

**Former Wurtsmith AFB
Restoration Advisory Board (RAB) Meeting**
13 February 2018
5:30 – 8:38 pm Eastern Standard Time
Robert J. Parks Public Library
6010 N. Skeel Ave., Oscoda Township, MI 48750

Final Meeting Minutes

Members Present	Organization	Comment
Tim Cummings	Oscoda Township	
Robert Delaney	Michigan Department of Environmental Quality (MDEQ)	
Bill Farrell (Alternate)	Michigan Department of Health and Human Services (MDHHS)	Bill Farrell represented Chris Bush, who was absent.
Bill Gaines	Community Member	
Martha Gottlieb (Alternate)	Community Member	Martha Gottlieb represented Matthew Hegwood, who was absent.
Arnie Leriche	Community Co-Chair	
Chuck Lichon	District Health Department #2 (DHD2)	
Matt Marrs	Air Force Civil Engineer Center (AFCEC)/Air Force Co-Chair	
Tony Martoglio	U.S. Department of Agriculture Forest Service (USFS)	
Joe Maxwell	Community Member	
Jeff Moss	AuSable Township	
Mike Munson	Oscoda-Wurtsmith Airport Authority (OWAA)	
Dan O'Conner (Alternate)	Community Member	
Jerry Schmidt	Community Member	
Dan Stock (Alternate)	Community Member	Dan Stock represented Joe Plunkey, who was absent.
Robert Tasiar	Community Member	
Aaron Weed (Alternate)	Oscoda Township	
Cathy Wusterbarth	Community Member	
Members Absent	Organization	
Chris Bush	MDHHS	
Jim Davis	Community Member	
Irene Dunn	Community Member	
Matthew	Community Member	
Catherine Larive	Community Member	
Ryan Mertz	Community Member	
John Nordeen	Oscoda Township	
Joe Plunkey	Community Member	
Other Attendees	Organization	
Ken Amerguish	USFS	
Saamih Bashir	AMEC (Air Force contractor)	
Vickey Cole	Community Attendee	
Dale Corsi	DLZ (MDEQ contractor)	
Tim Cwalinski	Michigan Department of Natural Resources Fish Biologist (Northern Lower Peninsula)	

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Leigh-Ann Fabianke	Galen Driscol (Air Force contractor)	
Jenny Haglund	Oscoda Press	
Breanne Humphreys	Cherokee (Air Force contractor)	
Michael Jury	MDEQ	
Gene Kirvan	Lake Huron Sportfishing, Inc and AuSable River Steelheaders (Chapter of MSSFA)	
Sue Manente	MDHHS	
Bill Palmer	Trustee of Oscoda Township Board	
Paul Rekowski	AGEISS (Air Force contractor)	
Troy Techlin	SCIT	
Ross and Donna Tingley	Community Attendee	
Russell Williams	Community Attendee	
Mike and Hazel	Community Attendees	
Facilitator	Organization	
Tim Sueltenfuss	Galen Driscol (Air Force contractor)	

Attachments

- Attachment 1: RAB Agenda
- Attachment 2: Meeting Slides
- Attachment 3: Operating Procedures
- Attachment 4: Former Wurtsmith AFB Fiscal Year (FY) 18 Projects, Programming and Updates
- Attachment 5: Acronyms
- Attachment 6: AFCEC RAB Comment Form
- Attachment 7: MDEQ Presentation
- Attachment 8: Community Co-Chair RAB Update
- Attachment 9: Dispute Resolution Letter concerning the Former Wurtsmith AFB and Response to Impacts to Drinking Water (DW) from Per- and Polyfluoroalkyl Substances (PFAS)
- Attachment 10: Need Our Water Action Group Summary for RAB
- Attachment 11: Spaniola Public Comment
- Attachment 12: Action item tracker

Welcome and Introductions

Mr. Tim Sueltenfuss, facilitator, began the RAB meeting at 5:30 pm and welcomed RAB members and others in attendance. Mr. Sueltenfuss introduced Mr. Matt Marrs, the Air Force Co-Chair and the Base Realignment and Closure (BRAC) Environmental Coordinator (BEC), who welcomed the RAB members to the meeting. Mr. Arnie Leriche, the RAB Community Co-Chair, also welcomed the RAB members to the meeting. Mr. Sueltenfuss reviewed the agenda and the attendees introduced themselves. Mr. Sueltenfuss noted the meeting was being video recorded and livestreamed on YouTube at: <https://youtu.be/SW7ET6lycAM>

[Note: The RAB Community Co-Chair would like to acknowledge Lake Huron Sportfishing, Inc and AuSable River Steelheaders (a Chapter of MS&SFA), which sponsored and paid for the video broadcasting of this RAB meeting.]

