

**Ravenna Army Ammunition Plant  
Restoration Advisory Board (RAB)  
Meeting Minutes  
March 16, 2005**

**1. Call to Order and Reading of the Minutes**

The meeting was called to order by LTC Tom Tadsen at the Windham Township Hall, Windham, Ohio at 6:00. LTC Tadsen announced we will do the first presentation and after we will address questions from the RAB members and at that time we will then open the floor to the general public. Once the questions are answered we will move to the second presenter and follow the same procedure. Christy Esler requested that when you address the presenters please identify yourself and the organization or township you are from. Also RAB members please follow the same procedure as the general public. Please be courteous and I think this meeting will go as well as the last meeting did. Did all the RAB members receive copies of the last meeting minutes?

Dan Spicer- I did not receive a copy in fact I found out at the last meeting my name wasn't even called during the attendance.

LTC Tadsen- Dan we apologize and we will look into that.

Mark Patterson- Dan, Christy will confirm your address after the meeting.

Secretary Christy Esler took a visual attendance with 16 present, 2 excused and 6 absent (Barbara Andreas, Kevin Cooper, Robert Daugherty, Maureen Frederick, Milan Markov and Mark Zigmont). Mr. Tom Smith announced that he would entertain a motion from the RAB to suspend with reading of the minutes of the previous meeting unless there were amendments. All those in favor please say "Aye" all those apposed? The motion carried, LTC Tadsen announced the minutes are approved as printed.

Mark Patterson- Dan, Christy has the address here she will confirm that with you.

Christy Esler- Dan, the address I sent the minutes to is; 6180 State Route 225 Ravenna, Ohio 44266 is that correct?

Dan Spicer- Yes

Mark Patterson- Dan, maybe the minutes were lost in the mail but do you need a copy of the minutes?

Dan Spicer- No, Tom Smith made a copy for me.

**2. General Business**

Next order of business is actually not on the agenda we have a celebrity with us tonight. Neighbors, you might have read about her in the newspaper locally recently- Edith Chase has most recently been awarded the National Oceanic and Aerospace Administrative Coastal Steward of the year award and she was awarded that for her stewardship over the water quality, Coastal resources and water sheds of Lake Erie and the other Great Lakes. She ensured Ohio's involvement in the Great Lakes water quality group and helped form the Ohio Department of Natural Resources in 1982. Provided substantial input to the Ohio Coastal Management Plan and was inducted to the Ohio's Women's Hall of Fame

in 1990. She was also inducted into the Ohio Department of Natural Resources Ohio Conservation Hall of fame in 1992 and, in 1995 awarded Individual recipient of Ohio's Lake Erie Awards. She is a member of the Working Group Cuyahoga County Plan, Coordinating Cuyahoga Remediation Committee, Active in the League Women Voters, Kent Environmental Council and Vice chair of the Ohio Coastal RESOURCE advisory council and the Portage County Environmental Round Table, and I think that she probably has a better attendance record over the years better than all of us here at the Restoration Advisory Board meetings. Thank you for all your environmental involvement you are a role model for all of us. Thank you for making this a life long commitment and realizing that environmental stewardship is just not a flash in the pan. Please stand so everyone can see you. Thank you again for all your dedication.

I would like to also take a moment to talk about the Ohio Army National Guard building a Mark 19 grenade machine gun range at Ravenna. This machine gun fires a nonexplosive projectile with a small bursting charge that shows the firer where that round impacted. It is a very important experience for the folks who are going to Iraq and Afghanistan whose mission is primarily convoys. The Army is reacting to environmental organizations and common sense and has now developed a projectile that does not use perchlorate. It has a mechanical device that sends up the booster with a non toxic powder instead of using a bursting charge containing perchlorate . The old rounds only had about 65 thousandths of a gram of perchlorate per round but the new one has none and it is in the right step for all of us.

### **3. Mark Patterson, Facility Manager**

LTC Tadsen introduced Mark Patterson. There are handouts being distributed and information sheets are in the back that contain information pertaining to the proposed burns here at Ravenna. There are additional copies so please feel free to take as many as you need. There is a sign in sheet, on the back table, with a column on the right to check if you want to be on our mailing list also on the back table. Also there is a letter from the Ohio Environmental Protection Agency (OEPA) director on the back table, regarding the concerns about the proposed burns and OEPA's position also on the back table. Mark asked Eileen Mohr if she wanted to add anything.

