

**Ravenna Army Ammunition Plant  
Restoration Advisory Board (RAB)  
Meeting Minutes  
May 21, 2008**

**1. Call to Order & Reading of Minutes**

The meeting was called to order by Community Co-Chair LTC Tadsen (Ret.) at 6:10 p.m. at the Windham Township Hall, Windham Ohio.

Mr. Walter Landor made a motion to suspend with the reading of the minutes of the previous meeting. The motion was seconded by Mr. Bill Steiner. LTC Tadsen (Ret.) asked the board members if they had any additions or corrections to the minutes. No comment from the RAB members present. LTC Tadsen (Ret.) called the motion to question..."All those in favor please say 'Aye.' All those opposed?" The motion carried, and LTC Tadsen (Ret.) announced the minutes were approved as printed.

Secretary Christy Esler took the attendance with 18 members present, 5 excused and 2 absent (Mr. James DiPaola and Mr. Thomas Smith).

**2. General Business**

The first order of general business, LTC Tadsen (Ret.) is scheduling the RAB member tour for this summer. LTC Tadsen (Ret.) suggested to the RAB members August 12, 2008 at 6:00 pm and the members agreed.

LTC Tadsen (Ret.) asked the members if there were any additional business items. The members did not have anything additional at this time.

LTC Tadsen (Ret.) introduced Mark Patterson, RVAAP Environmental Coordinator. Mark will be taking the place of Cynthia Ries, USACE for the first evening presentation.

**3. Presentation of the Performance Based Acquisition (PBA) 2008 Project Briefing, Ravenna Training and Logistic Site Future Development, Mark Patterson, RVAAP Environmental Coordinator.**

After completion of the formal presentation, the RAB members proceeded with questions directed to Mark Patterson. (To request a copy of the formal presentation please contact Christy Esler, RAB Administrator).

LTC Tadsen (Ret.) asked when this project would be started.

Mark Patterson- The contract is under a milestone date and the Ohio EPA is involved.

Eileen Mohr (Ohio EPA) - added that the Ohio EPA is not involved in the selection of the contractor.

LTC Tadsen (Ret.) - If you are drilling wells to the Sharon Conglomerate, do you have a range of alternatives if you find any contamination?

Mark Patterson- Six wells will be drilled to that depth then the data will be evaluated. Additional data will be collected farther out in different directions.

Eileen Mohr (Ohio EPA) - There will be phases, we will follow the contamination.

LTC Tadsen (Ret.) fielded questions from the RAB Board Members.

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Jon Barber (RAB Member) - Who determines the sites the wells, will be installed?

Mark Patterson- Six locations were chosen by the United States Army Corps of Engineers (USACE) and the Ohio EPA. The two agencies physically visited the sites to determine the installation relative to the shallow locations on the South Eastern side of the facility.

Jon Barber (RAB Member) - Is Ohio EPA involved throughout the contract

Eileen Mohr (Ohio EPA) – Yes, Milestones are under contract, the contractor is held to those dates. There are two sets of dates

George Tompkins (RAB Member) – Are all the potential wells on the property?

Mark Patterson- Yes, and consideration of geology was taken into account to follow the general direction of the flow of water in the sandstone.

Bill Steiner (RAB Member) - After the contract is awarded when will the work commence?

Mark Patterson- Once the contract is awarded the contractor will prepare a Project Management Plan (PMP) which will take them approximately three months. The entire project will be scheduled over five years and these plans need to be approved before work commences in the field.

No additional questions were fielded from the members. LTC Tadsen (Ret.) asked the public for any questions directed to Mark Patterson.

Bill Krimmer (Paris Township Resident) – Six test wells will be installed. If you find any contamination will you add additional drilling sites? Will these sites include wells past the property boundary if contamination has migrated in that direction?

Mark Patterson- The Agency for Toxic Substance & Disease Registry (ATSDR) does work beyond the boundary lines. An example Mark gave was Load Line 12, where there are wells located near the fence. The government property line extends beyond the installation fence. Federal and State agencies coordinate internally regarding these matters.

Bill Krimmer (Paris Township Resident) - So you consult with them on a regular basis?

Mark Patterson- That is correct.

Ron Duncan (Middlefield Resident) - Why hasn't Ohio EPA requested off site ground water monitoring wells?

Eileen Mohr- There is no contamination found off post.

Mark Patterson- As discussed in previous meetings, the Army legally cannot extend monitoring wells past the property line if there is no evidence of contamination. As of yet, contamination hasn't migrated beyond the fence, and until the sampling indicates that it does, the Army cannot go past the property line.

