108:23, 108:24 electronically [1] - 9:7 element [2] - 101:12, 103:20 eligible [1] - 88:19 eliminate [3] - 27:22, 35:22, 64:2 end [12] - 4:21, 5:10, 15:13, 16:25, 32:4, 32:6, 49:15, 69:16, 84:22, 93:15, 95:10, 96:13 ended [1] - 79:9 Energy [2] - 11:12, engage [1] - 83:13 engineer [1] - 26:16 engineering [1] -26:17 enroll [1] - 88:22 enrollees [1] - 88:21 enrolling [1] - 88:7 ensure [1] - 9:16 entering [1] - 13:20 Environment [2] -11:12, 24:6 environment [1] -105:21 environmental [2] -

ecological [2] - 15:8,

94:3

107:7, 107:12, 107:15 **equipment** [1] - 68:2 ERIC [1] - 1:15 Eric [5] - 10:23, 30:24, 31:17, 31:18, 88:17 **ESI** [2] - 20:25, 46:10 essentially [2] - 102:3, 104:7 established [1] - 33:7 et [2] - 41:2 Etten [12] - 18:24, 29:17, 44:11, 44:24, 47:23, 53:1, 53:25, 54:11, 72:4, 89:17, 93:4, 93:5 evaluate [6] - 15:20, 57:23, 58:13, 67:17, 67:19, 75:17 evaluated [2] - 39:6, 60:1 evaluates [1] - 39:2 evaluating [6] - 16:23, 19:8, 29:2, 58:4, 58:10, 64:12 evaluation [4] - 14:18, 17:22, 67:11, 100:6 evaluations [1] -39:10 Eve [1] - 51:24 evening [3] - 9:4, 108:19, 109:6 event [2] - 14:13, 69:3 everywhere [1] -99:22 evidence [1] - 100:5 exacerbate [2] - 74:8, 74:15 exact [1] - 71:7 exactly [1] - 97:1 example [3] - 34:1, 105:19, 106:5 exceed [1] - 87:23 exchange [1] - 6:11 excluded [2] - 106:20, 106:21 excuse [2] - 14:10, 105:21 existing [2] - 37:15, 54.7 expand [1] - 88:10 expanded [2] - 35:7, 100:19

81:22, 82:1

EPA [6] - 106:18,

106:21, 107:6,

expectation [2] -23:15, 73:13 expedited [1] - 39:13 experience [3] -72:21, 105:17, 107:18 experts [2] - 22:5, 105:16 **expired** [1] - 36:10 **explained** [1] - 32:10 **explaining** [1] - 47:15 exposure [3] - 88:4, 88:6, 88:12 expressed [2] - 36:21. 37:16 extends [1] - 17:1 extension [1] - 50:21 extensively [1] - 59:8 extent [2] - 15:13, 97:4 extraction [5] - 41:7, 56:16, 56:22, 57:1, 57:3 extreme [2] - 81:7, 81:16 eyes [1] - 50:16 F

F41 [1] - 57:4 fabric [2] - 68:17, 68:20 faces [1] - 3:5 facilitator [3] - 4:6, 51:14, 51:21 fact [1] - 75:14 factoring [1] - 72:15 faded [1] - 46:20 failure [2] - 81:5, 81:10 fair [1] - 85:19 fairly [3] - 50:25, 69:6, 109:7 fall [1] - 71:19 far [6] - 17:1, 30:1, 45:8, 46:12, 60:2, 86:15 farm [2] - 16:2, 25:23 fashion [3] - 39:13, 73:10, 81:17 feasibility [6] - 15:3, 15:19, 39:1, 39:7, 60:1, 78:4 February [4] - 48:8, 48:9, 48:10, 50:6 feed [2] - 5:17, 19:18 feedback [1] - 91:14 fence [2] - 20:1, 57:4 **few** [7] - 3:5, 4:1, 31:10, 34:15, 36:6,

field [14] - 20:19, 25:1, 25:17, 44:2, 44:22, 48:4, 70:22, 72:9, 72:16, 78:9, 78:15, 78:19, 79:2, 98:16 figure [2] - 53:14, 67:18 figures [2] - 96:11 fill [1] - 46:15 filter [1] - 61:23 filtering [1] - 68:13 filters [1] - 65:14 final [7] - 15:4, 15:12, 15:23, 55:3, 79:16, 108:8, 108:9 finalized [5] - 18:13, 55:22, 57:22, 73:15, 73:23 finally [1] - 106:17 fingerprinting [6] -98:13, 99:5, 99:12, 100:15, 100:20, 101:1 fingers [1] - 105:1 finish [3] - 49:22, 78:24, 80:24 finished [2] - 79:4, 87.17 fire [2] - 86:7, 86:12 firearm [1] - 87:25 first [13] - 5:6, 5:12, 32:2, 38:3, 52:13, 59:19, 64:19, 72:20, 73:22, 81:3, 84:4, 92:17, 97:10 first-hand [1] - 72:20 fish [4] - 93:16, 93:18, 95:21, 96:19 fishing [1] - 20:1 five [14] - 6:22, 7:18, 28:21, 42:14, 42:19, 42:22, 42:23, 42:25, 43:3, 43:5, 77:24, 80:22, 80:25, 81:1 five-year [11] - 42:14, 42:19, 42:22, 42:23, 42:25, 43:3, 43:5, 77:24, 80:22, 80:25, 81:1 fix [1] - 61:9 flight [1] - 61:16 floating [1] - 69:24 flooding [2] - 27:22, 30:10 flourine [2] - 101:23, 102:16 flow [22] - 58:20, 59:4, 59:11, 62:25, 63:2,

64:6, 65:5, 65:11,

expansion [2] - 54:5,

expect [3] - 69:2, 69:6,

54:9

65:17, 65:20, 65:23, 65:25, 66:13, 68:1, 68:19, 69:12, 69:13, 69:17, 69:18, 69:25, flow-through [5] -58:20. 59:11. 63:2. 64:6. 68:19 flowing [2] - 65:11, 94:9 flux [1] - 67:17 FNB [1] - 23:4 **FND** [1] - 50:18 focus [2] - 17:15, 82:1 focusing [1] - 84:8 folks [6] - 7:16, 8:20, 74:17, 82:17, 83:6, follow [4] - 8:18, 26:12, 59:5, 71:12 followed [1] - 78:4 following [3] - 33:1, 33:11, 76:13 food [1] - 99:22 foot [2] - 61:3, 61:17 Force [59] - 1:3, 3:24, 4:2, 4:5, 10:21, 12:11, 14:2, 14:6, 14:18, 20:9, 20:11, 22:10, 24:12, 27:1, 28:2, 28:17, 34:25, 35:18, 38:3, 41:11, 44:25, 46:9, 49:2, 50:20, 71:4, 71:5, 74:6, 84:22, 84:24, 85:2, 85:5, 90:9, 90:20, 93:6, 94:11, 95:4, 95:8, 95:21, 98:12, 100:3, 101:3, 101:23, 105:13, 105:22, 105:23, 105:25, 106:7, 106:12. 106:13. 106:17. 106:20. 106:21. 107:5. 107:10, 107:11, 107:15, 108:13 Force's [5] - 25:8, 50:16, 105:18, 106:3 forcing [1] - 67:20 Forest [9] - 11:21, 11:22, 84:19, 86:5, 86:12, 86:16, 93:18, 94:13 Forestry [2] - 85:3, 85:11 forgot [1] - 66:5 formal [2] - 17:21, 40:7 former [9] - 1:3, 12:10,

17:6, 23:17, 25:16, 32:10, 44:25, 84:22, 84.24 formulation [1] -102:2 forth [3] - 72:18, 73:5. 99:24 forward [15] - 6:24, 8:19, 11:25, 20:4, 23:13, 45:5, 49:19, 50:7, 73:9, 83:7, 89:13, 91:5, 93:6, 97:19, 100:16 four [10] - 6:6, 6:20, 14:17, 27:1, 33:6, 61:3, 61:17, 105:14, 105:19, 106:1 four-foot [2] - 61:3, 61:17 Freeman [1] - 26:16 frequency [1] - 41:1 frequently [1] - 50:25 front [2] - 37:7, 81:19 FS [1] - 15:19 FT002 [4] - 44:10, 52:13, 54:20, 54:25 full [6] - 4:10, 13:12, 38:18, 66:23, 77:2, 90:18 functional [2] - 31:20, 102:2 fundamental [1] -90:13 funds [1] - 31:4 future [11] - 14:15, 17:24, 28:10, 39:24, 54:5, 58:11, 59:22, 76:4, 102:17, 103:3, 109.9

G

GAC [1] - 70:5 Gaines [2] - 9:18, 93:11 **GAINES** [4] - 1:9, 9:19, 93:11, 94:12 gaining [3] - 59:4, 59:5, 59:7 galen [1] - 4:6 Galen [2] - 1:6, 51:20 galleries [1] - 75:6 gallery [1] - 75:9 gallons [9] - 52:20, 52:21, 53:5, 54:4, 64:21, 65:6, 65:7, 65.19 Gantt [3] - 34:17, 34:18, 76:15 gap [4] - 16:25, 19:4,

24:19, 46:15 gather [1] - 90:14 gathering [1] - 60:15 general [3] - 26:23, 26:24, 27:4 generate [1] - 102:12 generated [1] - 106:12 geologic [2] - 96:5, geologists [1] - 94:14 geology [1] - 47:10 geotextile [2] - 68:17, 68:20 gift [1] - 85:12 given [2] - 31:1, 90:3 glitches [1] - 21:23 goal [2] - 58:8, 64:11 gosh [1] - 35:5 GOVERNMENT [1] -1:14 Government [4] -10:20, 24:4, 24:5, 37:9 grab [2] - 29:4, 29:7 grant [3] - 31:2, 31:3, 31.7 gravel [3] - 65:17, 69:23 gray [2] - 44:1, 44:3 Great [2] - 11:12, 24:6 great [8] - 14:12, 35:10, 53:6, 56:1, 72:22, 87:13, 92:1, greater [1] - 99:11 greatly [1] - 40:1 **GREG** [1] - 1:12 Greg [4] - 10:4, 21:16, 21:19 gross [1] - 106:6 ground [5] - 6:7, 7:6, 50:17, 50:21, 90:3 groundwater [19] -18:23, 46:17, 55:17, 57:25, 58:14, 58:15, 58:17, 59:12, 59:14, 59:17, 62:7, 66:12, 66:14, 67:8, 68:24, 90:6, 94:9, 94:24, 102:13 Group [1] - 22:4 groups [1] - 102:3 guess [4] - 75:1,

54:17, 105:21

gaps [3] - 24:18,

78:23, 92:3, 92:5, 96:10

Н

half [2] - 52:4, 63:7 hand [6] - 9:6, 9:11, 37:4, 72:20, 83:14, 92:11 hands [1] - 37:5 hard [1] - 53:15 harmful [1] - 19:23 Harrisville [2] - 16:2, 25:23 haste [1] - 90:15 hate [2] - 49:12, 103:1 head [4] - 5:5, 69:15, 96:22, 104:3 heading [1] - 61:4 heads [1] - 95:22 health [2] - 81:24, 105:20 Health [4] - 11:2, 11:4, 11:6, 87:16 hear [22] - 3:12, 3:14, 3:16, 3:19, 5:20, 5:22, 7:23, 8:2, 8:9, 8:10, 21:11, 38:7, 82:14, 82:17, 82:22, 83:1, 83:20, 83:21, 84:14, 97:15, 97:20, 105:10 heard [4] - 74:11, 92:22, 105:21, 108:18 hearing [4] - 82:21, 83:6, 98:1, 106:14 held [3] - 1:4, 80:1, 81:15 Helen [2] - 93:15, 95.11 hello [1] - 3:9 help [1] - 108:20 helpful [2] - 34:19, 42:9 HENRY [36] - 1:9, 3:9, 3:16, 3:19, 3:22, 27:8, 27:10, 28:4, 28:13, 34:17, 37:25, 40:23, 41:14, 56:5, 56:13, 56:15, 57:9, 57:14, 59:1, 59:10, 60:10, 61:15, 61:21, 66:10, 67:12, 67:16, 68:6, 86:1, 86:10, 89:21, 94:20, 95:12, 95:18, 101:17,