Mr. Sueltenfuss stated that greater than 50% of community RAB members, greater than 50% of government RAB members, and both co-chairs were present, so a quorum was achieved. RAB members read and agreed to abide by the team ground rules:

- Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.
- Use our time together efficiently, wisely and respectfully.
- Listen and remain open to differing points of view.
- Speak clearly and succinctly one person at a time; avoid interrupting others.

- Share information early, openly and honestly.
- Maintain a propensity for progress: prepare, discuss, document and move forward.
- Accurately and objectively relay to others the discussions that occur at board meetings.

Meeting documents included in the RAB Packets were then reviewed.

Operating Procedures (Attachment 3)

Tim Sueltenfuss, Facilitator

Review draft and discuss recommended changes

RAB operating procedures are intended to guide RAB members, make the RAB an effective and functioning advisory board, and establish rules and guidelines to address common issues. RAB members had an opportunity to provide additional feedback on the draft operating procedures prior to the February 2018 RAB. Some of the comments received were reviewed and discussed:

1. Section 2.2. Frequency: It was suggested this be changed to once every three months instead of every six months.
2. Section 2.7 Access to Technical Documents and Related Communications: Inform stakeholder groups how to access such documents as soon as possible.
3. Section 3.1 Board Composition and Types of Members: Alternate RAB members are strongly encouraged to attend RAB meetings.
4. Section 3.5 Terms of Service: Community members serve for two-year terms but may serve consecutive terms. If a member decides not to complete his/her term, he or she should notify the RAB co-chairs and AFCEC Public Affairs in writing of this intent at least 60 days prior to his or her end of service.

Section 3.7 Adding Members: Any RAB member can recommend in writing to the community co-chair and Air Force co-chair that a new member be added to the RAB.

Cathy Wusterbarth recommended that the RAB Co-Chairs consider ways in which the general public who are unable to attend RAB meetings in person could participate. Action Item 13 was established to consider viability of including a conference call option at future RAB meetings.

Adoption of procedures or schedule adoption at next RAB meeting

The community RAB members then unanimously voted by show of hands to adopt the operating procedures. After the meeting, both co-chairs signed the operating procedures (reference Attachment 3).

General Updates

Stakeholder/RAB Member Updates

Mr. Sueltenfuss noted that this agenda item will help the RAB serve as intermediary to share information from stakeholder groups. In the future, he will solicit update bullets before the RAB meeting via email. Each group will have 3-5 minutes to provide updates. If RAB members think their update will include significant information, they are requested to notify the co-chairs so a separate action item can be created.

Mr. Sueltenfuss reminded all attendees that the updates provided by each stakeholder group represent the speakers' view of the environmental restoration at the Former Wurtsmith AFB and he noted others may have somewhat differing perspectives.

MDEQ

Bob Delaney

Mr. Bob Delaney shared his perspective (reference Attachment 7). He stated the pump and treat systems on Mission Drive, Arrow Street and Benzene Plant have been discharging treated water into Van Etten Creek. It was determined these systems have not been capturing Perfluorooctane Sulfonate (PFOS) because they were not designed to eliminate this emerging contaminant. The water from the pump and treat system has been discharged into Van Etten Creek.

Mr. Delaney stated the MDEQ Water Source Division sent a Violation Notice to the Air Force on 16 January 2018 because the treatment system that was previously ordered to be installed by 31 December

2017 was incomplete. The Violation Notice mandated that the Air Force have a system in place by 1 August 2018 plus additional incremental deadlines.

Mr. Delaney explained that MDEQ remediation work is paid for by a federal grant from the Department of Defense (DoD). When there is a disagreement, there is a dispute resolution process to go through before taking legal or enforcement action. RAB members received a copy of the violation letter, including the MDEQ response, dated 16 January 2018. Mr. Delaney stated MDEQ invoked dispute resolution on 14 December 2017. The intent is to avoid going to court and now the Air Force and MDEQ are working together to determine a resolution. There are seven identified issues currently in dispute.

Mr. Delaney presented a map that showed the first issue, Groundwater Surface Interface (GSI) discharge. He commented that MDEQ believes contaminants are accumulating in fish and contributing to the foam issue on Van Etten Lake. Mr. Delaney stated the Air Force needs to respond to this problem based on Michigan law. One of his maps showed the shoreline where MDEQ feels there is a discharge that is above the criteria. One of the dispute criteria dictate that the groundwater that is contaminated should be below 12 ppt. He noted that, if it is above this level, it is a violation and the Air Force needs to address it.

