

**Former Twin Cities Army Ammunition Plant (TCAAP)  
Restoration Advisory Board (RAB) Meeting  
Arden Hills Ben Franklin Readiness Center  
August 16, 2022**

**Date/Time:** August 16, 2022, at 7:00 pm

**Place:** Conducted In-person at the Arden Hills Ben Franklin Readiness Center and virtually using Microsoft Teams.

**Attendees:** Approximately 28 people attended the meeting including four Restoration Advisory Board (RAB) Community Members and nine Government RAB Members. Names of attendees are included in Attachment A.

**Agenda:** Review/Approve Minutes from Last Meeting, Old Business, Cleanup Status Update, New Business, Next Meeting Agenda and Public Comments.

**Introduction:** Ms. Cathy Kropp took attendance. The Army Community Co-Chair called the meeting to order at 7:09 pm and provided plans for the evening.

Review/Approve Minutes of Last Meeting

- Draft minutes from the previous RAB meeting were sent out to RAB members. No edits or changes were requested. The RAB voted to accept meeting minutes as final.

Old Business

- The US Army Environmental Command (USAEC) has coordinated with the industrial well owners and the US Army Corps of Engineers (USACE) to get access agreements in place. The Army is working to establish a contract mechanism to connect three well owners to municipal water.
- The Army provided RAB members a handout that includes acronyms and definition of terms, including the different types of wells.
- A groundwater stakeholder meeting and Source Groundwater Recovery System (SGRS) tour took place on 16 August 2022 prior to the RAB meeting.
- The Army and regulators are finalizing the Record of Decision (ROD) for Round Lake, currently in the signature process.
- The Army will schedule a Round Lake Technical Working Group (TWG) meeting when the ROD is signed by all parties according to the Federal Facilities Agreement. This will likely occur in the September/October timeframe [2022].
- Since the last RAB meeting, the Army finalized the Fiscal Year (FY) 2021 Annual Performance Report (APR). The Army will distribute the final report in August 2022 and post on the TCAAP RAB website (<https://tcaaprab.org/>).
- The Army completed annual groundwater sampling in May 2022 for Operable Unit 1 (OU1) and Operable Unit 2 (OU2) in June 2022. Land use control inspections were completed in June. The groundwater data is currently being validated by the Army.
- The US Environmental Protection Agency (USEPA) noted the Minnesota Pollution Control Agency (MPCA) and USEPA would like to complete a final check of the FY 2021 APR review. prior to release, to ensure that their comments were sufficiently incorporated into the document. The Army agreed the USEPA and MPCA will receive the FY 2021 APR within an adequate review period.

### Groundwater Sampling Update

- The Army is currently validating data from the 2022 annual groundwater sampling event. The Army will update plume maps after data validation. The 2022 annual groundwater sampling event was a major sampling event and therefore collected more data points than the 2021 minor groundwater sampling event. Sampling events are scheduled as major and minor years, depending on the number of wells sampled. In 2022, nearly all wells were sampled, making it a major year.

### OU1 Optimization Update

- OU1 optimization efforts remain the same since the last RAB meeting.
- The Army and City of New Brighton agreed on a new well location central to the plume. It is likely that a well will be installed before next summer [2023] Well installation is anticipated to occur before summer 2023. The City of New Brighton prefers the well installation event takes place during low water usage periods before the summer. The Army continues to work with the City of New Brighton to ensure drinking water treatment operations remain unaffected.

### OU2 Optimization and Source Groundwater Recovery System (SGRS) Update

- Plume control evaluation will be completed during FY 2023 to determine plume capture effectiveness.
- The Army anticipates a pumping rate of 1,300 gallons per minute at building 116 in accordance with the operating strategy. The SGRS will operate at 500 gallons per minute. The combined pumping rates meet the 1,800 gallons per minute ROD requirement rate.
- The discharge water from SGRS and Building 116 will be sampled and analyzed in accordance with the ROD to ensure discharge standard compliance.
- Air sampling and modeling will occur at Building 116 and SGRS after SGRS is operational. Sampling results will be shared during the next Stakeholder meeting.
- A construction completion report will be submitted to MPCA and the USEPA.
- The SGRS system operational reports will be added to the FY 2022 APR.

