

**Former Badger Army Ammunition Plant (AAP)
Restoration Advisory Board Meeting
Sauk Prairie High School River Arts Center
July 26, 2023**

Time: 6:30 pm, July 26, 2023

Place: Conducted in-person at Sauk Prairie High School River Arts Center and virtually using Microsoft Teams

Attendees: Approximately 27 people attended the meeting, including 12 Restoration Advisory Board (RAB). Attendees are included in the attachment.

Introduction: Mr. Quang Nguyen, US Army Environmental Command (USAEC), provided the agenda and plans for the evening followed by roll call.

Review/Approve Minutes of Last Meeting

- There were no additional comments on the meeting minutes from the 20 April 2023 RAB meeting.
- The RAB adopted the minutes as final.

Community Involvement Plan (CIP) [Impromptu discussion proposed by a RAB member during the meeting]

- A RAB member commented that on page 11 of the CIP there is discussion about the Nitrocellulose (NC) Plume at the top of the page which states that in November 2015, “the RAB decided* the NC plume would be put under natural attenuation as the best cleanup method to reach remedial goals. The same RAB member expressed no memory of the RAB taking a position on the remedy and asked the other members if they recalled taking a position. No RAB members present expressed having a memory of taking a position on the remedy. (*Post-meeting note: The role of the RAB is advisory only. Validation of the assertion that the 2015 CIP indicates a RAB decision on a remedial action was unable to be completed at the time these meeting minutes were finalized.)
- The Army suggested referring to the meeting minutes from 2015 to verify.
- A RAB member noted during the [2015] period, there was no process through which meeting minutes were approved by the RAB.
- A RAB member provided a quote from page eight (8) of the current CIP, and commented that where it says, “the remaining cleanup decision will be executed under the Army’s delegated Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorities and substantive requirements of the Wisconsin State law.” It should say or reference Applicable or Relevant and Applicable Requirements (ARARS).
- The Army will document and address the RAB CIP comments when the next CIP is prepared.

County Road Z Residential Sampling Wells, Quang Nguyen (USAEC)

- In January 2023 RAB meeting, RAB members asked why Wisconsin Department of Natural Resources (WDNR) had not asked the Army to do any additional groundwater

sampling at two residential wells. An official request was submitted to WDNR by the RAB Community Co-Chair in February of 2023.

- WDNR approached the Army and requested the Army evaluate any historical and recent data of those residential wells.
- The Army determined sampling for those groundwater wells is not warranted at this time. Dinitrotoluene (DNT) remains undetectable at those wells since 2007. DNT was detected in 2006 at concentration levels below the WDNR enforcement standard. DNT at the second well remains undetected since 2006. Additionally, chlorinated solvents at either of those wells remain undetected since 2006. These wells are located to the west and outside of the plume; the plume is migrating to the east. The Army reviewed the well construction details. Well number one was installed at a total depth of 288 feet below ground surface and well number two was installed at a total depth of 275 feet below ground surface at or below bedrock.
- A RAB member commented the location of the PFAS plume is unknown, and the plume is highly mobile therefore should be tested. The sampling approach should be aggressive to assure everyone has a safe well.
- The Army stated they are developing a comprehensive sampling program for the FY24 Remedial Investigation (RI) to address Per- and Polyfluorinated Substances (PFAS). The Army identified a detection at one location and will work to delineate the whole area if there are more [detections].
- A RAB member commented that PFAS showed up in multiple wells and the RAB understands additional studies are needed and the Army must wait for funding, the immediate concern is that people may be exposed to unsafe levels of PFAS in their drinking water and not be aware.
- The Army noted the current Department of Defense (DoD) policy for PFAS remains 70 parts per trillion (ppt) [regarding concentration levels] based on the EPA health advisory risk level. The PFAS currently remains below the EPA health advisory risk level. The Army will proceed with the remedial investigation phase to delineate the extent of PFAS concentrations and address the concentrations accordingly.
- A RAB member commented the EPA established a lower health advisory level [interim] that should be applied although it remains unfinalized. The RAB member stated it is a mistake to wait [for the drinking water regulation to be finalized].

