## Final Meeting Minutes

<table>
<thead>
<tr>
<th>Members Present</th>
<th>Organization</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Tim Cummings</td>
<td>Oscoda Township</td>
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<tr>
<td>Robert Delaney</td>
<td>Michigan Department of Environmental Quality (MDEQ)</td>
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<tr>
<td>Bill Farrell (Alternate)</td>
<td>Michigan Department of Health and Human Services (MDHHS)</td>
<td>Bill Farrell represented Chris Bush, who was absent.</td>
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<tr>
<td>Bill Gaines</td>
<td>Community Member</td>
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<td>Martha Gottlieb (Alternate)</td>
<td>Community Member</td>
<td>Martha Gottlieb represented Matthew Hegwood, who was absent.</td>
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<tr>
<td>Arnie Leriche</td>
<td>Community Co-Chair</td>
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<td>Chuck Lichon</td>
<td>District Health Department #2 (DHD2)</td>
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<tr>
<td>Matt Marrs</td>
<td>Air Force Civil Engineer Center (AFCEC)/Air Force Co-Chair</td>
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<tr>
<td>Tony Martoglio</td>
<td>U.S. Department of Agriculture Forest Service (USFS)</td>
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<td>Joe Maxwell</td>
<td>Community Member</td>
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<td>Jeff Moss</td>
<td>AuSable Township</td>
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<td>Mike Munson</td>
<td>Oscoda-Wurtsmith Airport Authority (OWAA)</td>
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<td>Dan O’Conner (Alternate)</td>
<td>Community Member</td>
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<td>Dan Stock (Alternate)</td>
<td>Community Member</td>
<td>Dan Stock represented Joe Plunkey, who was absent.</td>
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<td>Robert Tasior</td>
<td>Community Member</td>
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<td>Aaron Weed (Alternate)</td>
<td>Oscoda Township</td>
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<tr>
<td>Cathy Wusterbarth</td>
<td>Community Member</td>
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<td>Members Absent</td>
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<td>Chris Bush</td>
<td>MDHHS</td>
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<td>Jim Davis</td>
<td>Community Member</td>
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<td>Irene Dunn</td>
<td>Community Member</td>
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<td>Matthew</td>
<td>Community Member</td>
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<td>Catherine Larive</td>
<td>Community Member</td>
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<td>Ryan Mertz</td>
<td>Community Member</td>
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<td>John Nordeen</td>
<td>Oscoda Township</td>
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<td>Joe Plunkey</td>
<td>Community Member</td>
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<td>Other Attendees</td>
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<td>Ken Amerguish</td>
<td>USFS</td>
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<td>Saamih Bashir</td>
<td>AMEC (Air Force contractor)</td>
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<td>Vickey Cole</td>
<td>Community Attendee</td>
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<tr>
<td>Dale Corsi</td>
<td>DLZ (MDEQ contractor)</td>
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<tr>
<td>Tim Cwalinski</td>
<td>Michigan Department of Natural Resources Fish Biologist (Northern Lower Peninsula)</td>
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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/SW7ET6IycAM

[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.
Meeting documents included in the RAB Packets were then reviewed.

Operating Procedures (Attachment 3)

Tim Sueltenfuss, Facilitator

Review 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. Tasior 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. Tasior asked if MDEQ also tests for Perflourohexane sulfonic acid (PHFxS). Mr. Delaney responded that they do test for PHFxS, but it is not included in the EPA lifetime HA. Mr. Tasior asked if adding those numbers would increase the HA to over the 70 ppt? Mr. Delaney said it would indicate additional PFASs. Mr. Tasior 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 PHFxS. Mr. Tasior asked if this group reports to the public. Mr. Delaney said that MDEQ toxicologists are looking at PHFxS 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. Tasior said that when he researches this topic online he finds that PHFxS is more harmful. Mr. Delaney encouraged Mr. Tasior 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.
RESTORATION ADVISORY BOARD (RAB) MEETING

DATE/TIME:        Tue, 13 Feb 2018 5:30-7:30 p.m. EDT
LOCATION:          Robert J. Parks Public Library, 6010 N. Skeel Ave., Oscoda, MI  48750

[Note: This meeting will be conducted as a teleconference in the event of inclement weather.]

GROUND RULES:
1. Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.
2. Use our time together efficiently, wisely, and respectfully.
3. Listen and remain open to each other’s varying points of view.
4. Speak clearly and succinctly one person at a time; avoid interrupting others.
5. Share information early, openly, and honestly.
6. Maintain a propensity for progress: prepare, discuss, document, and move forward.
7. Accurately and objectively relay to others the discussions that occur at board meetings.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Purpose</th>
<th>Presenter</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introductions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welcome</td>
<td>• Air Force and community co-chairs welcome RAB members and attendees.</td>
<td>Matt Marrs</td>
<td>5:30-5:40</td>
</tr>
<tr>
<td></td>
<td>• Participants introduce themselves and read ground rules.</td>
<td>Arnie Leriche</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Facilitator summarizes agenda.</td>
<td>All Tim Sueltenfuss</td>
<td></td>
</tr>
<tr>
<td><strong>Adopt Operating Procedures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review draft and discuss recommended changes</td>
<td>• Discuss any recommended changes</td>
<td>Arnie Leriche</td>
<td>5:40-5:45</td>
</tr>
<tr>
<td>Adoption procedures or schedule adoption at next RAB meeting</td>
<td>• Air Force co-chair and community co-chair may sign operating procedures</td>
<td>Co-chairs</td>
<td>5:45-5:50</td>
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<tr>
<td></td>
<td>• Delay adoption until the next RAB</td>
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<tr>
<td><strong>General Updates</strong></td>
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<tr>
<td>Stakeholder/RAB Member Updates</td>
<td>• Government RAB members provide brief updates for their stakeholder organizations</td>
<td>Government RAB members</td>
<td>5:50-6:10</td>
</tr>
<tr>
<td></td>
<td>• Updates from other RAB members regarding matters pertinent to the RAB</td>
<td>RAB Members</td>
<td>6:10-6:20</td>
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<tr>
<td><strong>BREAK</strong></td>
<td></td>
<td></td>
<td>6:20-6:30</td>
</tr>
<tr>
<td><strong>Substantive Requirements</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Document Update</td>
<td>• Update status and discuss Benzene and Arrow pump and treat systems.</td>
<td>Matt Marrs</td>
<td>6:30-6:40</td>
</tr>
<tr>
<td><strong>Granular-Activated Carbon (GAC)</strong></td>
<td>• Update status and indicate progress on selecting GAC system location.</td>
<td>Matt Marrs</td>
<td>6:40-6:55</td>
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<tr>
<td><strong>RAB Business</strong></td>
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<tr>
<td>Topic</td>
<td>Purpose</td>
<td>Presenter</td>
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<tr>
<td>Meeting Minutes and Action Items</td>
<td>• Update status of previous meeting minutes.</td>
<td>Tim Sueltenfuss</td>
<td>6:55-7:00</td>
</tr>
<tr>
<td></td>
<td>• Update status of current action items.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule Next RAB Meeting</td>
<td>• Consider date for the next RAB meeting.</td>
<td>RAB members</td>
<td>7:00-7:10</td>
</tr>
<tr>
<td>Meeting Evaluation</td>
<td>• Evaluate elements of this meeting that worked well and elements that need change. (Note: All attendees are encouraged to complete written meeting evaluation forms.)</td>
<td>All</td>
<td>7:10-7:15</td>
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</tbody>
</table>

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<tr>
<th>Topic</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Public Comment</td>
<td>• Public participants provide two-minute verbal comments to the RAB.</td>
<td>Public participants</td>
<td>7:15-7:25</td>
</tr>
<tr>
<td></td>
<td>• [Note: Public participants may also choose to provide written comments.]</td>
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<tbody>
<tr>
<td>Conclusion</td>
<td>• Co-chairs offer closing remarks.</td>
<td>Co-chairs</td>
<td>7:25-7:30</td>
</tr>
</tbody>
</table>

RAB Meeting Adjourns
Welcome and Introductions
Wurtsmith RAB Agenda

- Introductions
  - Ground Rules
- Review/Discuss Operating Procedures
- Updates
  - Air Force
  - Other Stakeholders

*10-minute break*

- Pump & Treat System(s) Updates
- RAB Business
- Public Comment
- Conclusion
1. Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.
2. Use our time together efficiently, wisely and respectfully.
3. Listen and remain open to differing points of view.
4. Speak clearly and succinctly one person at a time; avoid interrupting others.
5. Share information early, openly and honestly.
6. Maintain a propensity for progress: prepare, discuss, document and move forward.
7. Accurately and objectively relay to others the discussions that occur at board meetings.
Operating Procedures
Operating Procedures are intended to: Guide RAB members, make RAB an effective and functioning advisory board and establish rules and guidelines to address common issues

- Discuss recommended changes
Wurtsmith RAB

Updates
### Wurtsmith RAB Stakeholder Updates

- Update
- Update
- Update
- Update
- Update
### Wurtsmith RAB Stakeholder Updates

- New GAC P&TS location approved, site work underway
- Completed first SSI mobilization, which included 200 GW samples in December; currently validating results

### Other Groups

- Update

- Update

- Update
Wurtsmith RAB

10-Minute Break
Substantive Requirements Document (SRD)

The SRDs at Wurtsmith are for documenting substantive requirements of the law – in this case water discharged to surface water or groundwater.