103:1, 108:17

66:8, 108:16

Henry [4] - 3:8, 37:2,

Henry's [1] - 36:7 hi [1] - 31:17 high [4] - 16:20, 26:8, 27:2, 55:11 highest [1] - 53:24 highlight [1] - 70:24 highlighted [1] - 34:5 highly [1] - 105:16 hold [1] - 5:9 holding [1] - 25:10 holes [1] - 90:17 holidays [1] - 48:25 homes [1] - 87:19 honestly [1] - 7:1 honesty [1] - 93:8 hook [1] - 31:4 hooked [1] - 31:6 hope [5] - 50:19, 58:8, 60:11, 71:5, 73:7 hopefully [1] - 108:19 hopes [1] - 31:7 hoping [2] - 71:8, 74:23 horrible [1] - 7:21 host [2] - 14:6, 49:24 hosting [3] - 49:21, 50:5, 50:7 hotspot [2] - 16:13, 16:17 hotspots [1] - 15:7 hour [1] - 64:21 House [1] - 22:16 **human** [1] - 15:8 Human [2] - 11:6, 87:16 hundred [1] - 99:16 hunters [2] - 19:23, 88.2 hunting [2] - 20:1, 87:25 hydraulic [1] - 67:1 hydraulically [1] -53:24 **hydro** [1] - 96:5

ı

idea [1] - 43:11 ideas [1] - 6:12 identical [1] - 54:13 identification [1] -38:20 identified [4] - 14:18, 20:24, 28:10, 62:11 identifies [1] - 20:25 identify [3] - 15:20, 15:21, 60:4 identifying [1] - 99:7 illegal [1] - 30:11

78:11, 79:10, 79:15

guides [1] - 20:23

guys [9] - 38:7, 46:3,

70:20, 72:1, 76:4,

gun [1] - 100:4

imagine [1] - 68:14 immediately [2] -61:17, 105:25 impact [2] - 21:1 impacted [2] - 18:24, 23:17 impacting [2] - 32:10, 32:12 impacts [1] - 44:24 impediment [1] implement [2] - 59:13, 106:1 implementation [4] -15:24. 66:23. 71:18. 80:23 important [3] - 12:1, 101:12, 103:19 impossible [1] -101:24 in-person [1] - 1:4 inaudible [70] - 3:7, 3:24, 4:1, 4:2, 4:23, 13:11, 13:13, 15:2, 15:6, 15:7, 15:14, 15:17, 16:24, 17:3, 17:6, 17:16, 17:18, 18:23, 18:24, 19:18, 20:22, 28:17, 28:20, 28:21, 28:23, 29:4, 29:9, 37:17, 41:5, 41:7, 41:9, 41:12, 41:18, 41:19, 41:20, 45:20, 45:23, 47:5, 52:22, 54:2, 56:13, 60:7, 60:23, 62:8, 62:21, 63:8, 63:20, 65:16, 65:23, 67:25, 68:8, 71:19, 72:11, 76:16, 80:5, 81:12, 90:25, 92:3, 92:7, 92:8, 92:9, 95:15, 98:1, 98:2, 108:5 inaudible) [44] - 3:3. 3:6. 3:10. 4:2. 4:7. 7:13, 7:25, 8:4, 13:4, 17:4, 17:8, 17:11, 17:14, 17:16, 17:19, 18:1, 18:5, 18:7, 18:9, 18:10, 19:1, 20:13, 21:3, 26:8, 37:17, 40:18, 41:22, 42:3, 46:4, 47:13, 48:20, 51:17, 54:3, 56:6, 61:10, 62:9, 78:6, 79:13, 80:10, 89:4, 92:5, 95:18, 97:17, 97:24 include [6] - 44:23, 47:22, 51:13, 76:15,

77:10, 99:20 included [4] - 33:22, 53:8, 89:18, 94:5 includes [2] - 15:18, 88:14 including [1] - 4:18 incorporate [2] -15:15, 75:19 incorporated [3] -73:15, 73:23, 77:13 incorporating [1] -77:14 incorporation [2] -15:12, 43:16 increased [1] - 32:8 increases [1] - 67:3 indicate [6] - 17:4, 28:2, 37:13, 39:21, 42:9, 75:5 indicates [2] - 41:1, 104:7 indication [1] - 100:1 indications [1] - 31:5 industrial [1] - 30:8 infiltration [6] - 54:18, 54:23, 55:12, 75:6, 75:9, 86:14 informal [2] - 92:25, 93:3 information [30] -6:25, 16:6, 18:1, 22:20, 23:10, 35:8, 35:9, 41:11, 42:21, 45:9, 47:1, 47:9, 50:23, 52:21, 53:10, 59:20, 68:5, 69:17, 72:20, 74:15, 74:18, 74:20, 74:21, 85:17, 96:20, 96:22, 98:25, 101:6, 101:8, 102:21 informed [1] - 74:19 initial [4] - 38:20, 46:7, 46:22, 54:3 input [3] - 5:2, 14:13, 109:10 inspection [1] - 28:1 install [4] - 56:16, 56:22, 67:25, 68:1 installed [1] - 41:8 installing [2] - 56:25, 68:1 instead [1] - 107:14 intake [2] - 54:24, 55:13

intended [1] - 27:3

interest [3] - 36:21,

interested [6] - 16:7,

23:21, 36:20, 37:3,

intent [1] - 91:21

37:16, 88:20

4:18, 24:24, 25:14, 25:19, 105:14 interrupting [1] - 6:16 intertwined [1] - 81:25 intro [1] - 13:9 introduction [1] - 23:1 intrusion [1] - 27:23 investigate [2] -76:18, 95:3 investigated [3] -66:20, 100:11, 100:12 investigation [17] -4:16, 20:17, 24:14, 24:20, 25:3, 38:24, 39:3, 44:22, 76:18, 84:16, 84:18, 90:7, 93:4, 93:14, 93:25, 94.6 investigation/interim [1] - 38:4 investigative [1] -89:22 involved [2] - 26:6, 86:4 involvement [8] -22:18, 40:4, 40:8, 40:15, 40:17, 42:10, 43:4, 106:21 IR [1] - 16:6 IRA [20] - 14:17, 15:6, 15:14, 15:18, 17:4, 19:10, 53:2, 53:13, 53:16, 53:22, 54:6, 55:20, 56:22, 57:21, 60:24, 61:9, 70:24, 74:4, 74:8, 80:22 IRAs [16] - 14:6, 15:10, 15:12, 18:9, 39:13, 39:16, 40:24, 41:4, 44:8, 44:10, 52:13, 53:23, 54:3, 105:15, 105:19, 106:2 ironically [1] - 8:21 **issue** [8] - 6:1, 8:20, 19:20, 23:7, 75:1, 89:20, 91:19, 93:14 issued [1] - 88:1 issues [9] - 22:7, 23:1, 73:21, 87:3, 90:19, 91:3, 91:9 item [11] - 14:16, 33:3, 34:2, 34:19, 34:20, 34:22, 35:6, 35:19, 101:3, 103:11,

60:15, 86:21

interim [6] - 4:16,

21:11, 21:13, 32:21, 33:2, 33:5, 33:7, 33:9, 33:13, 33:19, 33:22, 33:24, 34:4, 34:6, 34:10, 34:13, 35:1, 35:4, 35:13, 76:12, 77:10, 77:11, 77:14, 89:15, 95:16, 103:6, 103:8 itself [1] - 26:22

Jack [1] - 22:25 January [3] - 71:17, 74:12, 74:25 JD [1] - 12:22 Jessie [2] - 11:20, 11:21 job [2] - 6:18, 47:15 Joe [1] - 10:2 Johnson [1] - 32:3 join [1] - 67:8 joined [1] - 109:13 joining [2] - 9:5, 9:10 July [1] - 38:25

Κ

keep [5] - 23:9, 63:2, 69:24, 76:10, 76:19 keeping [1] - 21:10 Ken [2] - 44:11, 53:1 kept [1] - 74:19 key [1] - 89:22 kicked [1] - 7:8 Kilde [1] - 22:14 kind [28] - 16:13, 27:23, 34:15, 38:14, 38:18, 39:11, 39:17, 43:14, 43:24, 44:4, 45:11, 53:14, 53:15, 63:5, 63:6, 63:12, 63:16, 70:16, 72:17, 76:19. 77:12. 79:5. 80:21, 89:22, 91:18, 92:25, 104:7 knowledge [1] - 93:1 known [2] - 26:22,

L

94:5

lack [2] - 88:20, 105:19 laid [1] - 58:16 Lake [17] - 18:24, 44:11, 44:24, 47:23, 53:1, 54:1, 72:4, 89:17, 93:5, 93:15,

95:11, 96:10, 96:15, 96:19, 96:21, 97:2, lake [6] - 41:22, 47:24, 56:18, 56:20, 96:13 Lake/Ken [1] - 54:11 Lakes [2] - 11:12, 24:6 land [2] - 93:18, 94:13 landfill [3] - 14:20, 17:8, 95:10 landfills [1] - 17:6 lands [1] - 86:8 landscape [1] - 72:6 language [1] - 19:24 large [1] - 20:16 larger [2] - 54:8, 102:4 largest [1] - 67:5 last [24] - 13:23, 14:5, 22:8, 22:25, 24:12, 25:1, 25:17, 28:1, 29:9, 29:12, 30:17, 32:3, 32:4, 33:1, 33:6, 33:8, 44:16, 49:20, 52:14, 52:25, 53:12, 55:7, 76:14, 80:3 latest [1] - 33:2 laundry [1] - 100:21

lay [1] - 66:25 laying [2] - 66:22, 67:21 lead [1] - 108:19 leads [1] - 30:10 least [9] - 49:5, 52:6, 59:7, 83:6, 86:3, 86:17, 88:23, 98:25, 102:15 leave [2] - 96:17,

