The Restoration Advisory Board (RAB) meeting was called to order by Elin Holton-Dean at 9:01 a.m. on 23 October 2018 at the West Burlington City Hall.

#### **Headquarters Visitors**

Stan Rasmussen introduced himself as DoD Regional Environmental Coordinator for Region 7 and his guests for the meeting, Acting Iowa Department of Natural Resources (IDNR) Chief Bruce Trautman and Environmental Protection Agency (EPA) Deputy Regional Administrator for Region 7 Ed Chu. Ed let his team members introduce themselves, Superfund Director Mary Peterson, Section Chief Preston Law, and EPA Regional Counsel James Stevens. Environmental Support Branch Chief for the Army Corp. of Engineers (USACE) Lara Beasley also introduced herself.

#### **Minutes Review**

The July 2018 meeting minutes were accepted as written.

#### **Agenda Review**

The October agenda was accepted as written.

### **New Members**

Billie Jo Hatfield is not present today. Since there was going to be a vote for her to join the board, this will be tabled until the next meeting.

### Old Business - Action Items from Previous Meeting

Randy Doyle spoke to the three action items from last meeting:

- (1) Building 1-70 water processing operation and how we mitigated that during the demolition and use of granulated activated carbon (GAC) unit. 3.5 feet of water in building 1-70's basement. Recirculated water through the mobile GAC unit and then discharged it into the Line 1 impoundment.
- (2) Relationship between surface water and groundwater, and explained the NPDES permit for surface water and Lifetime Health Advisory Level for groundwater. Randy showed a Conceptual Site Model (CSM) figure and explained the difference between surface water and groundwater since that had been a source of confusion at the previous RAB meeting. He then presented the NPDES permit limits on a slide. It showed the limits for TSS, pH, TNT and RDX at different concentrations and levels. Randy is expecting the new permit to be issued from DNR this spring. The last one expired in 2006. RDX and HMX are combined in 2.25 ppm maximum discharge.
- (3) Draining of water from underground structures and where does the water go.

Vaughn Moore asked about the overflow of creeks and whether we are checking the levels of what it percolates into. Aaron Steele clarified that the watershed approach is currently being worked on in work plans and that issue will be in consideration.

Mark Hagerla asked if we had a new system and old system in place? Randy clarified that it isn't a system but a permit with limits.

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Aaron clarified that the Line 1 impoundment and Line 800 impoundment treats surface water before it gets discharged. Those impoundments are sampled and Brush Creek is sampled monthly between the installation boundary and off-site plume location.

Vaughn asked if anyone checked in with Brockway about the new filter system out of Canada? Randy said he was in touch with that vendor and had a demonstration. Randy put them in touch with ERDC (research branch of the Army) and the Army Environmental Command (AEC) is going to fund it.

Bruce Workman asked if NPDES is an EPA permit? Randy replied, no it is a DNR permit. Why is there a 12-year lapse or is that normal? Dan Cook said they reviewed the monthly reports and since nothing has changed from the process standpoint. Renewal process does take time.

Julie Solinski asked about how do you reconcile the different limits. Danny O'Connor from EPA clarified that one is ppm and one is ppb. Lara Beasley clarified that one is the pipe to the creek and the other is what is in your glass at the tap (Health effects).

Building 1-40 has a sump to collect groundwater and is pumped to a drainage ditch. The water table is very high. Groundwater constantly flows down into the basement, especially in rainfall. Randy said this building is next for demo. Vaughn asked where the dirt went. Dirt was put on the back side of Line 1. Vaughn added that it was used for a parking lot.

### **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. Randy indicated that only 7 phases had been planned last meeting, and now are 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.

Continuous improvement process for concrete crushing. Doing erosion control per SWPP. Going to try and use some of the sand from this process and see if it can save IAAAP from buying sand this winter as a reuse. Will test it out on a couple of roads. There were a bunch of the old light fixtures removed and there is a chain of restaurants that refurbishes them and reuses them. 1,443 tons of asbestos has been abated and 40 tons of PCBs.

