The Restoration Advisory Board (RAB) meeting was called to order by Jen Busard at 9:00 a.m. on 21 July 2020. Due to the pandemic, this meeting was held virtually over MS Teams.

Minutes Review

There were no corrections to the minutes from April 2020. There were also no public comments.

Agenda Review

The July 2020 agenda was accepted as written. Jeff Morrison then took a quick roll call of the attendees.

Environmental Services Update

Jeff Morrison of CH2M HILL, now Jacobs, presented an update on the Environmental Services Contract. Under the CERCLA program, the objective of the Remedial Investigation (RI) is to determine the nature and extent of contamination, to update the conceptual site model, and evaluate risk. 35 sites or areas were included in the approved Quality Assurance Project Plans (QAPPs) for Operable Unit 6 (OU-6).

Recently Jacobs finalized the Interim Human Health Risk Deliverable for Line 2 with EPA and is incorporating changes into risk assessments for all other sites at the Iowa Army Ammunition Plant (IAAAP). The team also finalized the Background Surface Water/Sediment Concentration Tech Memo with EPA. Jacobs and Leidos are continuing to work on draft RI reports for OU-4 and OU-11, and a draft final RI report for OU-9.

Fieldwork conducted in May/June 2020:

- Additional temporary well installation and groundwater sampling at the Line 3A Pond
- Temporary well abandonment at Line 3A
- Second seasonal seep survey at the Deactivation Area/Deactivation Furnace (DA/DF) (June/July 2020)
- Alluvial well installation and sampling at various sites:
 - West Burn Pad (WBP)
 - East Burn Pad (EBP)
 - CCL (Contaminated Clothing Laundry)
 - o InDA (Incendiary Disposal Area)

Jeff then showed an updated map with all the green stars showing that his team had completed all planned RI fieldwork at sites identified in the approved work plans.

A Site Inspection (SI) is underway for emerging contaminants called per- and polyfluoroalkyl substances (PFAS) at IAAAP:

- Draft PFAS SI QAPP was submitted to EPA for review in May
- Based on conclusions and recommendations of the PFAS Preliminary Assessment (PA)
- Field work planned at the former Fire Department, Fire Training Pit, and Trench 6 at the Inert Disposal Area (IDA) for later in 2020

Bioreactor Treatability Study

Jeff M. then provided a Bioreactor Treatability Study (TS) update. Jacobs is collaborating with Engineering Research & Development Center (ERDC) to evaluate a RDX treatment system for the South Tributary to Brush Creek.

- Construction completed in June 2020
- Phase 1 Drum-scale testing is now underway
- Preliminary results are highly promising
- Phase 2 Tank-scale testing is planned for August 2020

Jeff showed a series of photos showing the winter weir construction in February and what the Phase 1 (Drum) and Phase 2 (Tank) systems looked like as of March. He also showed a table with the TS preliminary results.

There were no further questions. Jeff Gamlin informed the group that drums mimic a 1:50 scale and are trying to determine what is the breakthrough time, is biochar by itself enough, or is biochar with iron the answer.

Steve Bellrichard asked when we would know the recipe. Heather Smith responded that we already know the recipe for Phase 2, but what we still want to know are the flow rates into the drums to know the contact time. We are checking the totalizer readings on the system to measure total throughput.

Jeff G. pointed out that the first round of samples is from the least favorable time because the system wasn't at a steady state yet.

Julie Solinski asked if we could quantify a "very long time." Biochar will last for decades.

Steve congratulated the team on the positive data. He wondered if we can compare with the boundary to the facility. Jeff G. qualified that the TS is focused on the tributary treatment and viability.

Vaughn Moore asked if there were filters inside. Jeff G. responded yes, but that the idea was for a filter that can regenerate itself.

Steve said he is very excited about the treatability study.

Building Demolition Status

Randy Doyle provided an update on the Building Demolition program. He indicated that there weren't any significant changes since his last update at the April RAB meeting because Bhate took some breaks during COVID; and because of that they are cleaning

RESTORATION ADVISORY BOARD MINUTES July 21, 2020

up many of the same buildings. All phases of the program are funded. Phases 1-5 are complete, Phases 6-8 are ongoing, and Phase 9 is being planned. Status: ~354 structures demolished; ~694k sq ft.

Randy reported that on Phase 8 they have one more facility to takedown after completing the flashing of the lightly contaminated equipment in there. The closed burn unit is on site and performing well now, after some initial startup issues were ironed out. Randy expects to be complete with the flashing of all of the equipment from these phases of the building demo program by the 18th of August.

