

## RESTORATION ADVISORY BOARD MINUTES

July 16, 2019

The Restoration Advisory Board (RAB) meeting was called to order by Jen Busard at 9:00 a.m. on 16 July 2019 at the West Burlington City Hall. Jen introduced LTC Eric Schilling as new commander for the Iowa Army Ammunition Plant (IAAAP). She also said that Elyn Holton-Dean, Julie Solinski and Bruce Workman will not be here today.

### Minutes Review

The April 2019 meeting minutes were accepted as written. There were no public comments.

### Agenda Review

The July 2019 agenda was accepted as written. There were no further questions.

### Environmental Services Update

Jeff Morrison of CH2M HILL, now Jacobs, then 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 to evaluate risk. 35 sites or areas were included in the approved Quality Assurance Project Plans (QAPPs) for Operable Unit (OU) 6.

Jeff provided a field work status. In late April and early May, Jacobs continued their groundwater investigation at Line 3A Pond, Line 3A, and Contaminated Clothing Laundry (CCL). Leidos was also out in the field during the spring and performed groundwater investigation at the following sites: Firing Sites Area, Fly Ash Disposal Area, Yard C, Yard G, Building 600-86, and Unidentified Substance (Oil) Waste Site.

He then discussed pending work planned for the late summer/fall:

- Well re-development and re-survey at various sites
- Ecological surveys
- OU-3 data gap investigation still pending
- Additional groundwater sampling at Line 3A, Line 3A Pond, and Line 9.
- Overburden and bedrock well installation and sampling at various sites:
  - Demolition Area/Deactivation Furnace (DA/DF)
  - North Burn Pads
  - West Burn Pads
  - East Burn Pads
  - CCL

Jeff then showed an updated map with stars showing completed sites and mentioned that some of this work was on hold pending funding, while other (OU-3) was delayed due to access issues with off-site landowners.

He then discussed some other future work that is pending. A Site Investigation (SI) is planned for emerging contaminants called perfluoroalkyl substances (PFAS) for the Fire

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Department, Fire Training Pit, and Trenches at OU-4. PFAS are compounds historically used in fire-fighting foams. This work is planned to start in the second half of 2019 after the contract is modified.

The Incendiary Disposal Area (InDA) site is still lagging others in the RI program due to access issues. Jen said the bridge is scheduled to be demolished in September. The new bridge will be designed by the end of the year and construction will begin in early 2020.

Jeff then shared an update on the Mathes Lake SI. He explained the delays from the lab which has affected their reporting schedule:

- Draft SI report scheduled to be delivered to the Army in May 2019
- Draft SI report scheduled to be delivered to the Environmental Protection Agency (EPA) in July 2019

He reminded the group that we need to follow the CERCLA review process, so we are unable to discuss Mathes Lake results until that document is reviewed by EPA and finalized later in 2019.

Jeff then provided a Bioreactor Treatability Study Update. Jacobs is collaborating with Engineering Research Design Center (ERDC) to evaluate the RDX treatment system from the South Tributary to Brush Creek. He filled the team on recent activities:

- Conducted site survey in April and began work on 60% Design Drawings/Specifications
- Preparing Treatment Plan for pilot study
- Construction tentatively scheduled for September 2019 and pilot study in October 2019

Jeff discussed there will be two phases of treatability testing, a smaller-scale drum testing in Phase 1, and a larger tank testing in Phase 2. He then shared some photos of the location for the treatability study.

Vaughn Moore asked about soil samples at Line 3A. Jeff replied we collected groundwater samples there. Vaughn said tanks leaked and that is how silver got into the Firing Site (FS). Chemicals they used to separate silver and gold and plutonium were recycled there. He then asked about the site down on K road and if they removed lead out by the creek. Jen said they did a removal action (TCRA for lead bullets).

Vaughn then asked about Line 9 and if we sampled the drainage area there? Vaughn asked if we were sampling soil? Jeff clarified that we were focused on groundwater sampling for this investigation and on data gaps. Vaughn then asked about 5 acres of freon in the soil? Jen replied that is what we are currently investigating.

There were no further questions.