Randy then showed the before and after photos for Line 800, Line 6, Line 8, and Line 1. Line 5 and Line 6 are complete. Lots of ongoing efforts at Line 1. Moved temporarily over to Firing Sites to help FUSRAP. Randy showed photos of Line 1 progress. Bruce asked what were these buildings used for. Julie thought maybe Stingers about 15 years ago. Bruce would like to see information about what modernization is going up. What are the plans? Randy said he would provide this in a future meeting.

Julie asked about how coordination with sampling goes on. Randy said that Jen attends the biweekly meetings and they try to get in to sample. A member of the public asked what is the FUSRAP program. Randy answered that Mike will do that in his

presentation later this morning. Vaughn asked if they took the filter bed out. Randy answered yes. Vaughn then asked about 1-74, too. Randy said he will look and talk with him offline.

### **Remedial Investigation Progress**

Jeff Morrison of CH2M HILL, now Jacobs, presented the CERCLA program and showed a schematic that Danny O'Connor from EPA had provided that showed the different steps in the process from a Preliminary Assessment (PA) through to a Record of Decision (ROD) and the steps beyond that including the 5-Year Review. Jacobs contract is focused on historical contamination as part of the Superfund program. The RI field investigation commenced this past summer and the data is coming in now.

IAAAP is divided up into nine 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.

Two of our four Quality Assurance Project Plan (QAPP) packets have been approved. We have started implementing that work. We are close to approving QAPP packet #3 and that includes OU3 off-site plume location. QAPP Packet #4 is behind the others and has been separated off on its own schedule, and it is focused on the Inert Disposal Area (IDA).

Stan Rasmussen asked what is the review process for the QAPPs. Jeff replied that it is a rigorous process where first it goes through USACE and AEC review, then IAAAP, and then to EPA and IDNR.

Jeff then summarized the field program (number of wells installed, number of samples collected). Survey being conducted. Data being validated. Jeff showed a map with a summary of which sites have been completed and which still need to have RI work conducted.

Jeff then discussed the work that Leidos has been conducting at OU1, namely an Explanation of Significant Differences (ESD). That document is in EPA review and Danny clarified that it has been signed.

Mathes Lake is a Site Investigation (SI) that is scheduled to be completed in November for sampling surface water and sediment (collocated locations shown on map).

Jeff then summarized the work PARS had conducted during the past year upgrading the groundwater treatment plant at the IDA and the use of the mobile GAC unit to help Randy's crew with pink water treatment during demo.

Bruce asked if we were just sampling water? Jeff replied both sediment and surface water. Vaughn reminded the team that the powerhouse and settling pond need to be checked, it is a part of the water system at the plant. Aaron clarified that the SI is to look for the presence/absence of contamination and that a Remedial Investigation (RI) would look at the nature and extent beyond if the SI finds a problem.

Julie asked why there were two locations picked near the boat ramp? Danny pointed out that it may be for recreational use and that it was a comment from EPA.

Vaughn asked where does silver come from? Line 3A was the response. Aaron said this is the ninth investigation of Mathes Lake and that previous results were used to come up with the list of constituents for this SI.

#### **OU3 Off-Post Groundwater Plume Status**

Darlene Abbott of Aerostar presented a status update for OU3. She stated that her presentation was geared toward last night's public meeting for off-site property owners. She showed her CSM schematic for surface water and groundwater.

Where is OU3 in the Superfund process? It is a complicated answer because it has taken a bit of a step back with some new higher concentrations. It is currently in the Operation and Maintenance (O&M) phase to monitor groundwater and surface water. Darlene presented a slide with examples of units of measurements to help visualize (e.g. drop of ink in a large tanker truck for ppb). For RDX the HAL is 2 ppb which was established by the EPA to define environmental impacts. The injection treatment was performed before Darlene came on board for this project. Because of the contamination rebound we are now stepping back to revisit the potential sources at OU3.