Mr. Delaney commented that an MDEQ team conducted a geologic survey of the bottom of the lake and determined where the groundwater could be emerging from seeps. MDEQ will collect samples at locations with more discharge to see if the plumes are coming out in higher concentrations. The MDEQ team has been doing onsite sampling, trying to bound how far out the plumes have spread. MDEQ decided to bound the plumes to be able to provide information to residents. MDEQ started this in the fall [2017] and has not completed the work. MDEQ placed a line of wells under the AuSable River to test if the plumes have spread in this area and all samples came back clean. They also determined that plumes are not affecting areas below [south of] the AuSable River. MDEQ has not been able to bound the area near the mouth of the AuSable River. MDEQ will be meeting with the EPA soon to talk about how foam is being created.

Mr. Delaney displayed photos of natural foam and PFAS foam to show the differences in appearance. MDEQ found the highest levels of PFAS at 220 ppt in the lake water, however they discovered 160,000 ppt in the foam. Mr. Delaney described the chemistry and environmental interactions of the PFAS molecule.

Ms. Martha Gottlieb asked Mr. Delaney to clarify whether the water is harmful due to the lower levels of PFAS. Mr. Delaney stated that the PFAS biomagnifies in fish by about 5,000 times what is in the water. He shared his view that the fish are inedible.

Ms. Gottlieb said someone from MDEQ had previously said the water is safe for swimming. Mr. Delaney responded that MDEQ did not know about the foam previously and that PFAS is regularly found in cosmetics and soaps and information about health effects is evolving.

Next, Mr. Delaney displayed a map to show the extent of the plume; he explained why some of the plume areas have not migrated. The existing pump and treat systems have been relatively protective of residents and effective in stopping the plume. Another map showed the results of surface water sampling at Cedar Lake in 2017.

MDHHS [Video @ 0h:38m:32s]

Bill Farrell

Mr. Bill Farrell noted Chris Bush was unable to attend the RAB meeting. MDHHS is currently developing a public health consultation regarding the foam issue. They are looking at dermal exposures (swimming) and hope to have this completed by early spring 2018. MDHHS administers the *Eat Safe Fish* program and are working to create a sampling strategy for the upcoming year because of requests for more frequent sampling. MDHHS will work together with the community on the plan.

DHD2 [Video @ 0m:40m:00s]

Chuck Lichon

Mr. Chuck Lichon provided an update on the alternate water supply data collected at the end of December 2017 until the end of January 2018. Filter replacements increased from 33 to 39 units during that time and they added one more Aquasana unit in a home, as well as two more water filtration units in homes.

Oscoda Township [Video @ 0h:40m:40s]

Tim Cummings

Mr. Tim Cummings asked about the progress on the building of a curtain wall for the east side of the base and as well as the proposed length. Mr. Matt Marrs stated he would provide this information during the Air Force update portion of the meeting. Mr. Cummings shared that, after listening to Mr. Delaney's presentation, he would like everyone to consider why the curtain is not being extended further to the north and south to try to create a barrier from the base to the rest of the environment that is getting contaminated. He said that the base is the source, so all should consider encapsulating it. Mr. Marrs responded that the Air Force is trying to put in projects on the northern side that will address that.

AuSable Township [Video @ 0h:42m:46s]

Jeff Moss

Mr. Jeff Moss said he had no updates to share but asked how the water flowing out of Clark's Marsh, ponds, and lagoons could be affecting the environment. He expressed his concerns about how the groundwater and surface water are affecting people south of the river.

AFCEC [Video @ 0h:43m:50s]

Matt Marrs

Mr. Marrs provided briefed FY18 Projects, Programming and Updates (reference Attachment 4). He stated the Air Force is doubling the size of the Granular-Activated Carbon (GAC) filtration facility to anticipate increasing capacity up to 1,000 gallons per minute (gpm) in the future. Mr. Marrs expressed his appreciation to the township in helping locate a site for the project. Construction is expected to begin the week of 12 March 2018 with the goal of having the plant up and running in early August 2018. He also stated the Air Force would like to have an opening ceremony in conjunction with a RAB meeting.

Mr. Marrs commented that the Air Force is looking at the ongoing process at the former Pease AFB, which uses resin technology in treatment systems. If the activities at Pease are successful, they could be incorporated at Wurtsmith. He said there is potential for additional Air Force funding for other projects. These 'out-of-cycle' funds could include addressing Landfill 3031, increasing capacity of the GAC plant from 500 gpm to 1,000 gpm, and adding additional extraction wells.

