

**IOWA ARMY AMMUNITION PLANT
RESTORATION ADVISORY BOARD
MINUTES**

January 15, 2013

The Restoration Advisory Board (RAB) meeting was called to order by Elyn Holton-Dean at 5:02 p.m. on January 15, 2013 at the Comfort Suites Hotel.

Minutes Review

The minutes were accepted as written.

Agenda Review

There were no changes to the agenda.

Public Comment

No public comment at this time.

IRP Update

Rick Arnseth from Tetra Tech briefed the RAB from a slide presentation. Please see exhibit 3 for his presentation.

Regarding the sediment ponds removal discussion on slide 2 of Rick's presentation, Vaughn Moore asked how many sediment ponds were associated with the IDA. Rick explained there were 3 sediment ponds; the CEA, Trench 6 and Trench 7. Mark Hagerla asked how is the offsite sampling as mentioned in slide 3 different than what is being done now. Rick said this is the same report and sampling they have been doing for years. There is some extra sampling the EPA wanted to check on the west side of the plume.

Regarding the CCL, Vaughn Moore asked about the area. Rick said the area is bigger than the sump. Paula Graham asked what they are sampling for at the CCL. Rick said RDX.

Vaughn Moore asked how many wells are at line 1 that shows the plumes. Rick said about 60 wells that should characterize the plumes. Vaughn Moore asked if it is possible for maps of the line to see where the wells are at. Rick said yes. Mark Hagerla asked how deep are the plumes. Rick said from the water table of 15 feet below the surface to 35 feet.

Regarding slide 6 of Rick's presentation, Rick mentioned a spike in Brush Creek levels of RDX at the boundary. Vaughn Moore asked if there is any chance the sewage treatment plant could have malfunctioned. Rodger Allison mentioned that we are looking into anything that could have triggered this. We have been replacing water mains and soil could have been exposed during clean-up.

Regarding slide 8 addressing the Compliance Sites update for the Demolition Area of Rick's presentation, Rick explained that they have been cleaning soil with injections of iron. Paula Graham asked how does the iron react to RDX. Rick explained the process of a bacterial reaction. Paula then asked how deep is the RDX down in the ground at Brush Creek. Rick said it is surface water, the creek is in till.

Paula asked if it takes 15 years to rid of the RDX from the plume. Rick said the off-site plume will be cleaned by 2047. Vaughn Moore asked if the old cast iron pipes in the ground could have caused the RDX to move freely. Rick explained it is unknown and there are a lot of old pipes.

Mark Hagerla asked, “Were the wells at the old homesteads closed?” Rodger said we still have open homestead cisterns and wells throughout the plant. There is a project ongoing to identify and close these.

Mark asked about the aquifers underneath the plant. Rodger explained that we have an understanding of the aquifer levels. Mark asked if anyone ever tested the waters in the aquifers underneath the plant. John Carroll with American Ordnance explained that one is active for restrooms and washing not drinking water and have always been tested. General discussion ensued about the aquifers. Paula said she read somewhere that there were two aquifers under the plant that were contaminated. Rick answered the water table aquifer has contamination. Rick said a past presentation shows the geology of the state of Iowa that shows the aquifers. Rodger recommended that he include this as a possible training opportunity to re-visit this topic at another RAB meeting. Additionally, the historical use of groundwater for drinking and production might be another good topic.

Technical Assistance for Public Participation (TAPP)

Rodger Allison, IAAAP briefed the RAB from the Technical Assistance for Public Participation (TAPP) Slide Presentation. Please see exhibit 4 for his presentation.

Mark Hagerla asked about the cost. Rodger explained that the TAPP effort is for education and training. It isn't intended to be another form of investigation. Vaughn Moore asked if the funds could be used to get a particular document from the Army. Vaughn said they do have sealed records at Pantex. Rodger said TAPP funding wouldn't help with an effort like that. Hans Trousil said this training is for scientific or engineering questions. Hans Trousil asked why would a funding request be denied. Rodger said if there is no funding it would be denied or if the request falls outside of the guidance. Elyn Holton-Dean suggested if the board wants to pursue this. We could set up a subcommittee for a better understanding for the communities. Rodger suggested that he can provide administrative support. Mark asked that Elyn set something up.

Inquiry Topics

Rodger explained the inquiry topics as questions posed by Vaughn at the last RAB Meeting:

- Mathes Lake Sampling:
Since the last meeting, we sought funding and will have more information at the next meeting.
- Long Creek Beaver Dams:

The historical pistol range ran east to west and fired across Long Creek into the embankment of the opposite side and one detection of lead was found where shots were made across the creek. Sampling indicated no lead detection in surface water or the sediment downstream of the site. The question was why they didn't sample further down the creek and the discussion continued about a beaver dam and why the Army did not sample there. Rodger said he asked the Natural Resource Manager and a contractor to walk the creek at separate times for any evidence of beaver activity and the only place activity was found was a brush pile with water flowing under it. There are three other areas that show incidental beaver activity. The Army agreed to sample sediment and water at the Installation boundary for lead.

- Cap & Rock disposal from 1-63: FUSRAP action item.

Public Comment Rodger:

Vaughn raised issues concerning what pathways contamination reached Mathes Lake prior to the late 1970s. He pointed out the processes and the amount of hydro shots conducted at the Firing Site. He discussed the fact that two pounds of Depleted Uranium (DU) were lost per shot. Vaughn indicated that the DU was dispersed widely from the test area and that they had fires outside the FS area. He goes on to state that Lake Mathes glowed after hydro shots and that fish had growth spots, perhaps some type of ulcer. When AEC cleaned up the FS in 1975, they found DU, Plutonium 239, Radium, Cobalt 60, Cesium 137; this dirt was contained in barrels and shipped out. Rodger added we can consult Tony Jones and Linda Wobbe regarding radiological concern.

