

RESTORATION ADVISORY BOARD MINUTES

Jan 10, 2023

The Restoration Advisory Board (RAB) meeting was called to order by Hans Trousil at 9:01 a.m. on 10 January 2023. This meeting was held in person at West Burlington City Hall. Hans started off the meeting with Pledge of Allegiance. We had 4 people join us over MS Teams today.

Minutes Review

There were no corrections to the minutes from October 2022, and there were no public comments.

Agenda Review

The January 2023 agenda had one correction. Jen thought there would be three presentations, but Lynelle Brode of Na Ali'i will just give a quick update on OU-5 work instead of formal slides.

Environmental Services Update

Jeff Morrison of Jacobs presented an update on the two projects his team is working on: Environmental Services at IAAAP, and the off-post bioremediation project at Operable Unit 3 (OU-3).

Jeff shared a slide with a list of the current OUs at IAAAP to remind everyone since they are discussed heavily during the presentations. He then updated the team on where the various Remedial Investigation (RI) reports stand for the Jacobs team:

- Submitted response to comments (RTCs) for the draft final RI for OU-10 to EPA on 10 November 22.
- Will submit RTCs to USACE on internal draft RI reports for OU-6 and OU-7.
- Draft RI reports will be sent to EPA in January 2023 for OU-6 and February 2023 for OU-7.
- Will conduct groundwater sampling at one additional monitoring well at Line 6 (OU-11) during week of 09 January 23 for verification.

Jeff updated the team on the status of several in- progress tasks:

- Submitted draft OU-4 Feasibility Study (FS) report to Army counsel in October 2022. Proposed IDNR Applicable or Relevant and Appropriate Requirements (ARARs) are under Army legal review.
- Submitted the Final 2021 and Draft 2022 Annual Groundwater Monitoring Reports for Ash Disposal Cell within Trench 5 for OU-4 RCRA to EPA in December 2022.
- Submitted Internal Draft OU-9 Proposed Plan (PP) for Army legal review on in December 2022.

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- Started working on the OU-12 Phase 2 RI Report.

Jeff reported back on one action item from the previous RAB meeting, to present more information about the OU-1 Remedial Goals (RG) evaluation.

- Objective: Evaluate whether OU-1 soil RGs are still protective for antimony, cadmium, hexavalent chromium, thallium, and mercury based on current toxicity values and exposure assumptions.
- Basis for RG Evaluation : 2021 Five Year Review (FYR) Conclusions.
 - Of 19 Chemicals of Concern (COCs) evaluated in the five-year review (FYR), the soil remediation goals (RGs) for antimony, cadmium, hexavalent chromium, thallium, and mercury were identified as no longer protective.
 - OU-1 RGs should be reevaluated and revised to incorporate current exposure assumptions, toxicity, and cumulative risk to ensure they are protective of human health and the environment.
 - A post-Record of Decision (ROD) change document will be required to document any changes to the RGs.

Jeff then presented several slides discussing the OU-1 RG Protectiveness Evaluation, based on FYR and Human Health Risk Assessment approach differences.

- RGs compared EPA's May 2020 industrial soil RSLs leading to 2021 FYR conclusion OU-1 RGs not protective.
- RSLs from the generic tables is not appropriate for comparison to the RGs due to differences in parameter assumptions used to calculate the RGs.
- Assumptions and conditions for RG development were based on default exposure parameters for commercial/industrial evaluation recommended by EPA (1991), and ingestion exposure pathway for indoor site workers. Dermal and inhalation pathways not included in RG because former considered insignificant for the site worker and latter not quantified since most sites were vegetated and wind erosion considered minimal.
- Because of these differences, the OU-1 RG protectiveness was reevaluated, and the technical approach consisted of:
 - Compare EPA's current industrial worker exposure assumptions to assumptions used during development of the existing OU-1 RGs.
 - Compare EPA's current toxicity values to values used during

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development of the existing OU-1 RGs.

- Identify EPA's exposure assumptions for current and potential future receptors at OU-1.
- For each metal (antimony, cadmium, hexavalent chromium, mercury, and thallium), identify current & potential future receptors, identify Use exposure routes for current and potential future receptors, calculate Proposed RGs, if warranted, and compare to IAAAP soil background values and existing RGs.