The AF has SRDs for five treatment systems at Wurtsmith which monitor effluent limitations and monitoring requirements:

- Maximum limits for water quality or loading
- Maximum limits for water quality or concentration
- Monitoring parameters and frequency
Wurtsmith RAB
P&TS Updates: Site Selection

- **Skeel Avenue, across from Arrow Street P&TS**
- **Preserves Township’s real estate interests**
- **Accommodates expansion if additional pumping wells are needed**
- **Anticipate cost increase due to expedited work**

Parcel 007
Three 20,000 lb GAC vessels: sacrificial, lead and lag

Taps into existing lines routing water to new system

Continues to discharge to storm sewer

60x120-ft Building
Wurtsmith RAB
P&TS Updates: GAC Treatment

Project Timeline

1 Aug
Contract Awarded

1 Sep
Design held up due to siting discussions with Township

12 Dec
Alternate Site Selected
Design resumes

8 Jan
Site Investigation begins

18 Feb
Action Memorandum

1 March
Construction Begins

TBD Aug
Construction Completed

2017 2018
Wurtsmith RAB
RAB Business

- 1 November 2017 meeting minutes available online:
- Next RAB meeting
- Meeting evaluation cards
Public Comment
Conclusion & Adjournment
Wurtsmith Restoration Advisory Board
Operating Procedures

1. Purpose, RAB Mission and Goals, and Definitions

1.1. Purpose
A Restoration Advisory Board (RAB) serves as a forum for addressing issues associated with environmental restoration activities under the Defense Environmental Restoration Program (DERP) at DoD installations and BRAC locations. A RAB is established and operates in accordance with three documents: Title 32, Code of Federal Regulations, Part 202 (32 C.F.R. Part 202), the Restoration Advisory Board Rule Handbook, which was issued by the Department of Defense in March 2007 and Air Force Instruction 32-7020, The Environmental Restoration Program.

These procedures establish operating procedures regarding the scope, characteristics, composition, funding, establishment, operating, adjournment and dissolution of the Wurtsmith RAB.

1.2. RAB Mission Statement and Goals
The Wurtsmith RAB provides the community with the opportunity to become involved in the environmental restoration process at the former Wurtsmith Air Force Base either as a RAB member or through attendance at RAB meetings. This RAB offers members the opportunity to influence cleanup decisions through discussion and to provide input to the installation decision makers. Because representatives of the environmental agencies overseeing cleanup participate in the RAB, the RAB offers members and the public the opportunity to share their questions, concerns and ideas with agencies involved in the cleanup.

The goals of the RAB include:
- Review and comment on environmental restoration documents and activities.
- Exchange research from global sources regarding environmental restoration.
- Serve as a community liaison by providing information to the community and receiving input from the community.
- Maximize efficiency and limit expense in completing environmental restoration efforts. Provide positive, solution-focused input to regulators.

1.3. Definitions
1. “Community RAB member” means an individual identified by community members and appointed by AFCEC/CIB to participate in the Wurtsmith RAB who lives and/or works in an affected community or is affected by the environmental restoration program for the BRAC location.
2. “Government RAB member” means an individual who works for a local, state, or federal government agency, office, or organization that conducts, oversees, is affected by, or otherwise associated with environmental restoration activities at the former Wurtsmith AFB and is appointed by AFCEC/CIB to participate in the Wurtsmith RAB on behalf of his or her government employer.

3. “Environmental restoration” includes the identification, investigation, research and development, and cleanup of contamination from hazardous substances, including munitions and explosives of concern, and pollutants and contaminants.

4. "BRAC location" means a DoD installation that is being or has been closed, or is being realigned by BRAC, but is still under the jurisdiction of the Air Force. Also means real property that has been transferred out of the Air Force by the BRAC process, but where the Air Force retains environmental restoration responsibilities. The former Wurtsmith AFB is a BRAC location.

5. “Public participants” means individuals who are not RAB members and may want to attend the RAB meetings, including those individuals that may not live and/or work in the affected community or may not be affected by the BRAC location’s environmental restoration program but would like to attend and provide comments to the RAB.

6. “Stakeholders” are those parties that may be affected by environmental restoration activities at the BRAC location, including local and state governments, and current land or business owners, as appropriate.

7. “AFCEC/CIB” refers to the Air Force Civil Engineer Center, Base Realignment and Closure (BRAC) Program Management Division Chief.

8. "Affected community" means a neighborhood, town, city, or other collection of people and businesses in the vicinity of the former Wurtsmith AFB that are impacted by environmental restoration activities at the BRAC location.


2. Meetings

2.1 Facilitation
Subject to the availability of funding by the Air Force, RAB meetings will be facilitated by a neutral third party selected by AFCEC/CIB. The facilitator is not a member of the RAB, nor the Air Force. The facilitator helps achieve the goals and purposes of the meetings and will assist in creating meeting agendas. Additionally, he/she will be available to resolve conflicts and facilitate communications between the RAB members and the Air Force if required. The facilitator is expected to coordinate with both co-chairs and other appropriate RAB members as needed to prepare meeting agendas, facilitate RAB meetings so that all RAB members have the opportunity to participate in an open, honest and constructive manner, ensure that community issues and concerns related to restoration are raised, communicate with RAB members and members of the public on RAB issues as needed between RAB meetings, attend all RAB meetings, track membership, assist with meeting minutes development and assist with overall RAB management.

2.2 Frequency
The Air Force will hold public RAB meetings at least once every three months, or as deemed necessary by the majority of the RAB members.
2.3. Meeting Minutes
Meeting minutes will be a summary of the proceedings. The Air Force co-chair, in coordination with the community co-chair, will prepare the minutes and distribute them to all RAB members and to those members of the public who signed the roster for distribution of that meeting’s minutes. They will also be available at former Wurtsmith’s information repository at the Robert J. Parks Public Library. The RAB meeting minutes shall contain a record of the persons present, a complete and accurate description of matters discussed, comments received and copies of all reports received, issued or approved by the RAB. The accuracy of the minutes shall be certified by the RAB co-chairs.

- Support staff prepare pre-draft minutes.
- Air Force co-chair emails draft minutes to community co-chair and CCs all RAB members. This email invites the community co-chair to review the draft minutes and provide feedback within two weeks. The email states that, in the absence of feedback, the Air Force co-chair will finalize the minutes and disseminate them to all RAB members.
- If the community co-chair desires to provide feedback, he or she provides such feedback to the Air Force co-chair. The community co-chair can choose to consolidate community RAB members’ feedback into the feedback he or she provides or he or she can simply forward on feedback from individual community RAB members.
- If government RAB members desire to provide feedback, they provide such feedback to the Air Force co-chair.
- Support staff attempts to incorporate community co-chair feedback into draft minutes, if possible.
- Air Force co-chair finalizes minutes as he sees fit (but advises community co-chair of any controversial inclusions/non-inclusions).
- Air Force co-chair emails final minutes to all RAB members and public participants who signed the roster for distribution of that meeting’s minutes.
- Public Affairs posts final minutes on website.

2.4. Meeting Schedule and Location
Regular RAB meetings shall be held at times approved by the co-chairs. The meetings shall be generally held at the Robert J. Parks Public Library or the Oscoda United Methodist Church. In the event these two locations are unavailable, the Air Force shall secure an alternate location convenient to the RAB members. Special meetings may be held at any time if deemed necessary by the co-chairs, provided that all members are given a reasonable notice, preferably at least seven business days advance notice of any special meeting.

2.5. Public Participation
In order to ensure public input into the planning and implementation of environmental restoration activities, the public shall have an opportunity to make comments at each RAB meeting. Public meeting announcements shall contain the date, time and location of the meetings and will be published in the local newspaper at least two weeks prior to regular RAB meetings and three days before special RAB meetings. The co-chairs shall assign responsibility for responding to public comments.

2.6. Meeting Agendas and Materials
The agenda for each RAB meeting shall be prepared by the co-chairs and the facilitator, with input on suggested topics from RAB members and associated stakeholders. Agenda items are limited to topics
regarding environmental restoration activities at the former Wurtsmith AFB and surrounding areas affected by former Wurtsmith AFB activities.

