

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

January 24, 2012

The Restoration Advisory Board (RAB) meeting was called to order by Elyn Holton-Dean at 5:00 p.m. on January 24, 2012 at the Comfort Suites Hotel.

Minutes Review

There were two grammatical errors brought to attention from the October 2011 meeting minutes as described below.

Page 2 under the FUSRAP presentation... “at” should be in place of “a” after the word “found” and before the word “firing”. The sentence should now read: “Ron said there was a piece of DU found *at* Firing Site 5 and ...”

Page 4 under the Public Comment section... “asset” should be in place of assessment”. The sentence should now read: “.....taken care of because the IAAAP is a community *asset*.”

Agenda Review

There was one change to the agenda. Sue Casteel from the Agency for Toxic Substances and Disease Registry (ATSDR) and Stuart Schmitz from the Iowa Department of Public Health (IDPH) will be presenting in place of Rodger Allison’s Cleanup Administration presentation. They will be presenting the results of the cancer cluster study and talk about their effort in the off-post assessment.

Public Comment

No public comment at this time.

IAAAP Safety

Butch Hicks briefed the RAB from a slide presentation. Please see exhibit 3 for his presentation.

In regards to IAAAP’s total case incident rates as presented on slide 4, Rodger Allison asked if IAAAP’s numbers include contractors. Butch explained that these numbers only represent American Ordnance employees and DA Civilians.

In regards to the risk management hierarchy as presented on slide 5, Rodger Allison noted that we also have the same type of hierarchy going on with restoration efforts. US Army Corps of Engineers and various contractors such as Tetra Tech have the same type of elements at work within their organizations. So, there are a lot of people looking at safety through the restoration efforts as well.

Vaughn Moore asked if it was still the plant policy if a person is injured, but not real critically injured, do they still have to go to the plant hospital and punch in and out so they don’t record a lost time accident. Butch said he doesn’t believe this is true.

Vaughn asked if the guard department now issues eye and ear protection on the firing range. Butch answered “yes.”

Vaughn asked if the guard department holds safety meetings. Butch explained that the guard department holds safety meetings on a monthly basis.

Vaughn asked about cell phones in buildings. Butch explained that cell phones can go into the lines, but they can't go in the explosive buildings.

Paula Graham noted that she is glad that they are instituting safety procedures and she realizes when she worked at the plant it was a different age and time, but she wants people to understand that the safety practices were completely different back then when she worked at the plant; they had steel toes shoes and safety glasses. Some of the places she worked in were so foggy, she couldn't see. Some of the powders they were working around ate up their shoes. She said during the Korean War, she never had a mask, just a little metal shield. She just wants people to know that the people that are dying and have died were really exposed to a lot of toxic substances.

Luenne McCracken noted that some of the pictures have people wearing respirators and some don't. Butch explained that during the era of the pictures, they had ventilation systems in place. Luenne said that she heard the ventilation systems were clogged and didn't work right. Butch indicated that he was just trying to show an example of some of the controls they had in place in the 1940s.

Vaughn Moore said that the only people who had access to Geiger counters in Line 1 were the safety department only. “They were locked up after safety put them in. No one working in those buildings ever got a reading out of one of them. That was all confidential and safety handled it.” Vaughn indicated he is all for what they are doing out there now in regards to safety but he wants us to realize that it wasn't always that way. Butch explained that he understands and they are trying to improve safety all the time.

Hans Trousil asked if the overalls were disposable. Butch explained how the overalls were laundered at the facility. Hans asked about the water treatment process. Rodger Allison explained the water treatment process. “The soap is collected in a sump and settles out, and then the water is sent through granulated activated carbon (GAC) units for treatment.”

Sivert Iversen asked if everyone wears coveralls on the lines. Butch said that not everyone wears coveralls, just people exposed to exposed explosives and propellants. Everyone is not required to wear them if they are not exposed to explosives. Vaughn Moore asked if they were worried about the cross contamination problem. Butch said that if workers are not exposed; if what they are working with is all sealed up, coveralls are not required for that operation. Vaughn asked if we took into consideration what a buggy drags in and out of the buildings. Butch said that hopefully our housekeeping today is better that this won't cause a problem.

Sivert Iversen said when he worked at the plant, they changed their overalls and sent them to the laundry, but he never heard what happened to the hamper liners and the cross contamination. Butch explained how the laundry is handled today and said that they review the laundry operations and ensure that the personnel handling the laundry aren't getting exposed themselves.

Mark Hagerla asked how we ensure that the people working in Line 1 now are not being exposed to past contamination since Line 1 has been in continuous service. Butch said that he was a radiation protection officer for 20 years and he surveyed about all the buildings in Line 1 and where personnel are working today there were no alpha beta or gamma emitters in the buildings so he is assuming that those areas were cleaned up because he couldn't find any evidence of contamination. Butch added that the Department of Energy (DOE) has been out there and conducted other surveys and such and did find contamination, but those areas are restricted from personnel. Paula Graham asked if they were going to clean up that contamination Butch spoke of. Butch explained that the areas are restricted and would be cleaned up, but it takes a budget and quite a bit of money to clean it up. Rodger Allison added that this will be cleaned up by FUSRAP.