Mr. Marrs referred to the MDEQ Violation Notice and shared that the Air Force anticipates being able to meet requirements and submit final construction drawings by 1 March 2018 and complete construction in a timely manner, provided there are no major road blocks. Mr. Marrs stated his commitment to find additional funds that may be required.

Mr. Robert Tasior asked if the Air Force will be providing Oscoda Planning Commission site plans. Mr. Marrs confirmed that they will, and they will also be providing the monthly updates to the Commission, including schedules and other activities.

Ms. Gottlieb questioned if there is an opportunity to expedite construction to be completed before August. Mr. Marrs said the Air Force has been pressing the contractor on this subject and the operational date has already been moved up from October. Ms. Gottlieb asked if the contract specifies any penalties for missing the completion date. Mr. Marrs will ask the Contracting Officer's Representative (COR) about potential penalties. Mr. Marrs said the Air Force will do everything practical can to expedite the process.

USFS [Video @ 0h:51m:16s]

Tony Martoglio

Mr. Tony Martoglio shared that he had advised USFS leadership team on important timelines to keep everyone in the service up to date. They are working on understanding how the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and other authorities and laws interact. Mr. Martoglio stated the National Environmental Policy Act (NEPA) applies to any action occurring on National Forest land. Because of this, USFS is trying to understand how processes that gather information, for example monitoring well sampling, could potentially impact National Forest land. Mr. Martoglio said he will pursue meeting with the Air Force and MDEQ to determine how to accomplish the integration of CERCLA and NEPA actions.

OWAA [Video @ 0h:55m:28s]

Mike Munson

Mr. Mike Munson explained that the airport authority was created to enhance the business environment surrounding the airport. Many of their onsite tenants are looking to expand their businesses, which is positive for the economy. He remarked that tenants are concerned about what they view as threatening letters from the Air Force, which imply that businesses could take on liability for contamination if they expand their operations. Mr. Munson noted the Airport Authority has discussed this with tenants, but tenants remain concerned. He added that there is also a financial concern about increasing costs of doing business to pay for studies to show contamination was not caused by the business.

Community Member Updates [Video @ 0h:57m:50s]

Arnie Leriche

Mr. Arnie Leriche, Community Co-Chair, noted that it is very important for **all agencies** to share documents and communications and do so in a timely manner per the operating procedures. RAB members and members of the public can review documents in the library's Information Repository. He stated the RAB is there to influence decisions made by the MDEQ and the Air Force. If they cannot or chose not to review documents before a decision is made, it will be too late. Mr. Leriche is pleased that the Air Force is working with him on making improvements to document sharing.

Mr. Leriche said that the groundwater criteria, which was published on 10 January 2018, indicates 70 ppt for PFOS/Perfluorooctanoic Acid (PFOA). He commented this is the same as the Environmental Protection Agency's (EPA's) lifetime Health Advisory. He remarked that MDEQ filed a suit against Wolverine on 18 January 2018 citing the new groundwater criteria and the Part 57 Rule.

Mr. Leriche suggested everyone review MDEQ's violation notice to the Air Force. He mentioned most of the criteria in the letter was also cited in a February 2016 letter MDEQ sent to the Air Force. Mr. Leriche pointed out that it has been two years since this letter with no significant action taken.

Ms. Cathy Wusterbarth asked to whom she should submit questions and concerns about the dispute resolution process. Mr. Delaney said that anyone can direct questions to MDEQ about the issues, but MDEQ is not able to disclose anything regarding negotiations.

Ms. Wusterbarth asked for confirmation that the RAB had previously determined that RAB meeting packets should be distributed prior to the day of the RAB meeting. Mr. Leriche responded that this was discussed between the co-chairs and perhaps they could consider following the guidelines of the Oscoda Township, which is to provide draft documents three days prior to the meeting. Ms. Wusterbarth asked if a stack of the meeting packets is made available to all meeting attendees. Mr. Sueltenfuss noted that meeting packets are available for members of the public who sign-in to the meeting. If they provide their email address, they will also receive a copy of the final meeting minutes after the meeting (which will contain meeting packet documents as attachments).

Mr. Delaney recently spoke with MDEQ communications personnel to find out how to obtain information on the Michigan PFAS Action Response Team (MPART) website more readily. He noted they are working through some issues with putting personal information on the site.

Ms. Wusterbarth expressed her appreciation for the stakeholder updates. She said there have been multiple requests for the Oscoda Township to provide a monthly community update on municipal waterlines, testing, and anything affected by federal budgets. She encouraged the Township to provide a monthly update with this information.