## OU2 Sites

- At Site K, the overall goal of the treatability study is to improve the shallow groundwater remediation of Trichloroethylene (TCE). The US Geological Survey (USGS) samples on a monthly and quarterly basis. The USGS will present one year of data results at the next RAB meeting.
- The University of Iowa will initiate a phytoremediation study at Site G under the Environmental Security Technology Certification Program (ESTCP). The team submitted their work plan for regulatory review [in March 2022] and is awaiting approval. The study is expected to begin in Spring 2023.

## OU3 Update

- No change since the last meeting. Monitored natural attenuation continues.
- Annual groundwater sampling was completed in June 2022. Updated plume maps will be available in FY 2022 APR.

## Round Lake Update

- The Round Lake ROD is currently in the signature process.
- The Army will schedule a Round Lake TWG meeting after the ROD is signed by all parties. The Army will release the ROD to the public after USEPA and MPCA acceptance.

## What's Next

- OU1
  - Optimization identified the need for a new OU1 well in the City of New Brighton. New well negotiations are ongoing between the Army and City of New Brighton.
- OU2
  - The Army is planning well abandonment of 40 monitoring wells that are no longer necessary.
  - The installation of three monitoring wells will be completed in OU2, including optimization of the monitoring well network.
  - The Army will conduct a risk assessment for unrestricted land use.
  - The Army will conduct an Engineering Evaluation/Cost Analysis (EE/CA) for the Primer Tracer Area. If GSA sells the area, and EE/CA is not required.
- OU3
  - The Army will continue groundwater monitoring.
- Round Lake
  - The Army will publish the ROD.

## TCAAP Groundwater Flow and Transport Model (Meg Haserodt, USGS)

- The USGS is generating a groundwater flow and transport model intended to simulate the deeper groundwater system near TCAAP. This effort intends to estimate the expected plume capture from the SGRS (in OU1, OU2, and OU3).
- Expected model completion date is FY 2024.
- The model will focus on 1,4 dioxane and trichloroethene (TCE).

- The USGS completed the initial groundwater model and is refining the model this year.
- Next steps include groundwater flow model calibration and adding the transport component. The USGS will conduct pumping scenarios with the new SGRS treatment plant.

#### New Business

- The Army inquired about topics for future RAB meetings and noted that the next RAB meeting agenda includes the Site K Treatability Study and Site G work.
- RAB member suggested cleanup costs at TCAAP be reported at a RAB meeting. For example, when establishing or abandoning a well, what are the cost factors in that? Rather than looking through the annual report to Congress [on DoD clean-up costs] or looking through the ROD, the Army could provide one or two pages just for the Fiscal Year.
- The Army agreed to put forward estimated costs and brief the RAB at the next meeting.
- The Army asked the RAB how often they would like to meet moving forward and noted that there would not be a lot happening for a while other than normal groundwater monitoring now that the SGRS system is in place. The Army recommended meeting be held close to the next stakeholder meeting on February 21, 2023.
- The February RAB meeting may be virtual, pending weather conditions.
- One RAB member noted that it is important for RAB meetings to be timely for the Army [in terms of having updates available for the RAB] and added approval for the current location at the Ben Franklin Readiness Center.
- The Community Co-chair motioned to hold the next RAB meeting the same day as the Stakeholder meeting.
- The RAB agreed to schedule the next meeting on February 21, 2023, at 6:30 p.m.
- The Army will conduct a poll to determine preferred days of the week and weeks of the month to hold future RAB meetings. This poll will happen before the next meeting.

#### Closing

The Community Co-chair adjourned the meeting at 8:15 pm.

#### **Questions and Answers:**

##### Operable Unit 2 (OU2) Optimization and Source Groundwater Recovery System (SGRS) Update

- **Q: Is that why the Army is not utilizing all of the wells (because of the need to meet the 1800 gallons per minute rate required by the ROD)?**  
**A:** The Army is not utilizing those wells because some of the wells are not as effective at removing contamination (Linda Albrecht, USAEC).
- **Q: What is the contaminant of concern at Site G and what plants are they [the ESTCP team] using?**  
**A:** They are using a mixture of poplar and willow trees. They are evaluating the use of phytoremediation on 1,4 Dioxane and will have to treat the TCE and daughter products as well (Linda Albrecht, USAEC).

