

Ravenna Army Ammunition Plant
Restoration Advisory Board (RAB)
Meeting Minutes
November 3, 1999

1. Call to Order and Reading of Minutes

The meeting was called to order by Tom Tadsen at the Town Hall of Windham, Ohio at 6:03pm. Secretary Denise Gilliam took attendance with 16 present, 3 excused & 2 absent (Mark Griffiths & Tom Lawson). Rachael Craig requested that a correction to the minutes be made. At the September 15, 1999 meeting the minutes reflect that "Ms. Craig expressed concern over pinkwater and with the plant uptake of pinkwater." This statement should read that Ms. Craig is concerned with two separate issues, 1) pinkwater and 2) any hazardous materials taken up by plants. Tom Tadsen motioned to accept the minutes as approved and corrected, seconded by Rebecca Carter, and approved by consensus.

2. General Business:

Mark Patterson began the meeting by opening the floor to discussion about the accident at load line #12 at the plant. OSHA has been on site since last Friday. The corporation involved is Environmental Construction Incorporated out of Tallmadge. The area, load line #12, is now secured and will be secured until the end of the investigation. Mr. Patterson stated that the accident was tragic and that he hopes, through OSHA's investigation, to find out exactly what happened. He stated that at this time it seems as if the contractors were attempting to cut the supports of the building, when the concrete roof/ceiling fell in upon them. Mr. Milan Markov asked if OSHA's findings would be released to the board and the public. Mr. Patterson replied that if the information could be released, it would be. Mr. Caryl Griswold expressed that he was disturbed by a newspaper article that stated that Mr. Patterson had said that the area was being cleaned to later be used as an industrial site. Mr. Patterson stated that had never been mentioned to the reporter. He stated that he told the reporter that the area was being cleared for reuse, but that no specifics were mentioned. Mr. Griswold expressed that he wants the people in the local area to be kept informed of what is happening with the land. Ms. Craig asked if the newspaper article could be corrected. The paper was the Warren Herald-Tribune. Mr. Patterson stated that his only recourse would be to call the reporter. Mr. Patterson then led the discussion to what is being done with the materials being removed from load line #12. Ms. Eileen Mohr stated that the buildings (rubble) were being placed on vis queen for removal. The building material is then tested to make sure that it is not hazardous. If no contaminants are found it is then used as clean hard fill. Anything that is contaminated will be sent off site for proper disposal. Chances of things being hazardous are slim. Testing the debris and using it as clean hard fill will help preserve the area's hazardous waste landfills for future use. The clean hard fill from these demolished buildings is being placed in a former quarry. Ms. Mohr stressed that all removal and demolition of building debris is done in accordance with federal regulations. Mr. Markov asked if the buildings were made out of transite. Mr. Patterson replied that not all of them were. Those buildings with roofs of transite are being removed. The building involved in the accident on load line #12 had a concrete roof. Mr. Tadsen added that some of the buildings have side panels of transite. Ms. Mohr stated that all of the transite was being properly disposed of. Mr. Patterson stated that _ million dollars had been saved so far by utilizing landfill sites on the arsenal for clean hard fill as opposed to using area landfills. Ms. Mohr went on to state that the area on George Road, where the clean hard fill will go, is being sampled to make sure it is clear of contaminates. Mr. Tadsen said that Tim Morgan had gone in to inventory the timber before selling it. The money from that sale will come back to the installation to help keep costs down as well. Ms. Craig asked which contaminates was the debris being tested for. Mr. Patterson answered that VOCs, SVOCs, explosive testing, T-Clip (used to check for DNT), as well as a dozen other explosives were being tested on the debris. Ms. Mohr stated that the area for fill is being tested for

explosives and hazardous waste. Mr. Patterson said that they were also looking into other areas. Where change houses are dug out of the bedrock in load line #1 the clean hard fill will replace it. Samples in this area will probably be taken tomorrow. Ms. Mohr stated that they will be looking into all areas and that if there are substances to be found that they will indeed find them. Ms. Craig asked if something could be done to see if the families of the two contractors who were killed in the accident could be helped. Mr. Patterson stated that the company that the two worked for was a family owned business, who appeared to take care of their own. The families of the victims were in a very supportive atmosphere. Ms. Craig asked if the Army had the resources to help out the families, financial or otherwise. Mr. Patterson stated that he did not know and that he would look into it. Ms. Craig asked if he could find out any information would he report his findings to the board at the following meeting. Mr. Tadsen agreed to look into the matter but did not seem hopeful about the outcome. Mr. Patterson went on to inform the board that a community newsletter would be coming out soon. It deals with the plans for the year 2000, bio-inventories, and testing of various areas. Mr. Patterson requested that the board members look over the newsletters and report any inconsistency to Mr. Patterson or bring them up at the next RAB meeting. These community newsletters will be distributed to the community including federal offices, schools, etc.