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### FUSRAP Update

Mike Kessler provided an update on FUSRAP activities. He 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 is primarily for explosives contaminated soils in Line 1 and West Burn Pads (WBP), while OU-8 is for low level radiation. For OU-8, there are 7 sites in the FUSRAP Record of Decision (ROD): Line 1 structures, West Burn Pad (South), Firing Sites Area, Yard C, Yard G, Yard L, and Warehouse 3-01.

At OU-1 there has been no additional demo work since the April RAB meeting. The focus has been on West Burn Pad South (WBPS) of the road. Remedial Action Completion Report (RACR) is currently at Cx (Army Center for Excellence) for review, and it will go to EPA and Iowa Department of Natural Resources (IDNR) next. This RACR does include a risk assessment.

One of Mike's action items from the last RAB meeting was to answer Vaughn's question about the amount of material removed at OU-1:

- 25,336 tons of material were remediated from the WBPS
- 22,996 tons of material have been remediated from Line 1

Mike added that we are not finished with Line 1 yet so the slide is "to date". He then pointed out the six excavation areas. There were 13,000 of contaminated material that was disposed of on-site at the Inert Disposal Area (IDA) in Trench 6. The remaining 11,000 tons of soil was disposed of off-site. FUSRAP is also drafting a RACR for Line 1 structures. At the Firing Sites Area (FS) we are remediating the depleted uranium (DU).

Mike presented a photo circa 2010/2011 in a slide of Firing Site-12 (FS-12). In the photo, he wanted to point out the oval trees on the left hand side that he has talked about remediating at past meetings. There were 49 original survey units that were each about a ½ acre size. The green line indicates the General Excavation Area (GEA). Now there is an extended GEA since the area of contamination is much bigger than originally anticipated. The GEA is where they use mechanical sorting process, which is the most economical way to remediate DU.

Hans Trousil asked why more units to the west instead of the east? Mike answered that investigation took them further north and west. They followed the extent of contamination based on sampling. Quonset hut and the FS-12 structure shielded some contamination in the east and south. Vaughn replied that whichever way the wind was blowing, that is where the shots went.

Mike indicated there will be a shift going forward to talk about the entire 118 survey units (SUs) and to not differentiate by contract or remediation contractor. He emphasized a "one team" approach to FUSRAP presentations. He then showed a series of slides with survey/remediation status (e.g. PDI in progress, complete).

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Some highlights are:

- PDI in progress on 13 SUs. Smaller trees cleared, brush cleared.
- PDI complete about 6 SUs. Gamma walkover surveys completed.
- 17 SUs where remediation is pending.
- About 19 SUs have Final Status Survey (FSS) complete. Another 18 or so where MARSSIM Evaluation Report (MER) is complete.

Mike then shared slides that showed the Third Quarter activities completed at OU-1, OU-8 and in general, as well as the Fourth Quarter goals for each of those.

Mike shared a photo of the Iso-Sphere S3 System and said that Sarah Brockway put together a nice article in this month's newsletter about it. Mike will have a video of this system at the next meeting.

Mark Hagerla asked what kinds of things are you finding in the processes? Mike replied it is designed for finding DU in the soil and it is performing well so far. It has a larger trammel than the previous contractor had, and this new one is almost as big as the S3 system itself.

It averages anywhere from 150 to 160 cubic yards of processed soil per day. Mark asked what you are finding. Mike said it varies with the area. For example, from ground zero in GEA it has a high percent of diversion rate. It drops off to 5-10%.

Danny O'Conner clarified that the outer areas are being hand remediated, as opposed to the highly contaminated areas where detonation occurred that is being removed with an excavator. In outer areas the DU is more widespread and you don't need to grab buckets of soil and sort.

Hans asked if it is just soil. What about the chunks in the last slide? Mike answered that most of the time we are finding fragments. The particular chunk in the photo was found in a ravine that runs through there. That chunk was an anomaly since most of the fragments are the size of an eraser.

There were no further questions.

### **Building Demolition Status**

Randy Doyle was unable to be here today, so Jen provided a brief update on Building Demo. They are currently working at Line 3. Phases 1-8 are 100% funded. Phase 9 is still in the planning phase. Jen then presented photos and updated statistics from Randy.