LTC Tadsen (Ret.) - Stated that Mr. or Mrs. Duncan has asked the same question at numerous meetings and asked for him to please refrain from repeating the question. He stated that this question has been asked at least five times at previous RAB meetings, and that the RAB members feel that the Army has provided a reasonable course of action. He further stated that this question will not be entertained from Mr. or Mrs. Duncan in the future. If the Army has any new information on this topic, Mark Patterson will inform the RAB members.

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Ron Duncan (Middlefield Resident) - I am not aware that ATSDR drills wells, are you looking for pathways of contamination?

Mark Patterson- Yes and there is no evidence at this time.

Laura Duncan (Middlefield Resident) - Who is the Ohio EPA's ground water expert that will handle this project?

Eileen Mohr- The project is handled by Connie McCambridge and team.

Laura Duncan (Middlefield Resident) - Are there any other Ohio EPA from the Northeast District working on this project? Will some of those people be the same that were involved in Middlefield?

Eileen Mohr- There are many Ohio EPA personnel involved in these projects and yes some were involved at Middlefield, including me.

Bill Krimmer (Paris Township Resident) - At Building 1200, did they cut through the shells, and were samples taken?

Mark Patterson- There is a sediment pond there and yes, samples were taken.

No additional questions were fielded from the audience members. LTC Tadsen (Ret.) announced the next presentation for the evening.

**4. Presentation of the Load Line 2, 3 & 4 Slab Removal Project Update, Brian Stockwell, PIKA International Project Manager.**

After completion of the formal presentation, the RAB members proceeded with questions directed to Brian Stockwell. (To request a copy of the formal presentation please contact Christy Esler, RAB Administrator).

LTC Tadsen (Ret.) - asked Brian now that the slabs are removed and a big hole exists, what is the desired end-state?

Brian Stockwell- There remains positive drainage, on site soils may be used to fill low lying areas. The soils will be tested prior to filling these areas, and the areas will be seeded with an approved native grass seed mix.

LTC Tadsen (Ret.) fielded questions from the RAB Board Members.

Jon Barber- This contract did not discuss the walkways beside the buildings?

Brian Stockwell- The contract only included slabs, the walkways are still there.

Jon Barber asked if the fields would be restored back to natural grass.

Brian Stockwell said yes.

Mark Patterson added that the Army wanted to add the walkways into the SOW contract but there is not enough funding available at this time.

LTC Tadsen (Ret.) - Introduced Katie Elgin, RTLS Environmental Specialist and asked her if the Ohio Guard needed that area and is it feasible to use in the future. Katie- said that the planned use for the land is armored vehicle maneuvers so removing the walkways would assist preparing the areas for training.

No contaminated property is transferred from the Army to the Ohio Army National Guard. If no contamination is found, then we could move the walkways if funding allows.

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Jon Barber stated that it is just unfortunate the funding was not available since the contractor is there and ready.

LTC Tadsen (Ret.) added that the National Guard goes thru the same process for funding demolition work.

Jay Abercrombie- asked what type of seed is used to restore the property.

Brian Stockwell was unsure of the exact type but only an approved native grass seed mix can be used. We use a local supplier for this specific mixture.

Jon Barber said so it is the type of grass found in this area?

Brian Stockwell- yes that is correct

No additional questions were fielded from the members. LTC Tadsen (Ret.) asked the public for any questions directed to Brian Stockwell.

No questions were fielded from the audience members. LTC Tadsen (Ret.) introduced the next presentation for this evening.

**5. Presentation of the Load Line 2, 3 & 4 Sampling of Soils beneath Floor Slabs Project Update, JoAnn Bartsch, URS, Project Manager.**

After completion of the formal presentation, the RAB members proceeded with questions directed to JoAnn Bartsch. (To request a copy of the formal presentation please contact Christy Esler, RAB Administrator).

LTC Tadsen (Ret.) - What type of quick field test do you perform to know if explosives are present?

JoAnn Bartsch- We immerse the sample in acetone, then test for the intensity of the color, with the Jenkins Colorimetric Test for Explosives.

LTC Tadsen (Ret.) - Is building G1 and G1A beyond your SOW?

JoAnn Bartsch- Yes was a decision by the Army.

Jon Barber- Is there a potential for run off?

JoAnn Bartsch- No, the material will be inside a building, not subject to rain and on plastic covered concrete floors.

Jon Barber- Will you continue to sample until clean?