Ms. Wusterbarth mentioned that an action group and a community member will provide a comment during the public comment portion of the meeting. This group believes they have seen a lack of action by MPART in seeking community involvement. She said that a local legislator submitted a resolution that addresses PFAS response and treatments, however, the community was not contacted to provide information. Ms. Wusterbarth noted this action group has reached out to the legislator to correct that issue.

Mr. Bill Gaines brought up a high school with two areas of contamination and commented that some people believe there is a link to Aqueous Film-Forming Foam (AFFF). The school is on its own water supply and the drinking well water tested cleaner than the municipal water. However, they do not know how or if there could be additional contamination. Mr. Gaines stated the school is exploring ideas with AuSable Township on how to connect the school to municipal water supply via grants, etc. He noted that tap tests also came back non-detect.

Mr. Sueltenfuss reminded RAB members he will solicit their updates before the next RAB meeting. He emphasized that the stakeholder updates portion of the agenda should include brief updates and any lengthy discussion topics should be included as separate agenda topics.

Substantive Requirements Document (SRD) Update [Video @ 1h:13m:46s]

Matt Marrs, Air Force Co-Chair

Mr. Marrs described that the purpose of the SRDs at Wurtsmith is for documenting substantive requirements of the law, such as the discharge of water to surface or groundwater. Mr. Marrs noted that the Air Force has SRDs for five treatment systems at Wurtsmith which monitor effluent limitations. SRDs also monitor maximum limits for water quality, maximum limits for water concentration, and monitoring parameters and frequency.

GAC System Update

Matt Marrs, Air Force Co-Chair

Mr. Marrs clarified that one of the treatment systems encompasses the three treatment plants, Mission St., Benzene and Arrow St., where the new GAC treatment facility will be built. Mr. Marrs expressed his appreciation to the Township again for their help with the site. The GAC system will be placed where the old tennis courts are currently located. The contractor, Aerostar, will conduct the demolition. Mr. Moss asked if local contractors would be allowed to bid with Aerostar. Mr. Paul Rekowski stated that he believed they had already sub-contracted local contractors.

Mr. Marrs stated again that the building will be up and operating in August. An AMEC contractor will do subsurface intrusion tests to identify areas where there is a need to broaden the system and decide if more extraction wells are needed. One of these identified potential projects is intended to tie in Mission Street. The current GAC system will cover the three 20,000 lb GAC vessels, with 500 GPM, that will discharge into Van Etten Creek. Mr. Marrs displayed a conceptual image of the building.

Mr. Marrs stated one of the out of cycle projects would place lines in along the right of way, about six feet below the surface. One line is going to be placed under Aero Street and it will be large enough in diameter to tie into Mission Street. Mr. Marrs then presented a project timeline. The contract was awarded with the Omaha U.S. Army Corps of Engineers in August 2017.

Mr. Leriche stated that he needed some additional clarification on the plans for the GAC capacity. It is currently 500 GPM, but he asked what the plans are to enable 1,000 gpm. He asked whether this additional capacity would address the plume north of building. Mr. Marrs stated the Air Force anticipated future needs and determined that a larger facility may be required. They will make the building and piping

large enough so that the Air Force can install three additional GAC vessels in the future. Mr. Marrs noted that technology is changing rapidly in this field.

Mr. Leriche shared his understanding that MDEQ wants the Air Force to use this well field to address other plumes. Mr. Marrs confirmed that this is one of the projects that could be covered with out of cycle funds. Mr. Marrs said the Air Force also wants to address Landfill Sites 30/31, but funding was not available in 2017.

Mr. Leriche suggested creating a project sheet that shows planned and future projects in a list with expected dates, so if one drops, it will be more easily viewable. This will help the RAB and community members to understand the plan moving forward. Mr. Sueltenfuss called everyone's attention to the hardcopy handout for the RAB members entitled FY18 Projects, Programming & Updates (reference Attachment 4), and suggested that out of cycle projects could be added to this document to address Mr. Leriche's comment.

Mr. Cummings asked what filtration material will be in initial GAC plant. Mr. Marrs said he believed it would be charcoal rather than coconut. Mr. Cummings then asked about the material at FT02. Mr. Rekowski stated it is a coal-based GAC.

Mr. Robert Taisor asked for information on the cost to put the curtain wall up and at site FT02. Mr. Marrs said that this still needs to be presented and considered by Air Force leadership. Mr. Taisor asked if the Air Force could share the estimated cost for this and Mr. Marrs said they could present an estimate sometime in April.

