

WURTSMITH RESTORATION
ADVISORY BOARD (RAB) MEETING

Oscoda United Methodist Church
120 West Dwight Street, Oscoda, Michigan 48750
Wednesday, November 8, 2023, 5:00 p.m.

RECORDED BY: Marcy A. Klingshirn, CER 6924
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1 RAB CO-CHAIRS: Mark Henry
Steven Willis, Air Force
2
3 Local Government Kalan Briggs, EGLE
Stakeholder RAB Denise Bryan, Local Health Department
4 Members Present: (virtual)
Tim Cummings, Oscoda Township
5 Chelsea Gary, MDHHS
Amy Handley, EGLE (virtual)
6 Michael Munson, OWAA
Eric Strayer, AuSable Township
7 Jessica Stuntebeck, USDA Forest Service
(virtual)
8
9 Community RAB Dave Carmona
Members Present: William Gaines
Kyle Jones (virtual)
10 Arnie Leriche (virtual)
Scott Lingo
11 Greg Schulz
Daniel Stock (virtual)
12 Josh Sutton
Rex Vaughn
13 David Winn
Cathy Wusterbarth
14
15 Also Present: Amy Rauser
Jessie Howard
Celeste Holtz
16 Craig Johnson (virtual)
Megan Barry
17
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Oscoda, Michigan

Wednesday, November 8, 2023 - 4:57 p.m.

MS. JESSIE HOWARD: Hello, everyone, and welcome to the November 2023 Restoration Advisory Board Public Meeting. I'm Jessie Howard, your facilitator. This meeting is being recorded and live streamed by Irving Entertainment and also documented by our certified court reporter, Marcy. She is joining us virtually this evening. So, again, that I will ask that everyone please be sure to state your first and last name clearly prior to addressing the RAB so she gets a clear record. Also, just a reminder to the RAB members with the microphones, please speak directly into the round piece and get as close as you can to the mic.

Now I would like to invite our co-chairs to give their opening remarks. Mr. Willis?

MR. STEVEN WILLIS: Good evening. Good evening, everyone, and welcome. We've got a good turnout considering the weather and kind of a dreary, rainy afternoon/evening. We've got a lot to cover tonight. We've got three presentations, updates on the -- the traditional RI/IRA that we talk about pretty much at every RAB. We've also got a vapor intrusion update for the RI that's being done for VI, and we've also got a presentation. The presenter is going to actually present virtually, but it's a presentation on our non-AFFF evaluation for other sources other than the

1 foam. That's all I've got.

2 MR. MARK HENRY: I would like to also welcome
3 everybody here. Thank you for attending. This is going to
4 be kind of a continuation of some of the technical
5 discussions that we had yesterday and I thought that was a
6 very productive meeting yesterday afternoon. So I'm hoping
7 to learn a lot and plan to ask a few questions. I encourage
8 you to do so also. Thank you.

9 MS. JESSIE HOWARD: Okay. Thank you both. Next I
10 will take attendance of the RAB members to ensure that we
11 have a quorum. Our RAB Coordinator in the back, Amy, will
12 respond for anybody that's joining us virtually. Steven
13 Willis with the US Air Force?

14 MR. STEVEN WILLIS: Present.

15 MS. JESSIE HOWARD: Tim Cummings, Oscoda Township?

16 MR. TIM CUMMINGS: Here.

17 MS. JESSIE HOWARD: Eric Strayer, AuSable
18 Township?

19 MR. ERIC STRAYER: Present.

20 MS. JESSIE HOWARD: I believe we have Kalan Briggs
21 sitting in for Amy Handley with EGLE, but Amy's with us
22 virtually as well, I believe.

23 MR. KALAN BRIGGS: That's correct. Present.

24 MS. JESSIE HOWARD: Michael Munson with OWAA?

25 MR. MICHAEL MUNSON: Here.

1 MS. JESSIE HOWARD: Denise Bryan with District
2 Health Number 2?

3 MS. DENISE BRYAN: (No verbal response)

4 MS. JESSIE HOWARD: Chelsea Gary with the State
5 Department of Public Health?

6 MS. CHELSEA GARY: Here.

7 MS. JESSIE HOWARD: And Jessica Stuntebeck with
8 the USDA Forest Service? Is she with us virtually?

9 MS. AMY RAUSER: Not yet.

10 MS. JESSIE HOWARD: Okay. For the commu- --

11 MS. JESSICA STUNTEBECK: Yes, I am here virtually.

12 MS. JESSIE HOWARD: Okay. Mark Henry?

13 MR. MARK HENRY: Present.

14 MS. JESSIE HOWARD: Dave Carmona?

15 MR. DAVE CARMONA: Present.

16 MS. JESSIE HOWARD: William Gaines?

17 MR. WILLIAM GAINES: Here.

18 MS. JESSIE HOWARD: Kyle Jones?

19 MR. KYLE JONES: (No verbal response)

20 MS. JESSIE HOWARD: Arnie Leriche?

21 MR. ARNIE LERICHE: Present.

22 MS. JESSIE HOWARD: Scott Lingo?

23 MR. SCOTT LINGO: Present.

24 MS. JESSIE HOWARD: Greg Schulz?

25 MR. GREG SCHULZ: Present.

1 MS. JESSIE HOWARD: Daniel Stock?

2 MR. DANIEL STOCK: (No verbal response)

3 MS. JESSIE HOWARD: Josh Sutton?

4 MR. JOSH SUTTON: Present.

5 MS. JESSIE HOWARD: Rex Vaughn?

6 MR. REX VAUGHN: Here.

7 MS. JESSIE HOWARD: David Winn?

8 MR. DAVID WINN: Present.

9 MS. JESSIE HOWARD: And Cathy Wusterbarth?

10 MS. CATHY WUSTERBARTH: Here.

11 MS. JESSIE HOWARD: Next I will quickly review
12 tonight's agenda. Let's see. After our welcome and
13 introductions we will have the RAB member updates followed
14 by the RAB business update, then we will get the PFAS, RI
15 and IRA update followed by the vapor intrusion RI update,
16 then the PFAS sources other than AFFF presentation, followed
17 by RAB member questions, and then our public comment portion
18 of tonight's evening and then the conclusion. We do ask
19 that all members of the community that are with us tonight
20 please hold their comments until that public comment portion
21 of tonight's agenda.

22 Next, do we have any state or local government
23 officials with us tonight either in person or virtually that
24 would like to introduce themselves?

25 MS. MEGAN BARRY: Megan Barry, Bay City District

1 Office, RRD.

2 MS. JESSIE HOWARD: Thank you. Anybody else?

3 UNIDENTIFIED SPEAKER: For the court reporter.

4 MS. MEGAN BARRY: Megan Barry, Bay City District
5 Office, RRD.

6 MS. JESSIE HOWARD: Okay. Now I would like to
7 move on to the RAB member updates. Mr. Willis, do you have
8 an update for the Air Force for us?

9 MR. STEVEN WILLIS: If we could flip -- flip to
10 the next slide, please? There we go. So, excuse me, since
11 the last RAB meeting we did have a in-person -- it looks
12 like the date's wrong there -- we did have an in-person
13 technical session. It was yesterday as Mark Henry
14 indicated. We did discuss the latest data that we collected
15 from the RI, we had updated plume maps and went through
16 those kind of working our way from the northeast portion of
17 the base kind of down south and to the west and basically
18 discussed each of the areas where the data has changed, what
19 -- what looks different about the plumes and so forth.

20 At the last RAB meeting I did indicate that the
21 Air Force was going to be doing a critical process analysis
22 of the four sites that both EGLE and the community have
23 identified as locations needing IRA's. The team did come up
24 and they met with Mark Henry and Bob Delaney and they
25 visited all four sites, talked about various histories of

1 the sites, some of the issues and challenges associated with
2 each of them. The team met two sequential weeks after that.
3 We did have EGLE representatives come down and participate
4 in those meetings and basically went through each of the
5 four sites, looked at the available information, looked at
6 the challenges and what kind of interim remedial actions we
7 could take to keep PFAS from moving off the former
8 installation boundaries. That team is still compiling all
9 the information, their recommendations.

10 The recommendations will include both what -- what
11 type of an IRA would be appropriate for the site as well as
12 identifying design investigation, data requirements. So
13 before we could complete a design and build the system,
14 there will be some data gaps that need to be addressed and
15 then they'll also recommend data gaps for the feasibility
16 study to support selection of final remedies and design of
17 those. So they'll have three separate recommendations. The
18 plan at this point is that that team is going to brief their
19 recommendations to the Air Force leadership next week, the
20 week after Thanksgiving they'll brief the EGLE's management,
21 and then the week after that which is the first week of
22 December, that team will be presenting their recommendations
23 to the community and RAB.

24 UNIDENTIFIED SPEAKER: Steve, do you know where
25 that meeting might be held?

1 MR. STEVEN WILLIS: Yeah. At this point I
2 understand that it's going to be a virtual meeting.

3 MS. JESSIE HOWARD: Mr. Henry, did you have an
4 update for us?

5 MR. MARK HENRY: Only a couple of things of note.
6 First of all, the RAB members provided comments to the Alert
7 Aircraft Area proposed for remedial action. So we had a
8 couple of meetings to discuss those. We put down our
9 comments and submitted them. And most recently as Steve
10 indicated, I participated along with Mr. Bob Delaney in the
11 Critical Process Analysis meetings which lasted about three
12 days. We went through a lot of good ideas. We talked about
13 historical data as well as current data and did a little
14 brainstorming and they took the ideas from that meeting and
15 those were discussed between the state and the Air Force
16 down in San Antonio a couple of times over the last few
17 weeks. But I think that's about it.

18 MS. JESSIE HOWARD: Okay. Next we do have an
19 update from Amy Handley with EGLE and she is joining us
20 virtually. Amy, when you're ready?

21 MS. AMY HANDLEY: Yes. Good evening, everyone.
22 Can you hear me? All righty. My apologies, everyone, for
23 not being able to attend in person tonight. I had every
24 intention to be there, but when I woke up this morning I was
25 feeling much worse than what I was yesterday for those that

1 saw me at the technical session. I was a recluse in the
2 back corner with a mask on trying to keep my -- my germs to
3 myself. So apologies. Hopefully I will be able to see you
4 all at the next RAB meeting. Okay. We can go ahead and
5 advance to the next slide, please.

6 All right. So some of the recent things that
7 we've been up to, at least within the Superfund section of
8 EGLE, myself and a few of our other technical staff have
9 been meeting with Mark and Bob over -- we saw them the last
10 -- I think it was a couple weeks ago now, and then
11 previously before that a few weeks prior to discuss some
12 different technical concerns that they have been having just
13 to hash out kind of where we're at with looking at things
14 and what their concerns are. They definitely seemed like
15 very positive meetings and I know that our team always left
16 feeling like we had a better understanding of -- of what we
17 should be focusing on and looking at and what the
18 community's concerns are. So that's been great. We did
19 have a BCT meeting in September, and those meeting minutes
20 are going to be posted to the Wurtsmith MPART site as soon
21 as we receive them. And I did give an update on that
22 meeting at the NOW meeting, so hopefully we'll be able to
23 share that information with everybody again in the future.
24 We have been having ongoing meetings with the Air Force to
25 discuss the fieldwork progress that's been happening out at

1 Wurtsmith over the last couple months. We usually spend
2 time looking over what additional data that has come in and
3 what our next steps are moving forward. It's been a really
4 good opportunity for all of us to be able to talk about what
5 -- what we need to focus on next. As Steve had mentioned,
6 we participated in that Critical Process Analysis. Myself,
7 Nick Shorkey and Matt Baltusis were there in person for this
8 in San Antonio. I thought it was a great opportunity for us
9 and I really think everyone's going to be very impressed
10 with what this group was able to put together when they
11 provide those briefing meetings to us in a few weeks. We've
12 also been reviewing a lot of documents recently. The PFAS
13 RI QAPP Addendum, we provided backcheck comments to the Air
14 Force and we also provided backcheck comments on the
15 Aircraft Alert Area IRA proposed plan. And then we also
16 reviewed the BECOS QAPP. We are just waiting for responses
17 back from that as well. And we're in the process of
18 reviewing the 2021 remedial action operation LTM report and
19 those comments are going to be provided in the next week or
20 two. We can move to the next slide.