Optimization Updates: Well Installations (Quang Nguyen, USAEC and Joel Janssen, Spec Pro Services)

- The Army is in the process of drilling eight (8) monitoring wells for plume delineation at the Deterrent Burning Ground Plume (DBG) and the Propellant Burning Ground Plume (PBG).
- A PBG well nest, comprised of three wells, was installed at the Great Sauk State Trail on 25 May 2023.
- The remaining property owners (private landowner and Alliant Energy) tentatively agreed access to well installations and sampling pending a leasing agreement.
- Alliant Energy has had issues with the agreement and provided comments. The Army is currently working on a revised agreement for resubmittal by mid-August.
- Completion of the five (5) remaining wells is targeted for summer of 2023.

- Mr. Janssen (Spec Pro Services) presented updated plume maps and pictures depicting completed well installation locations. Spring 2023 groundwater data was also presented (slides 6-10 of presentation).

Gruber's Grove Bay Desktop Supplemental Remedial Investigation (RI) (Quang Nguyen, USAEC)

- The Army received a draft of the report in April 2023. The Army reviewed and provided comment to the contractor that prepared the report in May 2023.
- The Army and contractors met with WDNR on 25 May to provide them with the status of the report and the opportunity to provide initial comments and recommendations.
- The draft report was submitted to WDNR on 17 July 2023. WDNR is in the review and commenting process. The Army will provide the RAB with findings and recommendations within the report at a future RAB meeting.

Project Management (Quang Nguyen, USAEC)

Proposed Plan (PP) for the Site-Wide Groundwater

- The Army plans to install injection wells and inject emulsified vegetable oil (EVO) to reduce the groundwater concentrations of DNT and volatile organic compounds (VOCs) at the groundwater plumes.
- The Army submitted the PP to WDNR in February of 2023 and received comments back in June 2023.
- The Army met with WDNR on 7 July to discuss preliminary responses to comments. The Army is currently revising the PP to address WDNR comments and will resubmit the revised plan. Once the PP is approved by WDNR, the Army will publish a public notice for the public meeting to share the PP with the RAB and the community to explain the alternatives evaluated and the selected remedy.
- The public will have a 60-day review period to provide PP comments after the public notice is published.
- The Army may delay the public notice until the RAB can utilize Technical Assistance for Public Participation (TAPP) resources and review internally.
- PP completion is targeted for the end of July or early August. The WDNR will review the report and provide comments to the Army.. The Army will notify the RAB by email when the PP is ready for their review.
- A RAB member voiced two concerns. The first concern is a procedural issue, the Army is moving forward with implementing a strategy as part of a decision that has not formally been made. The second concern voiced was a lack of communication by the Army at a critical phase of the discussion. The same RAB member requested the Army and the WDNR provide the RAB with a briefing about the issues they have discussed, and how the Army intends to move forward with an effective strategy.
- The Army agreed a briefing on the PP can be included in the next meeting agenda.
- The Army explained the remedy has not been implemented and part of the procedure is obtaining public input at the public meeting. The purpose of the public meeting is to gather community concerns and knowledge, not just the technical component. The TAPP will assist the RAB with technical understanding.
- A RAB member commented the RAB is not provided an advanced copy of the document to comment on during the development process and is treated like a member of the

general public, while the Army has months to review and modify the document. The RAB member explained the 60 days provided to the RAB for comment on document is insufficient.

- A RAB member noted that the RAB is a conduit to the community and the public. The RAB cannot effectively answer people's questions if the RAB is unaware of what is going on.
- The Army stated the RAB will have an opportunity to review the PP with TAPP assistance prior to the Public Meeting but during the public comment period.] The Army will determine when to begin the public review process.