Ms. Gottlieb asked about the plan for removal of foam at Van Etten Lake. Mr. Marrs stated the Air Force must follow the CERCLA process to address this. Ms. Gottlieb asked if it is possible for this be done before summer. Mr. Marrs stated that following the CERCLA process takes time.

Mr. Delaney stated MDEQ has been looking at short-term methods to address the foam, however there are many sources feeding into this lake, so any type of system would need to be operating constantly. He noted such action would not remediate the foam for very long. Mr. Delaney stated MDEQ will consult with the EPA about how the foam is created and to see what if any methods might address it.

Mr. Marrs stated that this is one of the reasons for finding the source and cutting it off. Mr. Moss asked if the Van Etten foam is one of the seven issues in dispute based on numbers tested in the physical foam or elevated in water since it exceeds Rule 57? Mr. Delaney stated that they do not have any specific criteria to follow regarding foam, which is why the health department is looking into it.

Mr. Moss asked if there is an ongoing conversation in the dispute resolution regarding the foam issue at Van Etten Lake between MDEQ and the Air Force. Mr. Marrs stated the Air Force is still waiting on a letter from the Attorney General regarding Rule 57. Mr. Moss countered that since the Township is not a part of discussion, he wants to ensure a conversation is happening and that the RAB gets an update on that discussion. He asked again if there is communication between the two parties regarding the foam. Mr. Delaney said the MDEQ and Air Force are talking about the plumes going into the surface water above the criteria of Rule 57. MDEQ believe this is the cause of the foam, but unfortunately, they do not know how to address it at this point because it is a new issue. Mr. Sueltenfuss remarked that there is a defined dispute resolution process to expedite required communications between the Air Force and MDEQ.

Ms. Gottlieb asked if there is educational information available to provide to the community. Mr. Farrell answered that MDHHS is working to create information to address concerns about how to handle the foam. Ms. Gottlieb then asked if the water would be safe if the foam was removed. Mr. Delaney restated that it is MDHHS' responsibility to advise the community on the health effects regarding the foam.

Mr. Leriche said that on the surface of Van Etten Lake, high concentrations of PFOS flow to the outlet of the lake and then to the dam. He asked if anyone in the remediation team has asked why they would let

that concentrated contamination of PFOS continue to flow down the creek and then into the AuSable River and Lake Huron, when a small surface boom could capture it and pump it up, in a dedicated small pipe alongside or in the storm sewer line. Then it would be treated by the GAC unit. Mr. Delaney acknowledged the idea and said that the MDEQ consultant present at the RAB meeting can take a note to look into it. He said that Mr. Leriche's concept is interesting, and they could investigate this. Mr. Delaney established Action Item 17, which states "Consider placing a boom, or another structure, on Van Etten Creek to capture the foam."

Mr. Rekowski shared that he had a discussion with Dr. TerMaath before attending this meeting. He stated the information, which Mr. Delaney presented, is only a theory of how foam gets created. The Air Force's position is that they must follow applicable requirements under CERLA and he remarked that there is no ambient water quality standard for PFASs in surface water. Mr. Rekowski commented that, as far as the Air Force is aware, there is no ambient water quality standard for PFASs in surface water and therefore there is no mandate to treat the surface water.

Mr. Delaney stated that there is a misunderstanding and that Rule 57 is the ambient water quality level for surface water. MDEQ law says for any plumes that empty into surface water, MDEQ must use the ambient water quality level as GSI. He stated 12 ppt is the water quality standard.

Mr. Rekowski emphasized that this is a miscommunication that needs to be clarified. He noted the Air Force is currently waiting on a letter from the Attorney General for Rule 57. Mr. Rekowski noted the Air Force does not see an applicable law to address the foam at present. He stated the CERLA process will determine what action, if any, would be necessary.

RAB Business

Tim Sueltenfuss, Facilitator

Mr. Sueltenfuss noted that the final minutes from the November 2017 meeting were distributed via email in mid-January with attachments such as briefings and other meeting materials. He added that minutes for this meeting will be distributed with similar documents. Mr. Sueltenfuss mentioned that the two co-chairs met earlier that day to go over action items and to discuss future agenda items.

Meeting Minutes and Action Items

Ms. Leigh-Ann Fabianke reviewed the action items recorded during the meeting. Mr. Sueltenfuss displayed an Action Item Tracker that contains Open Action Items, Closed Action Items and Future Agenda Items. This document will be shared as an attachment in the meeting minutes (reference Attachment 12).

Schedule next RAB meeting

Mr. Sueltenfuss stated a RAB member could not attend meetings scheduled for Tuesday nights, so the RAB decided to shift the next meeting to Wednesday, April 18, 2018, at the Robert J. Parks Public Library. Mr. Sueltenfuss will send an email to all to confirm this.