3. Creative Solutions

Creative Solutions had nothing new to really report so they took this opportunity to put together a customer satisfaction survey to get a sense if the board is satisfied with their job performance. Mr. Patterson passed out the survey to the board members and asked that they take the time to fill them out and return it to him. Mr. Patterson then stated that the time to reapply for another TAPP grant is here. The maximum \$25,000 has been set aside. Ms. Craig and the board need to decide if the board should continue to use Creative Solutions.

4. Candid Comments on Creative Solutions

With regards to their previous presentation Mr. Landor stated that he was lost by what Creative Solutions was saying. Mr. Markov agreed stating that he did not have a clue as to what they were talking about and that they needed to put their presentations in layman's terms. Mr. Markov asked if any of the companies or organizations could offer the board a presentation in simpler terms. Mr. Markov asked if Mike Kangas could have explained it to the board. Ms. Craig responded that she believed that Mike Kangas could have done a better job. Mr. Landor stated that reports should have been in plain talk, not jargon. Mr. Tadsen stated that taxpayer dollars are being spent and that the board needed to seriously look into the provider and make sure that the board is getting what they require. Ms. Craig asked if there was anyone on the board that felt that contractor was performing satisfactorily. There was no reply from any member of the board at that time. Ms. Nina Miller asked if they were to go to someone else would the year of work invested in Creative Solutions be lost, or would they (the new organization) look at Creative Solution's information and decipher it in layman's terms. It was agreed by many that there would have to be a certain degree of backtracking. Mr. Richard Kern stated that he was concerned that if the board used another \$25,000 of the \$100,000, they will have used half of their money and yet the job is not half complete. Mr. Tadsen asked if the payout to Creative Solutions should be included in the minutes and the board agreed. The payout to Creative Solutions so far totals: \$17,736.18 (please see enclosed invoice). Ms. Miller stated that if the board was going to opt to change contractors they needed to notify the present contractor so that they did not continue to use money. Mr. Tadsen asked the board if they should continue to use the present contractor and should they apply for a new grant. There was no answer from the board. Let the record reflect the fact that neither Mr. Mark Patterson nor Ms. Eileen Mohr participated in this candid discussion. The board agreed that spreadsheet invoices with the expenditure on Creative Solutions be passed out from now on with the minutes of the meeting. Mr. Tadsen suggested that if the board provided accurate feedback on the

customer satisfaction survey passed out, that maybe Creative Solutions would change their presentation format. The board requested more time to fill out the surveys and Mr. Patterson agreed to collect the completed survey at the next RAB meeting. Mr. Tadsen then posed the question before the board again, should they terminate the contractor. Mr. Patterson interjected that secret ballots could be sent to the members. Ms. Craig stated that in her personal opinion the contractor is not providing the clarity of presentation that the board needs. She would not personally waste any more money on them. According to Ms. Craig the contractor that was initially wanted by the board was unavailable so the board chose Creative Solutions. Mr. Tadsen called the motion to terminate the activities of the current provider, Mr. Landor made the motion, Ms. Miller seconded the motion, Mr. Markov seconded the motion on Creative Solutions, none opposed, motioned carried. Mr. Tadsen called the motion to select a new TAPP provider. Mr. Markov suggested amendment to original motion from selecting new provider to selecting a prioritized list of applicants. Mr. Markov asked if the board could look into using members of universities for applicants, instead of just looking into the private sector. Ms. Craig stated that she would look into the universities and that she welcomes any suggestions. Mr. Landor asked Ms. Craig if it was possible to canvas all of the universities in Ohio. Ms. Craig replied that she would check into all of the universities and see what is available. Amendment to original motion accepted. Mr. Tadsen called the motion, Mr. Landor made the motion, Rebecca Carter seconded the motion, 1 opposed (Mr. Jay Abercrombie), motion carried. Ms. Craig stated that it would take a couple of months to line up new prospects. The problem being that the qualified ones work nationally and that the board would then have to pay travel expenses, which would eat up the budget. Mr. Abercrombie stated that he was frustrated with not getting any information and stated that if a new provider was selected that maybe the board should use less than \$25,000. Ms. Miller concurred and asked if the board receives \$25,000 for one year, what happens to the remainder of the money if it is not all used. Mr. Patterson stated that he would check into the matter and report back to the board at the following RAB meeting. At this time Ms. Craig asked Ms. Mohr if she could ask a question off subject. Ms. Mohr agreed. Ms. Craig stated that they seemed to be focused on two main things: potential carcinogens and toxins. She asked Ms. Mohr if the test being run on these two broad areas, excludes testing for endocrine disrupters. Ms. Craig asked if Ms. Mohr could please look into the matter. Ms. Mohr agreed.