2nd Five Year Review

- The review is being conducted by a third-party independent contractor (Dawson).
- Dawson submitted the Draft Five Year Review (FYR) to the US Army Corps of Engineers Environmental and Munitions Center of Excellence (USACEEMCE) on 20 June 2023.
- USACEEMCE provided Dawson with FYR comments the week of 24 July 2023.
- Dawson will address comments and submit the Draft to USAEC.
- USAEC will review and sign the Draft Final Report by 31 October 2023.
- USAEC will publicly share the Final FYR Report once the review process is complete.

Community Involvement Plan (CIP)

- The Final CIP was submitted for review to the Army on 18 May 2023.
- The Army posted the Final CIP on the BAAP website on 12 June 2023.
 - <https://aec.army.mil/index.php/baap>
- The CIP is a living document which may be updated and revised.
- A RAB member suggested a more thorough discussion concerning the remediation strategy stated in the PP. The RAB member proposed future meetings with TAPP contractor, Jim Tinjum, to discuss potential mentoring and alternatives to the PP strategy.
- A RAB member questioned the remedy selection being applicable to the DNT and VOC's. The RAB member restated their concern with the lack of PFAS data in the Deterrent Burning Ground (DBG) northeast corner. The member stressed the Army expand DBG PFAS sampling to include PFAS data in the site wide groundwater remediation strategy.
- The Army noted that the PA/SI conducted at the DBG did not identify any PFAS releases.
- The Army discussed the possibility of more PFAS testing at DBG locations during the Remedial Investigation (RI) Phase.
- A RAB member stated the DNR recently initiated PFAS testing for drinking water and requested the Army conduct occasional PFAS testing at the landfill.
- A RAB member stated the Bluffview's Wastewater Treatment Plant will reject waste if PFAS is detected at the landfill.

Project Management Updates

- The Army is working on contracting for the Settling Pond Expanded Site Inspection and the development of the Site-Wide Groundwater Monitoring Plan.

- The Army is working with The Mission Installation Contracting Command (MICC) on the contract procurement process. The procurement process has stalled due to MICC staff shortages. The Army looks to award using a sole source procurement process which must meet several milestones, including:
 - Providing a justification letter for sole source procurement.
 - Market research.
 - Legal review.
- The MICC completed the market research in June which triggered the next phase of the contracting process.
- The MICC provided a late August target award date.
- A RAB member commented the RAB put forward a resolution to the WDNR requesting to expand soil and sediment sampling to include all six forms of DNT. The RAB member expressed concern over the Army rejecting the expanded soil sampling request.
- The Army stated if the contract is awarded, and the expanded soil sampling is not included, the contract can be modified to add additional scope.
- A RAB member stated they would like the soil testing for the six DNT isomers included in the contract.
- A RAB member expressed safety concerns for first responders who don't know what contaminants they are being exposed to, and requested an improved communication process between the RAB, WDNR, and the Army.

PFAS Remedial Investigation for PBG

- The contract is on track to be awarded fiscal year (FY) 2024.
- The Army will submit the necessary documentation to the MICC to procure the award.
- The Army has completed the scope of work and independent government cost estimate for the MICC.
- The Army will engage with the WDNR to develop the RI work plan once the contract is awarded.

Landfill #5 – Repair of Settled Areas

- The Army is working on the SpecPro contract modifications to repair the settling areas.
- The Army hopes the modification will be complete by the end of July 23 and initiate work in the fall of 2023.

Badger Army Ammunition Plant Groundwater Remediation: Article Publication

- The Army developed an article to share the USGS storyboard with the public at the RAB's request.
- The Army submitted the article to various news outlets on 25 April 2023, including:
 - Wisconsin State Journal
 - Baraboo News Republic
 - Portage Daily Register
 - Sauk Prairie Eagle
 - Sauk Prairie Star
 - Lodi Enterprise-Poynette Press
 - Dear Neighbors

- U.S. Army
- <https://www.army.mil/article/266071>
- A RAB member commented The Sauk Prairie Eagle no longer exists.
- A RAB member commented they have not seen the article on any of the news outlets.

