

RESTORATION ADVISORY BOARD MINUTES

July 17, 2018

The Restoration Advisory Board (RAB) meeting was called to order by Jennifer Busard at 9:00 a.m. on 17 July 2018 at the West Burlington City Hall. Elyn Holton-Dean is not attending today.

Minutes Review

The April 2018 meeting minutes were accepted as written.

Agenda Review

The July 2018 agenda was accepted as written.

New Business

Jen Busard indicated that they have an application for a new RAB member, Julie Solinski, and we need to take a vote to have her join the board. Vaughn asked, did you work at the Plant? Julie replied that she was on staff in Quality Assurance for 33 years and in property. The Board voted her in as a member and she will join for the next meeting.

Jen asked about changing the date of the next meeting to Oct 23 due to conflicts. Randy clarified Region 7 EPA administrator and IDNR environmental chief have been invited. Nobody objected so Jen will update the website and get email reminders out with the new date.

Remedial Investigation Progress

Jeff Morrison of Jacobs presented the Remedial Investigation update. Two of the four Quality Assurance Project Plan (QAPP) Packet work plans are approved and the field work has started on those. Still waiting for approval of Packet #3 for the offsite plume. Packet #4 is lagging behind the others in terms of schedule. The Army just responded to EPA comments for the Mathes Lake Site Investigation (SI) QAPP, and sent the Draft Final work plan back to EPA.

Started fieldwork in late April 2018 with staking and clearing vegetation, marking utilities, and clearing sites for UXO avoidance. Groundwater samples were taken and the initial sampling event was done in advance of the larger drilling event for confirmation. During the month of June, 32 temporary and permanent wells at production lines, were installed and some additional groundwater sampling at the Central Test Area (CTA) and the North Burn Pads (NBP) was conducted. All of these were shallow, overburden wells. A hollow stem auger drill rig was used. Just this week we are mobilizing a sonic drill rig for bedrock drilling. The majority of surface water and groundwater sampling will be conducted after both drilling phases have been completed.

Leidos has drafted an Explanation of Significant Differences (ESD) and is working through comments from the DoD and EPA. It amends the Record of Decision (ROD) and gets a lot of scrutiny by all the parties. It also includes the Fire Training Pit.

Bruce Workman asked, what is the average depth of water and what does shallow mean? Jeff Morrison answered that it varies across the facility but is generally 20-30 feet. Bruce asked how the wells worked, and are the pipes perforated. Jeff explained

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how a monitoring well screen is a slotted pipe screened at 5 or 10-foot lengths in the targeted zone to sample.

Hans Trousil asked if the dryness helped our investigation. Jeff replied it has helped for construction of the wells. Thunderstorms did cause some delays for safety. The dry season hasn't affected the groundwater in terms of the water table level it is more of an issue with surface water.

Mark Hagerla asked, what are the results of some samples that we have collected so far? Jeff replied that we are still analyzing and will send it to data validation next to ensure lab followed QA/QC. Based on screening levels, some sites had data that showed we had more contamination and other samples showed that there was less than we previously had.

Mark asked does this include water runoff. Jeff replied we will be doing some surface water samples in the fall. We are focusing on groundwater first in the approved work plans which focuses on groundwater. The surface water samples will be collected after QAPP Packet 3 is approved. Mark said that he understood from previous minutes that samples will be collected from all the tributaries at the facility.

Vaughn Moore asked whether we are looking for all contaminants or just selected chemicals. Jeff replied that each sampling effort is focused on selected chemicals based on previous results and the use of those sites. Mark asked, are you using all new wells or are you using existing wells. Jeff answered both, and that we are trying to find data gaps.

Mark said that he is very concerned about the RDX contamination that escapes from the Plant during runoff from rainfall events. He thinks that it is critical that the Army finds out what the source is. Mark then asked if our contract includes finding out what the sources to the creeks and rivers are. Bruce added that we need to have a Tech on the site to sample runoff during the rain. Bruce then asked, how often do we sample the wells? Jeff replied annually. Randy Doyle then asked Bruce if he was referring to RDX discharges to the stream, because there seems to be confusion about surface water and groundwater sampling. Randy added for surface water discharge monitoring reports (DMRs) we do monthly sampling as part of our permit. There are permitted limits of what amounts we can discharge, and a Notice of Violation if we exceed that.

Vaughn asked if we are sampling offsite at all. Jeff replied we are in OU3 and that is a part of QAPP Packet 3. Bruce asked what the total number of wells are. Jeff answered that Jacobs added 32 this summer, and Jen added that there are 532 facility-wide wells. Vaughn mentioned the rock quarry filled up with water because of a 10 $\frac{3}{4}$ " rain event that went over the fields into the rock quarry and then Brush Creek overflowed.

Mark asked if there was any ongoing treatment of the offsite plume. Aaron Steele answered surface water is monitored monthly and groundwater is monitored annually. Mark clarified that he was asking about treating, not monitoring. Aaron replied that part of this contract will be to evaluate treatment and produce a ROD.