The Air Force shall provide each RAB member a copy of the meeting agenda, presentation materials, and meeting minutes, as appropriate. Copies of meeting materials, if available, shall be provided to the public participants during the meeting.

The Air Force co-chair shall ensure copies of meeting agendas, presentation materials, and meeting minutes are filed in the information repository for the former Wurtsmith AFB. The information repository is maintained at Robert J. Parks Public Library. The Air Force co-chair should post RAB material that is used in Air Force decision-making in both the information repository and the administrative record for the former Wurtsmith AFB. The administrative record is available at http://afcec.publicadmin-record.us.af.mil/.

2.7. Access to Technical Documents and Related Communications
Access to technical documents and related communications, which pertain to the environmental restoration of the former Wurtsmith AFB, is essential to RAB members' ability to influence cleanup decisions through discussion and to provide input to the installation decision makers.

For this reason, the stakeholder groups represented on the RAB shall inform RAB members how to access such documents and related communications in a timely fashion. This access can be provided online, at the Air Force information repository at the Robert J. Parks Public Library, or via other mechanisms.

3. Membership

3.1. Board Composition and Types of Members
The board shall consist of community RAB members and government RAB members. Community RAB members shall include individuals who live and/or work in an affected community or are affected by the BRAC location's environmental restoration program. Community RAB members also include representatives from various non-governmental stakeholder groups in the vicinity of the BRAC location. Community RAB members are appointed by AFCEC/CIB. The number of community RAB members shall not exceed nine primary community RAB members and nine alternate community RAB members.

Primary community RAB members attend and participate in RAB meetings and proceedings, to include voting. Alternate community RAB members serve as replacements for primary community RAB members. As such, they are strongly encouraged to attend and participate in RAB meetings as members of the public, but do not vote on any RAB matters unless their corresponding primary community RAB member is absent. Alternate community RAB members receive notices, agendas, presentation materials and meeting minutes to the same extent as primary RAB members.

Government RAB members are selected by the government agency they represent and shall include representatives from each of the following government entities: the Air Force Civil Engineer Center, Au Sable and Oscoda Townships, Michigan Department of Environmental Quality, Oscoda-Wurtsmith
Airport Authority, Department of Health District No. 2, Michigan Department of Health and Human Services and the United States Forest Service.

3.2. Compensation
Community members shall serve without monetary compensation. All expenses incidental to travel and document review shall be borne by the respective members or their organizations. Subject to the availability of funds, the Air Force may provide training for RAB members if it is unique to and mutually benefits the establishment and operation of the RAB and if it is relevant to the environmental restoration activities occurring at the BRAC location.

3.3 Co-chairs
The RAB has two co-chairs, one representing the Air Force and the other representing the community. Co-chairs are responsible for directing and managing the RAB operations.

The primary community RAB members select the community co-chair by majority vote. The community co-chair serves a 12-month term and is eligible to serve multiple consecutive terms.

AFCEC/CIB designates an AFCEC representative to serve as the Air Force co-chair. If he/she cannot attend a scheduled RAB meeting, the Air Force co-chair may designate an Air Force affiliated alternate to serve as the Air Force co-chair on his/her behalf at that RAB meeting. Subject to being changed by written notification in the future, AFCEC/CIB has designated the BRAC Program Manager for the former Wurtsmith AFB to serve as the Air Force co-chair.

3.4. Roles and Responsibilities
RAB members discuss activities and issues related to the environmental restoration program for the former Wurtsmith AFB. As such, they exchange information, concerns and ideas about cleanup of environmental contamination at the BRAC location. RABs provide valuable input to the Air Force and environmental agencies on environmental restoration decisions, but RABs are not decision-making bodies. The RAB may only address issues associated with environmental restoration activities under the Wurtsmith Environmental Restoration Program.

— The RAB co-chairs shall: coordinate with the facilitator and RAB members to prepare agendas; ensure that all RAB community members have the opportunity to participate in an open, honest and constructive manner; ensure that community issues and concerns related to the restoration are raised; ensure that periodic training assessments are conducted and training needs met if necessary; assist with information sharing with the general public; report back to the community and coordinate with other RAB members to ensure that they are adequately representing segments of the community at RAB meetings.

— The Air Force co-chair shall ensure documents distributed to the RAB are written in layman’s terms when possible and made available to the general public; ensure an accurate list of interested parties is developed and maintained; provide relevant policies and guidance documents to the RAB; refer issues not related to restoration to the appropriate officials; report
back to AFCEC/CIB; produce meeting minutes and ensure that RAB members receive training when funding is available and training is appropriate.

— Primary community RAB members shall: attend meetings; provide input in an open, honest and constructive manner; represent and communicate community concerns and priorities to the RAB; act as a conduit for exchange of information; review, evaluate and comment on documents and other materials related to restoration; represent and communicate RAB issues to the community; and serve without compensation on the RAB.

— Government RAB members shall: attend meetings; participate in an open honest and constructive manner; serve as a referral and resource on restoration; facilitate flexible and innovative resolutions of environmental issues and concerns; and assist in education and training of RAB members if so deemed necessary.

3.5. Term 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. AFCEC Public Affairs will then follow the procedure below for replacing members. After serving all or part of a term, a community member may continue to serve additional terms if re-appointed. The co-chairs and facilitator will be responsible for tracking member term limits. Government RAB members serve until they voluntarily leave the RAB or are replaced by the agency they represent.

3.6. Replacing Members
If a primary community RAB member is no longer available or willing to serve but his or her corresponding alternate community RAB member is available and willing to serve, the alternate community RAB member shall become a primary community RAB member and no replacement is necessary. Government RAB members are replaced by the government agency they represent.

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, as long as it does not exceed nine primary community RAB members and nine alternate community RAB members. The recommendation should be discussed at a RAB meeting. RAB member comments and recommendations, pro or con, are forwarded by the RAB co-chairs to AFCEC/CIB for consideration. If AFCEC/CIB approves the recommendation, he/she may use a Selection Committee to select the new RAB members (primary and alternate) or may act on the recommendation of the stakeholder group and RAB.

3.8. Removing Members
If a voting RAB member has two unannounced absences, one of the RAB co-chairs will contact him/her. If a RAB member feels that another member is not fulfilling his/her responsibility (for example, poor attendance, disruptive behavior), the RAB co-chairs will seek to resolve the conflict. If resolution is not reached, the co-chairs will provide a written recommendation to AFCEC/CIB. AFCEC/CIB will review the issue and the co-chairs' recommendation and will contact the parties to reach a resolution. If after all
reasonable remedies are tried and the decision is for removal, AFCEC/CIB will notify the affected member and the RAB. If a member is removed, the member will be replaced in accordance with section 3.6.

3.9. Issue Resolution
If a voting RAB member feels that an issue is unresolved, he/she may raise the issue with the facilitator. The facilitator will work with all parties involved to settle the issue. If it cannot be resolved, the facilitator will provide a written description to the two co-chairs. If the issues cannot be resolved, the co-chairs will then take the issue to AFCEC/CIB through Public Affairs, who will meet with the parties to resolve the issue.

3.10. Quorum
In order to resolve issues that require a vote by the RAB, to include voting to adopt or modify this set of Operating Procedures, a quorum of RAB members must be in place. A quorum consists of 51 percent of primary community RAB members and 51 percent of government RAB members. In addition, the community co-chair and the Air Force co-chair must be present for a quorum to exist. Alternate community members are not included in the voting process, unless the associated primary member is absent at the time of voting and the alternate is serving in the primary position.

3.11 Public Participation
RAB meetings shall be open to the public. The Air Force RAB co-chair will prepare and publish a timely public notice in a local newspaper of general circulation announcing each RAB meeting. RAB meetings will be held at reasonable times and in a manner or place reasonably accessible to and usable by all participants, including persons with disabilities. Presentation materials and readable maps should be provided to all meeting participants as appropriate. Interested persons will be permitted to attend, appear before, or file statements with any RAB, subject to reasonable rules developed by the RAB. Open solicitation of public comments will be permitted and members of the public will have a designated time on the agenda to speak to the RAB committee as a whole.

4.0 Adjournment and Dissolution
The pre-requisites and process for adjournment and dissolution of this RAB are specified in Title 32, Code of Federal Regulations, Section 202.10 (32 C.F.R. § 201.10), which are hereby incorporated by reference.

5.0 Effective Date and Amendments

5.1. Effective Date
The effective date of these Operating Procedures shall be the date of approval by both co-chairs and a majority of voting RAB members (primary community and government), as specified in section 3.10 above. Such approval shall be indicated by the execution below by the co-chairs.

