RESTORATION ADVISORY BOARD MINUTES
January 15, 2019

The Restoration Advisory Board (RAB) meeting was called to order by Jen Busard at 9:03 a.m. on 15 January 2019 at the West Burlington City Hall. The RAB Co-Chair, Elyn Holton-Dean is on her way.

Minutes Review

The October 2018 meeting minutes were accepted as written.

Agenda Review

The January 2019 agenda was accepted as written.

Amendment to RAB Operating Policy

Jen introduced that there have been a few updates to RAB Operating Policy, which are the first changes since 2007. Changes are in redline format to see amendments. Bruce Workman asked about edits on page 2. Are G, H, and I being eliminated or rolled into F? Jen answered that those were an editing issue and are not being removed. Mark Hagerla asked about acronym being used and Jen said Army has changed it to IAAAP. The vote would require 2/3 to be in favor. Hans Trousil made the motion, Bruce Workman seconded it, and the RAB unanimous approved it verbally.

Old Business – Action Items from Previous Meeting

Jeff Morrison of CH2M HILL, now Jacobs, spoke to the action item that he had from the last meeting about Mathes Lake. Jeff presented slides addressing some of the history and contamination at the lake and reviewed the Preliminary Assessment (PA) previously conducted. During the PA, a review of historical reports and records was performed, interviews were held with RAB and IAAAP members, and site visits were conducted.

The PA finalized in 2016. The lake was used as drinking water source from 1941 to 1977 and it is now recreational. 16 CERCLA sites are currently upstream and being investigated. H&S looked at previous work that had been done as far back as 1981, including a Base-wide Ecological Risk Assessment (BERA) and the 1996 Remedial Investigation (RI) by Jaycor.

Jeff then presented a map showing the 41 previous locations that had been sampled at Mathes Lake, including 23 locations from within the lake. A list of the all the historical analytes was shown, including Depleted Uranium (DU).

The Conclusions from the PA were the following:

- Sites upstream could have contaminated the lake; however, most have been addressed through remedial action or are being addressed and have undergone long term monitoring.
- Other than the observation of coal in the reaches of the lake, there is no evidence indicating potential upstream sources have adversely impacted the lake.

- 2003 and 2005 samples collected downstream of possible DU sites (Inert Disposal Area [IDA] and Firing Site [FS] Area) did not indicate a DU release in water beyond the site boundaries.

As part of the SI Quality Assurance Project Plan (QAPP), some additional data evaluation was conducted of FUSRAP data from 2014 to 2016. This evaluation helped inform the sampling plan implemented by Jacobs of collecting 10 co-located surface water and sediment samples.

The recommendation of the PA was that since some of the data were older, and the previous investigations were base-wide and not Mathes Lake-specific, that a Site Investigation (SI) would be conducted at the lake.

Steve Bellrichard clarified why we presented the PA at this meeting, it was to get the RAB ready for next meeting when the SI data will be presented. He also clarified that no DU was ever found at the IDA, but that site is located right next to the Firing Sites so that may be part of the confusion.

Mark Hagerla asked what is our team's analysis of all that? Jeff replied that it directly supported the scope of SI field work in terms of number of samples collected, sample locations, and which analytes to sample for.

Vaughn Moore asked did we check the settling pond behind the powerhouse? Jeff replied that we did not and that we followed the CERCLA process as discussed by Aaron Steele at previous meeting. The SI will be a presence/absence investigation to see if there is large enough problem to lead to an RI with additional sampling, risk assessments, etc. Steve added that we will be looking at chemicals and analytes that were suggested in PA as potentially being a problem, including uranium from coal at the boiler house. Anything that was upstream of Mathes Lake was considered during the PA (16 Sites) as discussed earlier in slides. Steve clarified that he didn't think there was any DU found at IDA.

There were no further questions.

Environmental Services Update

Jeff Morrison then presented an update on the Environmental Services Contract. Under the CERCLA program the objective of the 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 QAPPs for OU6.

IAAAP is divided up into eight Operable Units (OUs). CERCLA is a complicated process and the OUs are at different phases in the process. Jacobs is primarily focused on OU6, the groundwater beneath the facility. Three of our four QAPP packets have been approved. We have started implementing that work. QAPP Packet #4 is behind the others and has been separated off on its own schedule, which is focused on the IDA.

The RI field investigation commenced this past summer, continued through the fall, and the data is coming in now. Field work is completed at 10 sites in 2018.

- Additional delineation is planned at 3 areas
- No exceedances were found at 4 areas
- Plumes appear delineated at 3 areas

Jeff showed a map with a summary of which sites have been completed and which still need to have RI work conducted.

We have started work at 7 additional sites:

- 3 areas require sampling of 1 well
- 3 require a second round of groundwater monitoring
- 1 requires surface soil sampling and 2 wells installed

8 sites we haven't even started yet. QAPP Packet #3 was approved too late in 2018 to get any field work done before winter. Jacobs team is currently preparing plume maps and potentiometric maps showing where groundwater and contamination are flowing based on the data collected to date.