Brush Creek surface water samples are collected monthly and groundwater samples are collected annually. BC on the map stands for Brush Creek. She presented a graph showing the results over time trend. Hans Trousil asked about the spikes being at the boundary of the facility. Darlene pointed out that other sampling points show much lower concentration due to dilution.

Hans asked about the two property owners that declined water hookup. Jen clarified that it was because the wells tested non-detect for RDX and they didn't want to pay for a monthly water bill. Darlene then summarized the groundwater sampling data and showed the map with the red dot at MW-309 exceeds the active remediation criteria.

She discussed the issue of the property owners that didn't allow access on the eastern side so they installed two new wells on that side on a different property. These wells are below the HAL so that eastern side is delineated. One public member asked if the plume goes under the Skunk River? The answer is yes, that plume is 65-75 feet below ground surface right above the glacial till.

Vaughn asked how much does the plume fluctuate when the Mississippi River and Skunk River overflow? Darlene said based on the data it doesn't have much influence because it is so deep. Mark asked if there is any active remediation? Darlene answered it is currently on hold. Hans asked why did the injection process stop? Darlene answered that we need to know more about the source. She also discussed the possibility of changing the amendment (food grade acetate was previously used but may not be necessary and likely isn't the best for remediation).

Darlene presented the path forward that the RI is currently ongoing at OU3 and the results will be used to reevaluate the remedial design for the treatment. Steve Bellrichard clarified that the Army agreed to inject until we get to 50 ppb and then we will monitor it for 40 years. Injections were performed in 2007- 2008. In 2012, it rebounded. We hit it with another injection and it went down and then rebounded again. At that

point, Steve indicated the Army needed to go back to the CERCLA process and see if there is a better remedy.

Mark asked a question to IDNR. Lee County had a problem with wells and Dan Cook clarified that last night's meeting was about the groundwater protection zone. IDNR had delegated authority to Lee and Des Moines Counties to permit wells, but is taking that authority back now in this area of the plume. The rule making process officially started last night with the public meeting.

#### **FUSRAP Update**

Mike Kessler of FUSRAP, provided an update on FUSRAP activities. Mike presented the FUSRAP work. A member of the public asked what FUSRAP stands for? Answer: Formerly Utilized Sites Remedial Action Program to deal with former atomic energy commission radioactive waste.

Line 1 was formerly used by the Atomic Energy Commission (AEC). Randy's Demo program was able to get Building 1-70 out of the way for Mike's crew, and they confirmed that RDX contamination is under the building footprint.

I-RACR (interim RACR) for West Burn Pad since that remediation is complete per the suggestion of Danny O'Connor. In a few years, there will be another I-RACR for Line 1.

OU-8 is the area that has radioactive contamination. Currently up to a total of 118 Survey Units. Mike referred to the 3 step process for Depleted Uranium (DU): Predesign Investigation, Remediation, and then Verification. Four sites were handed over to the remediation contractor with high concentrations of DU, the other 32 were remediated and verification (walkover survey) and those areas will be released next year.

The goal with funding is to finish characterization by the end of FY19 (but shooting for July). Removed DU is shipped off by rail cars. Verification is by third party – not the contractor itself. Soil is processed to minimize how much T & D we do to save tax payers money. Mike then presented the remaining 2018 activities slides and showed a picture inset of the north face of the FS bunker.

We plan to stop excavation around Thanksgiving when it gets too cold. In December they will do the rail car loadout, the T & D campaign will remove approximately 750 tons of contaminated material. The first 5-year Review for FUSRAP activities are underway and should be completed by April. Accomplishments: 9000 CY of soil processed and shipped, 1,155 CY of contaminated material for disposal.

Mark asked if any fenced in property is under FUSRAP control. Mike answered that his crew is working at FS-12. The Commander has the responsibility. Steve clarified that MMRP fences are not part of FUSRAP.