5.2. Amendments
These Operating Procedures may be amended by both co-chairs and a majority of voting RAB members, as specified in section 3.10 above. Such proposed amendment shall be distributed in writing to all RAB
members prior to the meeting at which the proposed amendment is discussed and considered for approval. Amendments shall be consistent with applicable laws, regulations, guidelines and Air Force agreements with state and federal regulatory agencies. If an amendment is approved, it shall be effective immediately.

**Meeting Guidelines**

**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 each other’s varying 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 discussion that occur at board meetings

**CERTIFICATION OF RAB APPROVAL**

The duly appointed Restoration Advisory Board (RAB) co-chairs certify that the foregoing RAB Operating Procedures, having as attachment thereto Appendix A identified below (the Handbook), were approved by both co-chairs and a majority of voting RAB members present at a regular or special meeting of the board.

IN WITNESS WHEREOF, we have set our hands below.

Air Force Co-chair:  

[Signature]  

BENJAMIN MARRS  

Date: 13 Feb 2018  

Community Co-chair:  

[Signature]  

Date: 3/13/2018
APPENDIX A: References


<table>
<thead>
<tr>
<th>Project</th>
<th>Status Update</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedial Action</td>
<td>Remedial Action</td>
<td>Full-scale enhanced bioremediation to treat PCE contamination</td>
</tr>
<tr>
<td>Remedial Control</td>
<td>Remedial Control</td>
<td>Levee 31 hydraulic gradient control to prevent leaching</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Operation and Maintenance</td>
<td>Central Region Performance Based Remediation, optimization, site design and five-year review</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Mission Street</td>
<td>PTS discharge mitigation for PFOA above discharge limit</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Mission Street</td>
<td>Arrow Street and Mission Street PFOA and PFOS</td>
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<tr>
<td>Monitoring</td>
<td>Mission Street</td>
<td>Influent/effluent monitoring for Mission Street</td>
</tr>
<tr>
<td>Investigation</td>
<td>Remedial Action</td>
<td>Incorporating remediation requirements from complex investigation, develop site investigation and baseline data, preliminary site investigation and full site investigation reports</td>
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<tr>
<td>Remedial Action</td>
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<td>Site location approved, December 2017, construction begins 8 June 2018</td>
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**12 January 2018**

Former Wisconsin ABP
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AF</td>
<td>Air Force</td>
</tr>
<tr>
<td>AFB</td>
<td>Air Force Base</td>
</tr>
<tr>
<td>AFCEC</td>
<td>Air Force Civil Engineer Center</td>
</tr>
<tr>
<td>AFFF</td>
<td>Aqueous Film Forming Foam</td>
</tr>
<tr>
<td>AFIMSC</td>
<td>Air Force Installation and Mission Support Center</td>
</tr>
<tr>
<td>AR</td>
<td>Administrative Record</td>
</tr>
<tr>
<td>ATSDR</td>
<td>Agency for Toxic Substances and Disease Registry</td>
</tr>
<tr>
<td>BCT</td>
<td>BRAC Cleanup Team</td>
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<tr>
<td>BEC</td>
<td>BRAC Environmental Coordinator</td>
</tr>
<tr>
<td>BRAC</td>
<td>Base Realignment and Closure</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation and Liability Act</td>
</tr>
<tr>
<td>DERP</td>
<td>Defense Environmental Restoration Program</td>
</tr>
<tr>
<td>DoD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DSMOA</td>
<td>Defense and State Memorandum of Agreement</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>EC</td>
<td>Emerging Contaminant</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>ERP</td>
<td>Environmental Restoration Program</td>
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<tr>
<td>ERD</td>
<td>Enhanced Reductive Dechlorination</td>
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<td>ESE</td>
<td>Extended Site Evaluation</td>
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<tr>
<td>FAQs</td>
<td>Frequently Asked Questions</td>
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<tr>
<td>FOUO</td>
<td>For Official Use Only</td>
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<tr>
<td>FTA</td>
<td>Fire Training Area</td>
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<tr>
<td>GAC</td>
<td>Granulated Activated Carbon</td>
</tr>
<tr>
<td>GW</td>
<td>Groundwater</td>
</tr>
<tr>
<td>HA</td>
<td>Health Advisory</td>
</tr>
</tbody>
</table>
IR - Information Repository
IRP - Installation Restoration Program
LHA - Lifetime Health Advisory
LUC - Land Use Control
MDEQ - Michigan Department of Environmental Quality
MDHHS - Michigan Department of Health and Human Services
MMRP - Military Munitions Response Program
NEPA - National Environmental Policy Act
OP - Operating Procedures
PA - Preliminary Assessment
PAO - Public Affairs Office(r)
PFAS - Per- and Polyfluoroalkyl Substances
PFCs - Perfluorinated Compounds
PFOS/PFOA - Perfluorooctanesulfonic and Perfluorooctanoic Acids
PM - Project Manager
POL - Petroleum, Oil and Lubricant
PPB - Parts per Billion
PPT - Parts per Trillion
PRD - Program Requirements Development
PTS - Pump and Treat Systems
RAB - Restoration Advisory Board
RAO - Remedial Action Objectives
RI - Remedial Investigation
ROD - Record of Decision
SC - Site Closure
SI - Site Inspection
SSI - Supplemental Site Inspection
TCE - Trichloroethene or Trichloroethylene
TRC — Technical Review Committee
VI — Vapor Intrusion
VOCs — Volatile Organic Compounds
WBT — Whole Base Transfer
Thank you for serving on the former Wurtsmith AFB RAB. Your service and participation is a key component in the restoration process. Your feedback will help us improve future RAB orientations, training sessions and meetings. Please take a moment to complete this short comment form. Leave completed forms at your seat at the end of the meeting or return to a member of AFIMSC Public Affairs. Thank you!

**INSTRUCTIONS**

Below is a guide for rating the effectiveness of the RAB orientation. Check the corresponding box that best describes your feelings about each statement listed:

**MEETING EVALUATION**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>Agenda content was comprehensive and relevant.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>Presenters were effective.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>Satisfied with meeting venue and set-up.</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>Overall, the meeting was worthwhile.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</table>

**OVERALL FEEDBACK**

**STRENGTHS**

What is the idea/topic you heard during the orientation that you found the most valuable and/or would like to discuss more?
<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th></th>
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<tbody>
<tr>
<td>What did you like best about the orientation?</td>
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</table>

<table>
<thead>
<tr>
<th>IMPROVEMENTS</th>
<th></th>
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<tbody>
<tr>
<td>What did you like least about the orientation?</td>
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<thead>
<tr>
<th>IMPROVEMENTS</th>
<th></th>
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<tbody>
<tr>
<td>What topics would you like to see discussed at future RAB orientations and training sessions?</td>
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<tr>
<td>What specific topics do you think would be helpful to have training sessions on?</td>
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<table>
<thead>
<tr>
<th>ADDITIONAL COMMENTS</th>
<th></th>
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<tbody>
<tr>
<td>Please leave any additional questions here regarding RAB processes and rules and/or the ongoing restoration activities at Wurtsmith.</td>
<td></td>
</tr>
</tbody>
</table>
Restoration Advisory Meeting
MDEQ Update

February 13, 2018
Significant Milestones

• Water Resource Division sends Violation Notice to the Air Force on January 16, 2018
  – Covers surface water discharges to Van Etten Creek
  – Benzene Plant and Arrow Street Plant

• Remediation and Redevelopment Division invokes dispute resolution on December 14, 2017
  – 7 Issues identified for dispute
Milestones  
(continued)

• Plume bounding work stopped until spring
  – We think we have bounded the plumes from the base to the north (not flowing to Cedar Lake)
  – Plumes are not under flowing the Au Sable River to the south
  – Low level contamination near the mouth of the Au Sable. We need to do further work.
    • Nothing above drinking water criteria
Sampling Foam in Winter 2017
Natural Foam vs. PFAS Contaminated Foam

Van Etten Lake Foam
<table>
<thead>
<tr>
<th>PFAS</th>
<th>Carbon Chain Length</th>
<th>Water Solubility (g/L)</th>
<th>Chemical Structure</th>
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</thead>
<tbody>
<tr>
<td>PFBA</td>
<td>C4</td>
<td>&gt;100</td>
<td><img src="image1" alt="PFBA Structure" /></td>
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<tr>
<td>PFOA</td>
<td>C8</td>
<td>3.5-9.5</td>
<td><img src="image2" alt="PFOA Structure" /></td>
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<tr>
<td>PFUnDA</td>
<td>C11</td>
<td>0.004</td>
<td><img src="image3" alt="PFUnDA Structure" /></td>
</tr>
</tbody>
</table>
Van Etten Lake - SW and Foam Samples

