

Ravenna Army Ammunition Plant
Restoration Advisory Board (RAB)
Meeting Minutes
March 03, 2000

1. Call to Order and Reading of Minutes

The meeting was called to order by Mr. Mark Patterson (Co-Chairman), in the stead of Lt. Col. Tom Tadsen at the Township Building of Paris, Ohio at 6:05 p.m. Secretary Denise Gilliam took attendance with 16 present, 2 excused, and 3 absent (Mr. Richard Walton, Mr. Mark Griffiths, and Ms. Irene Glavies-Lutz.). The RAB Secretary asked that the minutes be amended to show that Mr. Kevin Cooper was excused from last meeting, not absent, and that Mr. William Roberts had resigned in writing prior to the last RAB meeting.

2. General Business

Mr. Patterson began the meeting by opening the floor to discussion about RAB membership situation. At the current time the RAB consists of 21 members and the original agreement stipulated 25. Mr. Patterson said that the RAB could take application for new members or leave it as is. He motioned to vote on new applications, Ms. Nina Miller seconded the motion and it was passed unanimously. Mr. Patterson then told the board that Mr. William Roberts, who had been the Chair for the Membership Committee, had resigned from the RAB. He asked for volunteers for the Chair position. Ms. Miller asked what the position entailed. Mr. Patterson informed her that it consisted of making recommendations on applications for new members of the RAB. Ms. Miller agreed to take the position.

Mr. Patterson then brought to the RAB's attention the spreadsheet for the Creative Solutions. Two invoices had been added, one for Oct 99 that had not been previously paid, and the final bill. This brought the total for funds remaining to less than \$1700. Mr. Patterson stated that those monies could be transferred to the current year and utilized to find a new TAPP provider. He reminded the members that they could apply for a new TAPP grant. He stated that potential providers were going to present that evening. He told them that initially there were to be three potential providers but USGS had decided that they could not do a thorough evaluation of risk assessments. In their place Mr. Patterson had invited Kent State University Water Research Institute but they had changed their mind about attendance that afternoon due to lack of resources. At this point he introduced URS Consultants: Ms. Janet Bishop and Mr. Gary Hribar.

3. URS Consultants

Mr. Hribar introduced himself as one of the Principals of the firm from the Cleveland office and Janet Bishop as the Senior Professional of Environmental. URS Consultants is a publicly held consulting firm. It is the largest environmental company in the world. URS handed out a presentation package to the members. The hand-out consisted of a company overview, various job sites that the company is/was working on, an introduction to their risk assessment and risk management services, resumes of employees who would be involved with the RAB, and a list of references. The job sites included NASA Lewis: They reviewed the Phase II R&R work plans and suggested clear objectives, Navy Clean, Miamisburg Mound, USACE jobs, and Gentile Air Station. Ms. Bishop stated that she wanted to really concentrate on the work done at Gentile Air Force Station. She stated that URS has been working on that project since 1994. Land

has been transferred back to the city of Kettering, Oh. She stated that there were two more parcels of land to go. These parcels of land would be converted into a business park. The other land, she said, would be a neighborhood park and possibly a residential area. Ms. Bishop stated that URS helped the Air Force with RAB meetings. Three years ago, she said, that she presented what a risk assessment was in layman's terms to the RAB and the public. The job concentrated on human/ecological risk assessments. She discussed the creek on the site and that PAH contaminated sediments had been found there.

In closing Mr. Hribar stated that the RAB members would have a single point of contact, Ms. Bishop. He went on to explain that there were several specialists in various fields that could be accessed, as the RAB required it. Their names were Ms. JoAnn Duchene (human health risk expert), Mr. James Burns (20 yrs. experience with wetlands), and Mr. Gary James (expert in endangered species). He pointed out that their complete resumes were located in the presentation package.