Eileen Mohr- We have a new director at OEPA, Mr. Joe Koncelik took over for Chris Jones, who was our director for 6 years. Joe is familiar with the program and is a very reasonable man to deal with.

### **4. Presentation on the Multi-Incremental Sampling Method used in the restoration program at RVAAP, John Jent, Louisville Corps of Engineers.**

LTC Tadsen introduced Mr. John Jent of Louisville Corps of Engineers. Mr. Jent presented to the board and passed out a presentation packet.

Immediately following the presentation LTC Tadsen asked the board if they had any questions for John Jent.

**5. RAB Members Questions to John Jent**

Jay Abercrombie- Do you air dry these manually, blow dry, or sun dry?

John Jent- Air drying is a huge thing, first of all none of this involves a volatile organic compound sample. Next question involves semi volatile organic compound samples. Air drying doesn't matter. It has no effect on semi volatiles, metals or pesticides. The large problem we had is that if you just send it out to dry it gets hard, and we need to break it up. Then you can sieve it down and grind and the grinders can be cleaned. The grinding provides a much more uniform representative sample which usually comes up with higher concentrations instead of taking it right off the top.

Marti Long- What projects have been compromised by using the discrete sampling methods?

John Jent- Before I answer that, I wanted to mention that when MKM Engineers completed the 14 Areas of Concern (AOC) sites, they had taken over 300 multi-incremental or discrete samples. MKM's Health and Safety, decontamination procedures were so impressive we invited Chuck Ramsey to Ravenna for a presentation. This was one of the largest and most practical contracts completed.

John Jent- This is a huge problem with the massive amounts of data. At a lot of our sites we have used discrete samples that showed a fairly representative sample.

Eileen Mohr- How do we take this discrete sample data v/s new multi-incremental approach sampling and connect with one another as John Jent mentioned? I think we came up with a good approach and the new projects we are working on use multi-incremental sampling. When we were all sitting in Chuck Ramsey's class at least in my head I was thinking yea right this is not going to work, because for 20 years we have been using the discrete method but at the end of the three days it made absolute sense. John had mentioned the other Ohio Site which was the Krecji dump site in Cuyahoga Valley National Park. I believe they use the confirmation sampling and it is something the agency concurs with and that we will continue to use it at Ravenna.

Charlie Ramer- I know when we do Landfill analysis to determine a plume. We use volatiles in soil when we do a chemical analysis, but what you are saying is that there were no volatile sampling completed.

John Jent- No, sediment study there was on the 14 sites there were but these were discrete samples and not multi incremental.

Charlie Ramer- Then why do you let it air dry (vaporize) why don't you take the volatile samples before they vaporize?

John Jent- You are getting into a subject that Chuck Ramsey is working on and they use the methanol method. They are working on ways to get volatile M.I. samples.

Eileen- like John said probably the smallest part of the error is the laboratory and we are quick to jump on the lab when the largest part of sampling variance is obtaining the sample itself,

Charlie Ramer- It just seems like this a big piece of missing data.

John Jent- You're right, it is.

Eileen- with the 14 AOC study they did take discrete samples for volatile organic compound analysis because you can't send it through the multi-incremental sampling process, so that piece of information is there.

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Rick Callahan- PID reading also obtained in the field.

## **6 . Public Attendees Questions to John Jent:**

Felicia Miller (Paris Township) - Are there any gas chrome topography tests done to see what actually is there like metals/volatiles.

John Jent- Sure once you get the sample, you take your 2 gram sample out of the top of the jar and into the machine it will tell your parts per million (ppm). The problem is how representative are the two grams you stick in the machine? And like I said there are people working on that. The bottom line is how do you get a representative sample out of the ground and ensure that representative sample represents that whole area. But they are working on that.

Steve Myers (Newton Falls Resident) - How soon after the burn are you going to take these samples. It seems like if you are going to check 12 inches down your sampling will be less as you go deeper.

LTC Tadsen- Steve I am sorry, but we are not talking about the burns at all. We are talking about multi-incremental sampling and discrete sampling, a change in techniques from discrete to multi-incremental.

John Jent- Some people like samples 0-2 (inches below ground surface); some people like 0-6 some like 0-12. In Ohio the Risk Assessors guide specifics it is 0-12 inches. This is defined as surface soil.

Robert Garner (Paris Township) - It seems like most of the samples are on the confines of the Ravenna arsenal shouldn't some be outside of the arsenal?

John Jent- Actually, on biologists' recommendation samples have been taken at the entrance, exit of the area and a bunch in between. For surface water and sediment we can not go off the property to sample, but we did as much as we could inside.