103:2 left [3] - 46:15, 46:18, 80:18 Legacy [1] - 50:13

Leriche [8] - 9:21, 20:6, 28:17, 55:8, 92:20, 92:22, 95:7, 100:24

LERICHE [58] - 1:11, 5:15, 9:22, 12:14, 12:19, 12:23, 12:25, 20:7, 20:20, 21:5, 21:14, 28:16, 29:3, 29:8, 29:15, 29:20, 29:22, 30:6, 30:19, 30:22, 39:20, 42:11, 42:13, 47:17, 47:21, 48:1, 48:6, 48:12, 48:17, 49:11, 51:9, 51:13, 51:16, 51:23, 52:1, 52:8, 54:21, 54:23, 55:6, 55:10,

items [28] - 4:12, 4:13,

55:24, 56:3, 75:17, 75:23, 76:22, 77:3, 77:6, 77:16, 92:21, 93:7, 95:8, 95:15, 95:19, 96:1, 96:4, 96:17, 100:25, 101:9 letter [9] - 25:14, 25:25. 35:17. 89:5. 89:6, 89:10, 91:18, 91:21, 107:11 level [2] - 30:11, 94:5 leverage [1] - 107:17 **LF** [1] - 14:19 **LF030** [2] - 14:20, 17:5 library [1] - 16:5 lights [2] - 12:16, 83:8 likely [1] - 99:8 limited [2] - 89:11, 109:7 line [10] - 10:9, 11:22, 27:21, 28:8, 61:16, 85:9, 86:15, 87:5, 100:5, 106:4 lines [3] - 23:6, 31:19, 31:25 **Lingo** [2] - 9:24, 10:1 link [2] - 63:19, 101:7 list [12] - 9:15, 17:13, 18:22, 20:19, 21:10, 31:13, 34:3, 34:8, 34:9, 80:3, 92:17, 100:21 listed [2] - 20:21, 43:1 listen [1] - 6:20 listening [2] - 8:15, 23:15 LLC [1] - 109:19 lobe [1] - 56:9 local [3] - 50:10, 50:13, 51:3 located [1] - 84:9 location [4] - 14:24, 16:20, 69:1, 75:10 locations [1] - 18:4 logistical [1] - 108:14 logistically [1] - 57:6 long-term [4] - 39:11, 40:23, 41:4, 43:2 look [21] - 15:4, 15:11, 16:7, 18:15, 20:14, 21:7, 24:18, 28:11, 29:11, 41:12, 42:21, 51:3, 51:5, 55:17, 70:21, 94:8, 94:11, 95:2, 99:23, 99:24, 102:24 looked [16] - 55:15, 55:22, 55:25, 59:8, 62:4, 62:6, 62:9, 62:17, 63:4, 63:11,

77:12, 96:10, 101:19, 103:2 looking [23] - 57:13, 57:25, 58:12, 58:13, 58:19, 58:22, 60:3, 60:4, 60:6, 60:9, 63:16. 63:21. 64:21. 74:22. 77:4. 95:20. 96:9, 96:12, 96:15, 97:5, 100:15, 102:5, 102:22 looks [6] - 56:6, 78:10, 93:5, 96:7, 99:16, 108.9 lost [1] - 73:3 Lota [1] - 50:2 lower [2] - 9:11, 16:18

М

magnitude [2] - 16:18, 65:4 mail [1] - 81:4 mailed [1] - 87:7 maintain [3] - 6:11, 6:22, 63:1 maintenance [2] -27:12, 27:25 major [4] - 49:13, 69:3, 76:18, 102:6 majority [4] - 36:14, 59:6, 86:15, 89:25 management [1] -43:2 manager [1] - 99:7 manipulates [1] - 69:4 manipulation [1] -62:15 manufacturers [1] -99:10 map [8] - 12:9, 12:10, 13:7, 13:15, 16:12, 48:19, 56:6, 59:2 maps [5] - 12:11, 18:3, 66:22, 106:13, 106:14 March [3] - 71:3, 71:7, 74:24 Mark [24] - 3:7, 4:3, 4:4, 32:10, 34:19, 36:7, 36:21, 36:22, 37:2, 40:22, 56:4, 57:15, 61:14, 64:15, 66:8, 66:9, 69:15, 86:1, 89:19, 94:20, 101:16, 108:16, 108:24, 109:1 MARK [1] - 1:9

mark [1] - 58:25

Mark's [1] - 37:11

60:14, 84:18, 85:2, 85:11, 86:3, 86:16, 88:3, 94:2 mass [2] - 67:5, 67:20 massive [1] - 106:7 material [12] - 45:23, 46:25, 57:24, 58:24, 62:22, 66:24, 69:20, 69:22, 70:1, 70:4, 70.8 materially [3] - 45:8, 46:16, 47:4 materials [1] - 62:12 mats [8] - 58:13, 58:15, 59:11, 61:22, 62:1, 62:2, 62:15, 67:7 matters [1] - 81:24 maximum [1] - 15:13 Maxwell [1] - 10:2 MDHHS [6] - 1:16, 11:10, 87:17, 87:24, 88:1, 88:4 mean [10] - 18:25, 34:5, 55:15, 69:2, 69:14, 74:6, 74:18, 91:17, 95:19, 99:12 means [2] - 19:7, 52:7 meet [8] - 21:12, 22:4, 25:5, 32:23, 33:11, 75:13, 90:24, 91:13 meeting [61] - 3:25, 4:6, 4:22, 8:23, 8:25, 9:1, 13:23, 14:6, 23:8, 24:18, 25:6, 26:14, 32:25, 33:1, 33:4, 33:6, 33:8, 33:11, 34:10, 34:21, 41:19, 42:25, 43:9, 43:10, 43:12, 43:14, 44:17, 45:2, 47:22, 48:2, 48:3, 48:7, 48:8, 48:13, 48:15, 48:18, 48:23, 49:6, 49:18, 49:20, 71:2, 71:6, 71:11, 73:8, 74:16, 74:24, 74:25, 76:5, 76:9, 76:13, 76:14, 81:5, 81:9, 81:12, 83:11, 91:7, 98:3, 101:13, 109:15 meetings [17] - 4:13, 7:4, 15:18, 16:1, 17:24, 21:13, 40:5, 43:8, 43:15, 49:24, 50:5, 50:7, 76:3, 76:16, 85:24,

Marsh [16] - 17:16,

20:1, 20:10, 20:15,

20:18, 44:10, 52:14,

103:20, 109:9 MEMBER [161] - 5:15, 7:7, 7:11, 7:20, 9:19, 9:22, 10:5, 10:7, 10:11, 10:14, 10:17, 10:25, 12:14, 12:19, 12:23, 12:25, 13:8, 13:15. 17:11. 17:17. 18:6, 18:10, 18:17, 18:22, 19:9, 19:13, 19:21, 20:7, 20:20, 21:5, 21:14, 21:17, 21:24, 22:3, 22:22, 23:25, 26:5, 26:12, 27:16, 28:16, 29:3, 29:8, 29:15, 29:17, 29:20, 29:22, 30:6, 30:19, 30:22, 30:25, 31:14, 31:17, 31:22, 31:23, 32:1, 32:7, 32:16, 33:18, 33:21, 34:12, 34:18, 35:25, 39:20, 41:16, 42:2, 42:11, 42:13, 45:22, 45:25, 47:5, 47:13, 47:17, 47:21, 48:1, 48:6, 48:12, 48:17, 49:11, 51:9, 51:13, 51:16, 51:23, 52:1, 52:8, 54:21, 54:23, 55:6, 55:10, 55:24, 56:3, 60:18, 60:21, 61:1, 61:7, 64:1, 64:17, 64:25, 65:2, 65:8, 65:21, 66:3, 68:9, 68:22, 69:9, 70:9, 71:22, 72:1, 72:10, 72:23, 75:17, 75:23, 76:22, 77:3, 77:6, 77:16, 78:8, 78:18, 78:23, 79:13, 79:15, 80:5, 80:9, 80:12, 84:5, 85:1, 85:7, 85:19, 85:23, 86:9, 86:18, 87:1, 87:9, 87:12, 88:9, 88:12, 89:2, 90:22, 91:16, 91:23, 92:2, 92:21, 93:7, 93:11, 94:12, 95:8, 95:15, 95:19, 96:1, 96:4, 96:17, 97:24, 98:12, 98:18, 99:1, 100:17, 100:25, 101:9, 103:10, 104:18, 105:11, 109:1 member [10] - 4:22, 36:8, 36:25, 37:15, 52:7, 55:8, 82:4, 98:7, 106:19

MEMBERS [1] - 2:1

members [47] - 4:11, 4:24, 4:25, 5:3, 5:12, 6:8, 7:5, 8:16, 9:2, 9:5, 9:10, 9:17, 10:19, 10:20, 13:22, 14:14, 23:9, 23:14, 24:4. 24:5. 33:3. 33:25. 36:14. 36:17. 36:19, 36:24, 37:7, 37:9, 37:10, 83:12, 83:16, 89:5, 92:18, 98:10, 101:15, 103:15, 103:22, 103:23, 103:25, 104:12, 104:13, 108:1, 108:4, 109:12, 109:13 members' [2] - 83:10, Memorial [3] - 44:11, 53:1, 54:11 memory [1] - 39:18 mention [2] - 34:14, 74:5 mentioned [13] - 23:4, 26:14, 41:16, 43:7, 53:11, 53:12, 60:22, 69:15, 70:18, 76:22, 88:18, 89:3, 90:23 met [2] - 22:24, 33:1 meters [1] - 68:1 method [1] - 100:14 methods [1] - 101:1 Michael [1] - 11:17 MICHAEL [1] - 1:17 MiChEM [1] - 88:15 Michigan [7] - 11:6, 11:11, 22:12, 24:6, 72:25, 87:15, 88:16 microphone [2] - 5:4, 104:3 microphones [1] - 9:8 microwave [1] - 99:21 mics [1] - 92:11 MiCTV [1] - 8:11 middle [1] - 63:7 might [6] - 8:18, 22:16, 23:15, 29:10, 103:8, 103:9 migrating [1] - 53:25 Mike [2] - 25:12, 26:3 miles [1] - 88:3 minimal [1] - 35:8 minimize [1] - 9:9 minus [2] - 67:2, 67:3 minute [7] - 52:20, 53:5, 54:4, 65:19, 82:5, 104:5, 105:5 minutes [4] - 5:5,

18:13, 18:14, 104:11

Minutes [1] - 109:16 misconception [1] -49:18 mismanagement [1] -106:6 Mission [4] - 26:21, 27:14, 27:21, 28:7 model [5] - 80:17, 93:13, 93:20, 93:22, 94.8 modeling [4] - 55:17, 74:14, 75:12, 75:22 models [1] - 20:22 molecule [2] - 102:4, 102:6 moment [2] - 33:10, 93:2 Monday [1] - 26:15 money [1] - 31:1 monitor [1] - 28:8 monitoring [9] -39:11, 39:15, 40:24, 41:4, 41:8, 60:6, 71:18, 80:23, 89:24 month [2] - 18:18, 23:8 months [3] - 72:7, 78:21, 106:16 most [5] - 50:12, 74:18, 74:20, 91:1, 105.14 move [31] - 4:8, 4:15, 6:6, 6:23, 7:18, 10:19, 11:25, 12:8, 13:18, 24:4, 32:18, 32:20, 38:2, 38:3, 39:1, 39:4, 39:8, 63:17, 78:9, 78:13, 79:9, 80:13, 83:7, 89:12, 91:4, 97:18, 98:10, 100:16, 103:15, 103:16, 108:7 moved [3] - 56:7, 79:17, 90:9 moves [2] - 79:21 moving [12] - 23:13, 26:7, 46:18, 49:19, 53:25, 63:2, 81:2, 82:3, 84:23, 91:11, 93:6 **MR** [125] - 3:2, 3:4, 3:7, 3:13, 4:3, 5:18, 5:24, 7:9, 7:15, 7:22, 8:1, 8:5, 8:8, 8:13, 9:20, 9:23, 10:6, 10:8, 10:12, 10:15, 10:18, 10:23, 11:1, 11:9, 11:14, 11:16, 11:17, 11:19, 11:20,