Jeff informed that there wasn't much to update since the last meeting about the Site Inspection (SI) that is underway emerging contaminants called per- and polyfluoroalkyl substances (PFAS) at IAAAP:

- A Site Inspection (SI) is underway for emerging contaminants called per- and polyfluoroalkyl substances (PFAS) at IAAAP
 - Five newly installed monitoring wells and 10 existing monitoring wells were sampled at the former Fire Station, Fire Training Pit (FTP), and the IDA in December 2020
 - Received approval from EPA on draft final SI report and finalized SI in December 2021.
 - Due to screening level exceedances, additional investigations are recommended at each site and RI planning will begin in early 2023.
- A fourth area of potential concern (new Fire Station) was included in the revised Final PA report and is being addressed in an SI Addendum. Draft QAPP worksheets are being reviewed by EPA now and tentatively scheduled for fieldwork in Spring 2023. Hans asked if the new fire station had been used as a training site previously. Jen replied that they tested nozzles and Wes pointed out they analyze these compounds to the parts per trillion (ppt) level.

OU-3 Optimized Remedial Action

Jeff provided an update on the OU-3 Optimized Remedial Action project, which is for the enhanced bioremediation at the off-post RDX plume.

- Finalized Optimized Remedial Design for OU-3 to implement additional bioremediation injections within the 50 ug/L RDX "hot spot" area.
- Installed 20 new injection wells along north and south side of US Hwy 61.

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- Conducted one round of baseline sampling in May 2022 prior to injections in July 2022.
- First round of performance monitoring was conducted in October 2022.

Jeff showed figure of the area with the RDX hotspot underneath US Hwy 61 and the proposed injection well locations for the remedial action. Jeff showed a table of results to date as well.

- Four wells were sampled in first performance monitoring round: EMW-02, EMW-04, IW-02 and MW-309.
- In all cases the RDX concentrations decreased, most importantly in historically problematic well MW-309.
- Other geochemical parameters are looking promising in MW-309 and EMW-02 as indicated by high Total Organic Carbon (TOC), reducing conditions demonstrated by depleted nitrate and sulfate and increased dissolved iron, elevated alkalinity.
- Seven wells are being sampled week of 08 Jan 23 as part of semiannual monitoring. The above four plus additional wells: SMW-08, SMW-10 and SMW-11.

Hans asked if any of it is making it into the plume. Jeff replied that we are targeting the source and trying to prevent future rebound. The idea of why this amendment was picked is that it is slow release and will migrate downgradient over time.

One public member asked how these wells were installed and how deep. Jeff replied they were drilled down to 60 feet, and they used sonic drilling method.

Vaughn: All the stuff that washed down the creek and floods from rains. Why haven't soil samples been taken along those creeks. Jeff responded that we did sample SW/SED samples as part of OU-6. Aaron replied that we were brought in to fill data gaps from previous investigations. Steve answered that brush creek study was conducted to address that question.

Vaughn said he talked with the guy that lives along brush creek and it was backing up to the bridge and filled the rock quarry.

There were no further questions.

FUSRAP Update

Mike Kessler provided an update on FUSRAP activities. He first presented the definition of FUSRAP: Formerly Utilized Sites Remedial Action Program to deal with former atomic energy commission radioactive waste. Assigned to DOE and then transferred to USACE. FUSRAP is in the final 12-18 months of Remedial Action.

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After the appropriate paperwork documenting that the project is completed, FUSRAP begins a 2-year monitoring phase. HQUSACE is providing sufficient funding to complete all OU-8 and OU-1 work. The IAAAP site is in the IMPLEMENTATION PHASE; specifically, the REMEDIAL ACTION step. This phase/step involves site preparation and construction activities.

Mike thinks FS 12 remedial action will be completed this year. FS 6 has some delays in the schedule. 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.

FUSRAP has conducted a significant amount of sampling at IAAAP. Additional remediation is required at Line 1:

- Leidos delivered REV A1 of the Buildings 1-03/1-04, and Clarifiers for Buildings 1-10/1-12 Pre-Design Investigation Report (PDIR) on 15-NOV. PDT review ended 16-DEC-22.
- Leidos continued working a PDI Work Plan to investigate Line 1 Buildings 1-03-2, 1-03-3, 1-06-2, 1-50, and 1-60. Delivery to FUSRAP is now anticipated later this month.
- Leidos continued working on the "Inaccessible & Continuing Sources" Data Summary Report. REV A is now anticipated later this month. Julie asked for an example and Mike said there is a spot at Line 1 near a steam line. Vaughn asked which building and Mike said he would report on this when he gets the report. As part of the Corps of Engineers he wants to make sure they have tried every feasible method to get at all contamination.
- Delivery to FUSRAP of the WBPS Risk Assessment is now anticipated in June.
- FUSRAP continues working to award a new contract for remediation.