Robert Garner (Paris Township) - I have another question, after 65 years a sample of 9 to 12 inches (bgs) would not be a good representative sample. Shouldn't it be deeper?

John Jent- Again the biologist determined the sample depth.

Mark Patterson- That is only small part of the overall sampling that we have done over the past 10 years. Subsurface soil samples are up to 8 to 10ft (bgs)., ground water wells are up to 50ft deep and in some places deeper, that would detect any of those contaminants. So that would catch any contaminants that could have been deposited over the past 65 years.

Bill Krimmer (Newton Falls Rd. Resident) - Sir, Should the discrete samples be redone with the multi-incremental sampling technique to get a better idea of what is going on around here?

John Jent- No I even checked with Chuck Ramsey but for most of these large areas we have many, many discrete samples completed here.

LTC Tadsen- I would like Eileen Mohr from Ohio EPA to also address that question.

Eileen Mohr- I would agree with John that is one of the questions we had before - do we have enough data to characterize the area we have done in the past? Do we have credible data, what is the nature (metals, explosives) and extent of the contamination not only vertically but horizontally? So I am more than convinced with the data we have collected in the past, with the great volume of discrete samples.

LTC Tadsen- Mr. Krimmer does that answer your question?

Bill Krimmer (Newton Falls Rd. Resident) - Yes

Mary Brown (Ravenna City)- In the fish studies you showed the variety of fish that you logged but what I didn't hear was any log of physical abnormalities, any internal organs that were abnormal. What about any difference from those fish and a normal fish?

John Jent- In addition to the population we looked for abnormalities in the fish, in Kelley's Pond we took tissue samples and I saw the results and there were no abnormalities and no explosives detected.

Mary Brown (Ravenna City) - But wouldn't you have expected to see some contaminants in these fish?

John Jent- I am not a biologist so I can't comment. But to me the field testing was better than any modeling we have done.

Eileen Mohr- John mentioned the deformities they look for lesions and tumors. I believe in mid 90's Ohio dept of natural resources did some sampling and there were some data on that. If you would like that information please call me.

Mary Brown (Ravenna City) - I have a comment to make but before I make it please do not take this in a offensive or disrespectful manor- But sitting here as a non-scientific member of the community and you showing us the different techniques and the way we should have been doing it instead of the way we have for over 10 years does not inspire a lot of confidence in the organizations.

John Jent- I hope you're mad as hell, it is hard to change the bureaucracy, it is hard to change and get this going. It is so practical but the chemists are talking about all of this other stuff that is why I decided to talk to you.

LTC Tadsen- The sampling technique used before discrete sampling probably looked pretty bad in comparison with the results of discrete sampling, but we are learning and updating sampling procedures as we go.

Mary Brown (Ravenna City) - But you report that we used this technique so much longer than everyone else.

John Jent- It is just not here, it is everybody OEPA, USEPA, and discrete sampling is in use by every state agency.

Mary Brown (Ravenna City)-You are not making me feel any better

Eileen Mohr- John is right it is not just the U.S. Army Corps of Engineers, it is everybody. Discrete sampling was as John put it the cat's meow. Multi-Incremental Sampling is a new technique that is just starting to be used in the environmental field.

Mary Brown (Ravenna City) - You established that there is a new sampling method and an old sampling method, one is clearly better than the other. Then you expressed that you are confident that the results of old way data are acceptable. Now fill me in. Am I missing something? We used to cut down trees by hand now we have chain saws isn't the old way not acceptable?

John Jent- The main thing is we have so many samples - 300 to 400 samples. We've got the most bang for the buck.

Mary Brown (Ravenna City)- If you were to go out and test again today the new way would you perform the same amount of tests today?

John Jent- No, It would be fewer, but there are still some die hards left who use the old way.

Mark Patterson- The discrete samples were not just randomly taken in the Load lines or production areas. Some places are right at the outfall of a pipe or drip line. Some places are actually pink where the explosives have washed out, so these places are biased. That gives you a confidence that we are testing the correct contaminated locations.

Julie Smeiles (The Villager) - I do not understand this- and it is the same question that has been going on for a while. If you have your discrete sample which you know can turn up certain non-detects in error (negatives instead of positives) is there some kind of statistical formula that you use, say that we have 1,000 samples and 300 are false non-detected? Are you saying that a percentage of those discrete samples are reliable? Are you trying to say that the margin of error is larger with discrete sampling than the multi-incremental?