12:17, 12:21, 12:24, 13:1, 13:5, 13:14, 13:16, 14:4, 14:10, 17:9, 18:20, 19:5, 20:5, 21:9, 21:15, 21:18, 21:20, 21:21, 22:1, 23:23, 24:2, 26:2, 26:9, 27:6, 27:9, 28:14, 30:23, 31:16, 32:17, 33:20, 34:11, 35:23, 36:2, 38:1, 40:19, 40:22, 42:5, 42:12, 43:6, 45:20, 47:7, 47:16, 52:9, 55:7, 57:15, 57:17, 58:25, 60:17, 60:20, 63:23, 64:14, 66:8, 68:7, 70:10, 71:20, 72:22, 72:24, 73:24, 74:2, 75:16, 75:24, 76:11, 76:25, 77:8, 77:17, 80:20, 81:2, 82:8, 82:12, 86:24, 87:6, 87:10, 87:14, 88:11, 88:24, 92:6, 92:13, 93:9, 95:6, 96:7, 97:6, 97:8, 97:25, 100:23, 101:10, 103:5, 103:12, 104:23, 105:3, 105:9, 105:12, 106:23, 107:21, 108:21, 109:2, 109:11 MS [86] - 11:13, 13:4, 24:8, 29:11, 29:21, 29:23, 30:15, 30:21, 38:7, 38:10, 40:3, 41:3, 41:15, 42:4, 42:18, 43:22, 45:24, 46:6, 47:12, 47:14, 47:19, 47:25, 48:11, 48:14, 52:11, 54:22, 55:1, 55:14, 56:2, 56:4, 56:11, 56:14, 56:21, 57:11, 57:16, 57:18, 59:9, 59:18, 60:2, 60:19, 60:25, 61:6, 61:11, 61:20, 62:4, 64:5, 64:23, 65:1, 65:7, 65:10, 65:16, 66:2, 66:7, 67:10, 67:13, 67:22, 68:16, 68:25, 70:11, 71:25, 72:8, 72:13, 73:1, 73:18, 73:25, 74:3, 75:7, 76:2, 77:19, 77:22, 78:14, 78:22, 79:1, 79:14, 79:24, 80:7, 80:11, 80:15, 80:21, 91:25,

93:2, 96:9, 96:20, 97:7, 100:7, 102:19 multiple [1] - 59:18 municipal [1] - 31:6 MUNSON [3] - 1:17, 11:19, 26:5 Munson [2] - 11:17, 26:3 mute [4] - 9:8, 9:12, 92:11

Ν

name [3] - 3:3, 37:14,

names [1] - 22:17

Nation [1] - 50:11

83:15

Natural [1] - 84:20 nature [2] - 90:19, 97.4 near [2] - 32:12, 56:18 necessarily [4] - 25:7, 46:6, 67:6, 91:2 Need [1] - 35:17 need [14] - 6:8, 15:7, 19:4, 22:19, 51:3, 68:4, 69:7, 69:19, 70:2, 72:3, 89:17, 91:15, 95:3, 103:8 needed [3] - 42:25, 63:21, 69:25 needs [4] - 17:4, 48:20, 59:23, 91:8 negative [1] - 49:12 neglected [1] - 108:22 negotiations [1] -49:14 Neller [1] - 25:12 never [3] - 20:20, 27:3, 85.5 New [1] - 51:23 new [23] - 3:5, 4:17, 22:13, 22:15, 22:24, 31:19, 31:24, 44:16, 47:9, 50:6, 51:9, 51:17, 51:18, 52:7, 52:25, 53:7, 53:10, 53:12, 53:16, 53:22, 54:6, 54:12, 86:14 newer [1] - 99:19 news [1] - 53:6 next [42] - 4:17, 13:19, 14:11, 14:16, 14:24, 16:9, 17:5, 20:19, 24:16, 24:19, 25:3, 32:18, 32:20, 34:15, 38:12, 39:19, 43:22, 44:6, 44:14, 45:5, 48:4, 48:8, 48:23, 49:5, 49:7, 52:11,

52:24, 53:21, 57:18, 70:11, 70:17, 76:8, 77:20, 81:1, 81:2, 82:3, 88:22, 97:9, 98:16, 103:17, 106:9, 108:7 nicely [1] - 43:14 night [1] - 109:14 nine [1] - 78:21 noise [2] - 9:9, 98:6 non [1] - 87:22 non-detects [1] -87:22 none [2] - 7:13, 77:3 normal [1] - 107:19 north [5] - 16:2, 32:3, 84:22, 93:15, 95:11 northeast [1] - 53:17 northern [1] - 86:6 Notary [1] - 1:20 **note** [2] - 45:7, 76:12 notes [2] - 36:6, 43:15 nothing [9] - 21:20, 21:24, 45:12, 55:22, 61:7, 61:8, 63:13, 93:24, 94:10 notice [1] - 42:24 November [4] - 24:13, 26:15, 35:18, 76:9 **NOVEMBER** [1] - 1:1 **NOW** [3] - 22:4, 35:17, 35:20 number [10] - 4:8, 4:9, 6:10, 6:20, 16:15, 35:16, 39:23, 89:13, 89:14, 92:23 numbers [1] - 64:23 0

objections [1] - 90:11 **objective** [1] - 15:6 objectively [1] - 7:2 obviously [2] - 20:15, 79:3 occur[3] - 7:3, 8:23, 26:20 occurring [1] - 60:8 occurs [1] - 106:9 October [7] - 14:9, 41:20, 44:21, 52:18, 53:2, 70:23, 71:15 **OF** [1] - 2:1 offered [2] - 42:20, 90:11 official [2] - 39:22. 107:8 often [2] - 4:20, 5:11 oil [4] - 61:18, 61:25,

o'clock [1] - 82:9

62:5, 69:14 old [4] - 26:21, 84:9, 89:25, 96:6 ominous [1] - 98:6 once [7] - 38:25, 41:17, 42:22, 56:23, 62:1, 83:8, 91:13 one [44] - 6:10, 6:16, 6:19, 14:10, 25:15, 26:13, 27:14, 30:6, 34:22, 35:11, 35:15, 36:5, 36:10, 42:6, 43:10, 45:7, 52:6, 57:10, 57:11, 63:17, 64:19, 66:20, 70:16, 74:3, 76:12, 76:17, 77:8, 79:25, 80:1, 80:3, 82:20, 82:25, 89:13, 90:13, 92:21, 100:9, 101:17, 101:20, 102:7, 103:6, 104:16, 104:24, 108:22 one-year [3] - 36:10, 70:16, 76:17 ones [5] - 29:24, 35:14, 71:13, 102:5, 103:8 ongoing [5] - 33:10, 36:8, 44:2, 44:3, 105:19 online [3] - 8:24, 104:19 open [7] - 6:11, 6:20, 33:9, 36:20, 37:8, 83:24, 91:17 opening [2] - 41:5, 103:22 openly [1] - 6:25 operating [3] - 11:24, 29:25, 36:12 **operation** [1] - 39:15 opinion [1] - 92:3 opportunities [2] -26:7, 42:9 **opportunity** [11] - 5:2, 5:3, 12:7, 13:24, 24:25, 25:4, 42:16, 42:21, 70:21, 91:13, 104:5 option [1] - 75:19 options [1] - 63:11 order [1] - 3:1 ordinance [1] - 65:4 organic [2] - 101:23, 102:16

organoclay [3] -

organoclays [1] -

58:12

57:24, 64:20, 68:12

orient [1] - 53:15 orientation [1] - 12:10 original [5] - 73:4, 73:14, 99:18, 102:1, 102:6 Oscoda [10] - 1:17, 11:15, 11:18, 26:10, 26:14, 31:2, 84:6, 86:11, 88:6, 88:18 otherwise [1] - 70:7 outfall [1] - 62:5 outfalls [1] - 30:1 outflow [1] - 61:19 outflows [2] - 29:23. 30:17 outlet [1] - 30:12 outlets [1] - 28:19 outlines [1] - 89:7 outlook [4] - 70:16, 76:17, 77:24, 80:22 outs [1] - 72:2 outside [3] - 95:23, 100:11, 107:19 overarching [1] -43:20 overlap [2] - 78:10, 79.2 OWAA [1] - 1:17 owned [4] - 84:25, 85:6, 86:6, 86:16 owner [2] - 18:2, 25:25

Ρ

p.m [1] - 3:1 P.M [1] - 1:2 package [1] - 74:13 packet [1] - 33:22 pads [1] - 67:19 page [1] - 13:9 **PALMER** [3] - 1:18, 19:21, 65:8 paper [2] - 37:11, 42:20 paraphrasing [1] -89:9 pardon [1] - 96:1 Park [3] - 44:11, 53:2, part [19] - 15:15, 20:3, 20:15, 26:21, 39:23, 40:13, 40:16, 43:1, 61:22, 67:10, 67:22, 68:3, 69:18, 75:21, 76:14, 93:17, 98:16, 100:12, 106:6 participants [1] - 88:7 participate [2] - 107:7, 107:13

participating [2] -107:14, 109:5 participation [3] -8:22, 107:6, 109:7 particularly [1] - 89:16 parts [1] - 18:25 party [1] - 37:18 PASI [1] - 38:22 pass [1] - 81:17 passed [2] - 12:5, 62:2 passes [1] - 70:7 past [4] - 25:12, 26:15, 59:8. 105:22 path [2] - 45:5, 73:8 patience [4] - 82:24, 105:4, 107:24, 108:7 Paula [16] - 13:2, 14:22, 38:5, 38:6, 39:21, 43:17, 52:10, 57:17, 60:21, 70:10, 76:1, 77:17, 96:8, 97:6, 102:19, 108:12 paula [1] - 45:22 **PAULA** [1] - 1:7 Paula's [1] - 84:7 pause [2] - 6:17, 43:19 pending [2] - 54:19, 87:21 people [4] - 19:22, 23:21, 49:17, 88:21 per [9] - 11:23, 18:25, 52:20, 52:21, 53:5, 54:4, 64:21, 65:19 performance [3] -41:8, 81:8, 81:9 performs [1] - 66:15 period [1] - 49:14 permit [1] - 30:8 person [13] - 1:4, 5:6, 5:12, 6:16, 8:23, 9:3, 50:11, 92:17, 98:3, 104:2, 104:8, 104:9, 108:1 personnel [2] - 22:10, 50:11 perspective [1] -25:20 PFAS [25] - 15:5, 20:9,