Mark asked, what is the coordination between contractors, and who is in charge of

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overseeing? Aaron answered that the EPA is the lead agency. Army Corps supports IAAAP and oversees the contractors. Mark asked if historical results are used and built upon or does every contractor start over. Jeff replied that the current investigation is built upon previous work and we are filling data gaps. Mark asked about the sugar water that was used to treat the plume. Aaron clarified how the offsite plume treatment came about. The sugar water injection and addition of bugs temporarily worked to lower the concentrations to below the levels. Concentrations have increased above the remedial goals. While it was effective at the time, we now need a more permanent and lasting solution.

Aaron explained that all three Corps of Engineers groups meet weekly to discuss what all the contractors are doing. There is significant coordination and a lot of communication about all the moving parts. Aaron then pointed out that the Jacobs contract is a little over \$7 million dollars once all the options are exercised plus a little more depending on what we find. This is a significant effort and that is why it is taking so long to get the work plans approved.

Danny clarified that the Army is the lead agency for IAAAP, and that the EPA is the lead regulatory agency. Jen added that Aerostar is the lead contractor for the offsite plume and that it has gotten smaller over time. Line 1 has long been thought to be the source of contamination for Brush Creek and the offsite plume. Several buildings are being demoed, such as 1-70 which is a likely culprit.

Mark said he is still upset about fencing off certain areas on the facility instead of restoring the ground. Jen explained that the MMRP was decided a while back and those were put up for safety reasons. CERCLA is a long process that takes a long time, but she is hoping to get some of the MMRP sites cleaned up and the fences taken down.

Vaughn commented that all we ever talk about is RDX, but not TNT. We talk about DU, but not cesium, cobalt or tetryl.

FUSRAP Update

Mike Kessler of FUSRAP provided an update on their activities. Regarding OU-1 activities, it is primarily explosive contaminated soils in Line 1 and the West Burn Pad areas. Known remediation is complete except for Building 1-70. The Internal Draft of the Remedial Action Completion Report (RACR) is 70% complete. 2018 activities include Building 1-70 and the adjacent filter bed. These expect to be removed soon (Mike had hoped by June, but it has slipped). FUSRAP sampling will start after utility clearance. Remediation pending on the analysis of samples and the development of the work plan. Will continue to work on the RACR document.

Regarding OU-8 activities, it is primarily Depleted Uranium (DU) contaminated soil and structures. Remediation is complete except for FS-12 areas. No remediation required at WH3-01 or Yards C, G and L to be protective of site workers. Mike then presented a FS-12 survey units overview. The black line shows the original general excavation area (GEA) in 2006 where explosives work was taking place. The black line is the tree line where they thought explosives would be contained. 50 survey units (SUs) were drawn. Excavation was going on in the GEA but FUSRAP started investigating DU fragments.

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69 additional survey units were added which were broken up into four sectors (western, southern, etc.). The original 50 were completed and will be remediated by excavation.

Western survey units have been added to excavation contractor. There are only two left (in blue on slide) in the western sector to complete.

The focus this year is to finish the southern survey units. Two of them (114, 115) have been included in the GEA contract to excavate. The original 9.1 acres in the GEA, plus six SUs added (12.7 acres more) is what Mike calls the extended GEA. 8.7% (6 SU) in the remediation contract and the characterization is in progress. FUSRAP has extra funding this year so they are trying to accelerate the characterization effort (added to the team member from 3 to 5).

Mike then presented the FS-12 remediation slide to paint the larger picture of what has been accomplished. The slide included areas of the contractor scope, with shown areas that are in remediation, areas that have been excavated, and areas that the contractor hopes to finish this year. He explained that the remediation contractor breaks SUs into areas by watersheds for storm water runoff control (berms, silt fences).

Mike then explains that the areas in area H has been a hurdle because of the trees. The original GEA area didn't need to be cleared because they could just go in and scoop and sort. Now vegetation clearance is necessary for the new areas.

Trees need to be felled in winter due to the Indiana bat. They get chipped and ran through the scan/sort to see if they contain DU. Jen asked if they are sampling for anything besides DU. Mike replied that he didn't think the ROD called for other constituents, but he will check.

Mike then presented the Upcoming 2018 Activities slide. Jen asked if the plan was to ship DU by rail cars again this year. Mike confirmed that it is the plan again this year. He is hoping to have a new contract by the end of August (it is currently in selection board review), since they need to extend to the additional areas.

Mike then discussed the removal of the FS-12 bunkers. The structures are located where the scanning/sorting are being done, and they want to support Randy's group to get those out of there so that FUSRAP can remediate the soil in those areas.

Giff Haddock asked about the DU. Mike then pointed out a large fragment shown on slide 3. He explained that the hand excavation phase includes: photograph, remove, and properly dispose of. FUSRAP remediates all the soil around it. Giff asked what is the photo of oxidized, whole fragments, etc. Mike said he can't answer that but at ground zero they excavate to 15 feet at FS-12 footers and it is still very hot. Due to safety they couldn't excavate any further but the concentrations were still very high in the soil (30%). As you radiate out it gets less and less (5 to 6%). They need to have the buildings gone so that they can safely excavate further and deeper.