OU-8 is the DU sites. Made some progress but not too much. Remains about 80% complete.

- No radiological remediation was required at Warehouse 3-01, or Yards C, G, & L to be protective of the site worker.
- Line 1 Structures remediation complete.
- RA is complete in the FS-1/2, 3/4/5, and 14 Areas. REV A of the PRAR/FSSE is now anticipated later this month.

Firing Sites 6 Area:

- Leidos completed PDI-survey work in 3 western transects.

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- The GWS Survey work is over 80% complete in the remainder of the FS-6 Area. About 10% of brush remains to be cleared.

Firing Sites 12 Area:

- Leidos completed verification of all excavated Survey Units (SUs), SU-125, and “back checked” SUs 17-18 and 26-33.
- Final Status Survey (FSS) is complete in 97.6% of the 125 FS-12 SUs.

Mike shared a series of remediation photos at FS-12 and SU-12, and then discussed the Q1 2023 Activities completed.

OU-1:

- Received and reviewed REV A1 of the Bldgs. 1-03/1-04 and Clarifiers PDIR.

OU-8:

- Completed decontamination and demobilization of all equipment used during the 2022 Field Season. Hydroseeded some/all of 26 SUs.
- Loaded 12 railcars with Above RG material.
- Downsized the Rad Control Zone. GWS “back checked” areas once outside the “corral”.
- Consolidated all supplies; inventoried GFE.
- Completed a topographical survey of FS-12 and final site inspection.
- Completed the MERs for all re-use soil SUs and excavated SUs.
- Completed a GWS of 3 transects at FS-6.
- Completed PDT review of the OU-8 FS-12 2022 PRAR/FSSE; sent to EM-CX for their review.
- Reviewed and finalized the CY 2021 EMDAR.

Mike gave an update on the Transportation & Disposal. FUSRAP has utilized two Government-licensed disposal facilities:

- U.S. Ecology Idaho (USEI), located in Grand View, Idaho. R8I-Cabrera has shipped 10,038 tons to USEI.
- EnergySolutions in Grantsville, Utah was used by previous contractor. North Winds shipped 7,122 tons to ES.

Mark asked if there were any surprises in these materials? Mike said the hydrashots that sent out the DU traveling as far as 200m is the biggest surprise. 100m from ground zero was expected. In general, the closer to ground zero the higher the concentrations of DU. But there were some exceptions at distance and Mike couldn't explain that. Maybe other testing was done in certain places at FS 12, and soil pushed to another location.

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Vaughn asked how much DU was found in a specific testing area, and Mike thinks he can get that pct per SU and can share that at future meeting. Vaughn also reminded about the plume and the particles traveling had an impact. Mike said that is one reason why the northwest has higher amounts due to the prevailing wind directions and a more open area with fewer trees.

The railcars are leased from Environmental Rail Solutions (ERS). The railcars used are gondolas with fiberglass covers and hold 105 tons of material. Typical number of days between USEI and IAAAP is 2-3 weeks. Burlington Northern Santa Fe is used out of IAAAP, and Union Pacific takes over at interchange in western IA/eastern NE.

Department of Transportation:

- Class-A waste (Non-regulated, low-level waste)
- Mainly Soil with some debris (i.e., 99.95% dirt, 0.05% DU).

T&D stats:

- Total railcars shipped: 168.
- Total tons of material shipped (RCRC and NW): 17,160.

Mike then provided a status update on progress toward 2022 goals:

- Award a new FUSRAP / HTRW Support Services Contract.
- Provide one article to the IAAAP *Restoration News*.
- Award a new Remedial Action Contractor Contract.
- Process 2,500 CY of material at FS-12.
- Stockpile 500 CY for shipping.
- Ship 3,800 CY of material. 884.2 CYs
- Restore of all remaining FSA SUs.
- Complete the 2022 OU-8 FS-12 SUs PRAR/FSSE.
- Complete the OU-7 FS Areas 1-5 & 14 PRAR/FSSE.
- Complete Risk Assessments for Yards L, C, and G.
- Complete an updated Line 1 RD/RAWP.

