

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

**October 29, 2013**

The Restoration Advisory Board (RAB) meeting was called to order by Elyn Holton-Dean at 9:05 a.m. on October 29, 2013 at the Comfort Suites Hotel.

**Minutes Review**

The minutes were accepted as written.

**Agenda Review**

There were changes to the agenda. FUSRAP was not able to attend, therefore Rick Arnseth, Tetra Tech will be presenting an update of DERP activities. The order of New Business was changed to accommodate the acceptance of new members prior to the Public Comment.

**Public Comment**

There were no public comments.

**DERP Activities**

Rick Arnseth of Tetra Tech briefed the RAB from his slide presentation shown in exhibit 1 (IAAAP PBC Project Update).

**Field Activities Underway and Planned – Line 1 Groundwater – Phase 3  
Investigation Fieldwork**

Bruce Workman asked “Are you looking for other contaminants [at Line 1]?” Rick Arnseth replied “No, only better defining the boundaries of known plumes.”

**Pattern for Surface Water in Brush Creek**

Rodger Allison asks about patterns of RDX in the surface water of Brush Creek. Rick Arnseth said there is no known pattern that is evident. Bruce Workman pointed out there does not appear to be seasonal patterns.

Vaughn asked if there is movement between shallow and deep aquifers on the Iowa AAP. Rick Arnseth indicated that movement of water between the aquifers is not likely given the tight clays that exist between them.

Vaughn Moore indicated that perhaps the Army should place the filtering systems like the ones placed at the old Line 9 area [40mm Test Fire] in drainage ways before it gets to Brush Creek. Rodger clarified that the system used there is called the passive iron bio-reactors.

Vaughn also indicated that he brought up an idea some time ago about placing filtration systems on the creek itself. Rodger replied “The amount of water is the issue; the cost and the chances for success is very poor. However, applying this idea to the tributaries might be a workable solution.”

Mark Hagerla asked “Are you sampling in the right areas? What causes these spikes?” Rodger explained that the Army is confident that is sampling the right areas. Rodger further explained the correlation between RDX levels that were left in place that meet leaching criteria (1.3 ppm) and how it might create elevated levels of RDX in surface water due to rainfall runoff. This is of particular interest if soil carrying RDX of 1.3 ppm or less is disturbed for water line maintenance or other activity. It exposes RDX for surface transport.

Mark asked if there was a way to sample upstream on Brush Creek to narrow the source. He indicated that we have been sampling this for years with no answers. Rodger responded that the Army team is developing an approach that will break the pathways that carry RDX that impacts Brush Creek. It will likely be considered as part of the FS.

Paula Graham asked if the Army has sampled Skunk River near the area that has groundwater impacted with RDX. Rick Arnnseth responded, “No, the impacted groundwater flows underneath the Skunk River”.

### **IAAAP Deep Water Wells**

John Carroll of American Ordinance (AO) briefed the RAB from his slide presentation shown in exhibit 2 (IAAAP Water Supply Wells).

Vaughn Moore asked “What year did they use water from Burlington?” John replied “1977.” Lueene McCracken asked for a copy of the distribution map. Paula Graham asked “Did you run into any wells they used for refrigeration?” John replied he didn’t know if they were identified. Hans Trousil asked “What size of mains will be replaced?” John said “All sizes, 6-12. There are three water towers currently being used.” Jody Bresch asked “Are you testing wells west of the plant?” Rick replied “No, not private wells west of the plant.” Rodger explained “We sampled wells to the south and southeast of the plant, but not west. We did a private well inventory in 2000.” Leon Baxter, IAAAP, indicated that he thought private wells were sampled west of the plant in 1996. Rodger indicated that he does not recall seeing results that reflect that action. Rodger will do some research to check if we have any records of sampling to the west of the plant. Jody wants to clarify, “Lake Mathes was used for a water supply?” Rodger explained “From 1941-1977 Lake Mathes was used for the plant water supply source.”

### **Inquiry Topics**

Rodger introduced the inquiry topics from the last RAB meeting:

- Mathes Lake Sampling – Uranium - Status/Path Ahead

LTC Michael Triplett, Commander of the IAAAP, briefed the RAB from his slide presentation shown in exhibit 3 (IAAAP Status/Path Ahead).

LTC Triplett discussed the status of activities at Lake Mathes. As it turns out, the Lake does not need to be drained to make repairs to the dam. Therefore, no controlled release of water or sediment will occur. He indicated that, even though no draining or sediment loss would occur as part of the dam repair, the Army pursued funding for sampling to address the RAB’s and the community’s concern about contaminants that may have been released into the lake between 1945 -1977.

The Army sent a request for funding to sample the Lake. However, upon legal and headquarters review, we were instructed to perform this work in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Army intends to take the first step in the process and perform a Preliminary Assessment/Site Investigation. From there, we will determine if further action or investigation must occur.