21 These are just some upcoming activities that we're
22 -- we're going to be doing. We have an SPP meeting planned
23 actually for tomorrow in Lansing. Fingers crossed that I'll
24 be better enough to be able to make that. We are planning
25 to have a meeting between EGLE staff and the Air Force to

1 discuss the approach for the east side of Van Etten Lake,
2 the investigation, relating to the signature analysis and a
3 few other items over there. That is currently planned for
4 November 20th. We have been reviewing the data that's been
5 coming in from the ongoing RI work this field season in an
6 attempt to kind of fasttrack any stepouts or additional
7 monitoring wells that might be needed onsite. And then we
8 have a couple of additional documents coming up over the
9 next few months for our review and those include the
10 Aircraft Alert Area, QAPP, the Record of Decision, and the
11 work plan. We're expecting to get those in November,
12 January and February respectively. AECOM has been onsite
13 for us for ongoing oversight and for collecting QA samples.
14 We were able to do split samples with the Air Force for the
15 fish samples as part of their biota study. The labs were
16 able to kind of homogenize those samples and split them off
17 and send them to the lab that -- that we're using. So that
18 was really great that we were able to -- to work something
19 out for that. And then just the Critical Process Analysis
20 report review and then the meetings that are going to come
21 with that. And that was it for me. Did anyone have any
22 questions?

23 MS. JESSIE HOWARD: No, Amy. It looks like we're
24 all -- thank you so much.

25 MS. AMY HANDLEY: Yep. Thank you.

1 MS. JESSIE HOWARD: All right. At this time I
2 would like to give the floor to the remaining RAB members
3 for their updates. I'm going to do it a little bit
4 differently this time. If we can start with Tim over here
5 and then we'll kind of move around the table that way?

6 MR. TIM CUMMINGS: Sure. All right. This is Tim
7 Cummings from Oscoda Township. And I understand that there
8 was a meeting between yourself, Steve, and -- and the
9 Cherokee contractors where you discussed the Mission Street
10 sliplining project.

11 UNIDENTIFIED SPEAKER: We -- we can barely hear
12 you.

13 MR. TIM CUMMINGS: Then this isn't on? I don't
14 know. Is that better? There we go. I'll stick it -- I'll
15 stick it in my mouth next time. All right. So as I was
16 saying, Tim Cummings from Township -- Oscoda Township. So I
17 understand that there was a meeting between yourself, Steve,
18 and the Cherokee contractors and you discussed the -- the
19 Mission Street sliplining project which will be completed
20 this Thursday; is that correct?

21 MR. STEVEN WILLIS: Yes.

22 MR. TIM CUMMINGS: That's good. Okay. Good.
23 That's my update there. And there was also a discussion at
24 the meeting that you had that took place regarding a
25 possible agreement for maintenance on the Skeel Avenue storm

1 sewer possibly in the future and that's all I know.

2 MR. STEVEN WILLIS: Yeah. That's something we're
3 looking into.

4 MR. TIM CUMMINGS: That's very good. Thank you.
5 That's all I have.

6 MR. MICHAEL MUNSON: Okay. My name is Mike Munson
7 and I'm with OWAA and I'll just basically highlight some
8 wrap-up projects that we had in 2023. Airport had a very,
9 very busy year. The Perimeter Road resurfacing project is
10 complete. So that along with the Pride Road we did last
11 year makes that road very nice to travel on. That was a big
12 problem for some of the businesses onsite transporting
13 stuff. We have -- we're in the process of finishing up the
14 initial striping on the new taxiway. I reported last month
15 that the rebuild of Alpha, Bravo and Charlie taxiway was
16 complete, so we're putting the initial stripings down and
17 we'll do the remainder when the weather gets warmer. We are
18 working on the make ready of the maintenance hangar that
19 stores the airport equipment for refurbishing of the heating
20 plant and the layout of some interior walls. Our new
21 entrance gate on the east side of the airport is complete.
22 The November auction will be held to clean out some of the
23 unused and obsolete equipment that the airport has collected
24 over the years. The build -- build process on the aircraft
25 -- large aircraft runup shelter is progressing. I share if

1 you drive by the airport you'll be able to see the skeletons
2 that's there. Some 2024 proposed projects that we'll be
3 working on in 2024, we will be rehabili- -- re- -- we'll be
4 redoing the decommissioned taxiways that were uncovered and
5 we'll return those to service. And we put -- the plans for
6 the airport terminal rebuild will be started at that time.
7 I'll be available after the -- after the meeting if you have
8 any airport questions. Thank you.

9 MS. JESSIE HOWARD: Josh, did you have an update
10 for us?

11 MR. JOSHUA SUTTON: I don't have any updates.

12 MR. ERIC STRAYER: Eric Strayer, AuSable Township.
13 I have no updates at this time.

14 MR. WILLIAM GAINES: Bill Gaines, no updates.

15 MR. SCOTT LINGO: Scott Lingo, no updates.

16 MR. GREG SCHULZ: Greg Schulz, no updates.

17 MS. CHELSEA GARY: I have a few updates. Hi. My
18 name is Chelsea Gary and I'm a new toxicologist with MDHHS.
19 I'm taking over for Puneet as he has moved on from MDHHS.
20 And I just have a few updates today. So, first, with the
21 2023 round four water re-sampling, just wanted to give an
22 update on that. We have sampled about 200 addresses in the
23 past few months and sampling is close to completion. We've
24 slowly been getting results back and results letters have
25 been starting to go out. On a different note, an ATSDR

1 certified letter health consultation was sent to the Air
2 Force related to the vapor intrusion investigation. The LHC
3 is published which can be found on the ATSDR website. MDHHS
4 has recommended seasonal sub-slab soil gas sampling and
5 indoor air sampling at the buildings indicated at the former
6 Wurtsmith Air Force Base as there is not enough info at this
7 time to make a public health determination for occupants at
8 those -- in those buildings. And, lastly, an update on the
9 Oscoda Area Exposure Assessment. Clinics are ongoing and
10 scheduling is still taking place and as of November 2nd of
11 this year, 652 participants have enrolled, 402 adults and
12 less than five adolescents have completed appointments. All
13 info is on the DEH bio website under the Oscoda Area
14 Exposure Assessment Project and PFAS results letters started
15 to go out last week for that. So those are the updates that
16 I have.

17 MR. REX VAUGHN: Rex Vaughn, community RAB. I
18 don't have any updates.

19 MR. DAVID WINN: Dave Winn, no updates at this
20 time.

21 MS. CATHY WUSTERBARTH: Cathy Wusterbarth, I have
22 -- I don't know if they're updates or questions, but I'd
23 like to say them now before we get into the agenda.

24 MS. JESSIE HOWARD: Okay.

25 MS. CATHY WUSTERBARTH: All right. So we had

1 mentioned -- Amy had mentioned the BCT minutes for that BCT
2 meeting and that meeting was in September and it sounds like
3 they're still not available. I'm not sure if we can address
4 in this meeting why there's such a lag for these minutes for
5 us. We'd really like to see those. We're coming on a
6 couple months here so would like to see those happen
7 quicker. The action item list, the last one that I see
8 given to us was last August. I'm not sure that is the last
9 time they were provided.

10 MR. STEVEN WILLIS: I'll talk about action items,
11 an update in a minute.

12 MS. CATHY WUSTERBARTH: Okay. So they were --
13 yeah, it was last August is the last one I see. I did make
14 a request to have those posted on the RAB website. I still
15 don't see that and I am uncertain if they were printed off
16 for the audience here today again. That was something that
17 I had requested in a previous meeting, but would like to see
18 those action items available to people that are in the
19 audience. And then I'd like to thank Chelsea for the update
20 on the Oscoda Area Exposure Assessment and us getting our
21 results now so that's very good news. Thanks.

22 MS. JESSIE HOWARD: Thank you.

23 MR. DAVE CARMONA: Dave Carmona, nothing.

24 MS. JESSIE HOWARD: I do believe that we have an
25 update from Jessica Stuntebeck from the USDA Forest Service.

1 She's with us virtually. Jessica, whenever you're ready.

2 MS. JESSICA STUNTEBECK: Hi, everybody. This is
3 Jessica. The only update I have from the Forest Service is
4 late this summer the Air Force requested that the Forest
5 Service put some institutional controls on some of our
6 property, Clark's Marsh area, and just giving you an update
7 that we do have that completed and we are just working on
8 our formal correspondence and letter to get back to you
9 folks with the language that we put in there, and then the
10 link to the -- the public facing website. So just so you
11 know those institutional controls are now in place. That's
12 all I have.

13 MS. JESSIE HOWARD: Thank you. Yes, Mr. Henry?

14 MR. MARK HENRY: I have a question of Jessica.
15 What sort of institutional controls were implemented?

16 MS. JESSICA STUNTEBECK: We have a database that
17 keeps track of our land records. It's similar to how a
18 county keeps track of, like, deeds and deed restrictions,
19 but the federal government cannot do deed restrictions on
20 our land. So we have this mechanism of -- of doing -- of
21 keeping track of all of our rights and uses on the land that
22 we own and manage so that we can protect the public when we
23 do various activities.

24 MR. STEVEN WILLIS: The restrictions specifically
25 were on groundwater use and residential use in Clark's

1 Marsh.

2 MS. JESSICA STUNTEBECK: Correct; yes.

3 MS. JESSIE HOWARD: Okay. Next Mr. Willis will
4 give us the RAB business update and review those action
5 items.

6 MR. STEVEN WILLIS: If you could advance it, I
7 think it's two more slides?

8 MS. JESSIE HOWARD: Oh.

9 MR. STEVEN WILLIS: Whoops.

10 MS. JESSIE HOWARD: Back one.

11 MR. STEVEN WILLIS: There you go. Yeah. So as
12 Cathy indicated, I was supposed to distribute the RAB action
13 items. We had an action item meeting specifically to go
14 through the action -- all of the action items because we
15 typically don't have enough time in this meeting. So we did
16 have that on the 12th of September. We updated the action
17 items based on that discussion. Unfortunately, we didn't
18 close anything based on that meeting. We had some very
19 productive discussions, but didn't close anything. But it
20 sounds like I didn't get those updated action items
21 distributed to everyone, so I'll get those out. In looking
22 through them prior to the meeting today, we actually have
23 closed one which I don't have indicated on the slide here.
24 Action item 129, Arnie Leriche had asked for a recent
25 example of a critical process analysis report that the Air

1 Force had done for another site and so that report was
2 provided to the RAB members. And, Arnie, I think you had a
3 question or potentially additional action item related to
4 that. You want to go ahead and bring that up now?

5 MR. ARNIE LERICHE: Can you hear me?

6 MR. STEVEN WILLIS: Yes.

7 MR. ARNIE LERICHE: Okay. Yesterday -- and I'd
8 like to add as an AI is there was a particular reference in
9 that CPA report that's very important to the hydrologic
10 analyses that has gone on in the past at these sites and
11 we'd like to get a copy of it and I've not been able to find
12 one on the AAR or on the internet. And it was done by the
13 firm Burns & McDonnell on environmental sequence
14 stratigraphy.

15 MR. STEVEN WILLIS: Okay. We'll -- we'll take
16 that as an action item and -- and I'll look into whether
17 that's a -- report's available for distribution.

18 MR. ARNIE LERICHE: Thank you.

19 MR. STEVEN WILLIS: And then I've got on here a
20 proposed follow on RA- -- RAB action item meeting for the
21 6th of December. At this point it's proposed. Mark and I
22 have not had an opportunity to talk about that date. But
23 the general feedback from the action item meeting I had with
24 the broader audience was to have it about that -- about a
25 month after the RAB meeting. That's all I've got.

1 MR. DAVID WINN: Steve, I have a question.

2 MR. STEVEN WILLIS: Yes, sir.

3 MR. DAVID WINN: I'd like to get an action item
4 added to the action item list. We -- we talked about last --
5 -- in the last RAB performance data for the FTO-2 site.