Mark Patterson- Bioremediation was used. Load Line 12 soils tested high for explosives, so we used organic materials such as cracked corn and chicken manure to bioremediate them. The explosive levels dropped 95% over a 28-day period of time. Feasibly you need 4-5 thousand yards of soils to set up bioremediation that would result in fewer disposals. Srinu Neralla from MKM Engineers studied the coolers of soil with the organic additives. It took a while but the results were 3 to 5% lower in explosive content.

Nancy Taylor- Did you test for RDX and TNT

JoAnn Bartsch- Yes that is correct

Jay Abercrombie- Brian discussed finding 1lb. of raw explosives.

JoAnn Bartsch- Yes and we covered the areas with plastic; there was a picture of that in the presentation.

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Mark Patterson said that Brian found pure raw explosives; JoAnn's work was concentrated in just the contaminated soils.

Jonathan Millea- What is the maximum time to complete?

JoAnn Bartsch- End of summer we were almost finished, so by the end of the year we will have all results.

LTC Tadsen (Ret.) - When is the end of the contract performance?

JoAnn Bartsch- The end of 2008.

Mark Patterson- at Joilet Army Ammunition Plant (JOAAP) contamination was much worse. They located 200lbs of raw explosives under a ramp. It has to do with housekeeping. So to compare Ravenna to Joilet, Ravenna did a pretty good job of housekeeping.

Jon Barber- Will you move soils to buildings then complete RI work?

Mark Patterson- No, we do not think so, but once we determine the amount of cubic yards of material versus our budget allowance we will know more.

LTC Tadsen (Ret.) - Would Bioremediation be successful in this type of work?

Mark Patterson- It is possible.

Bill Krimmer (Paris Township Resident) - When you completed the test with the Jenkins method, did it also detect DNT?

JoAnn Bartsch- The parallel samples were split samples, one goes to the lab and we use the Jenkins method on the other.

Mark Patterson referred to the last minutes regarding Dr. Thomas Jenkins' response to DNT isomers. Please see inserted end note for Dr. Thomas Jenkins response included in the March 19, 2008 RVAAP RAB Meeting Minutes.

**6. Presentation of the Central Burn Pits Project Update, Jed Thomas, Science Application International Corporation (SAIC).**

After completion of the formal presentation, the RAB members proceeded with questions directed to Jed Thomas. (To request a copy of the formal presentation please contact Christy Esler, RAB Administrator).

Nancy Taylor- Asked Jed to confirm the lead value of approximately 8000 parts per million.

Jed Thomas- I was referring to soil concentrations not TCLP values.

Bill Steiner- the 157 tons of soil was non-hazardous correct? And where did this go?

Jed Thomas- Yes that is correct and it was transported to the American Landfill.

Nancy Taylor- said that this is a lot of soil and with transportation fees wouldn't it be feasible to conduct the bioremediation?

Mark Patterson- Everything that Jed's project dealt with was metals.

LTC Tom Tadsen (Ret.) - asked if this was also due to fiscal reasons as well ? There was not enough material to treat, so bioremediation wasn't feasible.

Mark Patterson- That is correct, it depends on the soil.

Nancy Taylor- What is the cost difference shipping non hazardous verse hazardous?

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Jed Thomas- It is significant, approximately double. This would also depend of the characteristics of the soil to determine the actual amount charged.

No additional questions were fielded from the members. LTC Tadsen (Ret.) asked the public for any questions directed to Jed Thomas.

Ron Duncan (Middlefield Resident) - What is the closest stream of water near the Hexavalent chromium pile?

Mark Patterson- Sandcreek is the closest. Jed and Mark said about 1200 ft. roughly, approximately a quarter mile.

Mark Patterson- the location was DB3 or DB6 which is the south end of Load Line 2.

Ron Duncan asked if this was a dumping area.

Mark Patterson said that it was possible.

No additional questions were fielded from the audience members.

LTC Tadsen (Ret.) asked for any additional questions prior to the scheduling of the next meeting.

LTC Tadsen (Ret.) announced the next meeting will be September 17, 2008 at Paris Township Hall, 6pm.

LTC Tadsen (Ret.) asked for everyone to keep all of the veterans and soldiers serving in our prayers. He wished everyone a happy and safe Memorial Day weekend.

Since there was no further business or questions, the meeting was adjourned at 7:40 p.m.

Respectfully submitted,

Christy Esler  
Ravenna Army Ammunition Plant  
Restoration Advisory Board Administrator