Randy provided a project update in regards to recycling:

- Over 81,000 Ton of Concrete crushed for re-use.
- Over 2,500 Ton of metal recycled
- Realizing a 85% diversion rate of solid waste (concrete, recyclable items)
 Stockpiling some sand for future projects

With regards to environmental stewardship:

- 2,600 Ton of Asbestos abated (in ramps)
- 40 Ton PCB Contaminated debris abated
- Proper disposal of other regulated material (lead, ballasts, Hazardous Material)

Randy shared a series of photos:

- Line 800 is complete
- Line 6 is complete
- Line 5 is complete
- Line 8 is complete; 83 saddles were removed from the woods
- Line 1 is 95% complete
- Line 3 is 95% complete

Randy commented that the old powerhouse by Gate 4 has come down (he indicated it was an eye sore).

Julie asked about a previous question to the RAB about what the CERCLA status is of buildings that are coming down. Randy answered that they have been using GPS for the corners of the buildings and they had hoped to have American Ordnance (AO) do the sampling. Jen Busard talked with Army Environmental Command (AEC) and is working on funding for that sampling. Randy said they put down a layer of fabric to show the bottom of excavations so that the next contractor can come in and do sampling. Jen said that they have a list of buildings with possible contamination.

Julie said they haven't seen that as a presentation for the RAB. She has asked it a couple of times now. Jen will prepare a list to share at the next meeting.

Steve wanted to add that this does not apply to Line 1 which is a Formerly Utilized Sites Remedial Action Program (FUSRAP) soil sampling site. Randy added that FUSRAP sampling occurred as demo occurred. Julie asked if it is complete at Line 1. Randy said

RESTORATION ADVISORY BOARD MINUTES July 21, 2020

they are working with Mike Kessler's team on that and it is underway.

FUSRAP Update

Mike Kessler provided an update on FUSRAP activities. He started off with a new slide showing FUSRAP areas of responsibility in OU-1 and OU-8. He then reminded the group what the acronym FUSRAP stands for: Formerly Utilized Sites Remedial Action Program; to deal with former atomic energy commission radioactive waste. Assigned to the Department of Energy (DOE) and then transferred to the U.S. Army Corps of Engineers (USACE). Two OUs were assigned: OU-1 which is primarily explosives contaminated soils in Line 1 and the West Burn Pads (WBP) areas. OU-8 is predominantly looking for low level radiation. Mike presented a slide that shows how FUSRAP interacts with CERCLA and showed where we are at in the process at IAAAP. He revealed that we are still in the remedial action phase of process.

He then added that the West Burn Pad South (WBPS) of the road Remedial Action Completion Report (RACR) is now complete.

Additional remediation is required at Line 1:

- Buildings 1-70 & 1-05-1
- Additional sampling planned for the above plus Building 1-155-1 & 1-03
- Results of sampling at Building 1-40 on the next slides

Pre-design Investigation (PDI) Addendum is complete. Line 1 Remedial Action (RA) Scope of Work (SOW) is in progress. After RA is complete, FUSRAP may leave contamination if soil is inaccessible (i.e. buildings not demolished by the installation). Mike showed a slide for OU-1 to answer Julie's question from earlier. Building 1-03 is a former lab building and it tested positive for RDX in a couple of places.

OU-8: Depleted Uranium (DU) on structures at Line 1 and in soils at the Firing Sites Area (FSA):

- No radiological remediation required at WH 3-01, or Yards C, G, & L to be protective of the site worker
- Line 1 Structures remediation completed in 2015
- Remedial Action Completion Report (RACR) through REV B; will be final in August
- Firing Sites (FS) 12 Area:
 - RA complete in FS-1 through FS-15 except for FS-6
 - Final Status Survey (FSS) complete in 50% of FS-12 Survey Units (SUs)

Q3 2020 activities completed:

- OU-1:
 - Completed PDI Addendums for Buildings 1-70, 1-05-1, and 1-155-1
- OU-8:

- Sampling within Northern SUs
- o PDI of SUs 1-2-3
- Mobilized RA contractor; began excavation and processing of soils in Area I SUs
- o Gamma Walkover Survey (GWS) verification of remediated SUs
- EPA and IDNR review of Line 1 Structures RACR REV B
- EM-CX review of 2020 "West-Central" SUs PRAR/FSSE
- USACE review of Area E (Test Fire Pit) Excavation Plan (draft)

Q4 2020 activities planned:

- OU-1:
 - Collect additional soil samples per PDI Addendums
 - Complete development of SOW for Line 1 remediation contract modification
- OU-8:
 - Continue PDI/Verification work in hand-remediated SUs.
 - Continue excavation and processing of soils in SUs.
 - Finalize OU-8 Line 1 Structures RACR
 - Complete EPA and IDNR Review of 2020 PRAR/FSSE REV B
 - Finalize Area E Excavation Plan; begin RA
 - Begin restoration in Area I SUs