Legend:
- Foam Sample
- Surface Water Sample
- Groundwater Impact (ng/L or ppt)
  - 1 - 50
  - 51 - 300
  - 301 - 1,000
  - 1,000 - 5,000
  - > 5,000
- Estimated Boundary
- Surface Water

Total PFAS (PFOA|PFOS) – Year Units: ng/L ppt

Note: Select representative samples are shown.
Pump and Treat Capture Areas

Legend:
- Air Force Pump & Treat Capture Area
- Groundwater Impact (ng/L or ppt):
  - 1 - 50
  - 51 - 300
  - 301 - 1,000
  - 1,000 - 5,000
  - > 5,000
- Estimated Boundary
- Surface Water

[Map showing pump and treat capture areas with different colored zones indicating groundwater impact levels]
Cedar Lake Surface Water Results
2017
http://www.michigan.gov/som/0,4669,7-192-45414_45929_83470---,00.html

Robert Delaney
delaneyr@michigan.gov
517-284-5085
Community RAB Update since last RAB
Co-chair

Recent Significant Activities or Events:

• Importance of all Agencies sharing Documents & Communications in a Timely manner – Op. Procedures

• Significant State Gov. & MDEQ initiatives
  • 12/14/17: MDEQ initiated Dispute Resolution with USAF
  • Jan.’18: MDEQ issued NOV to USAG – Deadline on PTS GAC
  • 1/10/18: MDEQ promulgated GW Criteria in DW aquifers – 70ppt PFOA/PFOS
  • Jan.’18: MDEQ filed suit against Wolverine citing new GW Criteria & Part 57 GSI (12 ppt PFOS)
  • 2/8/18: Dispute Resolution: MDEQ response to USAF; 7 topics
(Continued)

7 topics in MDEQ dialogue with USAF:
(Released public by MI AG Office)

- Regularly monitor existing residential and Type I community wells for PFAS contamination
- Full characterization of PFAS plumes upgradient of [wells]
- Implement “sentinel monitoring well system” . . Protect DW source.
- Evaluate existing GW extraction system at PTS’
- Present plan for final remedial actions
- Provide alternative DW source to affected well users – new GW Criteria standard 70ppt PFOA/PFOS plus other statutes
- Sample and evaluate compliance with GW GSI locations
  - (Part 57 12 - ppt): Protections for DW, but also fish consumption
February 8, 2018

Mr. Stephen G. Termaath, GS-15, DAF
AFCEC/CIBE
Chief, BRAC Program Management Division
Installations Directorate
2261 Hughes Avenue, Suite 155
JBSA Lackland, Texas 78236-9853

Dear Mr. Termaath:

SUBJECT: Dispute Resolution Concerning the Former Wurtsmith United States Air Force (USAF) Base and Response to Impacts to Drinking Water from Per- and Polyfluoroalkyl Substances (PFAS); Site ID No. 35000058

During our telephone conversation on January 16, 2018, it was agreed that the Michigan Department of Environmental Quality (MDEQ) would provide clarification and direction for resolution of the seven primary issues in dispute as set forth in the USAF January 11, 2018, response to MDEQ’s initiation of dispute resolution. The issues and MDEQ’s proposals for resolution of the disputes are set forth below.

1. MDEQ: Regularly monitor existing residential and Type I community wells for PFAS contamination.

   USAF: The USAF has performed two rounds of potable well sampling for the Residential and Type I wells in the affected area and results on both rounds are consistent. The first sampling events were conducted in the Winter/Fall of 2015 and the summer of 2016, and the second round in the Summer of 2017. There has been only one exceedance of the USEPA lifetime health advisory (HA) for PFOS/PFOA at a private drinking water well. No further sampling has been conducted of water from wells that showed no detectable levels of PFOS and PFOA.

   The USAF plan is to sample quarterly for the next year the drinking water wells sampled in 2017, which all had PFOS/PFOA below the HAs, then annually for the next two (2) years. We will evaluate these results in coordination with MDEQ to determine further monitoring needs. For example, if sampling results indicate stable concentrations and these are below one half the HA, these wells may not require further sampling.

   MDEQ Response: The frequency and the duration of the sampling of residential wells on the west side of Van Etten Creek and Van Etten Lake as proposed by the USAF is acceptable to the MDEQ. However, information collected since the
MDEQ originally requested monitoring of existing residential wells indicates that assessment of conditions east of Van Etten Creek and Van Etten Lake can be more efficiently accomplished through the actions detailed below.

The USAF must develop, in the form of a work plan to be submitted to the MDEQ for review and approval, a plan with a proposed schedule for the investigation of conditions on the east side of Van Etten Lake and Van Etten Creek in the areas indicated on Figure 1. Sampling results in these areas demonstrate that contaminants released from the former USAF base are present at varying concentrations, and must be further evaluated to determine the necessary course of action to protect human health and the environment.

The work plan must be submitted to the MDEQ no later than forty-five (45) days after receipt of this letter. The work plan must include immediate, interim steps to install a groundwater monitoring well network to (1) serve as a sentinel for potable residential and Type I community wells, and (2) support the characterization, both vertically and horizontally, of the plumes in the areas east of Van Etten Lake and Van Etten Creek identified on Figure 1. The monitoring well network necessary to achieve this task must include vertical aquifer sampling for the complete depth of the aquifer. The resulting data must be sufficient to develop a predictive model of the plumes' potential impact on public health and the environment.

2. MDEQ: Full characterization of the PFAS plumes in areas up gradient of the impacted residential and Type I community wells.

**USAF:** The USAF conducted an initial Site Inspection (SI) for PFAS from April 2016 to November 2016. The SI field work consisted of 60 soil samples and 269 groundwater samples. In addition, the USAF conducted a Supplemental Site Inspection (SSI) from August 2017 to December 2017. Field work conducted for the SSI consisted of 201 more groundwater samples. Further investigation will depend on the results of this field work, and the results are expected to be final by March 2018. The results will be evaluated, and decisions will be made on whether further sampling is needed or enough data has been obtained to characterize the plume. The USAF is following a phased approach and is prioritizing locations that are up gradient of potable residential and Type I community wells impacted by PFOS/PFOA. The SSI results will also refine the delineation of the width of the fire training area (FT002) plume.

MDEQ Response: In 2016, the MDEQ required that the USAF fully characterize the PFAS plumes in the areas up gradient of the impacted residential and Type I community wells without distinguishing locations where response actions should be prioritized. Since the MDEQ’s February 29, 2016, letter to Mr. David Strange from Mr. Robert Wagner, information collected and analyzed by the MDEQ indicates that the extent of the plumes emanating from the base and the number
of residential wells that are impacted are much greater than was known at the time of the 2016 letter. Although it is important to fully characterize the PFAS contamination from the base, the MDEQ recognizes that these large and complex plumes from the former USAF base must be addressed in a phased, iterative approach that builds upon information and knowledge gathered in each phase. In the immediate, near term future, the first priority for the USAF is to characterize impacted groundwater areas of high concern from a human health impact perspective. Figure 2 shows these priority areas.

The areas identified in Figure 2 are a priority because contamination is elevated in residential wells that are down gradient of highly contaminated plumes, such that these residential wells are threatened with levels of PFAS contamination that could exceed federal health advisory levels or state criteria. The work plan required under Issue No. 1, above, must also include an investigation of these priority areas, along with a schedule for implementation of the investigation to address this disputed issue.

The investigation of the priority areas must be sufficient enough to identify individual plumes, the maximum concentration levels of contaminates, and migration characteristics. The study must be sufficiently rigorous such that the USAF can identify appropriate sentry well locations and depths, as well as sufficient monitoring frequency, to yield information that will provide warning of plume movement above Part 201 criteria into residential drinking water wells.

To fully characterize the plumes in these areas, the investigation must also include a study of the geology, hydrogeology, appropriate analysis of chemicals of concern, plume extent, characteristics of plume movement and contaminant concentrations. Because the contamination seems to vary greatly with depth in the Wurtsmith plumes both on and off the former USAF base, vertical aquifer sampling through the entire water column will be necessary to fully characterize the plumes.

3. MDEQ: Implement a sentinel monitoring well system to assure that higher level PFAS contamination is not moving toward the portion of the aquifer that is used as a drinking water source.

USAF: The results of sampling described in items 1 and 2 will determine whether existing monitoring wells or new wells up gradient of drinking water wells impacted by PFOS/PFOA can serve as sentinel wells.