6 MR. STEVEN WILLIS: Uh-huh.

7 MR. DAVID WINN: We still haven't seen it. I'd
8 like to get that added to the action item list for -- so
9 it's included with the next meeting.

10 MR. STEVEN WILLIS: Okay. Yep. And that's --
11 I've already talked with the contractor and they're on tap
12 to put -- put together a presentation for the February RAB
13 meeting.

14 MR. DAVID WINN: Okay. But can we get it put on
15 the action item list?

16 MR. STEVEN WILLIS: Sure.

17 MR. DAVID WINN: Because I don't want -- I don't
18 want it to fall off, please. Thank you.

19 MS. CATHY WUSTERBARTH: This is Cathy. I have a
20 question for you, too, on action items. And I think it was
21 something that Mark had mentioned yesterday in the technical
22 session about the organizational chart or chain of command
23 for this RAB and getting that. And I don't think that's on
24 the action item list, but I'd like to see that added.

25 MR. STEVEN WILLIS: Okay. We can add that.

1 MS. CATHY WUSTERBARTH: Thank you.

2 MS. JESSIE HOWARD: Okay. So before we begin
3 tonight's presentations, I do just want to request that for
4 the sake of time the RAB members please hold their questions
5 and comments until the end of each presenter's presentation.
6 We will have time for discussions at that time. First, we
7 have Ms. Paula Bond from Aerostar to give us the PFAS RI and
8 IRA update.

9 MS. PAULA BOND: Thank you. All right. Can you
10 guys hear me okay? So I'm going to give everybody an update
11 on the PFAS RI, the fieldwork that we've been doing over the
12 last few months. We've been doing quite a bit of fieldwork
13 as most of you know, so I've just got some updates on each
14 of the different types of sampling and fieldwork that we've
15 been doing. So if we can go to the next slide, please?

16 A couple things before the fieldwork. We'll talk
17 about the UFP-QAPP addendum. That was issued back in June
18 for public comment and comment from EGLE. We have received
19 comments. We've reviewed those. We've responded to those
20 comments from EGLE. We've kind of gone back and forth on
21 that. And we had a meeting on the 6th of October with EGLE
22 to go over some of those comments, so we hope to issue that
23 final UFP-QAPP addendum in the very near future. So the
24 nature and -- and then the nature and extent investigation
25 regarding the RI, that will also continue through the end of

1 2023. Next slide, please.

2 So we are sampling different media at Wurtsmith.
3 We're sampling groundwater, soil, surface water sediment,
4 seeps, biota, the storm and sanitary sewers, and we're also
5 looking at some private well sampling, going to do that. So
6 we are sampling these different media to determine the
7 nature and extent of PFAS impacts in all of these media.
8 And that's been going on -- we started the fieldwork in
9 2021, and we've been doing that for the last couple of
10 summers. Next slide, please.

11 I'm going to start with the groundwater nature and
12 extent, or the groundwater delineation. We have a figure
13 here and I know it's difficult to see, but what I want to
14 kind of draw your attention to is just the general locations
15 of where we have been collecting these samples across the
16 base. As you can see they run from the southwest end of the
17 former installation all the way up to the northeast and then
18 down to the south. So we have been collecting quite a bit
19 of groundwater data. These are vertical aquifer samples
20 which means we're collecting groundwater data at different
21 depths in the aquifer. And we have completed everything
22 that is green on the figure; we have completed and there's
23 just a couple of locations that we're pending access that
24 fortunately we have recently gotten. So there's just a few
25 locations and we'll be finished with our vertical aquifer

1 sampling. We are screening the groundwater data to either
2 the lower of the USEPA regional screening levels or the EGLE
3 groundwater cleanup criteria and I've listed them here on
4 the slide just to give you an idea of what the screening
5 criteria are. Next slide, please.

6 For soil, kind of the same story. We've been
7 doing soil sampling in areas where we had evidence that AFFF
8 may have been used at the former installation. The figure
9 that you see shows red dots and green dots. We kind of made
10 it just a yes or no concentrations of PFAS for any of those
11 analytes were above the screening criteria or below. And
12 you can see we have collected samples up into the north at
13 DRMO, all across the base, down in the south, southwest, the
14 fire training area FT02, the base operation area and site
15 SS71, kind of in the central east portion of the base. So,
16 like I said, as you can see some of those, the green dots
17 represent locations where soil concentrations were lower
18 than our screening criteria and these were at also multiple
19 levels in the soil down to the water table. So we're
20 sampling surface soil zero to six inches, six inches to two
21 feet, two feet to four feet, five feet to seven feet, 10
22 feet to 12 feet until we reach the water table. So there's
23 multiple sample depth locations for each of the soil. Our
24 screening criteria that we're using for the soil is the
25 updated USEPA regional screening levels and I've listed

1 those there for you on the slide. Next slide, please.

2 Surface water, sediment and seep samples. We've
3 collected a few seep samples already. We're still going to
4 try to capture a few more before the year is over. We have
5 collected a portion of the surface water sediment sampling.
6 We have completed that portion of sampling for the locations
7 that you see on Van Etten Lake. We have completed a portion
8 of those along the Au Sable River, Three Pipes Ditch that
9 we're looking at. So we are planning on finishing that up
10 this week and into next week and then all of the surface
11 water sediment and seep sampling will be completed at that
12 time. But that work is still ongoing. Next slide, please.

13 The biota sampling. So we were looking at
14 different types of biota. We have sampled small mammals, we
15 have sampled aquatic vegetation from different water --
16 water bodies that we're looking at. We have sampled
17 terrestrial vegetation from areas and we have also done fish
18 sampling from the Au Sable River, the Van Etten Lake, a
19 couple of the ponds in Clark's Marsh and around. And you
20 can see on the figure -- again, I know it's a little hard to
21 read but the locations where we've collected some of those
22 samples. All of the biota sampling is complete at this
23 time. Next slide, please.

24 We are also sampling the storm water drain system
25 at Wurtsmith. The figure that you see shows the locations

1 where we have sampled and there's a couple of locations that
2 we are -- are -- we just finished sampling, actually, the
3 end of last week so this figure is a little bit out of date.
4 But you can see the locations where we have sampled, where
5 we want to get samples. And we're looking at the outfall
6 where the storm drain comes in to Three Pipes Ditch. And I
7 don't have a pointer, but it's down on the bottom left or
8 the central portion there. So we are sampling all of those
9 storm drains. We know there's a portion of that storm drain
10 that is below the water table as it moves down towards Three
11 Pipes Ditch, yeah, right in that area. So we are sampling
12 those storm drains to see if there's any impacts there. We
13 also did a camera survey of the storm drain. We wanted to
14 see if there are any cracks or any damage to the storm drain
15 and we got some really good video of that, that we'll be
16 sharing at the next RAB meeting but that all of this data
17 and information is just coming in. But that's not --
18 activity isn't completed yet, but it will be in the next
19 couple of weeks. Next slide, please.

20 So also as part of the RI we're looking at the
21 sanitary sewer system in areas that were operated by the --
22 by the Air Force. You can see on this slide the little red
23 boxes are pump stations that we're planning to sample and
24 then there's some other manholes that we're planning to
25 sample for the sanitary as well. None of this sampling has

1 been completed yet, so that will also be completed in the
2 next couple of weeks. Next slide, please.

3 We are also going to do a transducer study to
4 evaluate the short-term effects of groundwater flow, the
5 rising of the lake level and the groundwater flow as it
6 relates to the raising and the lowering of the lake level.
7 So we're going to install piezometers or small monitoring
8 wells to monitor the depth of water as it changes and we're
9 going to put pressure transducers in those wells which can
10 automatically monitor the changes in water levels for us so
11 that we can take a look at that. We're planning to install
12 those in the locations that you see on the figure. We have
13 some of these piezometers installed already, some are not.
14 We were waiting on access to some of these properties and we
15 just got access to several of these as recently as today.
16 So we will be installing some additional piezometers and
17 getting those transducers in for that study. Next slide,
18 please.

19 Van Etten Creek Hydrologic Study. So we're also
20 looking at some of those changes associated with Van Etten
21 Creek as well. We're looking at the difference in water
22 level on each side of the creek. So as the plume moves
23 toward the creek, we can kind of evaluate how it's moving
24 and transporting in that area. You can see the blue in the
25 northwest corner of the figure. That's actually the -- the

1 PFAS plume drawn there. And you can see it doesn't go over.
2 We haven't -- and just a couple of dots on there that are
3 kind of hard to -- I think kind of hard to see. But,
4 anyway, we're evaluating the movement across -- into and
5 across Van Etten Creek. So we're measuring water levels,
6 installing transducers in those wells, too. So this work is
7 not fully complete yet. It's probably 50 percent complete.
8 Again, some of these locations that we are looking to
9 install the piezometers we're relying on access to private
10 property and, again, we've just gotten access as recently as
11 today for some of these locations. So this work will be
12 completed in the next few weeks also. Next slide.

13 So as I mentioned a couple of times, a lot of our
14 sampling down in that area on the east side of Van Etten
15 Lake or south of Van Etten Creek is related to access
16 because most of this -- these -- this area is privately
17 owned property. So we're working to get access to those to
18 get the data that we need to finish our studies. We have
19 done a letter campaign. One thing that we're trying to do
20 also is verify if there are private or other wells existing
21 on properties. We know as the township is installing that
22 new water line out Loud Drive, we know that a lot of folks
23 have been put on city water. We are looking for drinking
24 water wells that have not been abandoned that we may want to
25 sample. So we have sent out letters to try to get

1 information or access to sample some of those existing wells
2 and also find out if your well has been abandoned, we want
3 to make sure we're tracking information. Even if your well
4 has been abandoned, we still want to know that. So that
5 letter campaign, those have gone out. We've sent out so far
6 120 letters. There's another batch of those letters going
7 out. And they include a survey just to update us on the
8 results or update us on are you using your well as a
9 drinking water source? Do you have a well? Or maybe you're
10 using it as irrigation but you're not using it as drinking
11 water. So we want to capture all of that information. And
12 then we have sent out letters also for access to install and
13 sample monitoring wells and piezometers. So some of you may
14 have seen some of those. Again, we were out actually today
15 doing door-to-door survey trying to get access to some
16 additional properties and we had some good success today so
17 that effort is also ongoing. So all of the work that we're
18 doing on the east side of Van Etten Lake and south of Van
19 Etten Creek are access dependent. But we are really -- feel
20 really good about our results and we are hopeful that we
21 will be able to get all of this work completed by the end of
22 the year. Next slide, please.

23 So I'm going to move on now to the Alert Aircraft
24 Area. Just a really quick update on that. As most of you
25 know, we did have a public meeting on October the 11th to

1 brief the community on the final proposed plan. We did
2 receive comments from the community. We are currently
3 responding to those comments. They will be included in the
4 responsiveness summary that will come as an attachment to
5 the record of decision that's being prepared currently as
6 well. And any changes that the Air Force makes based on
7 those comments will be included in the record of decision.
8 So those documents are all being prepared right now. Next
9 slide, please.

10 The Three Pipes Ditch Pilot Study. I guess the
11 first bullet kind of says it all. The pilot study has been
12 terminated based on the rainfall that we have observed and
13 the effects that that has on Three Pipes Ditch. In the last
14 RAB meeting or two we briefed information on the fact that
15 we installed some flow meters in Three Pipes Ditch because
16 before we installed the pilot study, we wanted to make sure
17 the effects that the rainfall has. So we were measuring
18 rainfall. We had a rain gauge out there. We were measuring
19 flow. Because we really wanted to see if we're going to put
20 the -- if you guys remember the Florosorb material? Jim had
21 a bag at the last RAB. You guys were looking at that. You
22 know, make sure that we could place that in there with some
23 certainty that depending on the amount of rainfall, the
24 effects that it would have, would it move those -- those
25 bags in the ditch and just, you know, kind of the conditions

1 that we would be encountering. So over the summer we
2 monitored that rainfall and one thing that we realized is
3 that the rainfall and those really short-term, heavy events
4 resulted in some really extreme flow through that ditch and
5 we felt that those conditions probably weren't the best
6 suited for the pilot study that we were looking at. It
7 could still be done, but it would require a lot more work to
8 keep those bags in place based on the flow. So we felt that
9 we would re-tool just a little bit and take the opportunity
10 to do some additional evaluation of Three Pipes Ditch which
11 would include installing a flow sensor in the six-foot
12 diameter pipe that takes the drainage from the base that
13 discharges into Three Pipes Ditch, add some additional drive
14 points and staff gauges to measure the levels in the lake
15 and the changes with rainfall over time and sample some
16 existing monitoring wells to determine the PFAS
17 concentrations and contributions to that ditch which kind of
18 coincides with some of the work that we're doing for the RI
19 as well. Next slide, please.