23:5, 24:14, 30:14,

31:5, 31:11, 43:23,

44:24, 53:25, 57:24,

58:13, 65:15, 67:4,

70:3, 88:13, 98:14,

99:20, 99:25,

101:25, 102:2,

PFOA [5] - 67:4,

99:17, 101:25,

102:2, 102:13

102:12

99:15, 99:16, 99:17,

phase [9] - 32:2, 38:24, 39:16, 40:14, 41:18, 55:4, 55:20, 57:21, 63:16 phases [3] - 32:2, 32:5, 50:14 pick [1] - 50:5 picked [1] - 86:11 picture [2] - 30:13, 76:20 pictures [1] - 51:5 piece [2] - 39:19, 104:10 pilot [17] - 4:19, 14:23, 53:13, 53:18, 57:19, 58:2, 58:7, 60:12, 60:22, 61:8, 62:10, 67:15, 67:23, 68:3, 71:16, 71:18, 80:23 pipe [2] - 61:3, 61:17 Pipes [12] - 4:20, 14:23, 28:24, 29:12, 30:5, 53:19, 57:20, 59:4, 61:13, 64:3, 66:12, 66:15 piping [1] - 57:1 **pit** [1] - 95:13 Place [8] - 11:11, 24:5, 24:8, 72:25, 73:1, 73:18, 74:4, 100:7 **PLACE** [16] - 1:16, 11:13, 24:8, 29:11, 29:21, 29:23, 30:15, 30:21, 73:1, 73:18, 73:25, 74:3, 75:7, 91:25, 93:2, 100:7 place [6] - 30:18, 45:19, 53:16, 53:19, 70:19, 92:4 placed [5] - 16:5, 23:7, 31:19, 42:20, 42:24 places [1] - 58:5 plan [44] - 6:4, 15:21, 20:3, 30:18, 33:10, 39:4, 40:5, 40:6, 40:11, 46:8, 48:4, 49:2, 54:16, 55:2, 55:5, 56:21, 57:2, 57:5, 66:19, 70:18, 71:1, 71:3, 71:14, 71:16, 72:8, 73:4, 73:16, 73:22, 74:7, 74:12, 74:14, 74:23, 75:13, 76:4, 76:10, 78:5, 78:12, 80:16, 94:2, 96:18, 96:24, 97:2, 101:18, 102:17 planned [1] - 28:19 planning [5] - 27:24, 45:2, 47:20, 49:8,

55:20 plans [8] - 41:6, 41:13, 41:25, 42:14, 55:2, 57:22, 84:17, 97:1 plant [7] - 16:2, 23:6, 25:16, 27:13, 27:14, 32:9. 32:13 plants [1] - 30:13 plume [14] - 16:12, 16:24, 17:7, 18:25, 32:12, 46:17, 46:23, 53:18, 55:12, 56:7, 56:9, 75:11, 94:25, 106:13 plumes [3] - 18:23, 57:10, 89:24 plus [1] - 30:10 point [12] - 20:2, 26:23, 26:24, 29:6, 42:6, 49:9, 56:13, 65:24, 80:9, 85:13, 90:22 points [4] - 6:21, 26:13, 41:2, 42:7 poke [1] - 90:17 political [1] - 105:23 poor [2] - 47:14, 106:8 popcorn [2] - 99:20, 99:21 portion [11] - 13:21, 23:18, 25:2, 32:19, 44:4, 59:16, 82:4, 83:11, 83:25, 97:4, 103:19 portions [4] - 13:25, 27:21, 28:7, 106:3 pose [1] - 9:7 position [2] - 36:20, 37:2 possibility [1] - 12:15 possible [6] - 15:13, 91:7, 94:13, 94:18, 94:22, 103:13 possibly [1] - 59:21 post [1] - 17:25 post-recession [1] -17:25 potential [7] - 21:1, 21:11, 49:14, 55:11, 61:22, 75:19, 99:25 potentially [4] - 24:19, 25:18, 65:23, 74:25 **pouring** [1] - 106:8 PowerPoint [2] -13:10, 13:13 **PPROD** [1] - 39:14 practice [2] - 21:2, 32:23 practices [1] - 77:13

precursor [1] - 102:12

precursors [1] -101:24 preferred [1] - 15:21 preliminary [1] - 41:4 prepare [1] - 6:23 prepared [1] - 81:23 present [10] - 9:17, 9:19, 10:7, 10:11, 11:7, 36:24, 44:18, 45:4, 48:22, 101:25 presentation [8] -5:10, 9:15, 13:25, 33:23, 38:4, 38:14, 43:21, 44:19 presentations [2] -5:8, 32:11 presented [5] - 23:5. 24:22, 44:20, 45:10, 46:7 presenting [1] - 16:8 presents [1] - 56:25 press [2] - 8:19, 88:1 pressing [2] - 9:11, 9:12 pressure [1] - 105:23 pretty [2] - 89:7, 89:10 prevent [2] - 19:25, 56:19 preventative [1] -27:24 previous [2] - 4:13, 16:1 previously [2] - 26:13, 103:21 **primaries** [1] - 20:23 primarily [1] - 69:23 primary [2] - 40:4, 40:15 priority [1] - 17:13 private [6] - 18:1, 56:24, 84:14, 84:16, 84:24, 98:22 problem [3] - 61:9, 92:12, 103:3 problems [3] - 27:22, 28:3, 28:11 procedure [1] - 90:12 procedures [2] -11:24, 36:12 proceed [2] - 12:3, 83:23 proceedings [1] - 1:3 process [23] - 15:1, 15:16, 15:18, 16:22, 17:18, 20:25, 38:16, 38:19, 39:9, 39:12, 39:22, 40:1, 40:2, 40:8, 40:16, 41:18, 42:8, 44:1, 45:18, 100:10, 104:7,

107:7, 108:20 processes [1] - 40:9 production [1] - 72:17 program [2] - 88:15, 99.6 progress [7] - 6:23, 22:6, 26:24, 27:5, 39:10, 43:23, 45:2 project [3] - 38:25, 47:19, 88:19 projects [2] - 35:1, 76:19 promised [1] - 106:13 **promptly** [1] - 82:10 propensity [1] - 6:22 property [17] - 18:1, 20:10, 20:11, 25:24, 56:23, 56:24, 57:3, 84:14, 84:17, 84:21, 84:22, 84:25, 85:3, 85:9, 85:10, 85:11, 86:13 proposed [10] - 15:21, 39:4, 40:5, 40:6, 40:11, 71:1, 71:2, 74:23, 78:4, 90:20 protect [1] - 105:20 provide [7] - 5:4, 13:23, 31:4, 41:25, 91:14, 101:6, 101:7 provided [3] - 19:19, 37:14, 50:18 providing [1] - 49:25 **Public** [1] - 1:20 public [33] - 5:2, 5:3, 39:22, 40:1, 40:5, 41:22, 42:2, 42:9, 42:15, 42:20, 42:25, 44:20, 49:4, 49:10, 71:1, 71:2, 71:6, 71:11, 74:24, 82:4, 83:25, 98:10, 98:20, 101:11, 101:13, 103:15, 103:19, 103:23, 104:5, 104:14, 105:20, 108:1, 109:13 PUBLIC [1] - 2:1 publish [1] - 42:15 pull [5] - 18:12, 43:8, 65:14, 98:5, 103:6 pulling [1] - 79:5 pump [1] - 54:1 pumping [1] - 54:10 **Puneet** [6] - 11:5, 11:7, 87:5, 87:7, 87:15, 88:13 **PUNEET** [1] - 1:16 purpose [3] - 53:22, 57:23, 58:9

purposes [1] - 76:21 pursue [2] - 26:17, 95:5 push [1] - 76:8 pushed [5] - 78:14, 78:15, 78:16, 79:10, 80:4 put [16] - 33:12, 39:24, 44:19, 45:22, 46:1, 48:24, 49:1, 54:12, 55:12, 56:6, 62:15, 64:6, 64:20, 69:20, 70:2, 90:2 putting [3] - 62:20, 62:22, 65:14

Q QAPP [2] - 73:4, 73:14

QRS [1] - 109:19

quarterly [2] - 22:6, 107:16 quarters [2] - 78:3, 78:21 quentina [1] - 8:1 Quentina [7] - 1:20, 3:13, 5:21, 6:17, 8:9, 81:11, 109:19 questions [22] - 4:22, 5:9, 5:11, 6:9, 12:12, 43:18, 43:21, 45:16, 59:19, 81:21, 81:24, 82:4, 83:11, 83:12, 83:14, 84:1, 88:25, 92:15, 92:17, 98:7, 103:24, 108:19 questions/ discussion [2] -98:9, 101:15 quick [19] - 5:19, 6:3, 7:24, 8:8, 9:25, 13:2, 39:20, 44:15, 52:12, 63:24, 64:15, 66:9, 71:20, 82:13, 82:25, 83:19, 92:21, 97:9, 97:13

R

quicker [1] - 96:16

quickly [1] - 57:19

quorum [4] - 9:17,

quite [2] - 31:10, 50:9

11:23, 11:25, 12:3

RAB [103] - 1:1, 1:8, 1:14, 4:11, 4:12, 4:22, 4:24, 4:25, 5:12, 6:6, 6:7, 7:5, 8:16, 9:2, 9:4, 9:9, 9:17, 10:19, 10:20,

13:22, 14:5, 14:14, 14:17, 15:17, 16:1, 17:24, 22:20, 24:4, 24:5, 24:11, 24:21, 25:11, 25:25, 32:18, 32:25, 33:1, 33:3, 33:6, 33:8, 33:22, 33:24, 34:10, 36:7, 36:13, 36:19, 36:24, 36:25, 37:7, 37:9, 37:10, 37:15, 37:19, 37:21, 43:8, 43:15, 44:16, 48:8, 48:13, 48:18, 48:23, 49:6, 49:7, 49:23, 50:5, 52:14, 52:25, 53:12, 55:8, 70:15, 76:3, 76:8. 76:14. 76:24. 77:2. 81:5. 81:9. 82:3, 83:10, 83:12, 83:16, 84:1, 85:24, 89:5, 92:18, 93:17, 97:23, 98:7, 98:10, 101:13, 101:15, 103:15, 103:20, 103:21, 103:23. 103:25, 104:12, 107:1, 108:4, 109:12 **RABs** [2] - 38:14, 40.16 raise [4] - 9:4, 9:10, 37:3, 83:14 raised [1] - 37:5 raising [1] - 9:6 range [1] - 95:14 rate [2] - 64:20, 65:25 rates [4] - 69:12, 69:19, 70:1, 72:17 Ratliff [3] - 44:11, 53:1, 54:11 reach [1] - 51:4 read [4] - 87:11, 91:18, 99:21, 105:7 ready [2] - 34:12, 49:3 real [6] - 6:3, 63:24, 64:15, 66:8, 69:12, 74:22 real-time [1] - 74:22 realistic [2] - 72:11, 72:14 really [20] - 25:3, 29:11, 33:23, 38:8, 41:18, 45:11, 45:12, 46:12, 46:24, 47:3, 57:6, 58:9, 59:6, 59:23, 63:6, 72:10, 90:21, 93:21, 98:4, 100:13

reason [8] - 32:8, 56:23, 65:21, 78:8, 79:15, 80:2, 89:14, 94:17 reasonable [1] - 85:13 reasons [1] - 63:17 receive [6] - 24:11, 25:1, 25:5, 74:12, 87:3, 92:15 received [5] - 31:2, 40:11, 74:20, 83:5, 87:20 receiving [1] - 74:21 recent [3] - 18:9, 28:18, 43:10 recently [1] - 99:21 receptors [1] - 15:9 Recess [1] - 82:11 recession [1] - 17:25 recirculation [1] -55:23 recommendation [1] -25:19 recommendations [1] - 39:3 recommended [1] -105:15 recommending [1] -25:14 reconsider [1] - 106:1 record [4] - 32:14, 39:5, 81:7, 81:11 recording [2] - 9:1, 98:8 recruitment [1] - 88:5 recycling [1] - 55:13 reddish [1] - 16:13 redevelopment [1] -51:1 redistricted [1] - 22:13 reduced [1] - 68:15 reevaluate [1] - 19:17 **reference** [1] - 9:16 referring [2] - 34:3, 88:13 reflect [1] - 34:9 refresh [1] - 39:17 regard [1] - 96:18 regarding [3] - 1:3, 14:17, 100:25 regards [1] - 107:6 regular [1] - 54:2 regulatory [1] - 107:8 reiterated [1] - 107:11 relate [1] - 48:7 related [2] - 4:1, 43:18 relatively [1] - 68:23