MDEQ Response: The MDEQ agrees that the sampling that the USAF refers to, which is part of the SI and SSI cited by the USAF in its response to Issue No. 2, above, is potentially sufficient to identify sentry well locations for some areas of

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1 Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
residential wells just off the base. However, the recently completed USAF work does not provide sufficient information for the hatched areas shown on Figure 2: (1) the Defense Reutilization and Marketing Office (DRMO); (2) LF30/31 and Loud Island contaminant plume; (3) the plume in the area of the Alert Apron; (4) the plume near Van Etten Lake Dam; and (5) the residential wells east of Van Etten Lake and Van Etten Creek. The hatched areas need more complete characterization to determine sentry well locations. The groundwater flow regime appears to be highly complex because of the impacts of the operations of the dam that creates the lake. A thorough understanding of the hydrogeological regime is necessary for understanding plume flux into the aquifers near residential wells. The MDEQ agrees that work completed as requested in Issues No. 1 and 2 will inform the location of additional needed sentry wells and appropriate monitoring requirements, including frequency and duration, in the hatched areas.

4. MDEQ: Evaluate the existing groundwater extraction systems as an interim remedial action to control the PFAS plume migration toward the impacted residential and Type I community wells.

USAF: The current SSI will provide information on the effectiveness of the three-man pump and treat systems (Arrow Street, Mission Street, and Benzene Plant) which are up gradient of the vast majority of the private wells. Based on the SSI evaluation, it will be determined if further plume capture action is needed to protect down gradient drinking water wells from PFOS/PFOA contamination above the HA.

MDEQ Response: MDEQ is seeking actions by the USAF to control PFAS plume migration toward the impacted residential and Type I community wells. The USAF’s proposal to rely on the current SSI to evaluate the effectiveness of the groundwater extraction systems is not adequate. The Arrow Street, Mission Street, and Benzene Plant extraction systems are not adequate to capture PFAS plumes on the east side of the base, north of Arrow Street all the way to the plume emanating from the DRMO. Also, the capture zones of these three systems cannot control plumes that are moving off-base south of 5th Street. Each of these areas is up gradient of residential wells that are impacted. Thus, as interim actions, the three systems are only partially effective, over a limited area. The MDEQ is also concerned that PFAS plumes are breaking through the three extraction well capture zones in the area of F41 and Budziak Road. See the plume map shown on Figure 2.

As part of its evaluation of the three existing extraction systems, the USAF must design and implement a monitoring plan that can delineate the capture zone of the existing systems. The monitoring plan shall include sampling locations, frequency, and constituents in order to demonstrate hydraulic capture of the plume over time. This plan, including a schedule for implementation, must be submitted to the MDEQ no later than March 1, 2018.
The USAF must also evaluate the feasibility of expanding the existing extraction systems or adding more groundwater extraction systems to adequately intercept the PFAS plumes. Results of this evaluation must be submitted to the MDEQ no later than forty-five (45) days after receipt of this letter.

5. MDEQ: Present a plan to the MDEQ providing for final remedial actions.

    USAF: In accordance with the Comprehensive Environmental, Compensation and Liability Act and 40 CFR 300.420, at the conclusion of the SSI the USAF will determine whether further action is warranted. Final remedial actions will be determined under the CERCLA process and these will come after a remedial investigation (including risk assessments) and feasibility studies are completed.

    MDEQ Response: The MDEQ agrees with the USAF that final remedial actions should be informed by investigations of the plumes and their impacts, as well as feasibility studies of possible response actions to address the risks posed to human health and the environment. This issue was raised in the dispute to ensure that the MDEQ and the USAF agree that the development and analysis of investigations and feasibility studies to address the PFAS contamination released by the USAF must keep the goal of final remedial actions in mind and must be aimed at reaching a final remedial action in the future. If the USAF agrees with MDEQ, this issue can be deemed resolved.

6. MDEQ: Provide an alternative drinking water source to affected well users.

    USAF: The USAF notes that in its February 29, 2016 letter MDEQ "urged" the USAF to take this action. It was not on MDEQ’s list of five demands. Where drinking water samples indicate unacceptable risk to human health, as defined by exceeding one or more of the USEPA’s HAs for PFOA, PFOS or PFOA and PFOS combined, the USAF will take appropriate mitigation action for public and private water sources reasonably believed to be contaminated by USAF actions.

    MDEQ Response: MDEQ acknowledges that the USAF has provided municipal water to the one residence with a potable water well that was found to have concentrations of PFOA and PFOS above the USEPA HA for PFOA and PFOS combined. It is MDEQ’s understanding that the USAF will also provide an alternate drinking water source for any future residential or community drinking water wells at which sampling results exceed the HA for PFOA, PFOS, or PFOA and PFOS combined.

    As you know, the MDEQ issued enforceable criteria for PFOA and PFOS in groundwater as a source of drinking water on January 10, 2018. The Part 201 criteria mirror the EPA HA levels of 70 ppt for PFOA, PFOS, or PFOA and PFOS.
combined. Section 120(1)(a) of CERCLA explicitly states that federal facilities shall be subject to CERCLA in the same manner and to the same extent as private facilities. 42 USC § 9620(1)(a). Section 120(a)(4) of CERCLA further specifies that State laws concerning removal and remedial actions shall apply to actions at facilities owned or operated by the United States. 42 USC § 9620(a)(4). The enforceable, generally-applicable Michigan standards are more stringent than federal standards, and therefore also qualify as Applicable or Relevant and Appropriate standards under CERCLA, which are mandatory under the National Contingency Plan (NCP). 42 USC § 9621(d), 40 CFR § 300.430(f)(1)(i)(A).

Under Michigan law, parties responsible for causing a release or threat of release, defined as "any circumstance that may reasonably be anticipated to cause a release," are jointly and severally liable for costs of response activity, natural resource damages, and actions necessary to abate imminent and substantial endangerment to the public health, safety, welfare, and the environment. See MCL 324.20101(1)(ccc); MCL 324.20126a. In addition, Part 201 sets forth specific actions that are required of liable owners or operators of properties that are "facilities" as defined under Part 201. A "facility" under Michigan law is any location where a hazardous substance in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use has come to be located.

Levels of PFAS exceeding Michigan's cleanup criteria have been identified both on and off the former base, making this area a "facility" of undetermined scope, at this time, where response activities are required. Response activities recognized under Part 201 expressly include enforcement actions, providing alternate water supplies, and state-approved health assessments or health effect studies, among other actions necessary to protect the public health. MCL 324.20101(1)(wv). At this time, the MDEQ is seeking the investigations and feasibility studies as described in this dispute communication in an effort to clarify where conditions exist that pose imminent and substantial endangerments to public health, safety, welfare, or the environment, and to appropriately direct response activities necessary to prevent exposures at unacceptable levels, including as needed alternate water supplies.

The discussion above presents a high-level, presentation of the State's authorities to require the USAF to take response actions to address its releases of PFAS at and near Wurtsmith. The State is not, in this statement, waiving its rights to fully enforce all applicable laws and regulations, whether mentioned in this communication or not. Those authorities include, but are not limited to, CERCLA, the Michigan Natural Resources and Environmental Protection Act, MCL 324.101 et seq, and the Michigan Safe Drinking Water Act and its water-supply replacement requirements. MCL 325.101 et seq.
7. MDEQ: Additional sampling is needed to evaluate compliance with Michigan's statewide criteria for groundwater-surface water interface (GSI) locations as set forth in Part 201. The USAF must move more aggressively and more quickly to define and remove the ongoing threat to public health and the environment, starting with the USAF action to provide a long-term potable water supply to affected well users and followed by response actions to remediate impacted ecosystems, including surface waters, groundwater, fish, birds, and mammals.

USAF: As described in item 6, the USAF has provided long-term potable water to the only residence with a well exceeding the USEPA HA levels. We will continue to take the appropriate mitigation actions for public and private drinking water wells reasonably believed to be contaminated above the HA levels by USAF actions. Our first priority remains protection of drinking water.

The USAF has installed a groundwater treatment system for the plume from the fire training area (FT002). This system is designed to control the levels of PFOS/PFOA in groundwater up gradient from surface water and provide protection of fish in the human food chain. After further base-wide investigations, PFOS/PFOA was discovered in areas that are up gradient of potential drinking water exposures, and this has taken on the highest priority. Ongoing design and construction of a treatment system for the Arrow Street and Benzene Plants will intercept and remove PFOS/PFOA from groundwater and reduce the levels reaching surface water. The SSI will provide additional information about plumes migrating toward surface waters. We will address the other locations that do not have potential drinking water exposures by following the CERCLA process.

MDEQ Response: The USAF has appropriately focused on drinking water, however, surface water contamination that affects humans through the consumption of contaminated fish can be of higher risk to human health than drinking water contamination, and is an issue at Wurtsmith. In 2012, the Michigan Department of Health and Human Services (MDHHS) issued a "do not eat" fish advisory for all fish caught from Clark's Marsh and for resident fish in the lower Au Sable River south of the base due to unsafe levels of PFAS released by the USAF. An additional concern is human exposure to PFAS-contaminated foam on surface water.