Mark requested bigger slides/handouts (one slide per page) so RAB members can read them. Hans noted the workers in the photos. Are there safety precautions? Any risks to the employees? Workers are scanned with Rad meters before going in and coming out of zones. Use of PPE is utilized. Hans said with the small photos you can't really see

what they are wearing. Steve clarified that DU is an ingestion hazard (a toxic metal hazard like lead).

Steve noted that the original estimate for FS-12 is \$50M, but with cost saving measures balanced out by larger areas being addressed, is there a revised estimate? Mike said the estimate is \$46M. Probably spent 2/3 of that since 2013. Current estimate is about another \$35M needed to finish it off.

Vaughn directed a comment to the EPA and DoD. The Army always talks about DU. It won't hurt you unless it oxidizes. Trinium, Uranium 235, cobalt, cesium should also be discussed. Danny explained these other constituents would have been looked at during the RI process. Cancer effects and non-cancer effects would have been looked at during the risk assessments to generate the contaminants of concern (COC) list. Danny agreed to work with Mike to see if trinium and cesium were part of the RI.

Bruce asked where the material goes during the T & D? Mike responded that contaminated material goes to Utah. Is CIP different? FUSRAP holds their own CIP from the general IAAAP one. Vaughn asked about an article in the Hawkeye and Randy clarified it has to do with the Rail Yard and replacing culverts and railways and SWPP makes them give public notice.

There are no more questions/comments.

### **Action Items for Today**

Jen asked about action items for next meeting. Steve suggested that we address the concerns that Vaughn raised about other radiological contamination. The scanners would have picked up other COCs including cesium because Steve said they did find it exactly once outside the FS area. Steve wants the community to know we are addressing those concerns.

Steve also wants us to address Mark's concern about fencing and clarify the misconceptions of being able to do anything we want after remediation. The truth is that we are treating to industrial standards and can't put a daycare there, a farm there, etc. Steve suggested we explain the proposed plan (PRAP) process to Mark to show where he can raise his concerns.

Julie wants to discuss how many sites have been demoed and if there was any data to show improvements or spikes in contamination. Randy said he could work with Mike and provide a status by working with Leidos and FUSRAP. Zaynab at AEC is working on a funding plan to sample after the demo.

Mark asked if there was going to be any data from Mathes Lake presented at the next meeting. Jeff said the data probably wouldn't be back in time for that but it could be presented at the following one. Danny wants to show a map of the Mathes Lake locations and the analyses, maybe a brief history of the Lake. Steve asked if we ever went over the Preliminary Assessment at a RAB? We should take that document and present it since that is the document that was the basis for the SI sampling locations and analyses.

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Vaughn wants to know when the Army sites will be cleaned up in addition to the AEC sites. Jen pointed out that a significant soil remedial action was conducted in the late 90s.

Stan Rasmussen said that even though he is an outsider, he wants the community here to know they are lucky. IAAAP is still open and operational and Army is making an investment in cleaning up the sites with funding. He praised the environmental staff. Steve praised the regulatory staff for being workable. Randy explained why the VIPs were there today and what the afternoon meeting was for to discuss what was working well and what needed headquarters help to work better.

The meeting was adjourned at 11:20 a.m.

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 Environmental Services Contract Update

6 OU3 Off-Post Groundwater Plume Status

7 FUSRAP Update

#### Exhibit 1

# GOVERNMENT MEMBERS PRESENT (4)

LTC Stephen T. Koehler Daniel O'Connor 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 (31)**

Gifford Haddock Kellie Orth Dean Johnson Steven Bellrichard Randy Doyle Jeff Morrison Aaron Steele Mike Kessler Sarah Brockway Amanda Smith Bill Hilger Len Osinski Zaynab Murray **Preston Law** James Stevens Lara Beasley Matt Vest Kathy Christy Darlene Abbott Scott Smith Mark Dunne **Herbert Price Brooke Thye Greg Reckers** Michaela Niehaus Stan Rasmussen Bruce Trautman Ed Chu Mary Peterson Michael Kurth

Total in attendance: 44

Michael Styvaert