ATSDR Introduction

Sue Casteel briefed the RAB from a slide presentation regarding an overview of ATSDR and their role at IAAAP. Please see exhibit 4 for her presentation.

Sue provided a handout titled "Chemicals, Cancer, and You." Please see exhibit 5 for this handout.

ATSDR last did a public health assessment in 1999 at IAAAP. They found that at the time this 1999 health assessment was done, they didn't feel like any chemicals at that point in time were getting offsite at levels of health concern. Since they hadn't looked at the site since 1999, several community members recently approached them and asked if they could come back and look at the site again.

ATSDR is trying to answer if chemicals are getting offsite at levels that could cause health problems for people who live around the facility. ATSDR is looking at the last 10 years worth of offsite data to see if they see any contamination getting offsite that could make people sick. They just started the data review, and Sue will come back with the results as soon as the review is finished.

Rodger Allison noted that these folks look at massive amounts of data and hats off to them for the amount of work and assessment that they do.

IDPH Cancer Incident Study

Stuart Schmitz briefed the RAB from a slide presentation. Please see exhibit 6 for his presentation.

Stuart provided the Cancer Incident Report dated 12 January 2012. Please see exhibit 7 for this report.

Sivert Iversen asked if the water seeped into the western pines trailer park. Eric Orth explained that IDPH just drew a box around the plant vicinity and they are just looking to see if there are any incidences where the cancer rate is different. Eric added that this data is based on geographical exposure, not worker exposure. Stuart said they were only asked to evaluate the offsite area, not in the facility. They were just trying to determine if there were any issues, and if there were issues found, if there was any correlation between the facility and those issues.

Paula Graham asked what the asterisk represented in table 2 of the study. Stuart explained that the asterisk means that they are fairly confident that there are elevated cancers according to gender and organ within the targeted geographical area. But, the study looks for elevated cancers in both males and females for a cancer cluster to be present, and that wasn't the case. Sue added that the 1999 public health assessment captures RDX getting offsite and getting into some drinking water wells so those people were put on public water supply. She added that they think RDX can cause cancer in people, but they are not positive. They do know, however, that RDX does cause liver cancer in rats. So, it's important to keep in mind that RDX in the past has not been associated with a lot of types of cancers that were elevated in this report Stuart is presenting. Sue added that there is a lot of variability in the data and it is hard to see what is going on when they are looking at a small population such as this.

Trent Henkelvig asked about the water lines running through the plant, and he wondered if anyone had looked at the water lines between Middletown and Danville. Stuart said he hasn't looked at the water lines. Sue added that she used to work in public drinking water and every public water supply is very closely monitored by EPA under the national primary drinking water standards. She asked the source of the water. Trent responded that the water comes from Burlington, but it runs through the plant and is distributed to Middletown and Danville. Sue said that the water systems are required to test water for its customers in the distribution system for a whole long list of chemicals and this information is available to the public. She also said that another thing to keep in mind is the water system pressure; it is when you lose water pressure such as when the power goes off, that is when they are most concerned with something from the soil or groundwater getting into those water lines, but they are monitored very closely and the water system has to provide all the test result data. Trent said he is just wondering if there is an impact to the water lines when it goes through the plant, permeation issues, etc. Stuart said in regards to permeation issues, he hasn't investigated things dealing with RDX, he said sometimes there have been issues in lines going through petroleum contamination if they are plastic lines, but it really depends on the line itself, pressure, age, etc. Most of the contamination issues Stuart has seen would have to do with petroleum compounds, but this isn't an issue he has looked at here at all. Sue added that she is not familiar with anything that specifically addresses RDX, she knows that there have been some permeability studies done on the PVC type lines because people were concerned that things were getting through the plastic and getting into the water but she is not familiar with anything that has been done on RDX. Vaughn Moore added that according to a gentleman who worked in the water industry, and according to the government standards, there are only about 15-20 things they have to check for in a water system, and he told Vaughn that if there is something else in that water that doesn't trigger one of those 15-20 things, it can pass right on through and they won't even know it's there unless you specifically test for it. Sue said the national primary drinking water standards regulate about 100 contaminants in water. Stuart said the point of evaluation is at the water plant for most of the contaminants, and there are times when they monitor for lead within the distribution system and things like that, but there are a lot of chemicals that they analyze for, not every year, but they do have to do that. Sue added that there is a list of things tested for located on the EPA's website. Stuart said based on his experience with the State, he is not particularly concerned with the public water supplies within the state of Iowa; he is more concerned with private wells and things like that. Sue said another thing to keep in mind is that if the water system does exceed one of the health screening values for water, they are required by law to notify everyone on the water system. Stuart said that Trent could send him information on the line locations and he would look into his concern. Hans Trousil said that he thinks Trent is referring to the residual content that is lost and the chlorination that comes out of the IAAAP before it goes onto Danville. The water supply comes