John Jent- Biased sampling is what we did with the discrete sampling. We used historical and on the ground knowledge. Biased sampling is done by most EPA and US Army Corps of Engineers agencies. So we have that going in our favor.

Julie Smeiles (The Villager) - So you are using the other data points in addition to the discrete sampling in order to back up the original data.

John Jent- We are using the biased sampling and the multi- incremental sampling procedure and looking for traces as we go along.

Mark Patterson- John, In addition to this we were using biased discrete and also a random discrete sampling method. So it was a combination of biased discrete sampling and random discrete sampling.

LTC Tadsen- We have about 4 more minutes available for questions then we will move on to the next presenter.

Marlene Nowak (Windham Township) - When I look at the list of metals- aluminum, iron, and copper, there is nothing "scary" on the list. When you talk about PCB's is that information available to us?

John Jent- Yes

Marlene Nowak (Windham Township) - When you say the arsenal has been around for 65 years, we get a lot of rain that has obviously percolated down into the water table. Is there a hydrologist looking at the water table?

John Jent- There have been over 200 ground water samples taken.

Marlene Nowak (Windham Township) - There has been a multitude of sample types done. Are they down to the water table? You mention wells, what is that? Marlene Nowak- Are they 50 to 100 ft. down, to the water table?

John Jent- Yes ground water wells, drill a hole into the ground to reach the water table.

Marlene Nowak- That far down?

John Jent- Yes

Mark Patterson- Yes like John said we do have wells in the depth range you just mentioned.

LTC Tadsen- Eileen you're a geologist would you like to comment?

Eileen Mohr- Sure, When we look at a Areas of Concern (AOC), for example, a quarry, load lines before we start the process we have a scoping meeting, we pull out maps to determine the presumed ground water flow is and we hammer out the numbers of soil, sediment, sub-surface and water samples that we take. What we do at Ravenna is we not only install wells near a source area, (i.e.: melt pour bldg.) we will put a well in that area and also at the perimeter of the AOC to see if there is any contamination in the water table. That way we are getting an accurate snap shot of the area.

Marlene Nowak- My understanding of an aquifer is that it is a big underground river? And this stuff would be traveling, wouldn't it?

Eileen Mohr- The aquifer does move but not flow like a river though. Like John said, we drill to the first ground water, if there is contamination it will show up. That tells us if we need to go deeper. The water travels through sandstone, gravel or clays so the travel times are very different and we perform modeling in transport section of our Remedial Investigation.

LTC Tadsen- Would you mention the topography testing that is done?

Eileen Mohr- Wells are installed based initially upon topography. After they are in the depth to the water is measured and you can make a map that shows the groundwater flow direction.



LTC Tadsen- We are going to conclude John Jent's presentation, but John are you available for questions after the meeting?

John Jent- Yes I will be here after the meeting.

**7. General Business /Establish a date for the next meeting**

LTC Tadsen- I would like to establish a date for the next meeting. The next meeting will be on April 20, 2005 at 6:00. Joe Beutler interjected and asked the board if any one would have an objection to holding the next meeting at the Charleston Fire House. The board had no objection. Joe Beutler will host the next RAB Meeting.

**8. Presentation on the U.S Environmental Protection Agency's PCB Regulatory Program and how it applies to the proposed Engineered Burns at RVAAP.**

LTC Tadsen introduced Mr. Tony Martig region V of the U.S. Environmental Protection Agency. Mr. Martig presented to the board and passed out a presentation packet.

Immediately following the presentation LTC Tadsen asked the board if they had any questions for Tony Martig.

Charlie Ramer- Is this the first application for a controlled burn of PCB contaminated buildings to Region V?

Tony Martig- No, this is actually the second: the first application was Badger Army Ammunition Plant. The second is Ravenna AAP. Ravenna notified us in 1992 that the buildings have over 50 ppm of PCBs. Badger has decided to postpone their burn.

Mark Patterson- Tony I just want to correct the date, it was 2002, not 1992. Badger AAP was a much different facility. Unlike Ravenna Badger AAP was not a load facility. Badger actually made and produced the propellants like black powder and nitro glycerin. Most of their buildings are constructed out of wood. That gives their buildings much different properties as well as explosives. When I talked with Badger's commander's representative I understand they are looking at possibly demolishing some of the buildings rather than burning them. And they have from this point pulled back from the permitting process and they are looking at actually demolishing some of the buildings.

Charlie Ramer: Are any other U.S.EPA Regions in the country pursuing the issue?

Tony Martig- This will be the first PCB of this nature in the country if it is approved. I have informed other Regions regarding the report we received to our agency.