Mike then showed a slide with his Q2 2023 Activities Planned.

OU-1:

- Begin PDT review of several REV A documents.
- “Inaccessible & Continuing Sources” data summary report
- “QAPP-5” buildings Pre-Design Investigation (PDI) Work Plan
- Resolve comments for the OU-1 Line 1 Bldgs. 1-03/1-04 + Clarifiers PDIR

OU-8:

- Complete EM-CX review of the 2022 OU-8 FS-12 SUs PRAR/FSSE

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- Begin PDT review of several REV A documents.
- OU-8 FS 1-5 & 14 PRAR/FSSE
- RAD Background Threshold Values report
- FSA Roads DGL Work Plan
- 2022 Field Season summary report
- Begin review of several REV B documents.
- 2022 OU-8 FS-12 SUs PRAR/FSSE
- Test Fire Pit Data Summary Report
- Start on the 2nd FUSRAP OU-1 and OU-8 Five Year Reviews (FYRs).

Mike presented a schedule for the 5YR and let the RAB members know that he would be in touch with many of them for upcoming interviews.

There were no further questions.

MMRP Remedial Actions Update (OU-5)

Lynelle Brody provided a quick update on the Munitions Response Sites. Revised PP was approved. Public comment period is from 02 Jan 23 to 02 Feb 23. Public meeting is tonight here at West Burlington City Hall.

Vaughn asked which sites are part of tonight's meeting.

IAAP-001 – Central Test Area

IAAP-002 – Line 6 Ammo Prod (Blast Radii)

IAAP-004 – Possible Demolition Site (north of K road).

Jen added it is just the MMRP sites in OU-5.

There were no further questions.

Old Business – Action Items from Previous Last Meeting

There were actions from last meeting:

- Jeff talked about RGs during his presentation.
- Mike asked about DU disposal pct and totals during his presentation.
- Jen tried to find out about the old incinerator that was taken down in 1952, but there were no records of it to be found.

Action Items for Today

Mike will work on total pct of DU per SU.

Hans has an additional question for Mike. How far is it from the railroad tracks? Greg Rakers answered it is 2 ½ miles. Mike added that the M yard facility was constructed with gravel liner and the soil will be sampled when the project is all finished.

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Hans asked the people that attended to ID themselves and whether they are from government or public. Unfortunately, most of the people were not near the microphone and the recording did not pick up most of the introductions.

The Commander then gave a few words from his perspective. He reminded team that the presenters today are helping clean up two previous generations of waste. It needs to be "low threat" and if we need more resources to do further scope, we can ask for more funds. The mission of IAAAP is to help maintain democracy but it can't be at the expense of the environment going forward. He recently hosted vice chief of staff of the Army along with several multi-star generals and had the opportunity to show them how linked IAAAP is to the local community and how modernization and economic stability are highlights. IAAAP is on the radar for Army leadership, as well as congressional representatives. Overall, Commander is very impressed with what IAAAP is doing both munitions wise and environmentally and he thanked the team in attendance.

Next meeting is planned for 11 April 2023. As of now it is planned to be in-person at West Burlington City Hall, depending on the covid situation.

Meeting adjourned at 10:12 am.

Original signed by:



Jen Busard
Army Co-Chair

Original signed by:



Hans Trousil
Community Co-Chair

Original signed by:



Kayla Johnson
Secretary

- Exhibits:
- 1 Attendees
 - 2 Agenda
 - 3 Environmental Services Update
 - 4 FUSRAP Update
 - 5 MMRP Update

Iowa Army Ammunition Plant
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Exhibit 1

GOVERNMENT MEMBERS
PRESENT (3 + 1 on Teams)

Jen Busard
Wes March
Shelly Nellesen (via Teams)
LTC Jason Crist

RAB MEMBERS PRESENT (7)

Hans Trousil
Julie Solinski
Mark Hagerla
Robert Haines
Dean Vickstrom
Vaughn Moore
Kellie Crist

PUBLIC PRESENT (14 + 1 on Teams)

Jeff Morrison
Mike Kessler
Steve Bellrichard
Aaron Steele
Dean Johnson
Seth Reedy
Jerry Manint (via Teams)
Jonathan Harrington
Lynelle Brode
Christa Proggemiller
Rachel Williams
Greg Rakers
Jacob Nye
Amanda Smith
Taylor Salsburg

Total in attendance: 26