To address these concerns, the USAF must also investigate and address the impact from its releases of PFAS to surface water and biota in lakes, marshes, creeks and rivers in the area surrounding the base. Although the USAF has conducted some limited investigation of impacts to surface water in the past, there are several areas where there is no data close to the water body. Figure 3 shows areas of potential impact to surface water and outlines the area that the USAF must cover in its investigation. The USAF must submit a work plan for this investigation to the MDEQ within ninety (90) days of receipt of this letter. The work plan must include a schedule for installation of proposed wells that are near the groundwater-surface water interface (GSI) or push point samplers at the GSI.
As requested by the USAF, the MDEQ is enclosing with this communication statutory language regarding GSI compliance (Section 20120e of Part 201) and a copy of Part 31, Water Resources Protection, and the Part 31 Rules related to water quality standards, which contain the basis for the State’s water quality standards and evaluation of GSI criteria compliance.

Please contact Mr. Robert Delaney, Superfund Section, Remediation and Redevelopment Division at 517-284-5085; delaneyr@michigan.gov; or MDEQ, P.O. Box 30426, Lansing, Michigan 48909-7926, to arrange the next call or meeting to discuss any or all of this communication. The MDEQ hopes that the USAF will satisfy its obligations in cooperation with the State of Michigan and we look forward to receiving your response.

Sincerely,

Kathleen Shirey, Acting Director
Remediation and Redevelopment Division
517-420-2503

Enclosures
cc:       Mr. Benjamin Marrs, USAF
         Ms. Sharon Vriesenga, USAF
         Ms. Carol Isaacs, Governor’s Office
         Ms. Polly Synk, Michigan Department of Attorney General
         Ms. Katie Barron, Michigan Department of Attorney General
         Ms. C. Heidi Grether, Director, MDEQ
         Mr. Michael McClellan, Environment Deputy Director, MDEQ
         Ms. Susan Leeming, External Relations Deputy Director, MDEQ
         Ms. Mel Brown, Communications Director, MDEQ
         Mr. Nate Zimmer, MDEQ
         Ms. Amy Peterson, MDEQ
         Mr. Mike Jury, MDEQ
         Mr. David Kline, MDEQ.
         Mr. Robert Delaney, MDEQ
         Ms. Lisa Agosta, MDEQ
Legend
- Residential
- Wells > 12 ppt PFOS
- Barren Water
- >12 ppt PFOS
- Groundwater
- >12 ppt PFOS
- Site Investigation Area

Groundwater Impact
Total PFAS (ppt)
- 1 - 50
- 51 - 300
- 301 - 1,000
- 1,000 - 5,000
- > 5,000

DRAFT

FIGURE 3
GSI INVESTIGATION AREA
FORMER WURTSMITH AIR FORCE BASE
OSCO COUNTY, MICHIGAN

Attachment 9
APPENDIX A: References


NOW!
Need Our Water
Action group
Summary for RAB

We are a community action group organized to give Oscoda-AuSable and surrounding communities a voice. Including:
- Contacts with Legislators within MI and US regarding PFAS contamination.
- Contacts with other affected groups- Veterans Civilians Clean Water Alliance associated with Mike Bussey and Erin Brockovich, Demand Action from Plainfield Township associate with the Wolverine Worldwide contamination, Testing for Pease, AuSable Anglers, Clean Water Action Group, Alpena Combat Readiness Center and other local municipalities.

Legislation monitoring and actions: Cleanup Criteria Rule 57 and Part 201 Environmental Remediation which per Michigan law may be defined as parties responsible for causing a release or threat of release, defined as “any circumstance that may reasonably be anticipated to cause a release,” are jointly and severally liable for costs of response activity, natural resource damages, and actions necessary to abate imminent and substantial endangerment to the public health, safety, welfare, and the environment. Also, as the Michigan PFAS Action Response Team notes, pursuing the current lack of nationwide best practice for the mitigation of PFAS contamination.

We are the Creation of activist group which is researching and promoting allocation of resources to the former Wurtsmith AFB area including the Department of Defense health studies and State of Michigan resources for addressing PFAS contamination.

Our Mission is to be a reliable resource and catalyst for education and communication while advocating for a long-term health and environmental welfare plan on behalf of those effected by the water contamination from the former WAFB. Give residents the location of resources for information on all above noted activities and as noted by MPART- informing and empowering the public!!

The next NOW (Need Our Water) meeting is noon, Wednesday, February 21 at The Villages of Oscoda.

Contact Cathy Wusterbarth and/or Greg Cole on Facebook’s NOW (Need Our Water)
The email address is - nowactiongroup@gmail.com
Copies of NOW’s Mission Statement and Goals are located in the lobby.

Vicky Cole
Greg Cole
Dear Mr. Sueltenfuss,

I hereby request that my email below (and its attachment) be added to the public comment that was read on my behalf by Ms. Wusterbarth at the Wurtsmith Restoration Advisory Board meeting in Oscoda last week.

Thank you.

Anthony M. Spaniola

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From: Anthony M. Spaniola
Sent: Tuesday, February 20, 2018 11:22 PM
To: Benjamin.marrs.1@us.af.mil
Cc: stephen.termaath@us.af.mil; Arnie Leriche; breanne.humphreys.ctr@us.af.mil; breanne.humphreys@cn-bus.com; breanne.humphreys@cn-bus.com; Bennett, Jacob; Brandon_Fewins@stabenow.senate.gov; Eric_Keller@peters.senate.gov; Suntag, Aaron (Stabenow); ZimmerM1@michigan.gov; 'SchuetteB@michigan.gov'; 'SenJStamas@senate.michigan.gov'; 'SueAllor@house.mi.gov'; DELANEYR@michigan.gov; Jurym1@michigan.gov; oscoda@1weed.com; clerk@oscodatownshipmi.gov; tcummings@oscodatownshipmi.gov; treasurer@oscodatownshipmi.gov; admin@oscodatownshipmi.gov; wpalmer@oscodatownshipmi.gov; superintendent@oscodatownshipmi.gov; Arnie Leriche; LeemingS@michigan.gov; BarronK1@michigan.gov; SynkP@michigan.gov
Subject: Former Wurtsmith Air Force Base / Request For Immediate Correction

Dear Mr. Marrs,

My family owns property on Van Etten Lake in the “Zone of Concern” for PFAS contamination from the former Wurtsmith Air Force Base. You and I spoke in Oscoda prior to the Town Hall meeting on December 6, 2017. You and I have also corresponded about my deep concern and frustration over the lack of any action plan by the Air Force to stop the ongoing PFAS-contaminant bleeding from the former Base into Van Etten Lake and other nearby surface waters.

In a report aired this evening by a Grand Rapids, Michigan television station, a representative of the Air Force is quoted as stating that “the Air Force doesn’t see an applicable law that applies to that foam or to that surface water [i.e., Van Etten Lake surface water containing PFAS contaminants from the former Base].” See, http://woodtv.com/2018/02/20/after-8-years-states-first-pfas-site-leads-to-lake-foam-fears/
I sincerely hope that this representative was either misquoted or did not accurately state the Air Force’s position. In all events, I request that the Air Force immediately correct this statement, as reported.

In a letter to the Fiscal Agency of the Michigan Senate dated March 17, 2017, Dr. Stephen TerMaath wrote on behalf of the Air Force that the “Air Force is... working with the Michigan Department of Environmental Quality (MDEQ) to ensure compliance with applicable Michigan promulgated surface water standards for PFOA and PFOS in groundwater entering Clarks Marsh” (emphasis added). For your convenience, and for the avoidance of any doubt, a copy of Dr. TerMaath’s letter is attached to this email. The quoted passage is at p. 2.

As Dr. TerMaath and the Air Force are well aware, the applicable Michigan surface water standards for PFOA and PFOS, as referred to in his letter, are the groundwater/surface water interface (or “GSI”) standards determined pursuant to Michigan Administrative Rule 323.1057 (also known as Rule 57). The Rule 57 GSI standard for PFOS is 11 ppt for surface water used as a source of drinking water and 12 ppt for all other surface water. The Rule 57 GSI standards were promulgated pursuant to Part 31 of the Michigan Natural Resources and Environmental Protection Act (also known as NREPA), and those standards govern, and are made applicable to, the Air Force’s remediation obligations at Wurtsmith under Section 120e(1)(a) of NREPA Part 201 [MCL 324.20120e(1)(a)].

As I stated in my public comment that was read into the record at the Restoration Advisory Board meeting last week, “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 is clueless about the applicability of Rule 57....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 stopped.”