Charlie Ramer: Then I ask the question why us? We are a populated area. Why here? Is this the proper place to conduct this type of burn?

Tony Martig- Why here you ask? That is not a question I can answer, we are here to review the proposal and application.

J.J Leet- I am trying to understand the whole PCB Issue. Are there PCB's outside this bldg.?

Tony Martig- 95% of today's transformers have less than 50 ppm of PCBs, older transformers could have higher levels.

J.J Leet- If there was a leak in one and you touch it, it could be absorbed in the skin and you would probably not get cancer. Correct?

Tony Martig- I am not a health expert, but I think you could get a rash. Long time exposure is a risk; for example a worker at a plant who may have not washed off properly day after day could be at risk for long time exposure or a very high personal concentration amount.

J.J Leet- Lets say if I were to go to the arsenal and touch a wall, I couldn't get cancer right?

Tony Martig- I couldn't say, but if there were demolition activities and dust particles in the air, then you could be exposed. I am not a biologist or a health expert.

Tom Smith- We live in a community where the EPA says our air is so bad that we are subject to E-checks. How can the EPA then consider a burn of this size and pump thousand and thousand of pounds of contaminates in the air. I am also a Fire fighter and the fire station can not get a permit to burn a house for training exercises. I can sit here and safely say that Akron Air would not give us a permit to conduct a burn.

Tony Martig- I am not the best person to answer this but this is the type of question that our agency is looking for.

Tom Smith- To me it is a no brainier, are they going to come here (Akron Air) and measure a day after. Then we are told that our air is worse and have to extend E-check.

Tony Martig- We have not gotten that far with Ravenna yet. With Badger, we planned on monitoring the air at ground level or slightly above.

Tom Smith- Given Badger's location, they would not be subject to E-check. That would be a good place to start.

Tony Martig- That would be entirely up to the Army.

Sarah Lock- What information would that provide to us? (a burn in another community) Isn't it specific to our weather and topography? What data would you pull from another location to be applicable to Ravenna?

Tony Martig- Specific to every site, Risk Assessment data can be collected. We may be able to use the other data on another site. Some aspects in the risk assessment are specific to each site.

Delbert Woloski- Early on you mentioned PCB Incinerators- explain this process in air quality monitoring and even the results.

Tony Martig- This requires a permit from the U.S. EPA, liquid PCB's, soils, and sediments usually it is pumpable. Oils, soils- primary 99.9999% efficiently (the 6- 9's) (Combustion proficiency) prove through a test, and monitor periodically.

Delbert Woloski- Do you know at what temperature they run?

Tony Martig- Yes 1800 degrees F They are required to monitor continually.

Dan Spicer- For how long?

Tony Martig- Continuously

Joe Beutler- If you monitor air at ground level, wouldn't make more sense to monitor up farther?

Tony Martig- We have concluded where to air monitor. We speak to our experts and move mobile monitors around and at higher fence lines and beyond.

Joe Beutler- When you monitor and find a problem what would we do?

Tony Martig- This is a very good question. Like any spill, any higher levels in those areas would have to be cleaned up consistent with the Risk Assessment.

J.J. Leet- In the Record Courier editorial, private hands (not the government) would receive less stringent rules to follow, if this was a private sector requesting this permit?

Tony Martig- It doesn't matter whether this was Army or private industry requesting such a permit. We would follow the same process.

J.J. Leet- Do you know how wide spread in the Army PCB's were used in paint? Wouldn't you say that not only Army used PCB's in paint but you would find that many private sector and corporations also used PCB's in paint?

Tony Martig- PCB's were mainly used by the Navy, but the PCB weren't put there on purpose and contamination was not the norm. Yes, private sectors also used PCB's in paints.

LTC Tadsen- We will now move to public questions for Tony Martig.

## **9. Public Attendees Questions to the Presenter**

Walter Adams (Kent Resident) – There seems to be a couple of other contaminates in these buildings, Is EPA considering other contaminates?

Tony Martig- Yes, asbestos and mercury we are taking into consideration. Although the main reason I am here is the PCB levels and that is the main focus of my review currently.

Walter Adams- Once you set precedence, will other burns be approved easier?

Tony Martig- Any other facilities Army or Private will go through the same entire process. Even though this could be the first, that would not mean that other burns could short cut. Going through this process for the first time will help the next permit process.