20 So this is a graph that we put together just kind
21 of to give you an idea, to show you that -- what we were
22 looking at with the rainfall and the discharge to the ditch.
23 And you can see on July the 5th there's a big spike there.
24 So that was one of the events that we looked at, and that
25 shows the weir discharge that we were measuring. And I'm --

1 can't see that number up there, but I think it's 33,000
2 gallons per minute is what we were looking at going over the
3 weir which was something that we weren't expecting for such
4 a short-term event.

5 And if you go to the next slide we've got some --
6 some photographs just to give you an idea of what the ditch
7 looks like. So on the left is the base flow conditions and
8 you can barely even see any water in the ditch. With the
9 short-term rain event, the peak flow conditions, you can see
10 the -- how the ditch has filled and overflowed with a really
11 short duration event. So based on what we observed here,
12 that was why we decided to re-tool the pilot study at Three
13 Pipes Ditch just a little bit. Next slide, please.

14 So for our one-year outlook on the schedule, this
15 schedule hasn't really changed a whole lot from the last
16 RAB, but you can see the proposed plan public meeting, we
17 added some actuals on there. You can see the timeline for
18 the record of decision that's going to be coming out.
19 That's the full timeline, so that is through completion of
20 that. But we're working on that ROD right now with the
21 responsiveness summary to the comm- -- for public comment so
22 that'll be going to the Air Force in the next few weeks for
23 review and then on to EGLE and then -- and then out.
24 Everything else, like I said, on here is really similar.
25 The pilot study for Three Pipes Ditch, we're still going to

1 monitor that data so that's still on here. We're just not
2 installing the Florosorb mats or tubes. Next slide.

3 So for the five-year outlook, this has everything
4 that we're doing for the RI, for the pilot study, the
5 Aircraft Alert Area pilot study, so you can see the dates
6 that we have here moving out over the next five years. And
7 for the RI, we have everything going through the RI, the
8 feasibility study, the proposed plan and then the ROD and
9 then remedial action. And then for the Aircraft Alert Area
10 we have everything going through the building, the Aircraft
11 Alert Area treatment system, and then monitoring on out
12 throughout the -- the next five years. Next slide.

13 I think that's it. Yes, Mark?

14 MR. MARK HENRY: I have a couple of questions,
15 please.

16 MS. PAULA BOND: Sure.

17 MR. MARK HENRY: During our technical meeting
18 yesterday you had indicated that in the soil sampling
19 profiles that had been done that it seemed like a lot of the
20 PFAS mass was down in the two to the four foot below land
21 surface depth.

22 MS. PAULA BOND: Uh-huh; right; uh-huh; yes.

23 MR. MARK HENRY: My question is, was part of the
24 protocol for soil sampling -- does it include the fraction
25 of organic carbon analysis in the soil?

1 MS. PAULA BOND: We haven't done that for all of
2 the soil samples that we collected at all the locations on
3 the base. But sampling that is part of the RI for some of
4 our locations and we haven't completed that work yet. We
5 were going to do that when we were installing some of the
6 monitoring wells for the final piece of the RI, so we were
7 going to go back. But we are collecting that and some other
8 parameters as well when we install the monitoring wells.

9 MR. MARK HENRY: I was just wondering because it
10 could be over the lifespan of the base that the significant
11 fraction of the carbon has just kind of settled out down
12 there at about four feet.

13 MS. PAULA BOND: Uh-huh.

14 MR. MARK HENRY: And I was just wondering if there
15 was a correlation between the two?

16 MS. PAULA BOND: Yeah. We will be doing that. We
17 just haven't done that yet.

18 MR. MARK HENRY: Okay.

19 MS. PAULA BOND: Yeah.

20 MR. MARK HENRY: My other question had to do with
21 the Three Pipes Ditch. I've been asking for a very long
22 time for periodic surface water monitoring in that ditch and
23 finally we got a end of the pipe NPDES type of sampling done
24 last fall, I think, and it came up with, like, 1650 parts
25 per trillion of PFOS. I would think that the State of

1 Michigan would have requested more than just one sample. It
2 would be very interesting to have a regular sampling program
3 that looks at that surface water discharge and also the
4 discharge from Clark's Marsh because those are essentially
5 going 24/7 without anybody taking a look at them. I would
6 request that the Air Force implement that like they do for
7 periodic monitoring well sampling around the base. And I
8 can make that an action item. That was it. Thank you.

9 MS. PAULA BOND: Thanks, Mark. Yes, Dave?

10 MR. DAVID WINN: I got a couple questions. First,
11 you talked about the RI QAPP addendum.

12 MS. PAULA BOND: Uh-huh.

13 MR. DAVID WINN: You mentioned that Air Force and
14 EGLE had a meeting to discuss EGLE comments.

15 MS. PAULA BOND: Uh-huh.

16 MR. DAVID WINN: Right now out of the 78 comments,
17 14 of them are still unresolved and 19 are partially
18 resolved. What's the plan to get them -- Steve, are -- are
19 they going to get those resolved before the RI addendum is
20 completed?

21 MR. STEVEN WILLIS: Yeah, that's the hope. We're
22 still working towards that. We're still talking, we're
23 still working. As Amy indicated, we've got a meeting
24 scheduled on the 20th and some of those comments are tied to
25 the east side of the lake.

1 MR. DAVID WINN: And if -- and if you don't, it
2 goes into an arrars (phonetic); right? Amy, can you help me
3 with that?

4 MS. AMY HANDLEY: Do you specifically mean the --
5 the new constituents that would become arrars or what do you
6 -- what do you mean, Dave?

7 MR. DAVID WINN: I'm talking about the -- the
8 unresolved -- if you guys come to an impasse with the --
9 before the RI is completed, or I should say when the RI is
10 completed, if there's still unresolved comments, how do they
11 get documented, resolved, what?

12 MS. AMY HANDLEY: So we still have the ability to
13 pursue a dispute resolution if we find that there are things
14 that need to be addressed that are not within this addendum.
15 So we do still have that ability if we get to that point and
16 EGLE still wishes to pursue certain items that -- that were
17 not addressed. So we do still have that ability to do that.

18 MR. DAVID WINN: Okay. Thank you.

19 MS. AMY HANDLEY: You're welcome.

20 MR. DAVID WINN: Next question. Steve, could you
21 kind of -- you mentioned the Aircraft Alert Area IRA. In
22 our technical meeting yesterday we had -- you had mentioned
23 that there was going to be, like, a two -- two-phased,
24 two-stage approach. Could you talk a little bit and kind of
25 bring everybody up to speed as to what that two-phased

1 approach is?

2 MR. STEVEN WILLIS: I'm not sure necessarily a
3 two-phased approach. But we designed the treatment system
4 based on the data that we had at the time. In the last
5 month we've collected additional RI data which shows that
6 that plume is bigger than we originally anticipated. So we
7 are still evaluating that data and what impact it has on the
8 capture zone for the wells that we had included in the
9 design. But my expectation is that we'll probably need to
10 put additional extraction wells in and use additional
11 capacity for that treatment system. The way it's currently
12 designed, I think we've got five extraction wells and we're
13 using 3- -- roughly 3- -- 250, 300 gallons per minute of the
14 500 gallon per minute capacity of that treatment train that
15 we're building. As far as maybe your perception of the
16 phased approach, my recommendation to the Air Force
17 management and to EGLE is to continue to move forward with
18 the current design. We're planning to start construction in
19 April and get the building built. In the meantime, I'm
20 going to go back and get additional funding to MOD that
21 contract to address some data gaps in that area so that we
22 can put in additional extraction wells as appropriate and so
23 we'll -- we'll -- I'll do that over the winter. In the
24 meantime, we'll go ahead and press forward and start
25 building the building and then when we finish that contract

1 MOD and figure out how many additional extraction wells and
2 where -- you know, to what depth and so forth, then we can
3 catch that up with the construction of the rest of the IRA.
4 If we don't do that and we completely stop and backtrack to
5 go collect that additional data and then modify the design,
6 we potentially could lose a construction field season which
7 instead of starting the system in October of next year, it
8 could be the following year. So my recommendation is we go
9 ahead and continue moving forward and not just stop and
10 backtrack.

11 MR. DAVID WINN: Okay. That's fine. I'm just --
12 that's what we had discussed yesterday --

13 MR. STEVEN WILLIS: Okay.

14 MR. DAVID WINN: -- and I wanted everybody to --
15 make sure that everybody was aware of that -- that thought
16 process, that's all. On the Three Pipes Ditch pilot study,
17 the intent of the pads was basically to try to alleviate
18 some of the contamination or monitor it at that point;
19 right?

20 MR. STEVEN WILLIS: The real intent behind it was
21 to evaluate that media for other applications at Wurtsmith.

22 MR. DAVID WINN: Okay.

23 MR. STEVEN WILLIS: It was never intended as an
24 IRA or anything like that.

25 MR. DAVID WINN: Okay.

1 MR. STEVEN WILLIS: So it was strictly a pilot
2 study to evaluate that technology specifically in that
3 application at that location. Based on that as Paula showed
4 in the -- the slides is based on that initial data that we
5 captured. Putting that -- that materials into the ditch was
6 just not going to be successful. The Forest Service owns
7 the property and they would not let us construct sufficient
8 reinforcement to keep the material from washing away and the
9 last thing we wanted was to put the material in the ditch,
10 load it up with PFAS which is what it's designed to do, and
11 then have a big storm and it washes all that stuff down to
12 the river.

13 MR. DAVID WINN: Okay. But that's -- but the --
14 the IRA is part of the -- the CPA process for this area?

15 MR. STEVEN WILLIS: Correct; correct. And so they
16 are -- they are completely separate. However, as Paula
17 indicated, we are continuing to monitor and collect data and
18 that data is being fed to the CPA team and will continue to
19 be collected and fed to the contractor when we do final
20 design and construction of an IRA.

21 MR. DAVID WINN: Thank you.

22 MR. STEVEN WILLIS: Yep.

23 MS. PAULA BOND: Cathy?

24 MS. CATHY WUSTERBARTH: Yep. So first of all,
25 Paula, I want to thank you and your team for going door to

1 door today. What a horrible day to do that.

2 MS. PAULA BOND: It was beautiful. It was
3 beautiful. We went really fast.

4 MS. CATHY WUSTERBARTH: All right. And, also, I
5 wanted to mention with the -- the Alert Aircraft Area IRA
6 comments, that responsiveness summary that you said is
7 included in -- in the response for those comments. I'd like
8 to request that the RAB member comments be addressed
9 separately from that because just by looking at the previous
10 documents for, say, the Van Etten Lake IRA, they're very
11 general in terms of responses and I believe that our RAB
12 members deserve a direct response for their comments at
13 least in that.

14 MS. PAULA BOND: Thank you. Tim?

15 MR. TIM CUMMINGS: Yes. Thank you, Paula. So on
16 page 21 and 22 of your -- the deck you referred to a camera
17 survey for storm sewer and sanitary sewer.

18 MS. PAULA BOND: Uh-huh.

19 MR. TIM CUMMINGS: And you mentioned getting some
20 good footage.

21 MS. PAULA BOND: Yeah.

22 MR. TIM CUMMINGS: I know you said that you also
23 were going to include this in the -- the next RAB, but any
24 sneak peak comments about what you saw down there?