Future Meetings

- October 19, 2023
- January 18, 2024
- April 18, 2024
- July 18, 2024

Closing Remarks

- The Army asked the RAB if the Army has communicated the RAB meetings and slides in a timely manner.
- A RAB member explained historically slides were received by the RAB the day of the meeting or the day before. The RAB has recently received the slides a week in advance.
- The TAPP contractor commented a research team at UW Madison has a grant from the Wisconsin Coordinating Groundwater Council to sample PFAS from a variety of sludges, wastewater treatment plants, and landfills. The contractor further noted sampling for PFAS could be completed at the [Badger] landfill with SpecPro services as part of this research grant. [*Post-meeting note: The Army will investigate PFAS in accordance with DoD policies and CERCLA process.

Questions and Answers

County Road Z Residential Sampling Wells, Quang Nguyen (USAEC)

- **Q: Per-and polyfluoroalkyl substances (PFAS) is detected in groundwater monitoring wells at the plant boundary, with the highest concentrations detected at the southern plant boundary upgradient from the homes on County Z. Will the Army be testing downgradient wells for PFAS?**
A: The Army is planning to proceed with the Remedial Investigation (RI) of PFAS in FY2024 and during that time any wells that need to be sampled or delineated will be considered [for testing].

Optimization Updates: Well Installations (Quang Nguyen, USAEC and Joel Janssen, Spec Pro Services)

- **Q: Do you have any hypothesis as to why increases of DNT are happening in the wells near the source (in the PBG plume)**
A: The cap is contained so the water table does not necessarily move freely. Water around the cap is migrating away from it. The water table is depressed underneath the cap so there could be a delay with that particular area from those wells (Joel Janssen, Spec Pro Services).
- **Q: What is the concern with this high level (of DNT) now, that is outside the cap?**

A: The concern would be related to the remedial design and how it will be performed (Joel Janssen, Spec Pro Services).

- **Q: In 2022, Badger submitted a document called the 2022 Monitoring Well Installation Plan. The Wisconsin Department of Natural Resources (WDNR) noted that the plan the Army submitted did not include recommendations for the installation of additional monitoring wells to define the degree and extent of the Central Plume. Why has the Army not responded to this request and complete the requested installation?**

A: The Army plans to install additional wells in the Central Plume and to acquire financial resources to complete those wells once the current set of monitoring wells is complete. (Quang Nguyen, USAEC).

- **Q: Is there a monitoring well planned to be put in on Highway 78 instead of the current residential well?**

A: The monitoring well that is straight south of that home is the well nest that will be utilized (Joel Janssen, Spec Pro Services).

Project Management (Quang Nguyen, USAEC)

- **Q: A RAB member asked if the landfill leachate was tested for PFAS.**

A: WDNR does not require PFAS testing at the landfill (Mr. Janssen (SpecPro)).

ATTENDEES

RAB Members Present

1.	Chris Hanson	At Large Member
2.	Curtis Hedman	WDHS
3.	Dennis Hancock	US Dairy Forage Center
4.	Laura Olah	Citizens for Safe Water Around Badger (CSWAB)
5.	Grace Vosen	Sauk Prairie Conservation Alliance
6.	Michele Hopp	Community Co-chair
7.	Randy Poelma	Ho-Chunk Nation
8.	Valerie McAuliffe	Sauk County Board
9.	Craig Walsh	Town of Prairie du Sac
10.	Doug Gjerston	Town of Sumpter
11.	Robin Meier	Bluffview Sanitary District
12.	Luke Lampo	WDNR
13.	Mike Gleason	Lake Wisconsin

Army and Army Contractors

1.	Joel Janssen	SpecPro Services
2.	Kay Toye	Environmental Research Group
3.	Dwight Hollon	USAEC
4.	Sergio Celis	Environmental Research Group
5.	Heather McNabney	Environmental Research Group
6.	Quang Nguyen	USAEC

Visitors

1.	James Tinjum	Guest
2.	Justin Williams	Guest
3.	Michael Leuth	Guest
4.	Wendy Carlson	RAB Alternate (CSWAB)
5.	Meg Haserodt	USGS
6.	Unknown	Guest
7.	Unknown	Guest
8.	Unknown	Guest