Mark Patterson- One of first things we do is remove all hazardous materials, and it must be done safely without exposing the workers and during that we would not create any heat, friction or shock. We have safely removed all the transite siding. It is a very high cost - over a million dollars to remove one load line. A Load Line has approximately 400,000 sq. ft. of transite siding. Load Line 1 had 40 to 50 (55 gal. Drums) of floor sweepings, animal droppings, and loose paint chips that were properly removed, characterized and disposed. Light ballasts, lead anchors and mercury switches have been removed.

Walter Adams- Did you remove all electrical wiring?

Mark Patterson- No, generally we do not especially in the melt pour buildings, it is not uncommon for the explosives to be inside the conduit.

John (Charleston Township) - What about the testing? My son has asthma. Maybe the last burn caused it and set him off? Will this burn affect children and more? Was 50ppm tested on just adults?

Tony Martig- Yes, it has a more serious effect on children and that is a part of the Risk Assessment. We are taking that into account.

Karen Kurtz (Freedom Township) - The PCB Incinerators, were studies done there in local areas?

Tony Martig- There is an incinerator located in Texas. There were studies done and in Chicago there is also an incinerator. The only problem is that other industries surround the incinerator. There are a higher number of asthma cases in those areas.

Paris Township Resident- Concerning the test burn in 2003', the OEPA said no air monitoring was done. Is that just because it is a cheaper way?

Mark Patterson- Load line 6 and Load Line 9 and Igloos in the wet storage area were burned. Sampling procedures were followed by Akron Air direction. At the time the PCB level was not above 50ppm and the data was not required.

Ralph Graham (Paris Township Resident) -I would like to follow up on that; I traded a couple of e-mails with Eileen Mohr. Testing for this burn was created in 2002. Why wasn't the testing done on the buildings that were not over 50ppm. If you knew you were going to create a burn over the 50ppm limit then why didn't you test? At the last meeting, Kathleen Chandler our state representative, asked you, why you did not test the burn that was below the limit first. And the response she got was we are going to burn them all. We don't know for sure what we are going to get over the fence.

Mark Patterson- The response you got was not that we were going to burn all of the buildings. It was that we were only going to burn 10 buildings in Load Line 11 and again we are only in the initial step, the review for risk showed below actionable risk levels. Again this is the initial step and the review is not completed yet. And at the time it was not above 50ppm and the data was not required.

Ralph Graham- I understand that. PCB's were under the limits at the last burn, now this burn is over the limit. It makes no sense to not test below the limit then you have had that opportunity in the past and then burn a building above the 50ppm. When we still have buildings below the limit you can test. You can not go back after the burn and clean out these people's lungs. Are we in the surrounding communities acting as guinea pigs?

Jonathon Smuck (Kent resident) -- What was the underlying reason for EPA to outline no burn of PCB's over 50 ppm?

Tony Martig- Initially the rules came about because of scrap yards, private sector entities were conducting uncontrolled burns of liquid PCB's.

Douglas Java (Southington Resident) - Why burn (PERIOD). My dad worked in here and he is dead, my mom is still alive but she can tell you horror stories about

the arsenal. Thousands of people will become sick with more than just asthma. Thank you.

Cheryl Morris- If you burn who will clean up our land, the Army? We own a campground outside the arsenal limits, if our business is contaminated who will pay for money lost and the clean up?

Tony Martig- The Army.

Unidentified Audience Member- We can not even burn leaves.

Julie Smeiles (The Villager) - Monitoring sites will gather up information during the burn and what happens if we get an oops factor? How long will it take to get these results back?

Tony Martig- It will take a couple of weeks to compile the data. The agency needs to be convinced there is no unreasonable health risk.

John Dolan (Charlestown Resident) - Are you doing this to be safe for workers? You just stated that you took out all of this stuff then why it isn't safe to take down.

Mark Patterson- Working in the buildings is not what causes a safety concern it is because any heat-shock or friction that can occur. A perfect example is at Joliet Army Ammunition Plant South of Chicago, they were turning a piece of equipment into recycled material at a local scrap yard, it was not clean of explosives (no thermal treatment) and when the worker turned the acetylene torch on the worker was killed. It is not just the workers on the installation; it is also the workers who have to deal with recycled material.

John Dolan (Charlestown Resident) - What about here, was any one hurt, right here?

Mark Patterson- Yes actually before they proposed thermal treatment they were doing it traditionally the worker was using an n acetylene torch on the equipment and the soil caught fire because it was so contaminated with explosives. We pulled back which is normal procedure and the fire burned it self out. Did someone get hurt? No, could someone have. Yes very easily.

