

**IOWA ARMY AMMUNITION PLANT  
RESTORATION ADVISORY BOARD  
MINUTES  
January 15, 2008**

The Restoration Advisory Board meeting was called to order by Eric Orth at 5:00 p.m. on January 15, 2008 at the Winegard Board Room located in the Burlington/West Burlington Area Chamber of Commerce.

**Minutes Review**

The minutes were accepted as written.

**Agenda Review**

There was one change to the agenda. The MMRP Project Update will be provided by Mrs. Jady Harrington from URS vice Rodger Allison.

**Public Comment**

No comment at this time.

**Project Update**

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

**Off Post Groundwater**

RAB members asked how the concentrations in the off-site monitoring wells were looking. Dr. Rick Arnseth indicated that, in general, levels outside the high concentration area appear to be slowly decreasing. Rick further added that they installed some additional monitoring wells addressing the high concentration area and recent data from them indicates that the high concentration area is smaller than previously represented on maps.

**IDA**

Rick Johnson asked what levels of contaminated material were placed in the IDA. Scott Marquess answered that the levels are about 1 ppm for RDX and 47 ppm for TNT on the low end. As a side note, the levels listed below are only for TNT and RDX as referenced in this discussion. If these contaminants are mixed with others, such as metals, then these levels will change depending on the amounts of each contaminant and the risk factors involved.

**TNT**

47.6 – 196ppm = Random Fill ( $10^{-6}$ ) = one in a million chance of getting cancer

196 – 1960ppm = Trench 6 ( $10^{-5}$ ) = one in one hundred thousand chance of getting cancer

1961 and higher = Trench 7 CAMU ( $10^{-4}$ ) = one in ten thousand chance of getting cancer

**RDX**

1.3 – 53ppm = Random Fill ( $10^{-6}$ )

53 – 529ppm = Trench 6 ( $10^{-5}$ )

530 and higher – Trench 7 CAMU ( $10^{-4}$ )

### Cap Extension Area Accelerated Capping

Mark Hagerla asked, "Why cap until the project is finished?" Rodger Allison responded, "As you recall, we divided the soil into risk factors at the IDA - high, medium, and low. This cap extension area holds the low risk soil and we don't have anymore low risk soils to place there. The cap extension area was developed because we found about 44,000 cubic yards more soil than expected that was contaminated with Barium at the West Burn Pads Area and needed extra space for low contaminated soil. We just don't have any more low level soils to go in there." Mark Hagerla stated, "I don't understand why you are capping any of it [the IDA] until the entire project is finished and we're sure there's no more soil to be dealt with." Scott Marquess stated, "We are at the end of the process for soils. Any future finds will be small enough to be economically addressed in place or taken off site."

### On Post Groundwater

Dan Nelson asked, "Are we seeing the results on post, especially at Line 800, going up or down?" Rick Arnseth responded that the results are decreasing. Scott Marquess stated, "We have only been injecting since October. We have a lot more to go."

### MMRP Update

Jady Harrington briefed the RAB from a slide presentation. Please see exhibit 4 for her presentation.

Mark Hagerla questioned the detection capability of the equipment. Jady Harrington led discussion that covered the general depth and detection capabilities of the different equipment types.

### Geophysical Information

Rick Arnseth briefed the RAB from a slide presentation. Please see exhibit 5 for his presentation.

Bruce Workman asked, "If the electrical methods are used, is it possible that it might discharge explosives?" Jady Harrington responded, "This method is typically used to detect trenches and not explosive (UXO) detection."

Mark Hagerla asked, "You are showing us information from the Demo Area. Are the items that you are finding by using this method going to be dug up?" Steve Bellrichard, responded "No. This is an active site." Mark Hagerla asked, "What are you doing with this information?" Rick Arnseth responded that this information is used for avoidance prior to sampling in that area.

Bruce Workman asked, "Which method does the gradiometer use?" Rick Arnseth responded, "Magnetic."

John Carroll asked, "What is the scale? How large are the spots/circles?" Rick Arnseth responded, "About 25 feet."

**Public Comment**

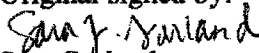
Sivert Iversen asked, "What is barium? We used it at Line 1." Rick Arnseth responded that barium is a metallic element. Scott Marquess stated, "You may remember our earlier discussion about the barium found at the West Burn Pads Area. The barium found there was shaped like hockey pucks." Rodger Allison added that barium was used by the Army and the former AEC as a plasticizer in various explosive processes. Sivert stated, "I know we used it in the melt process."


**Next Meeting/Draft Agenda**

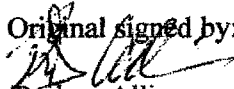
Richard Johnson noted that at the last meeting there was discussion about changing the frequency of meetings from quarterly to semi-annual and asked whether there had been any decision. Discussion ensued about the benefits and detriments to having meetings scheduled as needed (e.g., what type of event would trigger calling a meeting, no consistent schedule would negatively impact public attendance). Several speakers noted that with IRP, CC, MMRP and FUSRAP activities going on there was a lot of activity at the Installation. A motion was made and seconded to stick with the quarterly schedule. The motion passed.

The next meeting was scheduled for April 22, 2008 at the Winegard Board Room located in the Burlington/West Burlington Area Chamber of Commerce. Agenda topics suggested were IRP project update, MMRP update, CC Update, and a possible update from FUSRAP.

The meeting was adjourned at 6:05 p.m.

Original signed by:  
  
Sara Garland  
Secretary

Original signed by:  
  
Eric Orth  
Community Co-Chair

Original signed by:  
  
Rodger Allison  
Army Co-Chair

- Exhibits:     1     Attendees
- 2     Agenda
- 3     Restoration/CC Project
- 4     MMRP Update
- 5     Geophysical Information

Exhibit 1

**RAB MEMBERS PRESENT**

- Jeff Bergman
- Mark Hagerla
- Richard Johnson
- Dan Nelson
- Eric Orth
- Bruce Workman

**RAB MEMBERS NOT PRESENT**

Marjorie Fitzsimmons  
Elyn Holton-Dean  
Dean Vickstrom

**GOVERNMENT MEMBERS PRESENT**

LTC Benjamin Nutt  
Rodger Allison  
Scott Marquess  
Dan Cook

**GOVERNMENT MEMBERS ABSENT**

Dan McGhee

**PUBLIC**

Andrew Maly  
Sivert Iversen  
John Carroll  
Steve Bellrichard  
Abby West  
Linda Wobbe  
Dean Johnson  
Howard Reif  
Jady Harrington  
Terry Thonen