One site, the Incendiary Disposal Area (InDA) has a bridge that has been deemed structurally unsafe to drive over is postponed until at least 2020 since it is also now classified as a historical bridge by State Historical Preservation Office (SHPO). Jen clarified that the plan is to have the bridge completely replaced.

Julie Solinski asked about which three sites require additional delineation. Jeff replied that it was the Contaminated Clothing Laundry (CCL), Line 3A and one other (he thought it previously was Line 800, but that one will no longer require additional work and the slide may not have been updated).

Julie asked what it meant to delineate a plume and Jeff answered that the RI work was to determine the nature and extent of the contamination.

Vaughn asked if the InDA is also fenced in. Jeff answered that it is.

Operable Unit 3 (OU3) is the offsite plume that Darlene Abbott with Aerostar presented at the last RAB meeting. Her team will install wells at offsite residence locations, will sample groundwater and surface water, and conduct a one-year transducer study to better understand groundwater flow. OU4 work is being conducted by Leidos under QAPP Packet #4. That document is currently being reviewed by EPA. OU7 and OU9 have no additional work at this time. There are some unassigned sites that have additional work.

Mark asked if we have monitors in areas where heavy rainfall in ditches. Jen answered that Heather Smith and her team with Engineering Research Development Center (ERDC) is working on a Line 1 Treatability Study and is looking at tributaries that are contributing to Brush Creek. Steve replied that there are auto samplers that can be used by Heather's team.

Vaughn asked how much RDX was found under Bldg 1-70. Mike replied that it was present but didn't have a quantity yet.

Julie asked what the unassigned sites are. Jeff explained that these were Leidos areas to be sampled within OU6, and Jen added that these are listed in the QAPPs. Julie also asked what the three sites are that require additional delineation.

There were no further questions.

FUSRAP Update

Mike Kessler provided an update on FUSRAP activities. He began by reminding the team what FUSRAP stands for: Formerly Utilized Sites Remedial Action Program to deal with former atomic energy commission radioactive waste. Assigned to DOE and then transferred to USACE. Two OUs assigned: OU1 primarily explosives contaminated soils in Line 1 and West Burn Pads (WBP), while OU8 is for predominantly looking for low level radiation. Mike introduced Nick Copeland and Greg Rakers, two team members he brought with him to this meeting.

Started OU1 remediation at WBP and was completed in 2010. Mike provided an overview to explain what we are really going after. Wastewater sources that contain the RDX and a by-product of the melt pours (Bldg 1-05-01 and 1-05-02) and sheeting processes. Buildings had sumps where contaminated wastewater would settle, had clarifiers, sludge would build up and be taken out of the sumps and clarifiers. Wastewater would be further treated in Bldg 1-70 and 1-70-01, and the sludge would be taken to the burn pads.

Mike then provided a summary of 2018 activities, sampling results, and planned 2019 activities. Bldg. 1-70 was removed and FUSRAP sampled in vicinity. Contamination was found there, and it needs remediation for RDX. FUSRAP will sample in 2019 in Bldg 1-05-01 and Bldg 1-40, and with EPA, made the decision to do a Remedial Action Completion Report (RACR) for WBP.

Within OU8, FUSRAP has 7 sites assigned per the ROD.

DU and its 3 isotopes were sampled. One of Mike's previous action items from last RAB was to answer about cesium and tritium. While these two compounds were not COCs in the ROD, and not specifically looked for, they do end up analyzing for both of them and neither one is present.

Mike showed an OU8 photo that depicted yellow oxidation shown in upper photo. Health risk assessments found that one would have to be exposed to DU > 150 and for a long duration. No remediation is required at the Yards, but it was required at FS 12.

Mike reiterated the 3-step process that FUSRAP uses: pre-design investigation, remediation, verification. One of the questions from last time was how do we protect our workers? Mike showed a slide with workers wearing latex gloves and booties if potential for RAD exposure. In construction zone, they wear hard hats, hearing and eye protection. All workers are scanned when they leave zones with potential RAD.

Mike presented his FS-12 survey unit overview. FS-12 pre-design investigation shows the original General Excavation Area (GEA) and the extended GEA. Four areas still to finish. Currently felling trees and clearing brush on east side since that has to be done

in winter. Will resume southern areas this Spring.

Mike presented 2018 accomplishments and 2019 goals. His team didn't get as much excavation done as he hoped in 2018. For Transportation and Disposal (T&D) in 2018, they started after Thanksgiving to transfer material from FS to M-Yard. Loaded material into railcars. Ground tarp used to capture spillage. 100 tons of soil per rail car. Telehandler used to reinstall lid. Rail cars are lined with plastic bag. Army switch engine moves loaded cars to A-yard. Ultimately disposed of in Utah. In 2018, 9000 yards processed for second year in a row. Shipped 1155 CY for disposal.