relay [1] - 7:3

releasable [1] - 18:2

release [1] - 88:1 releasing [1] - 61:3 relook [2] - 95:25, 96:3 remain [2] - 6:20, 73:6 remaining [2] - 24:4, 28:7 remarks [2] - 108:11, 108:15 remedial [25] - 4:16, 4:18, 24:14, 24:20, 24:24, 25:2, 25:14, 25:19, 38:4, 38:5, 38:23, 39:3, 39:10, 39:14, 40:12, 41:5, 41:12, 71:14, 78:5, 78:6, 80:2, 105:15 remediation [3] -74:13, 76:18, 103:4 remedies [2] - 15:4, 39:6 remedy [3] - 15:12, 15:23, 79:16 remember [3] - 48:24, 65:10, 99:5 remembered [1] -68:10 remind [3] - 14:25, 25:11, 96:23 reminder [5] - 23:11, 23:14, 34:7, 37:8, 81:20 reminding [1] - 88:2 remote [3] - 5:7, 81:6, 109:6 remotely [1] - 5:14 removal [2] - 58:14, 68:12 **remove** [1] - 69:7 removed [1] - 68:21 rep [1] - 22:16 repeat [1] - 35:18 replace [1] - 69:7 replicate [1] - 16:19 report [14] - 23:5, 35:20, 50:18, 78:1, 78:3, 78:11, 78:20, 78:25, 79:3, 79:7, 79:12, 84:8, 87:3, 108:22 **REPORTED** [1] - 1:19 Reporter [3] - 1:20, 6:18, 8:24 **REPORTER** [8] - 3:11, 3:15, 3:21, 5:23, 7:25, 8:4, 8:6, 8:10 **Reporting** [1] - 109:19 repositionina [1] -69:5 **repository** [1] - 16:6

reapplied [2] - 31:3,

representation [1] -11:3 representatives [1] -11:22 request [1] - 35:4 requested [4] - 34:20, 34:22, 105:14, 106:2 require [1] - 106:18 requirement [1] - 30:9 reroute [1] - 65:24 resampled [1] - 16:19 resampling [1] - 87:18 research [1] - 60:23 reservations [1] - 74:7 reserve [1] - 101:11 reserved [1] - 4:20 resident [1] - 102:9 residential [1] - 87:18 residents [3] - 31:10, 88:17, 88:18 residing [1] - 84:13 resolution [1] - 92:24 resolutions [1] - 35:5 **resolve** [1] - 109:8 resolved [6] - 73:8, 73:10, 73:22, 89:12, 90:14, 90:21 Resources [1] - 84:20 resources [2] - 30:3, 74:14 respect [1] - 6:10 respected [1] - 105:16 respectfully [1] - 6:14 Respond [1] - 35:16 responded [2] - 40:11, 40:13 response [7] - 24:11, 24:12, 35:21, 84:12, 89:7, 104:12, 107:2 responses [1] - 24:16 responsibility [1] -50:5 rest [2] - 12:15, 67:8 restoration [3] -81:20, 81:22, 82:2 **RESTORATION** [1] restrict [2] - 64:2, 65:19 restricting [1] - 65:23 result [2] - 15:13, 33:7 results [8] - 16:18, 37:18, 87:20, 87:21, 98:20, 108:22, 108:23 retain [1] - 51:20 returned [1] - 54:17 reveal [1] - 37:18 reversal [2] - 105:23,

106:4 review [19] - 6:7, 25:10, 25:17, 25:20, 33:13, 39:23, 41:11, 41:19, 42:1, 42:23, 42:25, 43:5, 49:3, 71:6. 77:15. 80:25. 81:1, 91:2, 91:14 reviewed [1] - 33:1 reviewing [2] - 24:15, 77:1 reviews [3] - 42:19, 42:22, 43:3 revisit [1] - 91:22 **REX**[1] - 1:12 Rex [23] - 5:15, 5:19, 6:1, 7:10, 7:15, 7:22, 10:9, 10:12, 13:5, 21:22, 81:4, 81:13, 81:14, 83:20, 97:17, 97:20, 97:23, 97:25 RFP [2] - 26:17, 26:22 RI [49] - 15:18, 16:16, 20:15, 20:18, 24:13, 28:23, 38:25, 41:21, 41:25, 43:23, 43:24, 43:25, 44:5, 44:15, 44:16, 44:22, 45:4, 45:15, 45:18, 46:2, 46:3, 49:15, 49:23, 59:16, 60:4, 70:18, 70:22, 72:3, 72:9, 73:4, 73:16, 73:22, 78:1, 78:3, 78:9, 78:11, 78:15, 78:20, 79:7, 79:20, 90:9, 90:15, 96:10, 97:4, 100:13, 101:18, 102:20 Rick [1] - 26:16 risk [9] - 15:8, 45:14, 45:17, 94:3, 96:18, 96:21, 96:23, 96:25, 97:2 River [4] - 61:5, 63:6, 64:4, 66:18 river [2] - 62:7, 62:18 Road [1] - 32:3 Rochelle [1] - 109:19 **ROD** [2] - 71:12, 78:5

role [2] - 4:5, 107:8

room [4] - 7:16, 8:11,

root [2] - 27:23, 66:21

roughly [2] - 27:1,

round [1] - 87:17

routine [4] - 29:3,

roles [1] - 49:19

roll [1] - 33:16

54:9, 83:23

85.9

29:9, 29:13, 30:18 routinely [3] - 29:24, 30:2, 30:4 **ROWE** [1] - 26:17 RRD [1] - 25:13 rule [1] - 6:18 rules [3] - 6:7, 7:6, 106:18 run [3] - 9:16, 43:15, 71:17 running [7] - 36:20, 44:13, 52:16, 53:2, 53:3, 53:7, 79:3 runs [3] - 50:8, 55:17, 96:13 runway [2] - 93:16, 95:10 Ryan [3] - 50:12, 50:19, 51:4 S 61:5. 63:6. 64:3. 18:4, 29:5, 29:7, 30:18 95:9 sand [1] - 95:13

Sable [11] - 1:15, 1:18, 10:24. 31:12. 31:20. 66:18, 69:17, 88:18 sample [5] - 16:14, sampled [8] - 16:16, 29:24, 30:2, 30:4, 30:17, 41:7, 87:19, samples [1] - 72:18 sampling [25] - 28:19, 28:23, 28:24, 29:2, 29:4, 29:9, 29:12, 30:12, 30:20, 38:21, 41:1, 41:2, 48:19, 84:21, 89:20, 89:22, 90:4, 90:5, 90:10, 93:23, 94:2, 95:23, 96:11, 96:24, 97:5 saturated [1] - 68:12 **saw** [2] - 9:14, 71:10 scenarios [1] - 62:10 schedule [2] - 72:11, 74:23 scheduled [2] - 48:15, 91:8 schedules [1] - 70:13 scheduling [1] - 48:7 schema [1] - 94:2 **SCHULZ** [5] - 1:12, 10:5, 21:17, 98:12, 98.18 Schulz [2] - 10:4, 21:16 scoping [1] - 74:16

Scott [2] - 9:23, 10:1 scratch [1] - 95:21 screen [1] - 7:12 season [4] - 20:19, 25:1, 25:18, 87:25 seasons [1] - 72:16 second [7] - 14:11, 66:3, 66:4, 68:10, 76:23, 92:8 secondary [4] - 20:11, 20:21, 20:24, 21:2 section [4] - 11:24, 26:20, 32:2, 36:12 see [48] - 3:4, 4:8, 5:1, 7:7. 8:2. 8:11. 8:21. 9:25, 12:4, 12:8, 13:6, 14:5, 16:11, 16:23, 18:21, 18:25, 28:12, 34:4, 35:11, 36:19, 44:2, 44:9, 50:6, 53:16, 60:7, 62:18, 66:18, 67:19, 68:22, 76:4, 77:25, 82:14, 83:11, 92:9, 93:24, 97:9, 97:22, 98:20, 98:21, 101:14, 101:21, 102:15, 103:8, 103:16, 104:11, 106:11, 107:25 seeing [8] - 5:16, 7:12, 8:6, 13:12, 22:17, 37:5, 60:15, 102:22 seeking [1] - 14:13 seem [1] - 90:12 seepage [2] - 14:21, 64:22 segue [1] - 88:8 select [1] - 15:4 selected [3] - 15:23, 36:13, 69:1 selection [1] - 13:11 selections [1] - 13:12 Senate [1] - 106:14 Senator [1] - 22:16 send [3] - 49:4, 101:2, 103.6 sending [1] - 89:6 sense [2] - 47:4, 47:6 sent [7] - 8:17, 25:24, 33:2, 35:17, 43:9, 81:4, 89:4 separate [1] - 91:7 separator [4] - 61:18, 61:25, 62:5, 69:14 September [5] - 18:19, 32:6, 36:8, 36:19, 88:5 serve [4] - 4:5, 36:15,

36:16, 36:22

Service [11] - 11:21, 11:22, 84:19, 85:3, 85:12, 86:5, 86:6, 86:13, 86:16, 93:18, 94:13 Services [2] - 11:6, 87:16 serving [1] - 37:16 set [1] - 91:1 **setting** [1] - 98:3 settings [1] - 98:4 settled [3] - 63:5, 63:12, 63:13 seven [4] - 7:2, 12:9, 72:7, 89:15 several [3] - 73:5, 93:12, 99:16 sewage [1] - 31:19 **sewer** [6] - 27:2, 27:3, 27:12, 28:20, 106:4, 106:8 sewers [3] - 23:12, 23:16, 30:11 **shall** [2] - 36:13, 36:15 share [12] - 6:25, 21:11, 23:10, 25:25, 50:19, 55:25, 81:4, 96:8, 97:22, 98:24, 103:24, 108:2 shared [2] - 76:24, 77:2 sheet [1] - 12:5 **shooting** [1] - 95:13 **short** [3] - 64:18, 76:17, 106:6 short-sighted [1] -106:6 short-term [1] - 76:17 Shorthand [1] - 1:20 shot [1] - 104:24 **show** [3] - 18:3, 18:4, 59:1 showed [1] - 27:4 **showing** [2] - 3:23, 13:9 **shown** [2] - 7:14, 56:8 **shows** [1] - 56:6 SI [4] - 16:15, 16:20, 20:25, 46:10 side [8] - 16:23, 41:21, 47:23, 54:10, 56:25, 72:3, 89:17, 93:5 sides [1] - 67:25 sighted [1] - 106:6 sign [1] - 12:5 sign-in [1] - 12:5 signed [1] - 12:6 significant [4] - 4:21, 15:8, 65:8, 75:1 significantly [1] -