Mike then presented a slide with 2020 and 2021 goals:

2020 Goals:

- Ship 1,750 CY of >RG material
- Process 16,400 CY of material
- Stockpile 1,500 CY for future shipping
- 'Release' 30 Survey Units
- OU-1 WBPS RACR
- OU-8 Line 1 Structures RACR

2021 Goals:

- Ship 2,400 CY of >RG material
- Process 19,000 CY of material
- Stockpile 2,000 CY for future shipping
- 'Release' 25 Survey Units

Vaughn asked about 1-100 north of 1-10 x-ray and how much soil is left in there. Mike said they sampled around this structure. What about the 1-10 and 1-12, Vaughn asked. Mike said at 1-10 he still has a little spot on the northeast corner that is inaccessible due to the blast berm. At 1-12 there is a little bit and in a handful of cases there is contamination above the remediation goals (RGs) due to structures that remain. Some contamination at Line 1 will be left in place.

Vaughn then asked about 1-55 soil sampling and about cell 6? Mike asked Vaughn to email Jen his specific questions about buildings and sampling and then Mike can address them.

Steve commented about FUSRAP data. Kim-Lee with Jacobs has asked for it as well. Does our site wide interactive map have that data? Kim-Lee replied that it isn't in there. Mike is going to send it to her to include.

Steve added, maybe look into if it would be do-able in this format, or in-person meetings with the interactive map to show where samples have been collected.

There were no further questions.

Old Business - Action Items from Previous Last Meeting

Danny gave a presentation of the 5-Year Review (5YR) process that is required by CERCLA when hazardous substances are left onsite above action levels. A contractor, Dawson, is currently in the planning phases of the next 5YR. Danny clarified that the purpose of a 5YR is to review any remedies that have not cleaned up the site to Unlimited Use/Unlimited Exposure (UU/UE) and ensure that they remain protective. There are four OUs at IAAAP that will be part of this 5YR: OU-1, OU-3, OU-4 and OU-5. Dawson will conduct interviews with public members of the RAB as part of that process to provide input.

There are three questions that need to be answered during a 5YR:

- Question A; is the remedy functioning by the Record of Decision (ROD)?
- Question B: are exposure assumptions, toxicity data and cleanup levels still valid? Are they still protective? Are there new contaminants of concern (COCs)?
- Question C: any new information come to light? Was an ecological risk assessment done (sometimes not if an older site)? Natural disaster impact remedy?

Come up with a protectiveness statement. Army is the lead agency at IAAAP, but ultimate decision authority on protectiveness determination falls on EPA.

Public Notification: May 2020 there was a public notice in The Hawkeye and Democrat. Army Contractor (Dawson) will be reaching out to schedule interviews.

In current 5YR, the following OUs are being evaluated:

- OU-1 Soil
- OU-3 Off-post Groundwater
- OU-4 Landfills
- OU-5 MMRP Sites

Danny asked if Dawson started reaching out to the RAB? Jen replied they wrapped up

RESTORATION ADVISORY BOARD MINUTES July 21, 2020

interviews yesterday and tomorrow is the site visit at IAAAP. Then they will compile the document. The Draft is scheduled to go to the EPA on September 23.

Action Items for Today

- 1) Update soil sampling list after building demo
- 2) Julie wants a status update (not just a list)

Next meeting will be October 20 at 9 am. It may be virtual again.

Meeting adjourned at 11:26 am

Original signed by:

Original signed by:

Original signed by:

Sarah Brockway Secretary Elyn Holton-Dean Community Co-Chair

Jen Busard Army Co-Chair

Exhibits: 1 Attendees

2 Agenda

3 Remedial Investigation Update

4 Building Demolition Status

5 FUSRAP Update

6 EPA 5YR Presentation

RESTORATION ADVISORY BOARD MINUTES July 21, 2020

Exhibit 1

GOVERNMENT MEMBERS PRESENT (4)

LTC Eric J. Schilling Dan Cook Jen Busard Danny O'Connor

RAB MEMBERS PRESENT (5)

Vaughn Moore Robert Haines Hans Trousil Julie Solinski Bruce Workman

PUBLIC PRESENT (23)

Zaynab Murray
Steven Bellrichard
Jeff Morrison
Mike Kessler
Sarah Brockway
Aaron Steele

Rachel Williams

Randy Doyle

Scott Smith

Kim-Lee Yarberry

Brooke Thye

Dean Johnson

Heather Smith

Hunter Blair

Kirk Bargerhuff

Jeff Gamlin

Angela Leek

Amanda Smith

Shelly Mellinson

Ryan Drew

Renie Aitken

Kellie Orth

Matthew Bange

Total in attendance: 32