5. Guest Speaker

At 7:07pm Mr. Tadsen welcomed Judy Pennington, U.S. Army Corps of Engineers Waterways Experiment Station. Ms. Pennington presented a discussion of fate and transport of explosive contaminated water (pink water) with special emphasis on uptake by plants. Ms. Pennington began her discussion by stating that her presentation would have an emphasis on plants due to the little amount of information available about animal uptake. She reviewed the process of contamination. Waste water from load lines was dumped on to the ground, ran over the surface, and percolated into the ground, and eventually was transported by groundwater. Pink water is largely a combination of TNT, RDX, HMX and other explosives. There are two terms used in the microbial degradation of these chemicals: transformation and mineralization. In transformation the original molecules change but are not broken down completely. In mineralization molecules break all the way down into simple entities. TNT can be converted to organic things very slowly. RDX is very prone to microbial degradation especially when they are in environments with no oxygen, such as wetlands. Included in Ms. Pennington's presentation was the classic pathway for biotransformations of TNT chart, showing that the products are as complicated as the original parent compound. The products may also have the same toxicity levels as the parents. Also included was a chart showing the microbial mineralization of RDX. From this process simple compounds are formed from the parent, these are unstable molecules. There is always potential for use of this process if conditions are right. Ms. Pennington went on to say that once explosives were in soil they could be taken up by plants through

their roots, foliage and fruits. She conducted an experiment showing how the different levels of toxins in the soil affected the plant as well as how the density of the soil was also a factor in the uptake by the plants. She proceeded to show how the various toxic levels affect food plants. Ms. Pennington went to discuss the affects of surface water/runoff, rainfall infiltration and ground water on the explosives and toxins. She discussed a way to gauge the movement of the contaminants via partitioning. She discussed the immobilization of TNT, how it forms covalent bonding to soil organic matter and how it interacts with clays. Ms. Pennington said that in the future there needs to be a risk assessment to begin probing into animal uptake. Ms. Pennington invited the members of the board and public audience to ask any questions that they might have. Ms. Miller asked if TNT was soluble. She had gone on a tour and saw pink water on the surface of the ground and wanted to know if TNT made the water pink or was it due to iron deposits. Ms. Pennington responded that it probably was tinted that color by a product of TNT , that would turn the water rust in appearance. Mr. Gary Newbrough asked if pink water couldn't just be burned. Ms. Pennington replied that it is possible to filter the water and then burn the residues. In a separate case in LA they took water, filtered it, dug up the soil, burned it, back filled the area with the burned soil and the area now has vegetation growing there and in this instance the process was extremely successful. A member of the audience asked what kind of silt was used in the testing process. Ms. Pennington expressed very loose silt and very dense clay was used in the experiment. A member of the audience asked what was natural attenuation. Ms. Pennington stated that first you must know characteristics of the site. This process is strictly for groundwater. Must understand the history of the groundwater. This includes the flow, rate and direction, and how fast the body of water is moving. Careful monitoring is a must. The whole process consists basically of looking for small trends over time. The EPA has come out with new reports on natural attenuation. The main clause is that you must develop a contingency plan upfront. Ms. Pennington closed her presentation at 7:54pm.

6. Scheduling of Next Meeting

Discussion on the date of the next meeting took place. It was decided that the next meeting would be held on January 19, 2000 and will be hosted by the city of Paris at 6:00pm at the Paris Township Building.

7. There being no further business Mr. T. Tadsen moved to adjourn at 7:57pm, seconded by Mr. Patterson.

Respectfully Submitted,

Denise L. Gilliam

Attach:

1 Invoice for Creative Solutions