45:12 similar [4] - 53:23, 54:2, 54:7, 54:19 simple [3] - 37:6, 69:6, 106:17 **simpler** [1] - 57:7 simplest [1] - 37:6 simplified [1] - 69:13 site [20] - 12:9, 13:6, 13:15, 15:11, 15:15, 17:6, 19:7, 20:22, 38:20, 39:8, 39:9, 50:10, 50:24, 53:7, 58:11, 80:17, 93:13, 93:20, 94:8 sites [3] - 15:5, 15:22 sitting [1] - 20:12 six [4] - 6:25, 85:9, 85:15, 87:23 slant [1] - 49:12 slide [38] - 4:8, 4:9, 5:16, 5:17, 6:6, 7:18, 12:9, 13:20, 14:11, 16:9, 17:5, 32:18, 32:20, 38:2, 38:12, 38:13, 39:19, 43:19, 43:22, 43:23, 44:6, 44:7, 44:14, 52:11, 52:24, 53:16, 53:21, 57:18, 70:11, 73:16, 77:20, 81:3, 81:19, 103:17, 108:7, 108:8, 108:9 slides [4] - 7:13, 13:13, 34:15, 39:24 slipline [2] - 27:20, 106:3 sliplined [1] - 23:18 sliplining [6] - 23:12, 26:18, 26:19, 26:25, 27:11, 27:25 smoking [1] - 100:4 Snowden [3] - 1:20, 6:18, 109:19 so-called [1] - 98:13 sock [1] - 69:21 soils [1] - 66:23 solid [1] - 65:18 solution [1] - 66:1 someone [2] - 34:1, 104:19 sometimes [1] - 81:25 somewhere [2] - 35:2, 60:14 soon [3] - 18:14, 48:18, 59:19 sooner [1] - 90:21 sorbent [3] - 58:13, 69:22, 70:1 sorry [13] - 3:11,

33:18, 38:11, 39:19, 44:25, 47:14, 65:1, 66:6, 74:1, 75:7, 77:17, 96:9, 96:15 sort [5] - 23:1, 34:7, 57:24, 95:16 sound [13] - 5:19, 8:8, 82:13, 82:18, 82:20, 82:25, 83:20, 83:22, 97:9, 97:14, 98:1, 98:3, 98:4 sounds [3] - 92:14, 94:19, 100:18 source [6] - 20:11, 20:21, 94:14, 94:18, 102:17 sources [8] - 20:24, 21:2, 99:8, 99:20, 99:25, 100:2, 100:10, 100:21 south [4] - 84:21, 86:13, 93:15, 93:22 southwest [1] - 53:20 Spaniola [4] - 105:8, 106:24, 107:23, 108:5 **SPANIOLA** [3] - 2:2, 105:9, 105:12 Spaniola's [1] - 107:3 **SPEAKER** [5] - 3:18, 48:9, 77:21, 92:7, 104:25 speaking [1] - 9:9 specific [2] - 43:18, 96:21 spend [1] - 38:17 spots [1] - 31:4 **SPP** [4] - 45:1, 47:17, 48:15, 76:5 spreadsheet [2] -25:2, 35:6 spring [3] - 19:14, 44:23, 71:11 stabbed [1] - 90:2 stakeholder [4] -13:19, 13:21, 24:3, 87:15 stand [6] - 8:5, 23:2, 47:18, 82:23, 83:17, 83:18 standard [3] - 32:23. 76:15, 77:12 standards [4] - 43:12, 43:14, 76:14, 76:23 stands [1] - 71:1 standstill [1] - 90:16 star [3] - 9:11, 9:12, 9:13 start [13] - 4:10, 14:2,

31:24, 31:25, 32:19,

52:13, 59:19, 70:21, 79:3, 79:8, 79:11, 82:10, 84:1 started [16] - 32:1, 32:3, 32:5, 32:15, 43:24, 52:5, 52:15, 53:2. 62:3. 71:19. 84:16. 85:8. 88:4. 88:5, 98:13, 98:15 starting [2] - 71:3, 88:16 starts [1] - 59:7 State [9] - 22:12, 22:15, 22:16, 29:8, 46:1, 84:20, 88:16, 90:11, 90:19 state [1] - 73:11 states [1] - 81:6 status [1] - 46:4 stay [2] - 57:2, 57:7 step [1] - 72:2 step-outs [1] - 72:2 steps [7] - 24:16, 24:19, 45:5, 63:10, 79:25, 80:1, 106:1 Steve [21] - 4:4, 27:18, 38:11, 38:16, 39:21, 53:10, 69:11, 70:9, 70:18, 73:13, 74:12, 81:23, 84:14, 89:4, 91:6, 99:3, 99:15, 100:8, 107:4, 107:21, 108:21 Steve's [1] - 74:19 **STEVEN** [1] - 1:15 steven [1] - 47:7 Steven [7] - 8:17, 10:21, 14:3, 40:20. 43:9, 60:17, 109:3 stewardship [1] -106:9 sticking [1] - 102:3 still [25] - 16:22, 16:25, 17:2, 19:8, 27:5, 39:13, 46:14, 46:25, 49:22, 55:3, 55:4, 55:19, 57:21, 63:15, 63:21, 65:18, 73:4, 78:24, 87:20, 91:17, 91:22, 98:8, 102:11 Stock [2] - 10:6, 21:19 STOCK [3] - 1:10, 10:7, 21:20 stonewalling [1] -94:19 **stop** [1] - 106:13 storm [12] - 23:12, 23:16, 27:2, 27:3, 27:11, 28:20, 30:11,

61:12, 69:3, 69:14, 106:4, 106:8 **story** [1] - 19:15 straight [1] - 62:14 STRAYER [6] - 1:15, 10:25, 30:25, 31:22, 32:1, 32:16 Strayer [2] - 10:23, 27:7 stream [4] - 59:5, 65:14, 69:15, 69:22 Street [3] - 26:21, 27:21, 28:7 stretch [2] - 62:11, 62:13 structured [1] - 81:21 study [24] - 4:19, 14:23, 15:3, 15:19, 38:24, 39:1, 39:7, 53:14, 53:18, 57:20, 58:2, 58:7, 60:1, 60:12, 60:22, 61:8, 62:10, 67:15, 67:23, 68:3, 71:16, 71:18, 78:4, 80:23 stuff [9] - 27:24, 30:12, 50:22, 67:5, 80:6, 91:22, 95:16, 99:18, 103:2 Stuntebeck [1] - 11:21 **sub** [1] - 39:25 sub-comment [1] -39:25 subject [2] - 27:18, 81:5 **submit** [1] - 33:25 submitted [3] - 35:14, 35:16, 71:4 subsurface [1] - 47:1 **succinctly** [1] - 6:15 Sueltenfuss [1] - 3:3 SUELTENFUSS [118] -1:6, 3:2, 3:7, 3:13, 4:3, 5:18, 5:24, 7:9, 7:15, 7:22, 8:1, 8:5, 8:8, 8:13, 9:20, 9:23, 10:6, 10:8, 10:12, 10:15, 10:18, 10:23, 11:1, 11:9, 11:14, 11:17, 11:20, 12:17, 12:21, 12:24, 13:1, 13:5, 13:14, 13:16, 14:10, 17:9, 18:20, 19:5, 20:5, 21:9, 21:15, 21:18, 21:21, 22:1, 23:23, 24:2, 26:2, 26:9, 27:6, 27:9, 28:14, 30:23, 31:16, 32:17, 33:20, 34:11, 35:23, 36:2,

38:1, 40:19, 40:22, 42:5, 42:12, 43:6, 45:20, 47:7, 47:16, 52:9, 55:7, 57:15, 57:17, 58:25, 60:17, 60:20, 63:23, 64:14, 66:8, 68:7, 70:10, 71:20, 72:22, 72:24, 73:24, 74:2, 75:16, 75:24, 76:11, 76:25, 77:8, 77:17, 80:20, 81:2, 82:8, 82:12, 86:24, 87:6, 87:10, 87:14, 88:11, 88:24, 92:6, 92:13, 93:9, 95:6, 96:7, 97:6, 97:8, 97:25, 100:23, 101:10. 103:5. 103:12. 104:23. 105:3, 106:23, 108:21, 109:2, 109:11 suggest [3] - 8:14, 43:16, 82:5 **suggested** [1] - 34:8 **suggestion** [1] - 43:13 SULTENFUSS [1] -107:21 summary [4] - 23:5, 43:9, 105:18 summer [1] - 107:12 summer's [1] - 98:16 supply [1] - 31:6 support [10] - 18:5, 37:11, 40:16, 49:23, 50:11, 50:15, 94:9, 94:10, 108:13, 108:14 **supporting** [1] - 51:8 supports [2] - 47:2, 95:3 surface [8] - 57:24, 58:20, 58:22, 62:8, 67:21, 75:10, 96:12, 97:5 surprises [1] - 51:24 **Swamp** [3] - 66:11, 66:19, 67:9 **swamp** [2] - 66:17, 67:21 system [17] - 27:21, 27:25, 31:24, 52:15, 52:17, 52:19, 53:4, 53:7, 54:8, 54:13, 56:16, 75:5, 81:6, 81:8, 81:10, 86:14 systematic [2] - 45:2, 47:19 systems [5] - 29:1, 29:25, 44:13, 50:4,

70:5 Т table [3] - 4:24, 5:5, 104:4 tank [2] - 16:2, 25:23 tea [1] - 62:22 team [10] - 17:22, 49:19, 50:6, 51:8, 51:19, 52:7, 105:18, 106:19, 107:19, 108:12 team's [1] - 72:18 teamed [1] - 50:1 technical [16] - 3:24, 5:8, 14:8, 16:11, 17:23, 21:22, 22:5, 34:21, 38:3, 41:19, 44:20, 45:10, 48:19, 52:17, 105:16, 108:13 technology [7] - 1:4, 58:4, 58:11, 60:13, 60:23, 60:24, 64:12 techs [1] - 98:1 teleconference [2] -1:4. 11:8 **TELECONFERENCE** [2] - 1:12, 1:16 telephone [1] - 9:10 ten [1] - 82:5 ten-minute [1] - 82:5 term [11] - 36:7, 36:9, 36:10, 36:11, 36:15, 39:11, 40:23, 41:4, 43:2, 76:17 terms [6] - 13:2, 22:17, 23:3, 27:25, 36:16, 69:18 testing [5] - 31:11, 31:12, 88:14, 88:22 tests [1] - 98:21 text [1] - 105:7 texted [1] - 5:16 Thanksgiving [1] -48:25 that'd [1] - 56:1 that'll [1] - 19:24 THE [10] - 2:1, 3:11, 3:15, 3:21, 5:23, 7:25, 8:4, 8:6, 8:10 themselves [2] -

19:23, 40:17

thereafter [1] - 5:1

they've [4] - 50:13,

third [1] - 106:15

three [15] - 4:9, 5:5,

therefore [1] - 68:13

52:5, 91:13, 107:11

6:15, 33:5, 34:6, 34:13, 35:3, 78:21, 87:17, 88:3, 92:24, 104:5, 104:11, 106.16 Three [12] - 4:20, 14:22. 28:24. 29:12. 30:5. 53:19. 57:20. 59:3, 61:13, 64:3, 66:11, 66:15 three-minute [1] -104.5 throughout [1] - 9:3 throw [1] - 92:10 Thursday [1] - 24:12 tie [1] - 43:13 **TIM** [2] - 1:6, 1:17 Tim [19] - 3:3, 3:11, 7:7, 7:21, 11:14, 26:10, 33:18, 34:3, 51:20, 63:24, 64:15, 64:16, 68:8, 84:4, 84:6, 86:24, 99:2, 100:17, 104:18 timeframe [1] - 71:7 timeline [1] - 75:3 timely [1] - 87:7 tiring [1] - 83:3 today [1] - 71:23 together [10] - 6:13, 43:8, 44:19, 46:1, 48:24, 49:2, 79:5, 91:15, 103:6 tonight [14] - 3:5, 4:10, 6:5, 10:3, 12:1, 14:5, 16:8, 33:4, 36:25, 105:13, 106:15, 108:1, 108:14, 109:7 tonight's [1] - 81:8 **Tony** [2] - 105:5, 105:8 tool [1] - 89:23 tools [1] - 90:13 top [3] - 68:17, 90:8, 96:22 topic [5] - 4:17, 13:19, 13:22, 26:25, 27:4 topics [2] - 33:14, 43:10 total [7] - 33:9, 81:5, 81:10, 87:18, 88:14, 101:23, 102:16 tour [3] - 14:6, 52:16, 53:8 toward [2] - 53:25 towards [2] - 4:21, 61:4 Township [15] - 1:15, 1:17, 1:18, 10:24,