#### Round Lake Update

- **Q: What were the comments by the regulatory agencies [on the ROD for Round Lake]?**

**A1:** The regulatory agencies wanted to confirm the ROD was consistent with USEPA's template and contained accurate site details. The Army was very responsive to incorporate updates. There were many comments, but they were mostly minor in nature (Bridgette Hays, MPCA).

**A2:** The USEPA sought to make sure the ROD information is consistent with the Administrative Record. Exceptions include a few added applicable or relevant and appropriate requirements (ARARs) identified by the Minnesota Department of Natural Resources (MDNR). The MDNR comments did not significantly change the remedy implementation. The change was mostly an administrative change (e.g. the ARARs were included in the ROD and addressing those will be a design consideration during the design process) (Viral Patel, USEPA).

- **Q: Will the RAB be notified of the date for the next TWG meeting? Can the RAB attend the TWG meeting?**

**A:** The RAB's representative for TWG is Forrest (the Community Co-chair). He will report on what occurred at the TWG meeting. The TWG meeting is more for engineers and geologists etc., to discuss technical topics.

#### TCAAP Groundwater Flow and Transport Model (Meg Haserodt, USGS)

- **Q: Does the Army have boring logs from when the wells were installed?**

**A:** Yes, and the Minnesota Geological Survey keeps a state-wide database of boring logs, including wells drilled at TCAAP and others drilled within the model domain, which the model will incorporate (Meg Haserodt, USGS).

- **Q: Arden Hills is looking at Rice Creek Commons as a possible destination location for kayaking and canoeing. With that in mind, is Rice Creek in good condition for kayaking and canoeing?**

**A:** USGS is thinking about it more from the perspective of groundwater flow. However, the USGS routinely runs a gauge on the creek and collects flow data. The gauge data is available online (Meg Haserodt, USGS).

**A2:** USGS collects real-time gauge data and has a webpage dedicated to the Rice Creek water trail. The web page provides safety guidelines to identify creek conditions for paddlers (Kyle Axtell, Rice Creek Watershed District).

- **Q: Will you calibrate the model by running pumping scenarios?**

**A:** The model will be calibrated to current conditions (Meg Haserodt, USGS).

- **Q: Will the addition of the SGRS system to the TCAAP Ground Water Recovery System (TGRS) system change the flow?**

**A:** That is something that USGS will compare within the model (Meg Haserodt, USGS).

#### New Business

- **Q: What involvement will the RAB have with the Primer Tracer area?**

**A:** The Primer Tracer area is up for auction through the General Services Administration aka GSA. If they successfully sell the property, the Army will transfer the property, but the TCAAP cleanup team will have no further involvement. If GSA is unable to sell the property, then the Army will conduct a risk assessment on the remaining buildings/property and conduct an engineering evaluation and cost analysis. The Primer

Tracer area may be more easily sold/transferred if the buildings are gone, but the Army would evaluate that from a remediation standpoint (Linda Albrecht, USAEC)

**Q: Are Stakeholder meetings separate from the RAB meetings?**

**A:** Yes, the information presented to the Stakeholders is similar to the information presented to the RAB, but more technical information is provided to the Stakeholders. (Cathy Kropp, USAEC).

## **ATTENDEES**

### **Government RAB Members Present**

1. Bernard Walker (City of St. Anthony Village)
2. Brigitte Hay (MPCA)
3. Dave Perrault (City of Arden Hills)
4. Kyle Axtell (Rice Creek Watershed - Alternate)
5. Linda Albrecht (Army Co-Chair)
6. Mary Lee (MN ARNG)
7. Melissa Collins (WDNR)
8. Nicole Menard (USFWS)
9. Viral Patel (USEPA)

### **Community RAB Members Present**

1. Forrest Kelley (Community Co-Chair)
2. Kristine Poelzer
3. Lyle Salmela
4. Tim Donakowski

### **Army and Army Contractors Present**

1. Arthur Peitsch (EA Engineering)
2. Cathy Kropp (USAEC)
3. Heather McNabney (Environmental Research Group (ERG))
4. Robert Reine (USAEC)
5. Sergio Celis (ERG)

### **Visitors**

1. Brittany Mrivard (US Army Corps of Engineers)
2. Elizabeth Wiebke (The Office of Congresswoman Betty McCollum)
3. Meg Haserodt (USGS)
4. Rich Straumann
5. Robert J. Young
6. Susan Johnson (MPCA)
7. Unknown (Guest)
8. Unknown (Guest)