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

The meeting was called to order by Community Co-Chair Tom Tadsen at 6:07 p.m. at the Paris Township Hall, Paris Ohio.

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

Secretary Christy Esler took a visual attendance with 14 members present, 6 excused and 4 absent (Mr. James DiPaola, Mr. Howard Furl, Ms. Sarah Lock and Ms. Nina Miller)..

#### 2. General Business

The first order of general business, Mr. Mark Patterson has returned to the Ravenna Army Ammunition Plant and as the U.S Army Co-chairman for the RAB. Tom Tadsen also announced that Mr. Irving Venger would be retiring soon.

Mark Patterson said that it was very nice to be back and to see familiar faces once again. Mark explained he will also continue to be the environmental coordinator for the Fort Wingate Depot Activity in Gallup, NM.

Tom Tadsen announced the resignation of Barbara Andreas and asked that anyone interested please contact Christy Esler for an interest survey.

Tom Smith brought up that Becky Carter, RAB Member is no longer with the township after she lost her position and her seat will be vacant. I informed Tom that Becky's RAB membership seat is not a township representative seat.

Tom Tadsen suggested a deadline for interest survey's of December 15, 2007. The ballots will be mailed to each member with a postage paid envelope for return. Tom also asked that I send out the voting ballot outcome to each member after the tally.

Tom Tadsen asked the members if there was any additional business. The members did not have anything additional at this time.

Tom Tadsen introduced Todd Fisher from the Ohio Environmental Protection Agency as the presenter for this evening.

# 3. Presentation on the Off Post Surface Water & Sediment Sampling, Todd Fisher, Ohio Environmental Protection Agency.

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

John Barber (RAB Member) - asked how deep did you sample sediment?

Todd Fisher- answered that the sediment sampled was from 6 inches to 1 foot.

John Barber- the tributary streams go deeper as you go.

Todd Fisher- Anything could go into the ground water; however we are looking at surface water.

This is what people come into contact with.

James Mayer (RAB Member) - Asked if we test water quality going into the arsenal.

Todd said that yes that is coordinated with the surface water. And all streams have been sampled. James pointed out the specific area near the Windham gate, large storm sewer near 303 entering the arsenal.

Todd Fisher- We looked at the total water quality. The results show no impact in water quality.

Bill Steiner- Asked about the correlation drawn: Same or cleaner?

Eileen Mohr said that the new report on water quality is not out yet. The last survey was in 1994, the link to that report is on the Ohio EPA website.

Bill Steiner- asked if they will compare the 1994 reports v/s the 2006 report once received. Eileen Mohr & Todd Fisher- yes we generally do compare, however in 1994 explosives were not sampled so we will have new data on particular parameters.

Tom Tadsen said that the sediment and water will be compared with the 1994 to the newer report in 2006.

George Tompkins (RAB Member) - Aquatic life in the streams. The southeast high school completed a program to look at the life downstream from Wayland Rd. Does the Ohio EPA coordinate programs with the school districts?

Todd Fisher- Yes, those are hester dendy samplers that they use to place in the creeks to classify what is collected. Greg Orr from Ohio EPA handles the public speaking for our outreach programs.

Tom Tadsen said twice a year spring & fall seniors and juniors from Windham High School complete the program at the stone arch bridge in the arsenal.

Walter Landor (RAB Member) - Target Parameter List of Metals- How many? Tom Tadsen said that the list is in the presentation handout on page 2, there are 23 metals analyzed. Tom Tadsen asked who decided what types of explosives were tested.

Todd Fisher & Eileen Mohr- Said they used the USEPA 8330 method and tested for the whole list, for example RDX, TNT, HMX. Todd added they tested a full suite. Eileen said it is a full suite for a Remedial Investigation.

No additional questions were fielded from the RAB members. Tom opened the floor to the public attendees for questions.

Julie Smeiles (The Weekly Villager) - Was the water tested for explosives and not just the sediment? Todd Fisher-The water was also tested.

Laura Duncan (Middlefield Township)- Did the Army split samples?

Todd Fisher- No the Army didn't sample.

Laura Duncan (Middlefield Township)- asked why?

Mark Patterson- the Army will not sample if contamination does not appear to be outside the installation boundary.

Eileen Mohr- the Ohio EPA funded the developed initiative.

John Barber (RAB Member) - Was testing completed on site?

Mark Patterson said yes.

Tom Tadsen said that the Army's scope of work is to investigate inside the fence.

Eileen Mohr & Todd Fisher said that the entire Mahoning watershed was sampled.