25 MS. PAULA BOND: Well, yeah, I mean, we -- we saw

1 some things that we expected. We didn't see significant
2 damage to the pipe, but there are some areas where
3 groundwater is -- is definitely seeping into the pipe and we
4 know that based on the concentrations that -- that we see
5 coming out of that pipe at Three Pipes Ditch. So -- and
6 that's the portion that's below the groundwater table out
7 there. So, yeah, we'll share those. Once we get the -- the
8 video downloaded and we can take some -- some snapshots from
9 that, we'll share that at the next RAB.

10 MR. TIM CUMMINGS: Thanks for the comment.

11 MS. PAULA BOND: Yes, Mark?

12 MR. MARK HENRY: Just because I'm really curious
13 about that pipe, about how far up from the -- the end of the
14 pipe at the beginning of Three Pipes are you seeing
15 groundwater coming into the system?

16 MS. PAULA BOND: So we had some issues. Once we
17 get down into that lower -- actually, can you go back to --
18 was that 22, Tim?

19 MR. TIM CUMMINGS: 21, 22.

20 MS. PAULA BOND: 21? That had the figure on it?
21 Yeah. So as you can -- if you see on the map -- who's got
22 the pointer? Oh. Can I borrow your pointer, Mark?

23 MR. MARK HENRY: By all means.

24 MS. PAULA BOND: Thank you. So this is Three
25 Pipes Ditch, the discharge here and then this is the first

1 manhole up from Three Pipes Ditch and then this one is up
2 here and you can see the infrastructure from the airport.
3 So we were able to run the camera from this manhole down to
4 this manhole and then we ran over this way a little bit and
5 then we got a certain distance down toward this location.
6 So we made it all the way down to this manhole. Once we
7 started heading down, one of the issues that we had was
8 there was so much water coming into the pipe the rover with
9 the camera was going underwater and we couldn't see anything
10 anymore. So -- and this was during dry -- no rain
11 conditions. So -- and we knew that, that that -- sorry. We
12 knew that that was an issue, that the groundwater was
13 infiltrating into the pipe. So it was pretty high. The
14 rover was under water.

15 Another issue that we had is once you get down in
16 this lower reach of the pipe, there is quite a bit of
17 sediment buildup in here. So the rover was also having a
18 hard time going through that sediment so it was just kind of
19 basically spinning its wheels. So we tried to go down to
20 Three Pipes here and put it in and try to run up the other
21 way so that we could get some information. We made it about
22 30 feet before it just kind of drowned out there with the
23 amount of water and the sediment that was in that part of
24 the -- of the pipe. So we do know between -- that from this
25 location here on down to here, this is under -- below the

1 water table. And then we're working right now to put
2 together a figure that shows where the -- the groundwater
3 elevations, the pipe elevations that we've collected, so
4 that we can see the difference and exactly where that
5 transition from above the water table to below the water
6 table begins and that water starts coming in. So --

7 MR. MARK HENRY: The reason that I am curious
8 about that is --

9 MS. PAULA BOND: Yeah.

10 MR. MARK HENRY: -- that in that portion of the
11 base there has not been much investigation done and none of
12 it has shown concentrations in the groundwater around 1600
13 part per trillion. It would seem like once you know the
14 distance from that pipe that the groundwater is infiltrating
15 it would probably be a good idea to characterize the
16 groundwater in that area.

17 MS. PAULA BOND: Yeah. So there's been quite a
18 few samples collected in here and I have -- I don't have it
19 in this slide show, but we -- I will show -- bring that for
20 the next RAB, the overlay of the plume and this storm drain
21 so you guys can see that along with the elevation
22 differences. I think that will help. But, yeah.

23 MR. MARK HENRY: Thank you.

24 MS. PAULA BOND: Mike?

25 MR. MICHAEL MUNSON: You made an interesting

1 comment because in one of my previous lives I was on the
2 board for -- for the villages. And right about in that area
3 we have -- we -- they have a storage lot there and the
4 ground every year would wash away.

5 MS. PAULA BOND: Uh-huh.

6 MR. MICHAEL MUNSON: You said you saw a lot of
7 deterioration in that storm sewer.

8 MS. PAULA BOND: Uh-huh.

9 MR. MICHAEL MUNSON: And I guess things are coming
10 full circle now. I have a pretty good idea I know why the
11 ground was washing away to the point where they actually had
12 to block off that area and not use it because it was -- they
13 were -- they were huge holes that would -- that would
14 swallow a vehicle or a trailer so we couldn't -- couldn't
15 park any trailers there anymore.

16 MS. PAULA BOND: Uh-huh.

17 MR. MICHAEL MUNSON: So it kind of makes sense
18 that -- that it's -- it's being washed away.

19 MS. PAULA BOND: Yeah. So that data will feed
20 into the CPA analysis that they're doing for Three Pipe --
21 so all -- all of the data is kind of dual duty, helping to
22 support the RI, the CPA analysis for this area. So it's all
23 kind of working together. So -- but I'll have more
24 information on that study at the next RAB.

25 MR. DAVID CARMONA: Oh, go ahead, Bill.

1 MS. PAULA BOND: Dave, you or Bill?

2 MR. WILLIAM GAINES: Yes. Bill Gaines. How far
3 does the sliplining go down that pipe?

4 MR. STEVEN WILLIS: There -- there is no
5 sliplining in that pipe.

6 MR. WILLIAM GAINES: Oh, that's different from
7 Mission Street?

8 MR. STEVEN WILLIS: That's correct. It's a
9 different pipe, altogether different.

10 MR. MARK HENRY: This is about a six-foot diameter
11 pipe.

12 MS. PAULA BOND: Yeah. It's -- it's very large.
13 You can walk in there. Kalan?

14 MR. KALAN BRIGGS: This is Kalan Briggs with EGLE.
15 Wondering if you could verify if the actions agreements have
16 language in there that includes sharing information with
17 EGLE for the drinking water results?

18 MS. PAULA BOND: So for the letters that we're
19 sending out for drinking water, getting access to sample
20 those drinking water wells, we are asking for permission.
21 There is a box on there to -- to share -- can we share this
22 data? So they are checking the box yes or no, you can share
23 or not share the data.

24 MR. STEVEN WILLIS: And -- and the question is can
25 -- can we share the data with EGLE and the public?

1 MR. KALAN BRIGGS: And I guess how successful have
2 they been getting those boxes checked?

3 MS. PAULA BOND: Well, from the response that
4 we've gotten so far, we've sent out 120 letters and I think
5 we've received back 29 letters. And there have been -- I
6 don't know off the top of my head, but I know there were
7 quite a few "do not share" responses on those. Yeah.

8 MR. KALAN BRIGGS: I guess just to the public, we
9 highly encourage sharing it because we can take actions
10 outside of what Air Force can do with those results. So
11 those that have not, I encourage you to do so in the future,
12 and -- and always feel free to share on your own as well
13 should you not choose or let Air Force share it on your
14 behalf. So thank you.

15 MS. PAULA BOND: Dave, do you have a question?

16 MR. DAVID CARMONA: Yeah. Slide 17, is that the
17 data you used to update the plume maps that you have out
18 here? The VAS, the vertical aquifer sampling?

19 MS. PAULA BOND: Yeah; yes; uh-huh; yeah.

20 MR. DAVID CARMONA: Okay. And then number 18 I
21 would like made an action item for slide 18. I would like
22 to see the plumes overlaid on the soil samples.

23 MS. PAULA BOND: Okay. We can do that.

24 MR. DAVID CARMONA: I think that would be a big
25 help for everybody because we discussed the airport, the

1 alert area yesterday regarding the sample, soil sample
2 versus what the plumes are showing.

3 MS. PAULA BOND: Uh-huh; yeah. We can do that.

4 MR. DAVID CARMONA: Slide 19, the Van Etten
5 surface water sampling and seep sampling, are we going to
6 get some sort of visualization of your results on that?

7 MS. PAULA BOND: Uh-huh.

8 MR. DAVID CARMONA: And when can we expect that?

9 MS. PAULA BOND: Yeah. So all of the data -- so
10 we're still collecting this data right now. So once we
11 collect the samples, we send them off to the lab, we get the
12 results, we should have everything back by the next RAB.
13 We'll be able to share all of this data for all of the
14 samples that we have on these figures here.

15 MR. DAVID CARMONA: Okay. And as far as the Three
16 Pipes area goes, I understand what you're going to be doing,
17 but monitoring is not a solution. I understand that the CPA
18 is going to be looking at your current proposal. Are there
19 other proposals on the table or other ideas that they've had
20 like using the impoundment area to the north side of the
21 six-foot pipe as a reservoir for your use? Just looking for
22 ideas that we can stop sinking 1600 parts per trillion into
23 the river.

24 MS. PAULA BOND: Uh-huh. Steve, do you want to
25 answer that with the --

1 MR. STEVEN WILLIS: Yes. The CPA team has looked
2 at all that.

3 MR. DAVID CARMONA: Okay. And then my last
4 question is slide 31. Since this quarter you're starting to
5 compile the RI report, are we going to see that in part or
6 will the RAB see that as a whole document at the end for
7 comments?

8 MS. PAULA BOND: You know, I'll let Steve answer
9 that. But probably the whole document will be issued, or
10 will be prepared before we issue that out for, for comment.
11 But I'll let Steve --

12 MR. STEVEN WILLIS: Yeah. As -- as Paula said,
13 you know, we'll share the data at the next RAB meeting, but
14 the actual document, we'll finish the document and we'll --
15 the Air Force will review it, EGLE will review it and then
16 it'll be out for the public.

17 MR. DAVID CARMONA: Okay. Previous experience
18 you've had doing this, how large is that document? Because
19 it seems like maybe several hundreds of or thousands of
20 pages.

21 MR. STEVEN WILLIS: It'll be huge. Thousands,
22 yeah; yeah. With all the appendices I'm sure it'll be
23 probably pushing 1,000 pages.

24 MS. PAULA BOND: It will be -- yeah. There's --
25 we've collected a lot -- I mean, you can see from the

1 figures all the sampling locations. We have a lot of
2 samples, thousands of samples that we've collected out here
3 over the last few summers. So it will be a big document.

4 MR. DAVID CARMONA: So what is the expectation --
5 the RAB's duty to that report? Are we -- comment on it or
6 is it a final document that we have no say on before we move
7 to the feasibility study?

8 MR. STEVEN WILLIS: At this point there -- there
9 is no public comment opportunity.

10 MS. PAULA BOND: Any other questions on the RI?
11 Oh, oh. Hey, Arnie, go ahead.

12 MR. ARNIE LERICHE: Can you hear me?

13 MS. PAULA BOND: Yes.

14 MR. ARNIE LERICHE: Okay. Thanks. Okay. Two
15 things. One is on the -- the slip -- I mean, the storm
16 sewer Three Pipes. Great AI, Mark. It's a good thing that
17 that's out in the open now. A year ago I requested as an AI
18 to the EGLE to give us an idea of who owns these storm
19 sewers, what management plan is out there? Has it been
20 sampled? And she came back a few meetings after that and
21 she said that EGLE -- the Surface Water Division I think had
22 been working with either OWAA or the airport or the Oscoda
23 Township and they had been developing a plan. And so I'd
24 like to add those questions ownership and past sampling of
25 the Three Pipes outfall, but also the other outfalls and who

1 owns them. So I'd like to add that to or add it as a
2 separate one depending on what the Air Force and, Mark, you
3 think is right. Go ahead.

4 MS. PAULA BOND: No, I think you're -- you're good
5 to continue, Arnie.

6 MR. ARNIE LERICHE: Okay. Okay. Thank you. So I
7 don't know if we're getting echo here. Paula, a -- your
8 survey that you're going to be doing in the homes regarding
9 the wells and which ones are being used for -- hopefully no
10 one's drinking water anymore, at least in the southern
11 area but I had brought up the point and I was wondering if
12 your survey along with DHHS for possible guidance against
13 using any irrigation wells in some of the east side of Van
14 Etten Lake for humidity control in the winter? Because I
15 have personal knowledge that one family was using it even
16 after receiving the drinking water osmosis system that they
17 use for drinking, but then they filled their humidifier with
18 -- from the laundry room faucet which came from their
19 private well.