Julie asked about the new contractor. Mike wasn't part of the source selection process, but he announced that it is going to be Cabrera.

Mark asked what does "cleaned up when economically feasible mean"? Mike replied it has to do with timing of remediation. Mobilization/demobilization is a significant cost so Mike wants to bundle sites to clean up together for cost efficiency. Steve clarified that OU1 ROD sets limit of what must be remediated in terms of cleanup levels of RDX.

There were no further questions.

Building Demolition Status

Randy Doyle, Environmental Coordinator at IAAAP, presented the demolition update. The demolition is part of the Army restoration program to abolish obsolete infrastructure. Randy indicated that they are now up to 9 phases. Bhate is doing the abatement and demolition work and it will be over 1 million square foot of demo when all phases are done. Randy said that Bhate has provided consistently good work and is supported by using many local businesses.

Team is currently working on Line 1. Phase 8 is driving schedule right now and Line 3 is currently planned for spring. Continuous improve process for keeping costs down. Working with a RCRA permit for a flash burn remediation process with a new subcontractor.

Randy provided a project status that 241 structures demolished. With regards to recycling:

- Over 42,000 Ton of Concrete crushed for re-use
- Over 1,300 Ton of metal recycled
- Realizing a 85% diversion rate of solid waste (concrete, recyclable items)

Modernization is huge component of this project. New solid waste and recycling facility was recently funded and that is exciting for IAAAP.

Abatement of asbestos is one of the most expensive and most important processes that his team is currently doing. With regards to environmental stewardship:

- 1,443 Ton of Asbestos abated
- 40 Ton PCB Contaminated debris abated

- Proper disposal of other regulated material (lead, ballasts, HM)

Vaughn asked about buildings 101 and 104 are they still there? Randy said they are part of Phase 7 and are coming down soon. Vaughn then asked about the rail lines. Randy said that a contractor is taking those free of charge.

Vaughn asked if they have started on Bldg. 1-40? No, done with abatement but they found a new floor in between and some pipes. Vaughn called it the Pipe Chase. Bldg. 1-40 is a large project for Randy's team.

There were no further questions.

Action Items for Today

Jen asked about action items for next meeting. She noted that the suggestion of one slide per page was a good idea last time and helped everyone read these easier.

Aaron Steele wasn't able to attend today, so his action item will be carried over to the next meeting.

Jen reported to team that a contract is being worked on to sample under buildings as they are demolished (CERCLA action). Not part of the FUSRAP contract.

The Mathes Lake action item was answered by Jeff earlier.

Julie asked about RI for OU6 what the third site is needing delineation and what were the unassigned areas. Jeff took those action items for next time.

Elyn asked if there were any public comments.

Dan Cook of IDNR asked about the explosion at IAAAP a couple of weeks ago. Commander answered it was warhead. Randy sent an email to the regulators that there was an incident but that there were no environmental concerns and that it was contained. Randy sent an email to Ruby and will forward it to Dan Cook.

Vaughn asked if anyone is even concerned about TNT in ground or leaving it ground? Randy said it will be all part of the CERCLA process. Steve responded that sampling for explosive captures. Steve responded when samples are analyzed for explosives they get results for RDX, TNT, HMX, etc.

Scott Smith stated that the Government uses a lot of acronyms. He asked if we can either use an attachment have a list of ones used, and or make sure they are spelled out first time they are used? Jen replied that we use an acronym page in all our documents. Steve suggested that we include an acronym page as a handout along with the newsletter at the sign in desk next time.

The meeting was adjourned at 10:32 a.m.

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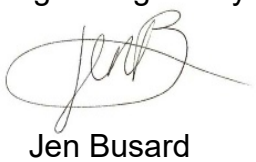
Original signed by:	Original signed by:	Original signed by:
		
Sarah Brockway	Elyn Holton-Dean	Jen Busard
Secretary	Community Co-Chair	Army Co-Chair

Exhibits:
1 Attendees
2 Agenda
3 Remedial Investigation Update
4 Building Demolition Status
5 Mathes Lake Update
6 FUSRAP Update

Exhibit 1

GOVERNMENT MEMBERS PRESENT (3)
LTC Stephen T. Koehler
Dan Cook
Jen Busard

RAB MEMBERS PRESENT (9)
Doug Coyle
Vaughn Moore
Robert Haines
Bruce Workman
Dean Vickstrom
Julie Solinski
Hans Trousil
Mark Hagerla
Elyn Holton-Dean

PUBLIC PRESENT (15)
Kellie Orth
Dean Johnson
Steven Bellrichard
Randy Doyle
Jeff Morrison
Rachel Williams
Mike Kessler
Sarah Brockway
Amanda Smith
Len Osinski
Kathy Christy
Scott Smith
Mark Dunne
Nick Copeland
Greg Rakers

Total in attendance: 27