Giff asked if test firing at FS-6 is slowing things down and how? Mike replied that it is generally not a big issue because it's usually just a couple of hours at a time. We are usually more compounded by weather delays but the test firing in and of itself is not a big deal.

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Building Demolition Status

Randy Doyle, Environmental coordinator at IAAAP, presented the demolition update. The demolition is part of the Army program to abolish obsolete infrastructure.

Building 1-70 has been targeted for demo for a long time, but there have been complications. Rebar and cement footings are still there in the photo. Floating floor (dampen vibrations according to Vaughn) with gravel in between two layers and a sump and some pink water. We stopped, brought UXO personnel in, and after that issue was cleared, the heavy rains came. Water management was a big issue in the basement. We used a mobile GAC unit from PARS and got the water out then recirculated the pink water through the GAC unit and treated the contamination levels down to non-detect. Heavy rain was a setback to the schedule, but he hoped to have it completed by today.

Randy said that he just added a Phase 8 to the project since he completed his slides. There will be a new melt pour going in near Line 3 and 33 additional buildings are coming out. Construction for the new melt pour is rescheduled for 2021-2022.

Recycling efforts are being made due to the Federal Government mandate for sustainability. As such, the work will recycle and divert as much as possible, where feasible. To date, 30,000 tons of concrete has been crushed for reuse and another 30,000 tons are waiting to be crushed. There has been 1,000 tons of metal recycled. Good news on recycling is that screening is modified for road gravel and it gets all the chicken wire out. Another example of reuse is the bi-product that is created from this, it is a very fine sand to use for roads (instead of buying it for ice conditions in the winter).

Phase 3 is complete with 234 structures removed to date. Phase 2 and Phase 4 have 2 buildings left to demo, and Phase 5 has just begun. For the most part it is all in Line 1 with its very large structures. There is a lot of equipment to get out of there. Vaughn asked about underground buildings and the equipment and whether Randy was stopping at 100. Randy replied that they are not. Vaughn then asked if they are recycling the material. Randy answered that Bhate (prime contractor) has subs that come in and take out all the recyclable material from the landfill material at no cost because they get to keep the materials which is a win/win for everyone including the tax payers.

There is an asbestos crew on site right now with 28 people in line 1 and line 2. When the buildings are ready to come down they are quite skeletal looking as shown in the photo. Then mercury crews come in behind the asbestos team, so the buildings are safe to demo.

Vaughn asked about whether Line 5 tetryl was remediated. Randy noted that his team is responsible for the demo portion, not the remediation. He added that Line 5 is totally cleared out and Jeff's teams are there now putting monitoring wells in.

Randy continued and said Line 800 was the renovation line and it reworked shells back in the day. We cleared this area and got funding to put a new rail into Yard E and this is another example of coordination between demolition and restoration programs and teams.

Nature has taken over with overgrown foliage on Line 8 which causes a bad problem

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with ticks.

There are no more questions/comments.

Action Items for Today

Jen then discussed Old Business topics:

- The 2017 Draft OU3 Annual Groundwater Monitoring Report went to EPA yesterday and is currently under review now.
- The Draft Final Mathes Lake SI QAPP is in EPA review. Awaiting comments on that document.

Jen asked if there were any other action items or information for the next meeting. Julie said she would like to hear more about water under 1-40 and other underground building removals.

Randy thought it would be good to have a slide on the difference between surface water and groundwater. Julie wanted to hear what the regulatory limits are, too.

Vaughn asked about the underground pipeline near 1-70 and the melts? It was used to flush RDX. Aaron said there is a drain line at 1-40 to the west side of the line. Vaughn said that he thinks it ran over to the ditch south of Line 1. Randy replied that Buildings 107 and 40 are the only ones that have pumps underground to keep the groundwater out that he is aware of, but would check again.

The next meeting will be held on 23 October 2018, in the same location.

The meeting was adjourned at 10:44 a.m.

Original signed by:



Jen Busard
Army Co-Chair

Original signed by:



Elyn Holton-Dean
Community Co-Chair

Original signed by:



Sarah Brockway
Secretary

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

Exhibit 1

GOVERNMENT MEMBERS PRESENT (4)

Daniel O'Connor
Jennifer Busard
Dan Cook
Giff Haddock

RAB MEMBERS PRESENT (6)

Mark R. Hagerla
Vaughn Moore
Robert Haines
Hans Trousil
Bruce Workman
Dean Vickstrom

PUBLIC PRESENT (14)

Dean Johnson
Jeff Morrison
Sarah Brockway
Billie Jo Hatfield
Linda Latta
Delbert Bennett
Kathy Christy
Randy Doyle
Julie Solinski
Russ Beckman
Hunter Blair
Brooke Thye
Aaron Steele
Mike Kessler

Total in attendance: 24