John Dolan (Charlestown Resident) - Is there documentation on that accident.

Mark Patterson- Yes I am sure the contractor has it. It was about 6 to 9 years ago, PDG probably has that.

John Dolan (Charlestown Resident) - I was talking about the most recent burn. Did anything happen? You talked about taking all of these materials out.

Mark Patterson- Do you mean taking out the materials in the buildings?

John Dolan (Charlestown Resident) - Yes

Mark Patterson- No there were no incidents where a worker was hurt and those activities are approved by the U.S. Army Technical Center for Explosive Safety that approves these activities and one step below the Department of Defense Explosive Safety Board.

Unidentified Paris Township resident- You talked about the 6, 9's that are required, what was held to the 6, 9's?

Tony Martig- The incinerator was held to the 6, 9's

Unidentified Paris Township Resident- What is an open burn held to?

Tony Martig- There isn't a number. The Army assumed that all PCB's go into the air according to the Risk Assessment. They are assuming the worst possible situation.

Unidentified Paris Township resident- So without information we are considering burning? How can this be considered? So this is going into the air, into the soil, near our children and it settles on our crops. How can this be considered?

Tony Martig- Modeling will help determine the risk. We do consider these subjects. No unreasonable risk to the public will be permitted.

Pat (Paris Township) – The EPA itself recognizes that PCB/Dioxins are among the 10 most toxic substances in the US. My theory is when you talk about vegetation/children, pregnant women are in danger. In 1941-1945 Atlas Powder was the original contractor for the Ravenna arsenal and produced, Ammonium Nitrate (used in fertilizer), chemicals and metals. When you start burning what do you think is going to happen? Fertilizer is used in explosives like in the Oklahoma City bombing.

Tony Martig- We are looking at that and Ravenna did include that in the risk assessment.

Debbie Roth (Our Lives Count Representative) - Currently as these buildings sit today - What hazard or threat do they pose in the community?

Mark Patterson- Most contaminants are found near the buildings. Ground water monitoring wells around the fence show no contaminates.

Debbie Roth (Our Lives Count Representative) - Then if there is no threat why take them down at all?

Mark Patterson- The land is being used, 1,481 acres are owned by the Army and the National Guard has the remainder of the land. We are on contract to remove the concrete structures so that way the National Guard can train.

Debbie Roth (Our Lives Count Representative) - You mean to tell me out of 21,000 acres there is not enough room to drive tanks around with out taking these buildings down?

Mark Patterson- I think LTC Tadsen is better at answering the tank question.

LTC Tadsen- To fulfill training requirements there is no money to demolish the bunkers. On the South side of the load lines no expansion room. Directly north of the maneuver area is the regional first responder site. Wet lands also limit training.

Eileen Mohr- On Load lines 1, 2, 3, and 4 we have gone through the Remedial Investigation process. We don't know what is underneath the slabs, or in the sewers. OEPA will not write off those areas without investigation. We know the final use is mounted training with no digging. It will be used as a National Guard Training Facility.

Dave Walton (Newton Falls Resident) - What about our land value- example: selling our homes, new families wanting to move into the area, what if anything will our land be worth?

Tony Martig- I am not a realtor and can not answer that question but we are looking at human health concerns and cancer/non-cancer health effects.

Dave Walton (Newton Falls Resident) – Was the dunnage obtained here? Imported? What about the pesticides and contamination in that dunnage? Why would you even consider this? One newspaper article says that these pallets are being shipped in from China.

Mark Patterson- The pallets we have tested and requested clean they are not contaminated. This is clean material. It is NOT shipped from China or Europe.

J.J. Leet- Newspapers have freedom of speech, but they are using scare tactics.

Bill Krimmer (Newton Falls Rd. Resident) - 6,000 to 9,000 pallets were sold to DOD (Department of Defense), from the conversations I had with the pallet companies.

Mark Patterson- That is not correct.



Bill Krimmer (Newton Falls Rd. Residence) - Pesticides were on the pallets, but as you know what looks clean might not be clean. I am sure you did the best you could.

Rick Callahan (MKM Engineers) - At the January 19<sup>th</sup> RAB Meeting, MKM Engineers was asked to present the data and risk information for the PCB's and the dioxins/furans. This is a multi step process. Once the USEPA provides their comments the next step includes the ecological Risk Assessment and monitoring plan. The risk is that explosives get in between those materials. This is associated with the lead floors below. We ran tests on the lead to determine how much would be released during a burn, what you have is factual.