Jen provided a project status that 281 structures have been demolished and approximately 450,000 square feet. With regards to recycling:

- Over 60,000 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)

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

- 2,500 Ton of Asbestos abated
- 40 Ton PCB Contaminated debris abated
- Proper disposal of other regulated material (lead, ballasts, Hazardous Material)

Vaughn asked where are we at Line 1. Jen replied the plan is to go from Line 3 back to Line 1 to finish up, then Line 3A. Randy thinks they will start on 1-40 soon and some smaller buildings after that. They have two melt pours done.

There were no further questions.

### **Old Business – Action Items from Previous Last Meeting**

Jeff covered the Bioreactor action item in his presentation earlier. Hans asked if the Bioreactor would be under construction in October. Jeff said he hopes so.

Jen had an action item for cleanup figures at the plant since the first RAB meeting in 1997. Sarah went through old minutes and found the following:

- 103 miles of active rail track. Much of it being replaced.
- 13 miles of active steam lines.
- In 1941 there were 12,000 employees, and today there are 773 AO employees.
- The Installation Restoration Program (IRP) has excavated 184,637 cubic yards (CY) since 1997.
- FUSRAP has removed 50,782 tons at Line 1 and WBP, and 43,857 CY at Firing Sites Area since 2013.
- OU-5 Military Munitions Response Program (MMRP) total cleanup and use/reuse: 8 sites and 4 of them concluded no evidence of munitions or explosives of concern (MEC). The other four (Central Test Area (CTA), Line 6, Possible Demolition Site (PDS), and InDA) are all fenced. Jen added that they are working with USACE Omaha to get the CTA and Line 6 cleaned and then tear the fences down. 4 sites are under Land Use Controls (LUCs) and are part of the ongoing RI for groundwater.

Mark asked about how much money has been expended. Jen was not able to determine that, since there have been so many contracts. She called DFAS for a history of contracts, but not everything is electronic. Jen started in 2017 and could provide Costs to Complete figures, but these are just estimated costs and not actuals spent.

Danny suggested that remediation costs may be easier to research since you can get from RODs. Investigation amounts could be tough to find.

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### Action Items for Today

One public member asked if the Admin Record has all the old meeting minutes. Jen answered yes, the link is [IAAAPrestoration.com](http://IAAAPrestoration.com).

Mark asked about off-site residents being hooked up to water south of the plant. Jen replied that she is tracking off-site residents and that OU-3 is being monitored/ sampled. She then added that the hotspot is no longer a hotspot based on the latest data since last October.

Mark said he is also concerned with the southwest side of the plant. Augusta road is right before you get to Lee town. Jen mentioned that she has looked at the map and there are 153 total Rathbun water hookups from the two hookup events (early 90's and 2001). We are still sampling Brush Creek and the contamination has decreased. The thought is that building demo is helping by removing the contamination.

Mark asked about where the fenced in areas are located in the southeast corner of the plant. Was there a dump area from the Atomic Energy Commission. Vaughn verified that AEC did use that as dump. There are some MEC in that area. Jen added that after the bridge is replaced, the InDA will be investigated.

Danny suggested that Jen should provide a map of the fenced in areas for OU-5 at the next meeting. It could show the 8 areas that were MMRP, and which needed to be fenced in and needed soil removal actions.

Next meeting will be October 29 at 9 am.

Meeting adjourned at 11:30.

Original signed by:



Sarah Brockway  
Secretary

Original signed by:



Elyn Holton-Dean  
Community Co-Chair

Original signed by:



Jen Busard  
Army Co-Chair

- Exhibits:
- 1 Attendees
  - 2 Agenda
  - 3 Remedial Investigation Update
  - 4 FUSRAP Work Status Update
  - 5 Building Demolition Status

Iowa Army Ammunition Plant  
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Exhibit 1

**GOVERNMENT MEMBERS PRESENT (4)**

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

**RAB MEMBERS PRESENT (5)**

Vaughn Moore  
Robert Haines  
Dean Vickstrom  
Hans Trousil  
Mark Hagerla

**PUBLIC PRESENT (12)**

Dean Johnson  
Steven Bellrichard  
Matthew Bange  
Jeff Morrison  
Mike Kessler  
Sarah Brockway  
Kathy Christy  
Scott Smith  
Bruce Munholand  
Aaron Steele  
Zaynab Murray  
Brooke Thye

Total in attendance: 21