from Burlington, located along the Mississippi River and it has to go through 20+ miles of water mains and the water mains inside the plant are 1940's-50's era so there is a lot of residual and chlorination that is lost and the IDNR is on their case. Trent concurred with Hans's synopsis and wants to know if they need to bypass the water lines. Hans said the line that goes from the plant to Danville is plastic PVC line put in 20+ years ago. Stuart added that chlorine would only take care of the bacteria issue and he thinks Trent is more concerned about other chemicals. Trent added that he is more concerned about other things and wants to know if Danville has a quick fix or do they need to develop a plan to bypass the plant water lines all together? Sue said she could talk more after the meeting and said there are some people that Trent could talk to at the national level that may be able to answer some of the questions he has.

Hans asked about the map with the targeted geographical area and stated that it seems like the study shows that the cancer probabilities percentage-wise are the same in the targeted geographical area as they are outside the targeted geographical area and the only fault he finds with this is in regards to the people that work at the plant, there are probably quite a few that don't live in the targeted geographical areas. Stuart added that they were not trying to address the people working at the facility at all; the scope was just to look at offsite contamination looking at a targeted geographical area in comparison to the rest of the county, so it doesn't address the people that work at the plant and where they live. Sue added that if he is interested in talking about occupational exposure onsite, they would be happy to talk after the meeting; their focus was just to look at offsite data. Rodger added that there were occupational exposure studies performed by the University of Iowa. Rodger added that the Community Advisory Board is the avenue to get a lot of worker health information.

Referring to the report, Vaughn Moore said that there is an IAAAP targeted geographical area and then there is the remainder of Lee and Des Moines counties and if the map is right, there is 16,207 cancer cases in just this small area in Lee and Des Moines counties combined from 1977 – 2009. Stuart said that the average cancer in a lifetime is between 1 to 2 people out of every 3 people, so it is extremely common all over the county. Sue added that they provided a handout titled "Chemicals, Cancer, and You" that would be helpful to look at.

IRP Project Update

Rick Arnseth briefed the RAB from a slide presentation. Please see exhibit 8 for his presentation.

Paula Graham asked about the iron reactions with RDX in regards to slide 11 of Rick's presentation. Rick said that some researchers have found that if you have the right kind of iron minerals in the soil, it will react with RDX and destroy RDX on its own and you won't need the bugs to eliminate it.

Vaughn Moore asked if Tetra Tech plans to install monitoring wells on Line 1 this spring. Rick concurred and thinks the schedule shows them starting in April.

Luenne McCracken asked about the gallons per day of treated water at the IDA for spring 2011 in regards to slide 7 of Rick's presentation. Rick explained that the decline in water treatment is attributable to the fact that the contaminated soil is now covered and there is no water getting into the trench. The only water in there is the water that was in the soils that they put in there; all contaminated soils were removed from trench 7, placed in trench 6, and trench 6 has been covered since October 2010.

Public Comment

None at this time.

Co-Chair Election

Elyn Holton-Dean was re-elected to serve another term as RAB Co-Chair by acclamation.

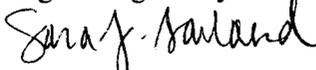
Next Meeting/Draft Agenda

The next meeting was scheduled for April 17, 2012, at the Comfort Suites Hotel. Agenda topics suggested were, IRP project update, CC Update, MMRP Update, and Cleanup Administration.

Elyn asked about a RAB Community Tour. Rodger will check on the best date and coordinate with the commander. Rodger will be in contact with Elyn as the discussion progresses.

The meeting was adjourned at 6:45 p.m.

Original signed by:


Sara Garland
Secretary

Original signed by:

Elyn Holton-Dean
Community Co-Chair

Original signed by:


Rodger Allison
Army Co-Chair

- Exhibits: 1 Attendees
- 2 Agenda
- 3 IAAAP Safety
- 4 ATSDR Introduction
- 5 "Chemicals, Cancer, and You" handout
- 6 IDPH Cancer Incident Study
- 7 Cancer Incident Report dated 12 January 2012
- 8 IRP Project Update

Exhibit 1

RAB MEMBERS PRESENT

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

RAB MEMBERS NOT PRESENT

Bruce Workman

GOVERNMENT MEMBERS PRESENT

Rodger Allison
Dan Cook
Sandeep Mehta

GOVERNMENT MEMBERS ABSENT

LTC Michael Bruens

PUBLIC

Paula Graham
Lueene McCracken
Stuart Schmitz
Thurman Huffman
Milton Hicks
John Carroll
Jim Nelson
Linda Wobbe
Si Iversen
Steve Bellrichard
Dan Snyder
Matt Dibas
Bruce Niven
Pam Horton
Dean Johnson
Jim Bard
Tammy Allison
Cyril Onewokae
Sara Garland
Trent Henkelvig