11:15, 23:4, 23:8,

26:14, 26:16, 27:11, 28:2, 28:9, 30:7, 31:3, 31:12 track [1] - 76:10 tracker [1] - 33:3 tracking [1] - 47:1 trail [1] - 63:9 training [2] - 86:7, 86:12 transcript [2] - 8:25, 81:12 Transcript [1] - 1:3 transfer [2] - 86:8, 86:20 transition [1] - 85:2 transmissive [1] -66:25 transparent [1] -81:17 transport [1] - 46:20 travels [1] - 94:25 treat [4] - 54:2, 54:16, 64:10, 64:11 treating [5] - 52:20, 53:4, 58:3, 58:10, 59:12 treatment [18] - 23:6, 25:16, 27:13, 27:14, 28:5, 30:13, 32:9, 32:13. 50:3. 52:14. 52:17, 52:19, 53:4, 54:3, 54:6, 54:7, 64:12, 70:5 trenches [1] - 54:24 trespassers [1] -19:23 **trillion** [1] - 19:1 true [4] - 41:23, 41:24, 78:25 try [14] - 8:15, 16:17, 38:9, 55:15, 57:7, 57:9, 60:4, 62:7, 65:14, 82:18, 103:7, 104:21, 105:4, 109:8 trying [4] - 17:15, 65:3, 68:7, 77:21 Tucker [3] - 66:11, 66:19, 67:9 turn [16] - 5:13, 5:21, 5:25, 14:3, 20:6, 24:5, 37:20, 40:19, 43:17, 68:8, 92:18, 97:9, 104:10, 105:7, 107:1, 108:15 turning [2] - 101:13, 108:10 turnout [1] - 14:13 twice [1] - 23:8 two [14] - 6:13, 17:6, 28:20, 32:24, 32:25,

35:13, 36:16, 39:23, 44:8, 50:10, 64:18, 72:16, 72:20, 89:14 **type** [2] - 27:23, 100:14 **types** [1] - 99:7 **typically** [3] - 6:5, 21:12, 40:8

U

U.S [2] - 22:11, 22:24

un-mute [2] - 9:12,

unable [2] - 81:13,

92.11

104:20 unanimous [1] -108:24 under [11] - 20:10, 40:3, 40:4, 40:14, 41:10, 45:22, 49:21, 50:2, 50:15, 99:6, 107:8 underflow [1] - 67:3 underflowing [1] -67:18 underflows [1] - 66:16 underneath [2] - 67:7, 89:4 understood [3] - 8:13, 85:15, 92:13 undertaken [1] - 53:13 underway [2] - 71:16, 88:1 unfortunate [1] -109:6 UNKNOWN [5] - 3:18, 48:9, 77:21, 92:7, 104:25 unofficial [1] - 95:9 unresolved [8] -24:13, 73:6, 73:21, 89:16, 91:2, 91:3, 91:9, 92:23 **up** [60] - 3:18, 3:23, 5:3, 5:4, 7:14, 13:15, 15:10, 15:14, 16:1, 18:12, 22:11, 23:9, 26:12, 29:11, 31:4, 31:6, 31:24, 31:25, 32:1, 32:5, 42:18, 43:11, 44:13, 46:12, 48:25, 50:5, 52:15, 53:2, 53:7, 53:17, 54:4, 54:14, 56:6, 58:3, 58:10, 58:17, 60:5, 62:25, 63:18, 65:14, 69:15, 71:11, 73:16, 75:2, 80:1, 81:24, 82:10, 83:24,

86:6, 86:11, 91:1, 92:11, 93:12, 96:15, 98:24, 99:12, 103:22, 104:3, 104:9 upcoming [2] - 70:17, 76:3 update [16] - 4:15, 14:2, 23:12, 25:22, 33:15, 38:5, 38:15, 43:25, 44:15, 52:6, 52:12, 70:14, 76:7, 77:10, 87:10, 87:15 updates [12] - 4:11, 6:3, 13:19, 13:21, 13:23, 21:16, 24:3, 24:10, 27:7, 49:25, 76:16, 87:16 updating [1] - 7:12 upgrading [1] - 75:20 ups [1] - 32:11 upstream [5] - 55:12, 63:6, 64:8, 95:11, 95:23 urge [1] - 105:25 usage [2] - 27:2, 27:3 **USDA** [1] - 11:21 **UVA**[1] - 20:23

V

valid [1] - 90:1 values [1] - 87:24 **Van** [12] - 18:24, 29:17, 44:11, 44:23, 47:23, 53:1, 53:25, 54:11, 72:4, 89:17, 93:3, 93:5 various [2] - 50:14, 101:19 VAS [2] - 90:10, 90:20 vast [1] - 61:2 VAUGHN [8] - 1:12, 7:7, 7:11, 7:20. 10:11. 13:8. 13:15. 97:24 Vaughn [6] - 5:15, 5:19, 10:9, 21:22, 81:4, 83:20 venison [1] - 88:2 venting [5] - 59:12, 59:14, 59:16, 60:3, 60:8 verbatim [2] - 8:25, 81:12 verify [1] - 85:22 version [2] - 8:17, 100:19 versions [1] - 99:19 versus [2] - 60:24,

vertical [5] - 89:20, 89:21, 90:3, 90:5, 90.10 vetted [1] - 49:10 via [3] - 1:4, 11:7, 54:18 **VIA** [2] - 1:12, 1:16 video [4] - 1:4, 8:7, 11:7, 19:19 view [3] - 6:21, 19:25, 48:19 vigor [1] - 81:16 VIJ [1] - 1:16 Vij [3] - 11:5, 11:7, 87:15 violated [1] - 106:16 virtual [3] - 8:22, 11:4, 87:2 virtually [13] - 4:25, 10:1, 11:10, 82:14, 82:17, 82:19, 82:22, 83:1, 83:6, 92:16, 92:19, 97:12, 97:14 volume [2] - 27:3, 32:8 vote [4] - 12:2, 26:15, 36:14, 37:8 votes [1] - 37:6

W

wait [2] - 25:20, 106:9 walked [1] - 62:18 warning [2] - 93:16, 93:18 warrant [1] - 19:10 washed [1] - 62:19 wastewater [5] -14:21, 23:6, 25:16, 32:9, 32:13 water [30] - 28:20, 30:3, 31:6, 54:10, 54:16, 57:24, 58:20, 58:22, 59:4, 61:13, 61:16, 61:18, 61:23, 61:24, 61:25, 62:5, 62:8, 63:2, 64:20, 65:12, 65:24, 69:14, 74:13, 93:21, 96:12, 96:14, 97:5, 98:23, 106:7 Water [1] - 35:17 ways [2] - 55:16, 55:17 wayside [1] - 91:4 website [1] - 101:7 **WEDNESDAY** [1] - 1:1 week [1] - 22:8 weeks [5] - 32:24, 32:25, 41:17, 45:11,

96:25 welcome [4] - 3:2, 3:4, 32:16, 97:7 wells [10] - 31:5, 41:7, 41:8, 56:22, 57:1, 57:3, 60:6, 87:18, 89:24. 98:23 west [1] - 93:23 whole [13] - 15:2, 15:11, 15:15, 27:25, 30:13, 39:25, 55:21, 56:9, 62:14, 78:12, 79:15, 80:5, 90:22 **William** [1] - 9:18 WILLIAM [1] - 1:9 willingness [1] - 36:22 Willis [11] - 4:4, 8:17, 10:21, 14:3, 40:20, 69:12, 73:13, 81:23, 99:15, 107:5, 109:3 WILLIS [64] - 1:15, 3:4, 10:22, 14:4, 14:12, 17:12, 17:20, 18:8, 18:11, 18:19, 19:2, 19:6, 19:12, 19:16, 20:14, 21:4, 21:7, 22:19, 27:19, 28:6, 28:22, 29:6, 37:23, 38:9, 40:21, 41:24, 42:17, 47:8, 48:2, 48:21, 49:16, 51:11, 51:15, 51:18, 51:25, 52:2, 59:25, 60:11, 65:13, 69:10, 72:15, 73:12, 75:4, 75:8, 75:21, 77:4, 82:7, 84:15, 85:4, 85:16, 85:21, 91:12, 91:20, 93:1, 94:7, 95:1, 95:24, 96:2, 98:15, 98:22, 99:14, 101:5, 107:4, 109:4 wind [1] - 94:25

Winn [6] - 10:13,

WINN [34] - 1:10,

89:1, 89:2

21:23, 63:24, 71:21,

10:14, 18:22, 19:9,

42:2, 45:22, 45:25,

47:5, 47:13, 60:18,

60:21, 61:1, 61:7,

64:1, 71:22, 72:1,

79:15, 80:5, 80:9,

80:12, 89:2, 90:22,

91:16, 91:23, 92:2

winter [1] - 70:20

wisely [1] - 6:14

72:10, 72:23, 78:8,

78:18, 78:23, 79:13,

19:13, 21:24, 41:16,

wondered [1] - 66:5 wondering [1] - 87:4 word [1] - 92:22 words [1] - 96:5 works [2] - 15:1, 59:21 workshop [6] - 14:8, 16:11, 17:23, 44:21, 45:10, 52:17 workshops [1] - 14:14 worries [1] - 64:25 worse [3] - 75:11, 75:15 write [3] - 25:14, 34:8, 37:14 writing [2] - 19:7, 107:10 **WSP** [4] - 50:1, 51:10, 51:19, 52:2 WURTSMITH [1] - 1:1 Wurtsmith [23] - 1:3, 11:18, 12:10, 14:7, 25:15, 26:3, 29:25, 44:25, 49:19, 50:4, 51:8, 52:3, 66:25, 72:21, 86:11, 89:23, 95:4, 100:11, 105:17, 106:22, 107:9, 107:17, 107:20 Wusterbarth [6] -10:16, 22:2, 26:13, 31:18. 82:17. 86:25 WUSTERBARTH [28] -1:11, 10:17, 17:11, 17:17, 18:6, 18:10, 18:17, 22:3, 22:22, 23:25, 29:17, 31:14, 31:17, 31:23, 32:7, 33:18, 33:21, 34:12, 34:18, 35:25, 87:1,

Y

87:9, 87:12, 88:9,

88:12, 104:18,

105:11, 109:1

year [25] - 14:24, 22:25, 31:2, 36:10, 42:14, 42:19, 42:22, 42:23, 42:25, 43:3, 43:5, 52:3, 52:4, 70:16, 70:17, 76:17, 77:24, 79:22, 80:22, 80:25, 81:1, 85:2, 88:23 20:12, 27:1, 28:18,

72:20, 78:3, 79:19, 85:9, 85:15, 86:4, 86:17, 86:21, 89:25, 92:24, 99:6 yesterday [1] - 88:2 yourself [1] - 9:13 YouTube [1] - 19:20

Year's [1] - 51:24 year's [1] - 48:4 years [18] - 16:15, 28:21, 50:9, 50:13,