It is time for the Air Force to be honest with the people of Oscoda by correcting the misquoted or inaccurate statement (as reported), reaffirming its March 17, 2017 commitment to comply with Michigan surface water standards, and devoting all of its energies, efforts and resources to the development and implementation of meaningful remedial solutions.

I would appreciate your immediate attention to this matter and look forward to receiving your response.

Very Truly Yours,

Anthony M. Spaniola
Dear Ms. Lowe:

This is a follow up to the email you received from Mr. Ronald Joyner on 13 March 2017 regarding your questions on Air Force responsibilities for alternate water supplies. For the reasons explained below, the Air Force is not authorized to comply with the mandates of Public Act 545 of 2016 (Act 545) to provide an alternative water supply or to reimburse the state of Michigan when it provides an alternative water supply. Nevertheless, the Air Force will continue to use current authorities to protect people from unacceptable perfluorooctanoic acid (PFOA) or perfluorooctane sulfonate (PFOS) contamination associated with Air Force past activities.

A fundamental principle of law is that the federal government is not subject to state and local laws unless Congress clearly and expressly waives its sovereign immunity. Where Congress has waived sovereign immunity, as it has done under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Safe Drinking Water Act, another fundamental legal principle must be satisfied before the federal government is bound by the law. The law must apply equally to all persons and entities. Act 545 does not meet this principle because only the federal and state governments are subject to its provisions. Accordingly, the Air Force is not authorized to comply with Act 545 law for this and other reasons.

The Air Force will continue to address PFOA and PFOS releases attributed to the Air Force that pose unacceptable risk to people in accordance with CERCLA and its implementing regulations. Where PFOA or PFOS levels (either individually or combined) exceed HA levels (70 parts per trillion in drinking water), the Air Force will act immediately to provide bottled water to affected persons. The Air Force then will work with each homeowner to install a whole-home treatment system to reduce PFOA and PFOS to below the United States Environmental Protection Agency health advisories (HA) for drinking water. Connection of homes to municipal water supplies is the preferred long-term solution.
To date, only one private drinking water well near the former Wurtsmith Air Force Base (Wurtsmith AFB) has been found to have PFOA and PFOS levels above HA. The Air Force promptly connected the home to the Huron Shore Regional Utility Authority water supply.

The Air Force is also working with Michigan Department of Environmental Quality (MDEQ) to ensure compliance with applicable Michigan promulgated surface water standards for PFOA and PFOS in groundwater entering Clarks Marsh. A groundwater treatment system began operation in April 2015 to reduce the contamination and meet these requirements. In January 2016, the Air Force completed a Preliminary Assessment (PA) for potential PFOA and PFOS releases at the former Wurtsmith AFB. Following the PA, the Air Force began conducting site inspections for PFOA and PFOS to identify sources of PFOA and PFOS contamination. A report on these findings is scheduled for June 2017. Remedial Investigation for PFOA and PFOS is planned for later in 2017.

The Air Force is working closely with MDEQ to comply with Michigan laws and regulations applicable to the federal government. If you require a more detailed statement of the Air Force legal analysis of Act 545, please contact Mr Marc Trost at the Air Force Legal Operations Agency, Environmental Law and Litigation Division. His telephone number is (210) 395-8973.

Sincerely,

[Signature]

STEPHEN G. TERMAATH, GS-15, DAF
Chief, BRAC Program Management Division
Installations Directorate
**Former Wurtsmith AFB Restoration Advisory Board Action Item Tracker**

**OPEN ACTION ITEMS as of 2/20/18**

<table>
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<th>No.</th>
<th>Date Created</th>
<th>Action Item</th>
<th>Comments/Resolution</th>
<th>Status</th>
<th>Owner</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1</td>
<td>2-Aug-17</td>
<td>Properly orient attendees to maps and figures when they are presented at RAB meetings and ensure that they are easily viewable.</td>
<td>Open</td>
<td>All presenters</td>
<td>Ongoing</td>
<td></td>
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<td>2</td>
<td>2-Aug-17</td>
<td>When presenters discuss the EPA’s Health Advisory for PFOS/PFOA or other regulatory standards, indicate what environmental media they are talking about (ex: groundwater, surface water, soil, air, etc.)</td>
<td>Open</td>
<td>All presenters</td>
<td>Ongoing</td>
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<td>3</td>
<td>2-Aug-17</td>
<td>When presenters discuss PFOS/PFOA levels, convert all measurements into parts per trillion.</td>
<td>Open</td>
<td>All presenters</td>
<td>Ongoing</td>
<td></td>
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<td>19-Sep-17</td>
<td>Advise RAB members which documents have been added to the AR since the last RAB meeting.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>Ongoing</td>
<td></td>
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<td>6</td>
<td>1-Nov-17</td>
<td>Include revision date on all documents shared with the RAB.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>Ongoing</td>
<td></td>
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<tr>
<td>7</td>
<td>1-Nov-17</td>
<td>Send meeting presentations electronically to RAB members.</td>
<td>Open</td>
<td>Air Force</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1-Nov-17</td>
<td>Clarify for RAB members the PFAS historical timeline, purpose, schedules, and locations of the GAC unit(s) [Arrow St and Benzene pump and treat systems]. Describe the information the Air Force has provided to the community about siting the GAC unit(s).</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>18-Jan-18</td>
<td>Specify which documents are available at the information repository and which are available elsewhere (including detailed location/website link); record date that hard copy documents are placed in the information repository.</td>
<td>Open</td>
<td>Air Force (M. McClendon)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13-Feb-18</td>
<td>Consider viability of including a conference call option at future RAB meetings.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>13-Feb-18</td>
<td>Provide GAC Treatment Plant plans to the Oscoda Planning Commission.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>13-Feb-18</td>
<td>Determine whether the contractor, which is constructing the GAC treatment plant, will be penalized for construction delays.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>13-Feb-18</td>
<td>Modify the FY18 Project Summary document by adding out-of-cycle funding requests and other projects.</td>
<td>Open</td>
<td>Air Force (M. McClendon)</td>
<td>18-Apr-18</td>
<td></td>
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<tr>
<td>No.</td>
<td>Date Created</td>
<td>Action Item</td>
<td>Comments/Resolution</td>
<td>Status</td>
<td>Owner</td>
<td>Due Date</td>
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<tr>
<td>17</td>
<td>13-Feb-18</td>
<td>Consider placing a boom, or another structure, on Van Etten Creek to capture the foam.</td>
<td>Open</td>
<td>MDEQ (B. Delaney)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>13-Feb-18</td>
<td>Discuss how to integrate CERCLA and NEPA processes when USFS permitting requirements interact with the environmental restoration program at the former Wurtsmith AFB.</td>
<td>Open</td>
<td>Air Force (M. Marrs) and USFS (T. Martoglio)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>13-Feb-18</td>
<td>Inform RAB members about the effectiveness of a resin exchange system (as compared to traditional PFOS/PFOA treatment systems such as GAC filtration).</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>13-Feb-18</td>
<td>Determine agency responsible for addressing sample results that exceed the EPA lifetime HA for PFOS/PFOA at the plumes near the high school.</td>
<td>Open</td>
<td>Air Force (M. Marrs)</td>
<td>18-Apr-18</td>
<td></td>
</tr>
</tbody>
</table>
**Former Wurtsmith AFB Restoration Advisory Board Action Item Tracker**

**FUTURE AGENDA ITEMS as of 2/20/18**

<table>
<thead>
<tr>
<th>No.</th>
<th>Agenda Topic</th>
<th>Discussion Points</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>How to apply for Technical Assistance for Public Participation grants</td>
<td>Consider the following elements: support document management at library; video broadcasting RAB meetings; hold additional outreach meetings; include examples of grant scopes/outcomes.</td>
<td>18-Apr-18</td>
</tr>
<tr>
<td>4</td>
<td>Document management</td>
<td>1) What types of documents does each stakeholder agency produce (pertaining to environmental restoration of the former Wurtsmith AFB)? 2) How can RAB members and the public access these documents (e.g., Admin Record, elsewhere online, library, etc.)? 3) When are such documents generally made available to the public?</td>
<td>18-Apr-18</td>
</tr>
<tr>
<td>5</td>
<td>Tiered approach and budget process</td>
<td>Discuss tiered approach by which the Air Force prioritizes investigative and remedial activities. Provide budget update. Consider inviting elected officials to address DoD funding.</td>
<td>TBD</td>
</tr>
<tr>
<td>6</td>
<td>Fish tissue sampling in Clark’s Marsh</td>
<td>Provide update about fish tissue sampling in Clark’s Marsh</td>
<td>TBD</td>
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</tbody>
</table>