We should take note that from previous test results there is no indication that unacceptable levels of uranium or other elements or compounds are in Lake Mathes.

There was a general discussion about what a PA/SI entails and what might be needed to conduct that level of investigation.

Vaughn asked "What was the major problem with the dam?" Rodger explained "The spillway wings and tower are old. It needs repairs simply based on age. The dam will be repaired in segments to allow for natural water release vs. a controlled release."

Vaughn asked "Will they remove the boards on the spillway?" Leon Baxter said "They are going to work on them."

Vaughn asked "Is the old cave there by the spillway?" Rodger was unaware of a cave and some general discussion ensued.

Paula Graham said that she has some documents that state the water in Lake Mathes was contaminated. Rodger stated that he is aware of the Agency for Toxic substances & Disease Registry (ATSDR) documents that reference this information; however, they couldn't provide the references that support their statements. Discussion regarding Uranium levels in Lake Mathes and possible contamination of the drinking water supply ensued. Lueene McCracken provided Rodger with an excerpt of the Final Integrated Version of the Review of NIOSH Site Profile for the Atomic Energy Operations at the Iowa Army Ammunition Plant (IAAP) that might assist with future discussions and research.

Jody Bresch commented that she was at the RAB for pollution and water supply information. Her concerns were Middletown, Iowa drinking water supply from 1973-1977. She said she has worked with other agencies to gather information and find solutions for those who might have been exposed to unacceptable levels of contamination. She indicated that she has documentation that might be helpful for the Army.

Hans Trousil asked about the use of Lake Mathes. LTC Triplett responded that it is primarily used for recreation now. Hans asked if the Lake could simply be drained and returned to the state it was in before the IAAAP dammed up Long Creek? He asked how much the repairs would cost. Leon Baxter informed the group that it will cost about one million dollars. Hans expressed concern about spending that much money to maintain a lake that was only used to recreation. LTC Triplett and Rodger said that there were other considerations to consider such as wetlands regulations and other habitat impacts that must be considered now that it is established. Dealing with those issues might exceed the cost of repair.

Billie Joe Hatfield and Linda Edmondson from Kahoka, MO expressed that they meet and are working with a group of former workers from northeast Missouri. They indicated that they are having trouble getting information about former worker health issues to some areas in Northeast

Missouri. They plan to continue their work and are thankful for the RAB group. She thanked the Commander for being honest and forward with the group.

- Long Creek Sampling – Lead

Rodger informed the RAB that the last time the contractor was on site to take one sample for lead in water and sediment along Long Creek near the boundary the water was too high. However, the Army is on track to obtain that sample in the very near future.

**New Members**

Rodger introduced new members of the RAB: Melenie Wonderlich, Thurman Huffman, and Forest Morrisett. The RAB accepted the proposed members with a unanimous vote. They will begin serving at the next RAB meeting.

**New Army RAB Co-Chair**

This is Rodger Allison's last RAB as the IAAAP RAB Co-Chair due to reassignment. LTC Triplett presented Rodger with a Certificate of Appreciation for all his work serving the RAB from its inception in August 1997 to October 2013.

Rodger thanked the Commander and the RAB. He then announced Linda Wobbe as the new Army Co-Chair of the RAB. He relinquished his seat to Linda, who Co-Chaired the remaining agenda.

**Public Comment**

There were no public comments.

**Next Meeting/Draft Agenda**

The next meeting is scheduled for January 14, 2014 9:00 a.m. at the Comfort Suites Hotel. Agenda topics suggested were FUSRAP, OU9-Construction Debris Sites, and the Old Fly Ash Waste Pile updates.

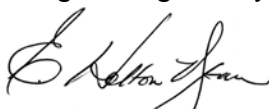
The meeting was adjourned at 10:57 a.m.

Original signed by:



Jen Busard  
Secretary

Original signed by:



Elyn Holton-Dean  
Community Co-Chair

Original signed by:



Rodger Allison  
Army Co-Chair

- Exhibits:    1    IAAAP PBC Project Update  
              2    IAAAP Water Supply Wells  
              3    IAAAP Status/Path Ahead

**RAB MEMBERS PRESENT**

Elyn Holton-Dean  
Mark Hagerla  
Dean Vickstrom  
Hans Trousil  
Vaughn Moore  
Alan Koenig  
Bruce Workman

**GOVERNMENT MEMBERS PRESENT**

LTC Michael Triplett  
Rodger Allison  
Sandeep Mehta  
Dan Cook

**PUBLIC**

John Carroll  
Leon Baxter  
Jim Nelson  
Steve Bellrichard  
Linda Wobbe  
Jen Busard  
Melenie Wonderlich  
Jody Bresch  
Kevin Tiemeier  
Paul Woodhouse  
Thurman Huffman  
Paula Graham  
Lueene McCracken  
Billie Jo Hatfield  
Linda Edmondson