Meeting Evaluation

Mr. Sueltenfuss asked that everyone fill out the RAB evaluation form included in the RAB packets to indicate what worked well and what needs change about the execution of this meeting. He invited attendees to also use this form to list questions or suggested agendas topics.

Public Comment [Video @ 1h:58m:7s]

Community Attendees

Mr. Sueltenfuss pointed out that a critical element of the RAB is the opportunity for the public to provide comments to the RAB. He noted members of the public are encouraged to use comment forms if they would prefer not to speak. Members of the community were invited to provide comments at this time.

Daniel O'Conner asked about the resin exchange system used at Pease and how the Air Force assesses the effectiveness of that system compared with typical GAC systems. Mr. Marrs stated the Air Force considers efficiency and cost-effectiveness when selecting remedial systems since tax dollars are used.

He noted AMEC Foster Wheeler did a pilot study on the GAC and resin system and the Air Force will provide more information to the RAB. Mr. Leriche said that he attended the RAB at Pease, where the contractor provided a presentation about their systems. He proposed getting a final study of resin, and in future have mini-trainings for RAB members, since information presented during RABs is highly technical. He also suggested having a conference call with the contractor to better understand the system.

Aaron Weed would like to know about the status of a neighborhood that tested hot and was connected to the municipal water system. He stated a well is above the EPA lifetime HA and this was discovered about a year ago. Mr. Rekowski responded that there is a filtration system there and the school system is asking the Air Force to connect the school to the municipal water system. Mr. Marrs said the Air Force has looked at the possibility of connecting to municipal water. Mr. Dale Corsi, the MDEQ contractor added that they received those results last summer and believes that it has not been tested since then, but it does have a filtration system on it. Mr. Moss responded that he thought if something tested over the HA standard of 70 ppt, immediate action would be taken. Mr. Rekowski clarified that an immediate action was taken to add the filtration system.

Mr. Rekowski stated that it still needs to be determined which agency is responsible for addressing sample results that exceed the EPA lifetime HA for PFOS/PFOA within the plumes near the high school. Mr. Marrs commented that he would research this and report back to the RAB.

Mr. Moss asked when the next sample is scheduled for the high school and when a permanent fix will be installed. He stated that, originally, the EPA lifetime HA specified 200 ppt but was later lowered to 70 ppt. He reiterated that, if the number exceeds the HA, immediate action is required.

Ms. Gottlieb said she understood that if the sample is under 70 ppt testing will continue to occur to see if the contamination levels change. She added that there is no way to understand if a given well is at the beginning, middle or end of the plume. Ms. Gottlieb expressed her view that every well should be retested. Mr. Moss said that retesting is currently being done, but possibly not in the specific area to which Ms. Gottlieb is referring.

Mr. Rekowski stated the Air Force needs to obtain legal clarification on whether the Air Force is responsible for addressing the plume at the high school. He explained that this could have been a mutual aid situation, which may not be the Air Force's responsibility to address. Matt Marrs established Action Item 20, which states "Determine agency responsible for addressing sample results that exceed the EPA lifetime HA for PFOS/PFOA at the plumes near the high school" (reference Attachment 12).

Trustee Moss said that, if a home is found to have PFOS/PFOA contamination over 70 ppt, then a response action should be taken. Mr. Corsi said that MDEQ has not found anything in the area Mr. Moss described above 70 ppt. Mr. Sueltenfuss stated that Action Item 20 was recorded to seek more information regarding the plumes near the high school. (Video @ 2h:8m:5s)

Vicki Cole provided a public comment on behalf of the "Need Our Water (NOW)" group (reference Attachment 10). Mr. Russel Williams stated that he lives on Van Etten Lake and supports the NOW group. He remarked that the answers about high concentration foam are inadequate and residents need answers now. (Video @ 2h:14m:7s)

Mr. Ross Tangway said he thought the water has been going into Van Etten creek above 12 ppt for some time. He asked how this became so bad for so many years without anyone checking. He said large areas of the lake are not freezing over, and he believes this is because of the foam. Mr. Delaney stated that PFOS/PFOA has been an issue since the 1980s and the Air Force began using AFFF in the 1970s. He stated he would contact Mr. Tangway because MDEQ is looking for places to take samples. Mr. Delaney noted seeps of warmer water could cause the lake to not freeze. Mr. Tangway said he does not understand why something is not being done rapidly to address the foam on the lake. He stated the fish have not been checked so he does not want to eat the fish. Mr. Delaney responded saying the fish in this area have been tested in the past. (Video @ 2h:19m:10s)

Ms. Sue Manente of MDHHS noted mercury contamination is a primary concern for fish consumption. She stated MDHHS has not issued guideline based on PFOS/PFOA. Ms. Manente stated MDHHS has annotated Van Etten Lake as a location to sample in the future. She advised RAB members that MDHHS will update them about sampling activities.