The other thing we come up with is that they mention the pipeline from line 1, the pipe over the spillway. The water from the power house was pumped to a pond that drained to the lake. So this water was drained and taken out of the plant.

Vaughn declared that with all this Army documentation, it clearly shows something happened at FS that got in the lake, whether it was radiation, or stuff that ran out of the Army lines, the power house, or the laundry. For instance, years ago the department of natural resources asked us how did silver get in the plant lake. It was from when they X-rayed on line 3A. It ran down there.

Vaughn said he spoke with someone involved with cleanup of radioactive materials and the projections from the Army Corp of Engineers to clean up 100 meter radius of the pad at two foot and 175 meter radius away from that at one foot. He said with what was found that this should be done at five foot. Two foot is not deep enough for what was shot there.

When we got the new study on the clean up for Firing Site by the Army Corp of Engineers, we saw how they are going to use water control so there is no run off from into the creek into the lake. That is all fine and good, but it has been laying there for years and it got in the lake by rain. The reports verify everything. So this is what I was told to bring to the meeting.

Elyn suggested due to the time, we should discuss this at the next meeting. Rodger asked what would the topic be. Vaughn said plant lake or FS. Rodger explained that the Army evaluated and presented information about pathway evaluations from the FS to Mathes Lake using both IRP and FUSRAP data. Rodger presented it at an earlier RAB meeting.

Rodger asked Vaughn if he had the titles of the documents to which he refers. Vaughn said he has a stack of stuff. Rodger was concerned about any drainage ways we didn't have the information on or we haven't investigated. Vaughn said you have to remember this happened since 1965 and nothing was checked until 1971. So stuff had been washing out and constantly moved.

One of the documents Vaughn had was the 2001 ATSDR document. Rodger explained that there has been numerous sampling over many years and funding is not available to sample when there isn't detection of contaminants of concern such as uranium. Rodger then reminded the RAB that he pointed out in his earlier presentation that the ATSDR document states they identified uranium but it was a small detection below background levels. These samples were taken in the late 1960s or early 1970s. The 2003 ATSDR health Consultation said there could have been a "slight potential" of uranium impact to water but there wasn't any supportive documentation. There isn't any evidence that supports detections are present now.

The only thing found was elevated iron. Sampling was conducted everywhere it could be or have gone and nothing has been detected. Tissue samples were taken of turtles and there are no metals or radiological uptake in the samples. We are having challenges getting funding for any further evaluation because we are not finding anything that requires cleanup.

In order to continue productive dialogue, Rodger asked RAB members to provide the Army with questions and we can prepare for further discussion on FS impact at Mathes Lake for the next meeting.

Hans said it would make sense to sample the lake when it is drained to determine if there is anything there or not. The Army did not disagree and will continue to pursue funding and contractual avenues.

Paula Graham said people are also interested in knowing if the lake was sampled and down gradient areas in the past since Lake Mathes use to be the main water supply before switching to Burlington City Water. Mainly interested in clean-up and what people were exposed to. Rodger understands the concern to find out what it was back then, but Rodger said this forum is limited to what remains today. Rodger tried to explain that this might not be the right forum. The RAB's focus is determining what is there today and its impact and priority for cleanup. We cannot recreate what was there in 1965.

Mark asked about an OU8 document. Rodger said he will ask FUSRAP. Mark was concerned about the clean-up and the contamination still present. Mark said that May of 2012 a statement was made about the west burn pads are complete and the report doesn't confirm that. Mark is concerned about whether it is cleaned up. Rodger asked that Mark send him his concern via email or telephone so Rodger can forward and follow-up with FUSRAP.

Next Meeting/Draft Agenda

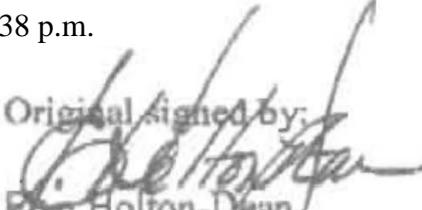
- The next meeting is scheduled for April 16, 2013, at the Comfort Suites Hotel. Agenda topics suggested were Lake Mathes funding and FS impact.

The meeting was adjourned at 6:38 p.m.

Original signed by:



Jen Busard
Secretary

Original signed by:

Eryn Holton-Dean
Community Co-Chair

Original signed by:



Rodger Allison
Army Co-Chair

- Exhibits: 1 Attendees
 2 Agenda
 3 IRP Update
 4 FUSRAP Update

RAB MEMBERS PRESENT

Mark Hagerla
Elyn Holton-Dean
Dean Vickstrom
Vaughn Moore
Alan Koenig
Hans Trousil
Kim Perlstein

RAB MEMBERS NOT PRESENT

Eric Orth
Bruce Workman

GOVERNMENT MEMBERS PRESENT

LTC Michael Bruens
Rodger Allison
Sandeep Mehta
Dan Cook

PUBLIC

Thurman Huffman
Sara Garland
Paula Graham
Luenne McCracken
John Carroll
Jim Bard
Leon Baxter
Rick Arnseth
Cyril Onewokae
Dean Johnson
Julie Solinski
Dennis Boyle
Jim Nelson