Bill Steiner said that this was a small snapshot of the sampling event.

Ron Duncan (Middlefield Resident)- What was the total cost of this event?

Eileen Mohr- said that she is unsure. She would have to total the cost up for the analyses (information in the files) but some would have no cost associated with them from our program because these were processed in the Ohio EPA Department of Environmental Services lab in Columbus OH.

Ron Duncan (Middlefield Resident) - As a taxpayer I would like to know the total cost. Tom Tadsen asked Eileen if this would be part of the final report. Eileen said no it wouldn't be.

Todd Fisher said that the money was secured by Ohio EPA Division of Emergency and Remedial Response (DERR) to sample for explosives at the same time that the Division of Surface Water (DSW) was conducting their routine watershed sampling. This would give us information to determine if there was evidence of contaminant migration off-post.

Ron Duncan (Middlefield Resident) – asked if explosives had never been sampled off site until 2006?

Mark Patterson (RVAAP Facility Manager) - That is correct.

Laura Duncan (Middlefield Resident) - What about the Rocket Ridge incident?

Mark Patterson- More testing will be completed at this site. Explosives do not float downstream so this would be found in the sediment.

Eileen Mohr- On November 5 we conducted a site visit to choose a location to install a barrier system to prevent migration of any explosives or UXO downstream.

Laura Duncan (Middlefield Resident) - What about the previous 5 months before the screen? Mark Patterson said that a magnetometer has been used downstream to identify anything that has moved downstream prior to the screen being installed. One of our Senior UXO Technicians (Lew Kovarik) took a magnetometer along with the team while conducting a visual survey. The first identifiable item was found 1500 feet upstream of the George Road Bridge where it crosses Sand Creek. That is approximately 1250 feet downstream of Rocket Ridge.

Eileen Mohr- Added that they started at the George Road Bridge and walked upstream. Mark Patterson - Installation boundary is approximately 4 miles from Rocket Ridge.

Ron Duncan (Middlefield Resident)- asked if hexavalent chromium is a concern. Todd Fisher- No

Mark Patterson said that there are only 2 or 3 locations that hexavalent chromium was used. That is the Load Line 2, where acid dipping occurred (this was used to dip shells into to treat them to avoid rusting). C Block Quarry is another location where acid and hexavalent chromium waste was dumped.

Eileen Mohr- 14 AOC Characterization Report was completed. This report has information on the hexavalent chromium in C-Block Quarry.

Katie Elgin (Ohio Army National Guard) - Reported that the water quality in the streams on site is very good.

Julie Smeiles (The Weekly Villager) - Discussed the water quality and the national average for the

JJ Leet (RAB Member)- Referred to the 2003 Surface Water Study that a biologist from the Ohio EPA and the USACE conducted. Looking at the aquatic life for any deformities, tumors etc.

Laura Duncan (Middlefield Resident) - How long has Ohio EPA been involved at Ravenna? Eileen Mohr & Todd Fisher- answered since 1995

Mark Patterson - The Army studies are presented on rvaap.org or may be viewed by calling the RVAAP office for an appointment.

Ron Duncan (Middlefield Resident) - Surface water and Sediment results are below background levels?

Todd Fisher- The surface water results are reviewed by chemists. We worked with Dr. Bob Davic (Ohio EPA DSW) regarding the Upper Mahoning basin project. The data is currently being analyzed.

Edith Chase- The middle Cuyahoga finished a long process and this is a lot of work. I am fully behind the Ohio EPA and your process. We had folks from the citizen's advisory council helping out with the project, like Steve Tuckerman. Tom Tadsen added that Steve is a local resident.

Mark Patterson & Tom Tadsen- Announced that John Jent from the US Army Corps of Engineers is retiring January 4<sup>th</sup> this year. John will be greatly missed on the Ravenna Team but we wish him well. Mark said that JJ was very involved in the RAB and was truly a critical part of Ravenna. Tom added that JJ has a true passion for environmental work and he is one of the top people to push the Jenkins colorimetric field test for explosives. He stands out in his field.

Tom Tadsen asked for any additional questions prior to the scheduling of the next meeting.

The next meeting will be March 19, 2008 at Freedom Township Hall.

Tom Tadsen reminded the members to please watch the mail for your voting ballots.

Tom Smith made a motion to adjourn the meeting, and Joe Beutler seconded the motion.

Since there was no further business or questions, the meeting was adjourned at 7:20 p.m.

Respectfully submitted,

Christy Esler Ravenna Army Ammunition Plant Restoration Advisory Board Administrator