20 MS. PAULA BOND: Inventory questionnaire that
21 we're sending out, we're asking if you -- number one, do you
22 have a well? Number two, has it been abandoned? And then
23 if you do have a well, are you using it for drinking water
24 or other purposes? So I'm hoping that if folks are using
25 wells on that side of the lake, that our inventory will

1 capture how they're using it and then we can work with DHHS
2 on maybe a follow-up to that if we get back those
3 questionnaires.

4 MR. ARNIE LERICHE: I would ask that you be a
5 little more specific with examples of other uses because if
6 one person in the family does that practice -- and that's
7 what was happening, the husband was using the laundry room
8 water, the wife wouldn't know that and did not know that.
9 So if you could come up with some examples of what other
10 uses are so that they would answer fully. It's definitely a
11 health hazard if we're using contaminated water in the
12 humidifier.

13 MS. PAULA BOND: I think that's a -- a good point.

14 MR. ARNIE LERICHE: Thank you.

15 MS. PAULA BOND: Any other questions? Dave?

16 MR. DAVID CARMONA: Just one last one. Are you
17 willing -- will you consider sharing your storm sewer --
18 Dave Carmona here -- storm sewer video and data with the
19 township since it's their infrastructure?

20 MS. PAULA BOND: Yes, absolutely. Anything else?
21 All right. Thank you.

22 MS. JESSIE HOWARD: All right. Thank you, Paula.
23 Our next presentation is Ms. Celeste Holtz from BB&E with
24 the vapor intrusion RI update.

25 MS. CELESTE HOLTZ: Good evening, everyone. My

1 name is Celeste Holtz and I'm the project manager for the
2 vapor intrusion remedial investigation addendum project. I
3 previously presented at one of the RAB's earlier this year
4 just to provide a quick introduction and overview to the
5 project, and then tonight we're just going to do a quick
6 status update on where we're at. Next slide, please.

7 So as part of our contract we are performing an
8 Immediate Sampling Task at four buildings. So those four
9 buildings are buildings 25 and 43 at site 21, and then
10 building 5067 and 5068 at site 8. And you can see those on
11 the map there. So this Immediate Sampling Task is being
12 performed ahead of the overall remedial investigation as a
13 result of data that was collected during the last vapor
14 intrusion RI, and also as coordinated with EGLE and MDHHS.
15 So since the last RAB meeting we worked with EGLE and MDHHS
16 to prepare and finalize our work plan for this Immediate
17 Sampling Task, and then in August we mobilized the field and
18 started fieldwork. As part of that first quarterly sampling
19 event, we conducted interior building surveys at all four
20 buildings and then we re-mobilized to the site to install
21 sub-slab vapor pins at all of the buildings. So we
22 installed a total of 57 vapor pins at the four buildings.
23 We installed two vapor pins at building 25, 16 vapor pins at
24 building 43, 23 vapor pins at building 5067, and then 16 at
25 building 5068. We collected samples from all of those vapor

1 pins and then they were sent to the lab and analyzed for
2 VOC's using TO-15 method. Next slide, please.

3 So this Immediate Sampling Task does include a
4 total of four quarterly sampling events over an
5 approximately one-year period. So we've already done that
6 first quarterly sampling event at the four buildings. And
7 then the buildings and sites included in that Immediate
8 Sampling Task will also be rolled into the overall remedial
9 investigation. So right now we are in the process of
10 preparing the summary report for that quarterly sampling
11 event that we completed along with the United States Army
12 Corps of Engineers and AFCEC, and then once completed, that
13 report will be submitted to EGLE and MDHHS. We are also
14 planning on presenting the results at the next BCT meeting
15 which is tentatively scheduled for November 30th. As far as
16 other activities under this Immediate Sampling Task, the
17 quarter two or second quarterly event will be performed
18 either at the end of this month or the beginning of
19 December, and then we'll prepare a summary report after that
20 event. And then the third and fourth quarterly sampling
21 events are tentatively scheduled for February and March of
22 next year and then May and June of next year as well. And
23 then we'll prepare reports for those events and submit those
24 to the state. Next slide, please.

25 As far as an update for the overall Remedial

1 Investigation, we've been working with EGLE and MDHHS to
2 prepare and finalize our UFP-QAPP. Right now we're working
3 on responses to comments that we received from EGLE and we
4 think that document will probably be finalized this month or
5 in December. As far as field activities for the overall RI
6 effort, the first phase of field activities is going to
7 include passive soil gas sampling and that's tentatively
8 scheduled to begin in the spring of next year once we get
9 through the winter season. Next slide, please.

10 On this slide, just a quick snapshot of our -- our
11 timeline and schedule for the contract. So you can see the
12 RI fieldwork there at the top and then the Immediate
13 Sampling Task that I talked about earlier down at the bottom
14 there in green along with our reporting activities for the
15 feasibility study, proposed plan and ROD.

16 And that is our last slide and update for tonight.
17 We plan to be at the next RAB meeting and hopefully we'll
18 have our results for the first quarter and hopefully the
19 second quarterly event as well. Thank you.

20 MR. SCOTT LINGO: Scott Lingo, community RAB. I
21 have a question looking at the map that you had where the
22 vapor pins are currently being utilized.

23 MS. CELESTE HOLTZ: Yep.

24 MR. SCOTT LINGO: The area beyond building number
25 21 that is blue, does that -- that's where they're going to

1 put additional darts for collection. Just immediately to
2 the northwest of that this past summer across from Ratliff
3 Park there were a lot of tents and kids and stuff like that
4 along that area camping and I wonder why we are having
5 outside activities in that area and people in that area if
6 they're putting the vapor pins all the way to 41 beyond
7 building 25.

8 MR. STEVEN WILLIS: The vapor pins are not going
9 in all that blue area. That's the SS021 IRP site boundary.
10 The -- this investigation is focused specifically on those
11 two buildings down in that lower corner.

12 MS. CELESTE HOLTZ: Yeah. They're kind of hard to
13 see, but they're in red kind of behind the blue shading. So
14 just that site 21, it's building 25 and 43 which are kind of
15 at the very west end.

16 MR. STEVEN WILLIS: On the screen they're marking
17 the area.

18 MR. SCOTT LINGO: Okay. I was just looking at the
19 additional soil vapor data collection on that key where it
20 says "requires risk assessment." So that's -- as that blue
21 continues towards Menoton (phonetic), this was just beyond -
22 - yeah, just beyond where they have the new building by Ken
23 Ratliff and that -- that open field area right across from
24 the park. So I guess my concern is -- is who is out there?
25 Is it safe for them to be out there if we've got vapor pins

1 possibly being placed and we have a concern about VOC's
2 being emitted from the ground, is that such a good idea to
3 continue public activity in that area? Just a thought.

4 MS. CELESTE HOLTZ: Yeah. So right now we haven't
5 installed anything and then the passive soil gas samples are
6 going to be limited to kind of the former base area. So
7 we --

8 MR. SCOTT LINGO: Okay. Well, this was on the
9 base and that's -- that's -- that's my question. And I'm
10 just looking at that key where it says "additional soil
11 vapor data collection," that's what led me to believe that
12 there was going to be some tests in that blue area in
13 looking at the key if I'm seeing it correctly.

14 MS. CELESTE HOLTZ: Yeah, in the future we will be
15 collecting passive soil gas samples kind of throughout that
16 site and those are just a small diameter tube that gets
17 installed into the ground --

18 MR. SCOTT LINGO: Sure.

19 MS. CELESTE HOLTZ: -- and sampled. And then I
20 guess I would just say if the kids were outside in tents,
21 probably not a concern from a vapor intrusion perspective.

22 MR. SCOTT LINGO: Okay.

23 MR. STEVEN WILLIS: Yeah. The concentrations in
24 general are -- are not high enough to create an exposure
25 concern for people out walking, recreating, that kind of

1 activity. What we're looking at is a potential concern for
2 the vapors coming up through the slabs in the buildings
3 because it's a closed -- enclosed space you may have it
4 concentrate and create a potential exposure for indoor
5 workers.

6 MR. SCOTT LINGO: Okay. Thank you for the
7 explanation. I understand.

8 MR. STEVEN WILLIS: That's -- that's what we're
9 looking at.

10 MR. SCOTT LINGO: Okay. You've got enough air
11 around and it's going to be dispersed.

12 MS. CELESTE HOLTZ: Thank you, Scott.

13 MR. MARK HENRY: Mark Henry. I have a question.
14 For the sub-slab monitoring points that you put in the
15 buildings, did you perhaps hook a PID instrument up to those
16 as a preliminary to find out if there were -- if it
17 registered volatile organics under those slabs?

18 MS. CELESTE HOLTZ: We did; we did and I -- going
19 from memory here, I think we had all zeroes. We had one low
20 level detection. I think it was less than one ppm.

21 MR. MARK HENRY: So the chances of those showing
22 significant concentrations are probably pretty low?

23 MS. CELESTE HOLTZ: Yeah. The PID results looked
24 good.

25 MR. MARK HENRY: Okay. Thank you.

1 MS. CELESTE HOLTZ: Yep.

2 MR. TIM CUMMINGS: Yeah. Hi. Thank you. Tim
3 Cummings, Oscoda Township. My question has to do with the
4 map that you show the sampling method we were just
5 discussing that's on the screen. And just south of these
6 two areas in blue are the residences of the villages of
7 Oscoda. Is there going to be any testing done in those
8 areas?

9 MS. CELESTE HOLTZ: So we do have the OTO-24 site
10 as included in part of our contract. Right now that site
11 isn't slated for additional sampling, but we have been
12 working with AFCEC and the Corps of Engineers for a contract
13 modification for that site to be added in.

14 MR. DAVID CARMONA: Dave Carmona. When was the
15 last VI, vapor intrusion, RI conducted?

16 MS. CELESTE HOLTZ: I think the report was
17 finalized in 2020 or 2021.

18 MR. DAVID CARMONA: Okay. And so we have a new
19 report or a new RI being done and I believe I asked you this
20 time and you were less than forthcoming on why all of a
21 sudden the sudden concern over vapor intrusion if we had a
22 report done three years ago and seems that it was
23 satisfactory. So I have a concern about the reason for
24 this.

25 MR. STEVEN WILLIS: So there's a couple of reasons

1 for the follow-on RI. The initial one did not include any
2 type of a risk assessment at all. So it collected a bunch
3 of data, but it only got us halfway there. It didn't really
4 get us the final answer do we have a risk at these sites or
5 not. So initially that was the primary concern for this
6 follow-on contract was to look at all the data that was
7 collected and do a risk assessment. But as we started
8 compiling and looking at not only the data collected for
9 that previous investigation, but also just some additional
10 general groundwater information, we identified additional
11 areas that needed to be evaluated. So this is not suddenly
12 a new, surprising thing. Just the previous investigation
13 was incomplete and it was scoped that way. It wasn't like
14 the contractor only did half the work. They were never
15 contracted to do a risk assessment. That was all before my
16 time. But at this point we're addressing that.

17 MR. DAVID CARMONA: So based on that lack of
18 scoping on the last one, this pre-testing that you're doing
19 before the RI, is that to help refine your scoping for this
20 or is this just additional data you think is necessary?

21 MR. STEVEN WILLIS: So this is -- the -- the
22 sampling in these buildings, the sub-slab vapor pin
23 sampling, is a result of the previous -- the data from the
24 previous investigation. They sampled around the buildings
25 and we had some fairly high values. So we met with EGLE,

1 talked through the data and EGLE requested that these
2 specific four buildings, because they are occupied
3 buildings, be moved forward for accelerated evaluation ahead
4 of the rest of the investigation. So that's why Celeste had
5 indicated we've got the immediate sampling activities and
6 that work plan was already finalized and the work is already
7 being done and then we've got the broader contract which
8 includes some additional sites we didn't previously look at
9 as well as a risk assessment for all the sites.

10 MR. DAVID CARMONA: Okay. So you're looking at
11 all this data. Is that going to be tied to the fate and
12 transport of groundwater?