Ms. Wusterbarth provided the following statement on behalf of Tony Spaniola, resident near Van Etten Lake: "Due to prior commitments, I have not been able to see or hear a large part of the presentation this evening. As a general matter, however, I would state on the record that the Air Force and the state have seriously failed the Oscoda community. The Air Force has been violating Michigan law by continuously permitting the discharge of groundwater into our lakes and streams in clear violation of Rule 57. It is long past time for the Air Force to stop pretending that it's clueless about the applicability of Rule 57, and it's time for the state to stop beating around the bush and move to enforce Rule 57. In Kent County, the state has moved in a matter of weeks to enforce Rule 57. In Oscoda, it's been years and now we have alarmingly high levels of PFOS in foam and surface water. Rule 57 is clear. The only confusion is in the minds of unresponsive bureaucrats who are hoping to wish this matter away. It is not going away, and my friends and neighbors will not rest until the bleeding has been stopped. Thank you." (Reference Attachment 11 and Video @ 2h:24m:25s.)

Mr. Leriche addressed the point that was made about residential wells being resampled and directed everyone to look at the dispute resolution. He stated that point one addresses continuously monitoring wells. Mr. Leriche suggested that, if anyone wants to see the MDEQ response, they can review the dispute letter(s). [MDEQ has made these publicly available.] (Video @ 2h:26m:00s)

Mr. Tasiar asked Mr. Delaney if they have locations and levels for the seeps into Van Etten Lake. Mr. Delaney said MDEQ sampled one seep. He explained that the new study will use a push sampler six inches deep into the bottom of lake to sample water. He also said that one seep tested at 232 ppt PFOS, which is well above 12 ppt. (Video @ 2h:27m:05s)

Mr. Tasiar asked if MDEQ also tests for Perfluorohexane sulfonic acid (PHF_xS). Mr. Delaney responded that they do test for PHF_xS, but it is not included in the EPA lifetime HA. Mr. Tasiar asked if adding those numbers would increase the HA to over the 70 ppt? Mr. Delaney said it would indicate additional PFASs. Mr. Tasiar responded that he is concerned about that and he shared his view that other harmful chemicals should be included in the EPA lifetime HA calculation. (Video @ 2h:28m:58s)

Mr. Delaney stated a workgroup of experts [Reference Governor's "Science Advisory" in his State of the State address in January. Information available on MPART web site.] from outside the government, including academics, has been assembled to consider PHF_xS. Mr. Tasiar asked if this group reports to the public. Mr. Delaney said that MDEQ toxicologists are looking at PHF_xS and other PFOS/PFOA literatures all the time. (Video @ 2h:30m:15s)

Mr. Farrell said that PFAS is made up of over 3,000 chemicals, but PFOS and PFOA are the only two contaminants which the HA is based on. Other PFAS chemicals have little or less information available regarding toxicity and that is why this is an emerging contaminant. As more information becomes available, limits will probably be put in place. (Video @ 2h:31m:38s)

Mr. Tasiar said that when he researches this topic online he finds that PHF_xS is more harmful. Mr. Delaney encouraged Mr. Tasiar to send questions on this topic to him so he can share them with his MDEQ colleagues. (Video @ 2h:32m:41s)

Mr. Sueltenfuss concluded the public comments portion of the meeting. He noted the topics discussed during the RAB meeting are important and he shared his view that the tenor of the conversation underscores that all participants care deeply about these issues and approach the topics from somewhat differing points of view. Mr. Sueltenfuss expressed appreciation for everyone's time and discussion. (Video @ 2h:33m:27s)

Conclusion (Video @ 2h:34m:24s)

Matt Marrs, Air Force Co-Chair, and Arnie Leriche, Community Co-Chair

Mr. Marrs expressed his appreciation to everyone for coming to the meeting. Mr. Leriche reiterated his appreciation for the help being received from the RAB members. He added that there was one topic not discussed during the meeting, which is the schedule for conducting fish sampling. He noted this pertains to the environmental risk assessment for Clark's Marsh and the AuSable River. He asked for this to be added as a future agenda item. Mr. Leriche mentioned there has not been fish sampling in AuSable River in a few years.

The RAB meeting adjourned at approximately 8:38 pm.