Bill Krimmer (Newton Falls Rd. Residence) – When you burned LL6 & LL9 in Feb-May 2003 did both load lines have antistatic floors in them?

Rick Callahan (MKM Engineers) - Lead flooring, based on tests to Akron Air & USEPA.

Mary Brown (Ravenna Township) - Despite the USEPA granting this burn, any other recourse to stop this burn?

Tony Martig- Granting the permit to burn is far into the future, you can contact your local government officials in the interim.

Marlene Nowak (Windham Township) - Will the public have a chance for input? Will smoke go as far as Pittsburgh? And how will they know it is coming there way?

Tony Martig- We will hold meetings and neighboring towns will be aware of the date of the burns, newspapers and local T.V channels will also be notified.

Marlene Nowak (Windham Township) - If you are not going to burn and it is not approved, could you transport the waste to an incinerator even though it is possible for air contamination in that area? Is this a safe way to destroy the PCB's?

Tony Martig- The incinerators are being closely monitored but right now this is the choice of permanent option to dispose.

Barbara Gaskin (Streetsboro Resident) - Dismantle the buildings and take them away.

Mark Patterson- There is explosive residual in these buildings. Army DOD experts have said there is enough explosive risks to not take it down the conventional way.

Barbara Gaskin (Streetsboro Resident) – So there is less chance of accident if we burn?

Mark Patterson- Yes, if we dismantle there is the potential of an accidental explosion.

Julie Smeiles (The Villager) - What are the figures on the synthetic floors.

Rick Callahan (MKM Engineers) – We have not sampled the synthetic floors yet. Why take the additional steps if we haven't made it past step one yet.

Julie Smeiles (The Villager) - You are burning different buildings, some with PCB's and some not. What about rubber or anything else that is not good to inhale. When Akron Air fills out a permit, are chemical concerns released that these people should know about?

Rick Callahan- We have not yet assessed the flooring, that is the next step.

Mark Patterson- LL6 & LL9, wet storage only had lead lined floors for static purposes, these things were considered.

Jonathon Smuck (Kent Resident) - What about new technologies, Robot soldiers etc or should we delay this a couple of years until the technology is there?

Rick Callahan (MKM Engineers) - MKM Engineers uses robotics in some areas however there are explosive residue between materials.

Bob Craiglow (Ravenna Resident) - How many buildings?  
184 in Load Lines  
121 below PCB 50ppm  
67 above PCB 50ppm  
So how many burn? 50 burn, 10 burn or 20 burn?

Rick Callahan (MKM Engineers) - This is part of the Risk Assessment.

Tony Martig- Badger AAP projected doing burns over 8 to 10 years. Risk of accumulated effect, they have since collected more data.

Marilyn- You need to either burn or demolish right? Is there epoxy on this stuff?

Mark Patterson- Critical building has residual explosives. PCB's over 50ppm have to be treated. We can not go in and tear down the conventional way. Open burn or thermal decomposition are our choices.

Unidentified Audience Member- I have a question, I am good at reading body language and your body language tells me that you are bored you are ready to go. I am not ready to go and if it takes all night then I will be here. You have yawned 9 times tonight. I want to hear a sales pitch that makes me feel good about what you are doing.

Mark Patterson- I am not bored, we are hear to give everyone information to make there own decision if they are for the burn or against it, I will respect their decision. I am not going to give you a sales pitch because I do not believe that this is what it is about. I have been working in the environmental field for years and believe in doing what is best for the people and the environment.

Bill Krimmer (Newton Falls Rd. Resident) - I talked to Mark Patterson and Rick Callahan and I believe they are very honest men. They are doing the best job they can; they have had me out to the arsenal and spent a lot of time with me during phones calls and tours. I do not believe they are intentionally being dishonest, I respect them but I do not like what they are doing.

Julie Smeiles (The Villager) - What about using heavy armed vehicles?

Mark Patterson- We have used them on the burning grounds and they are very expensive. But lexan can only protect you to a limit, 25 to 30 lbs of TNT and that is large enough to kill the person inside a heavy armed vehicle.

Bill Krimmer (Newton Falls Rd. Resident) - We are having a public meeting on March 30<sup>th</sup> at 7:00 in Paris Township, I would like to publicly invite the Army, MKM and the board to our meeting. That way the roles can be reversed you can sit out here and we will run the meeting.

LTC Tadsen made a motion to adjourn the meeting at 10:07 p.m.  
Tom Smith seconded the motion.

Respectfully submitted,



Christy Esler  
RAB Secretary