13 MR. STEVEN WILLIS: No.

14 MS. CELESTE HOLTZ: I mean, we --

15 MR. DAVID CARMONA: Doesn't this -- there's
16 something, organics in the ground. Groundwater is going to
17 move it. It makes sense that it may be outside of the
18 boundaries of the base or outside your scoped areas. That's
19 what I'm asking.

20 MS. CELESTE HOLTZ: Yep. So as part of that
21 overall RI. So right now we're just looking at these four
22 buildings to -- to get that taken care of, like talked about
23 with EGLE and DHHS. And then as part of the remedial
24 investigation, I kind of went over it during the last time I
25 presented. We have kind of a phased approach where we're

1 doing first the passive soil gas sampling, then we'll be
2 doing additional soil and groundwater characterization as
3 needed to identify any data gaps, figure out where the VOC's
4 are actually at in the soil and groundwater like you were
5 talking about. And then based on that we'll know exactly
6 where our point of compliance line is at is what it's
7 usually referred to, and our lateral inclusion zone and then
8 that's how we'll identify the buildings that we want to
9 install vapor pins in.

10 MR. DAVID CARMONA: Sounds to me like the scope is
11 predetermined to limit this to the base boundaries.

12 MS. CELESTE HOLTZ: I don't think that's
13 necessarily the case. Some of the areas will be extending
14 off -- off base as needed.

15 MR. DAVID CARMONA: Okay. Thank you.

16 MS. CELESTE HOLTZ: Any other questions? Okay.
17 Thank you.

18 MS. JESSIE HOWARD: All right. Thank you,
19 Celeste. At this time I am going to break us for our
20 ten-minute break, and then we do have one more final
21 presentation for tonight, but we will be back here in about
22 ten minutes. Thank you.

23 (Off the record)

24 MS. JESSIE HOWARD: All right. Finally we have
25 Mr. Craig Johnson from EA presenting the PFAS sources other

1 than AFFF. Craig is joining us virtually tonight so he'll
2 be presenting virtually. And then when he's done with his
3 presentation, so that we don't get any loud feedback noises
4 from the mics, I'm going to pass my mic around so we can ask
5 him questions with my mic so we can turn all the rest of
6 them off. So, Craig, when you're ready, go ahead and begin
7 your presentation.

8 MR. CRAIG JOHNSON: Yeah. Good evening, everyone.
9 As mentioned, my name is Craig Johnson, project manager from
10 EA Engineering, Science, and Technology. And I'll be
11 providing the briefing on the PFAS sources other than AFFF
12 at multiple AFCEC BRAC installations and specifically
13 tonight we'll discuss the former Wurtsmith Air Force Base.
14 This project was awarded in 2023, February of 2023, so this
15 is the first presentation to this RAB board here. Next
16 slide, please.

17 All right. The project team includes the US Army
18 Corps of Engineers' Omaha District, the Air Force Civil
19 Engineering Center (AFCEC) BRAC division, and EA
20 Engineering, Science, and Technology. Our contract is with
21 the Omaha District and we're working with both the Omaha
22 District as I mentioned and the AFCEC BRAC team. Next
23 slide, please.

24 There are two primary objectives to this -- for
25 this project as noted here, to determine whether and where

1 potential PFAS sources other than AFFF were stored, handled
2 and/or used and released, and the other one is to identify
3 if a potential PFAS release poses little or no potential
4 threat to human health and the environment from PFAS or if
5 it warrants further investigation. We do have a couple
6 project constraints. As you know, PFAS is somewhat of a new
7 industry here and there are -- is a limited material content
8 information in the safety data sheets that we review, and
9 there is limited knowledge of base operations due to the
10 closure back in 1993, so that's quite awhile ago, and
11 struggles with finding some of the folks that had worked
12 there previously. Next slide. Thank you.

13 So the four primary tasks associated with this
14 project, first is a historical records search of existing
15 documents and that was primarily through the admin record.
16 Those might include the environmental baseline surveys and
17 those type of reports that consolidate the information, the
18 activities completed at each of the buildings that we
19 evaluated. We also do -- interview personnel familiar with
20 the history and operations of the base. And then from that
21 we determine if potential or identified releases of PFAS due
22 to the Department of the Air Force activities will require
23 additional investigation and that gets documented in a
24 research report that we will do for each BRAC installation.
25 We've estimated that we'll probably get this one wrapped up

1 by February of 2025, if not earlier. Next slide, please.

2 So summary of the things that we are evaluating.
3 There's over 1230 shops, locations, former buildings that
4 are within the former Wurtsmith Air Force Base footprint.
5 The primary documents, there's seven primary documents that
6 we evaluated. There's numerous other ones that are
7 available and that we looked at, but those that had the most
8 current information were evaluated a little bit more
9 intently. And then we also did conduct -- we were able to
10 conduct eight interviews of folks who were familiar with the
11 former activities and processes there. Next slide, please.

12 As shown here, our -- our -- the focus of the
13 records research and interviews was the processes and
14 products used in each of the former buildings and shops and
15 then to identify the potential discharges and disposition of
16 those potential PFAS materials. So this table to the right
17 kind of summarizes that. It shows the former shops and
18 processes there in the first two columns that may have used
19 PFAS products with the final column that identifies the
20 types of products that might have potentially had PFAS in
21 them. You know, we're -- we're early on in the process. We
22 have interviewed quite a few folks that we were provided
23 names and when we interviewed those folks, we asked them if
24 they had any additional folks that we could interview and
25 that led us down a path of a couple more interviewees. But

1 part of today is to identify maybe anybody at this meeting
2 or anywhere else that might have some information of the
3 former activities and products that were used at that and if
4 so, we'd like to get your contact information such that we
5 could interview you, too, as well. And you can provide that
6 to Steve at the meeting. The last slide that I have here
7 identifies -- provides his contact info obviously, but you
8 guys should all have that. So we're just early on in the
9 process and kind of getting things going on Wurtsmith. Like
10 I said, we're evaluating those 1200 plus buildings and doing
11 -- completing interviews and this will all be completed
12 ultimately in a report that'll get submitted. And that's --
13 that concludes the summary of this PFAS -- this project that
14 we're doing right now. Do we have any questions?

15 MS. CATHY WUSTERBARTH: Thank you. Thanks for the
16 presentation. This is Cathy Wusterbarth. Outreach
17 questions. I'm wondering if you are going to consider
18 outreach to our local VFW, our local American Legion, and
19 possibly our newspaper? I find -- I feel like that would be
20 helpful for getting some feedback for community members that
21 may have worked on the base.

22 MR. CRAIG JOHNSON: Yeah. Cathy, that's a great
23 idea. We'll -- we'll give that some consideration. We were
24 provided the initial contact interviewees with Steve and
25 some of the other folks that had worked there historically

1 and from the Air Force, but we would -- that's a good idea.
2 We could certainly reach out to those folks as well.

3 MR. DAVID CARMONA: Dave Carmona. A lot of this
4 research that you're doing has been done. Are you -- can
5 you use the information, historical reviews from the current
6 PFAS RI being conducted for your purposes for the historical
7 information? And have you looked at the National Archives
8 or DOD Logistic Archives for that information?

9 MR. CRAIG JOHNSON: Yeah. So we -- we are --
10 Dave, we are using the existing documents. Many of those
11 were focused on AFFF. The focus of our PFAS evaluation is
12 non-AFFF. And so we do reference those documents where
13 applicable. As far as any other historical documents during
14 our interviews and our conversations with the Air Force, we
15 requested any information that they might have that's not in
16 the admin record to be provided to us.

17 MR. REX VAUGHN: Rex Vaughn, Community RAB. In
18 your slide 42, the former shop building column, have you
19 identified -- let me back up. The -- that column lists a
20 lot of stuff that you wouldn't necessarily correlate with an
21 air base, but that's from a civilian standpoint. Is every
22 item or every row listed in there -- were those shops or
23 buildings found on the base or is this just a general list
24 of everything that you found on the other bases or other
25 installations that you've looked at?

1 MR. CRAIG JOHNSON: Yeah. Good question. No,
2 this is a generic kind of template that we follow. We -- we
3 are working at 40 installations and this is kind of our
4 laundry list of -- probably a bad term but it's a list of --
5 of former shops that might have used potential PFAS
6 materials and they may or may not be applicable to each
7 installation. But this is kind of our -- the places that we
8 will focus most of our effort on.

9 MR. REX VAUGHN: Have you been able to boil it
10 down for Wurtsmith or aren't you there yet?

11 MR. CRAIG JOHNSON: We're still in the process of
12 evaluating those, yes.

13 MR. REX VAUGHN: Okay. Thank you.

14 MR. CRAIG JOHNSON: Welcome.

15 MR. KALAN BRIGGS: This is Kalan Briggs. Just to
16 follow up. So the Gaines report that's referenced on the
17 bottom of this, that was provided by USEPA, that's where Air
18 Force is focusing the study based on the results of that
19 report. So you can get -- all those are sourced inside that
20 Gaines report.

21 MS. JESSIE HOWARD: Any other questions for Craig?

22 MR. CRAIG JOHNSON: There's one online I see.

23 MS. JESSIE HOWARD: Okay.

24 MR. ARNIE LERICHE: Hello? Can you hear me?

25 MR. CRAIG JOHNSON: Yes.

1 MR. ARNIE LERICHE: This is Arnie Leriche, with
2 the Community RAB. Are you looking at beyond just the
3 physical building and what was done there outside the box on
4 intermittent uses or changes to normal procedures? One case
5 in example, and it's a high volume PFAS potential, and
6 that's the oil/water separators on the base. Now those
7 could be at many different locations. Like we heard earlier
8 there's one that is at the outfall of the Three Pipes storm
9 sewer that's now owned by township or the airport. But
10 there was one also at the fire training site, FTO-2, and
11 we've heard that there was a time when rather than the
12 separated water going to the old sewage treatment plant that
13 the Air Force ran when it was active, but they trucked it to
14 another location. So there's -- there's different questions
15 that you would -- might want to target that have the highest
16 potential for a lot of PFAS.

17 MR. CRAIG JOHNSON: Yeah. No, that's a good
18 point. We are evaluating -- looking at all the oil/water
19 separators that we have available information for and going
20 back to those reports. And if in that research identifies a
21 process or a chemical that may have been discharged to that,
22 then we would include that as potentially moving forward.
23 So, yeah, we are -- we are aware of the oil/water separators
24 and those kind of things, tracking drains, maybe where they
25 might end up, sanitary sewer, those kind of things. So,

1 yeah, we are definitely looking outside just the immediate
2 vicinity of the building and -- and in the interviews and
3 historical records we're considering any uses that may have
4 been just outside the norm if we're aware of it.

5 MR. ARNIE LERICHE: I would -- I would like to ask
6 is it possible that you may do an interview of the whole RAB
7 but not as individuals, but as a group so that we could have
8 some comfort level on what and how the questions are asked
9 and the detail of it and the purpose and also you may find
10 out that some of us have some knowledge through friends and
11 hearsay that may lead to additional interviewees.

12 MR. CRAIG JOHNSON: Yeah. Steve -- Steve Willis,
13 I guess we'd coordinate that through you if we were doing
14 kind of a group thing. We could certainly do an individual
15 thing, but if you wanted kind of a group interview, we
16 could -- we'd certainly work with Steve to coordinate
17 something to that effect.

18 MR. ARNIE LERICHE: Thank you.

19 MR. STEVEN WILLIS: Yeah. So we can look into
20 that, Armie -- Arnie. We did a couple of group interviews
21 with smaller groups. I'm not sure that having the whole RAB
22 on a group interview would be productive. If you know of
23 somebody -- you mentioned hearsay and others. If you know
24 of somebody that might have information, if you could give
25 us that information that was on Craig's last slide, we can

1 set up an interview directly with that individual. It would
2 be much more productive.

3 UNIDENTIFIED SPEAKER: I'll talk to you.

4 MR. STEVEN WILLIS: Okay.

5 MR. ARNIE LERICHE: Thank you. The reason I asked
6 was because the preliminary assessment that was done in
7 2015, '16, seemed to be very light on conversations and
8 information shared. It just seemed to be very, very light
9 and that was disappointing and we're learning from that. So
10 that's why I was thinking maybe if just a Community RAB,
11 let's talk to the two Community co-chairs, I mean, the two
12 co-chairs, think it through, see if there could be a benefit
13 of a one hour call. That's all. Thank you.

14 MS. JESSIE HOWARD: Thank you. Did we have any
15 other questions for Craig? Okay. So now I would like to
16 open the floor for RAB member questions and comments. Just
17 remember to state your name for the record prior to your
18 question or comment.

19 MR. DAVID WINN: Dave Winn. Steve, I'd like to
20 know now that all the biota sampling and the surface water
21 and sediment sampling is completed, it's been quite awhile
22 since we've heard any status on the ecological risk
23 assessment. Can you give us any update there?

24 MR. STEVEN WILLIS: We just collected the data so
25 we don't have any results back from the lab yet. All the --

1 I mean, timeline --

2 MS. JESSIE HOWARD: I'm sorry?

3 MR. STEVEN WILLIS: Paula -- Paula --

4 MS. JESSIE HOWARD: I'm thinking I don't know the
5 timeline.

6 MS. PAULA BOND: Sure, you can answer. Yeah,
7 Dave, so like Steve said, we are just finishing the data
8 collection efforts. So once we have all the data collected,
9 that's when they will really dig into developing the risk
10 assessment. So that's going to be probably -- that will
11 come out with our draft RI report which will be next year,
12 next summer.

13 MR. DAVID WINN: You hand all that information
14 over to Janet Anderson's group?

15 MS. PAULA BOND: Yes; yeah; uh-huh; yep.

16 MR. DAVID WINN: Okay. So, I mean, are they --
17 are they working on anything at all or are they just
18 waiting?

19 MS. PAULA BOND: Yep. So they have -- yeah, they
20 have some -- the preliminary data that we have. So as we've
21 collected the data we're shooting that over. But the biota
22 data, all of that, we have just finished that sampling so we
23 don't even have the results back from that stuff yet.

24 MR. DAVID WINN: Okay.

25 MS. PAULA BOND: Yeah.

1 MR. DAVID WINN: Steve, all I'm asking is it -- if
2 it's possible that we can get an update from Janet Anderson
3 or whoever on where they sit? I mean, if they've been doing
4 nothing, then fine. But if they've been doing something for
5 the risk assessment, it'd be nice to seek some kind of an
6 update if that's possible.

7 MS. PAULA BOND: Yeah. I don't think they have --
8 they are deep enough into it yet, Dave, to have any results.

9 MR. DAVID WINN: Okay. Okay.

10 MS. PAULA BOND: But I think as we move on in the
11 spring maybe an update at that time.

12 MR. DAVID WINN: Okay.

13 MS. PAULA BOND: Thanks.

14 MR. SCOTT LINGO: Scott Lingo, Community RAB. In
15 regards to the biota sampling, it sounded like we were done
16 with that. Are they going to look at any more collection of
17 whitetail deer in the area? It's been some time since
18 they've done any muscle mass testing or any other testing of
19 deer. I believe Fish & Wildlife had harvested I think 21
20 several years ago now and just wondering if they're going to
21 take a look at that again in the future.

22 MR. STEVEN WILLIS: So the Air Force was not
23 including deer in our eco risk assessment. I don't know if
24 the state health department was doing any additional work on
25 deer. Are you aware of any -- any updates on that?

1 MS. CHELSEA GARY: I think I would have to get
2 back to you on that one. I don't remember right now, but
3 I'll note that.

4 MR. SCOTT LINGO: It'd be nice to hear if they are
5 going to take a look at that -- you know, large mammals in
6 the future. Because we have our Do Not Hunt signs
7 established within our five-mile radius and they've been up
8 since that initial assessment so it would be nice to see if
9 maybe there's been any change?

10 MS. CHELSEA GARY: So you're referring to Clark's
11 Marsh?

12 MR. SCOTT LINGO: Yes, the Clark's Marsh area and
13 around Wurtsmith Air Force Base.

14 MS. CHELSEA GARY: Yeah. So in the Clark's Marsh
15 area, the radius was lowered to three miles.

16 MR. SCOTT LINGO: Okay. And are the signs that
17 are posted currently -- have they been updated to decrease
18 that radius from five miles to three miles or are they still
19 stating five miles that are out along the roadsides and
20 such?

21 MS. CHELSEA GARY: That is a good question as
22 well. I'll have to look into that.

23 MR. SCOTT LINGO: Okay. Thank you.

24 MR. KALAN BRIGGS: Kalan Briggs from EGLE. My
25 phone a friend says it's a three-mile radius now.

1 MR. SCOTT LINGO: And those signs are designating
2 three miles now?

3 MR. KALAN BRIGGS: That I don't know.

4 MR. SCOTT LINGO: Okay.

5 MS. JESSIE HOWARD: Cathy?

6 MS. CATHY WUSTERBARTH: All right. Cathy
7 Wusterbarth. Wanted to thank the coordinators -- I'm not
8 for sure who made that happen -- but get the -- getting the
9 presentation on the RAB website. Appreciate you getting
10 that on there so that it can be available to the public for
11 the meeting.

12 MR. STEVEN WILLIS: That's our Public Affairs
13 office.

14 MS. CATHY WUSTERBARTH: Thank you, Public Affairs.
15 And then the notice in the paper, it looks -- I'm trying to
16 figure out the pattern in this. It looks like maybe it's
17 posted in the papers three weeks before the meeting, and two
18 weeks before, but not, like, today? Today -- our local
19 paper comes out on Wednesdays.

20 MS. JESSIE HOWARD: I believe that we run the ad
21 the Wednesday prior to give people a heads-up.

22 UNIDENTIFIED SPEAKER: The 25th (inaudible) --

23 MR. MIKE MUNSON: It was in today's paper.

24 MS. CATHY WUSTERBARTH: Was it? I didn't see it,
25 Mike, no.

1 MR. MIKE MUNSON: Yeah. On the third page.

2 MS. CATHY WUSTERBARTH: Okay.

3 MR. MIKE MUNSON: At the bottom.

4 MS. CATHY WUSTERBARTH: Great. Well, thank you
5 for putting that in and it has a QR code that makes it
6 easier. And I don't know, the little website, registration
7 website, is much shorter, too, so thank you very much for
8 making all those corrections for the public. That's it.

9 MS. JESSIE HOWARD: Thank you. Anybody else?

10 MR. DAVID WINN: I have just one. And this is
11 just for audience people and online. If -- if anybody has -
12 - as far as Van Etten Lake or anything, have any pictures or
13 any foam sightings, Paula Bond from Aerostar is looking for
14 additional pictures and indications so that they can see
15 where the foam is -- is -- is gathering and creating. So if
16 anybody on Van Etten Lake has foam pictures, Paula would
17 like to see those I believe; right?

18 MR. STEVEN WILLIS: Particularly if you've got
19 foam pictures and you're interested in letting us sample on
20 your -- collect soil samples on your property.

21 MR. DAVID WINN: Very good. Thank you, Steve.

22 MS. JESSIE HOWARD: All right. Any other RAB
23 member questions? Do we have anyone virtually, Amy?

24 MS. AMY RAUSER: (Inaudible)

25 MS. JESSIE HOWARD: Arnie, go right ahead when

1 you're ready.

2 MR. ARNIE LERICHE: Okay. Arnie Leriche.

3 Regarding the ecological risk assessment status as David
4 Winn asked, Paula, I talked to you yesterday and it'd be
5 very helpful rather than wait another six months before we
6 hear anything from -- on the ecological risk team, if we
7 could just get a few presentation -- a few slides, a status
8 of the monitoring plan that was established. Did it go as
9 planned? Did -- were you able to collect all the samples
10 that you tried to or were you unable to on some section of
11 where you wanted to? Just a status. Just about three or
12 four slides on -- on what, how it compared, what you
13 collected versus what you asked or you wanted to do?

14 MS. PAULA BOND: Yeah. Arnie, we can pull that
15 together and have that ready for the next RAB for you.

16 MR. ARNIE LERICHE: Okay. Maybe as a technical
17 session like a month before or something?

18 MS. PAULA BOND: Right; yeah. So we were talking
19 about and I'll confirm -- we'll confirm this with Steve --
20 about doing a technical session that was focused on the risk
21 assessment to give everybody an update on that kind of like
22 we've done in the past. We've had the risk assessors come
23 in and give some additional information. We don't have a
24 date scheduled for that yet. But, yeah, we are looking at
25 that.

1 MR. ARNIE LERICHE: Thank you.

2 MS. JESSIE HOWARD: All right. So I will do just
3 a quick review of the public comment guidelines and then we
4 will move on to that. Number one, please raise your hand to
5 indicate that you'd like to make a comment. Number two,
6 when I acknowledge you, please -- we will bring you a mic
7 actually this time and be sure to say and spell your name
8 for the record prior to making your comment. Number three,
9 please keep your comment to three minutes or less. And
10 number four, comments will be addressed at a later time if
11 the RAB members determine that a follow-up is needed. Do we
12 have anybody with us in the building tonight that would like
13 to make a comment? Nobody. Amy, do we have anybody
14 virtually?

15 MS. AMY RAUSER: (Inaudible)

16 MS. JESSIE HOWARD: Okay. Tony, whenever you're
17 ready.

18 MR. TONY SPANIOLA: Thank you. Can you hear me
19 okay?

20 MS. JESSIE HOWARD: Yes.

21 MR. TONY SPANIOLA: Thank you. I just -- I just
22 had a question I wanted to make sure that I -- that I was
23 hearing things right when -- Steve, when you spoke earlier.
24 Is it -- am I correct in hearing you say that with regard to
25 the -- the -- the proposed aircraft or Alert Aircraft Area

1 IRA that -- that Air Force is looking at not as -- not
2 necessarily as part of the current construction because it
3 would slow things down, but looking at expanding the -- the
4 capture, the extraction well capture fields and using more
5 of the -- using more of the capacity? Did I hear -- is
6 that -- did I hear that right?

7 MR. STEVEN WILLIS: Yes, that's correct.

8 MR. TONY SPANIOLA: Thank you. Thank you for that
9 clarification. That's -- that's all I have.

10 MS. JESSIE HOWARD: Thank you, Tony. If there are
11 no other additional comments, I would like to invite our
12 co-chairs to give their closing remarks and adjourn
13 tonight's meeting.

14 MR. STEVEN WILLIS: Do you want to go first?

15 MR. MARK HENRY: Sure. I'd like to thank everyone
16 who attended the meeting tonight. I thought it was fairly
17 productive. I'm looking forward to the next one when we get
18 a -- a better sort of global look at what's been going on
19 and hopefully everything will go as planned, all the
20 fieldwork will get done this year and we can sit back and
21 figure out what to do next.

22 MR. STEVEN WILLIS: Yeah. I'd also like to thank
23 everyone for coming. I thought we had some good -- good
24 discussions tonight. It's actually surprisingly short
25 meeting. I thought we were going to run long with the

1 number of presentations. But, again, I appreciate
2 everybody's interest in coming out and listening and look
3 forward to seeing you at the next meeting. Thank you.

4 MS. JESSIE HOWARD: Thank you. Everyone have a
5 great night.

6 (Meeting concluded at 7:01 p.m.)
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CERTIFICATE

I, Marcy A. Klingshirn, a Certified Electronic Recorder and Notary Public within and for the State of Michigan, do hereby certify:

That this transcript, consisting of 80 pages, is a complete, true, and correct record given of this meeting conducted on November 8, 2023.

I further certify that I am not related to any of the parties to this action by blood or marriage; and that I am not interested in the outcome of this matter, financial or otherwise.

IN WITNESS THEREOF, I have hereunto set my hand this 16th day of November, 2023.

Marcy A. Klingshirn

Marcy A. Klingshirn, CER 6924
Notary Public, State of Michigan
County of Eaton
My commission expires: March 30, 2029