At this time Mr. Hribar invited questions from the members. Mr. Waltor Landor asked if Public Works had merged with URS. Mr. Hribar stated that they had in the 70s. Public Works merged with Dalton & Dalton. Mr. Landor asked about brownfields. Mr. Hribar replied that there are more than 20 brownfields in the state of Ohio. He stated that URS does reuse planning. He told of a job in Loraine that is a 400-acre site with a city landfill. This area will one-day be used to house an industrial park. Ms. Miller stated that even though the previous provider had good working knowledge, they were unable to explain things to the board in layman's terms. She asked if URS was capable of doing this, as this is one of the important issues with the RAB. Ms. Bishop stated that she would leave a copy of the risk assessments for Gentile Air Station. She stated this would show to the RAB that they will not use acronyms and will explain all work in simple terms. Mr. Jay Abercrombie asked if URS was a TAPP provider or a primary contractor at Gentile. Mr. Hribar replied that they were the primary contractor. Ms. Bishop added that they were very experienced with getting comments back and revising them. Mr. Hribar stated that the Federal and Ohio EPA were both involved at Gentile. He stated that URS worked with the Air Force to help solve problems. Ms. Bishop stated that there was a list of references located in the back of the handout. She invited the RAB to call them and ask about URS, their work, and RAB contacts. Mr. Abercrombie asked if the work they had done with NASA had involved a RAB. Mr. Hribar replied no and stated that it was more of a peer review. Ms. Rachael Craig stated that there was a lot of background material with the arsenal that had to be understood. She asked if URS was at all familiar with the material, and how long would it take for them to get started. Ms. Bishop replied that they would make researching the background top priority. Ms. Craig then asked if they would note things in the research that the RAB should be aware of, contact the RAB, and present their findings. URS agreed. They closed at 6:45 p.m.

4. Kelly-Buck Company

At this time Mr. Patterson introduced Mr. Michael Lyden, President of the Kelly-Buck Company. He thanked the board for being given the opportunity to present; he stated that he was flattered to be in the same company as URS. Mr. Lyden stated that his company has three engineers on staff and some part-time engineers. He stated that Kelly-Buck was a small company. He passed out a paper copy of his presentation and proceeded to review it with the board. He felt that the RVAAP project sounded interesting and challenging. The main focus was to find

someone who could help the RAB interpret and decipher information. He stated that there is a lot of history at RVAAP. According to Mr. Lyden he is up to the challenge. He has 20 years of experience in environmental engineering and the applied environmental sciences. The majority of experience has involved site investigations, risk assessments, design and implementation of corrective actions at hazardous waste sites. He has done a lot of work in Ohio. He stated that he has mostly done work with private companies but has also worked with superfund sites and has had some involvement with DoD. His firm is licensed in the State of Ohio to provide professional engineering services. He stated that he could understand the technical aspects of a project and can relay that information in a clear and precise manner. He has had to decipher large amounts of technical information and have to break it down to people. He stated that he had never been a TAPP provider, but has been asked to translate technical information to citizen groups and how it relates to them. Mr. Lyden said that he doesn't have any personal risk assessment expertise, but could call upon experts. He stated that he realizes that the budget is limited, but mentioned that there were a lot of public resources that could be drawn upon. He said that he would be the person working with the RAB, coming to meetings, helping decipher reports and providing information to help the RAB reach their objectives. His company, he said, is reasonably priced, and they will work within a client's budget. They will roll up their sleeves and stay up late to get reports read. At this time Mr. Lyden welcomed questions from the audience.

Mr. Abercrombie asked how long Mr. Lyden had been in business. He answered three years. He started the company and prior till that had been a sole practicing consultant for 8 years. He spent the first half of his career working with large environmental corporations and the second half with small companies.

Mr. Landor asked who works with Mr. Lyden and what their qualifications were. Mr. Lyden replied that one has a degree in civil engineering, and the other has an agricultural engineering degree. This later individual also has 20 years experience providing consulting in health and safety matters. Ms. Craig asked how they would get experience with regards to explosives and biocontaminates. Mr. Lyden stated that he has worked with PCB contaminants and the bio uptake of PCBs. He has not worked with a site with ordnance and explosives, but feels that some of the biological aspects have similar traits. He stated that he would really dig in and find out information with regards to ordnance and explosives. Ms. Courtenay Willis asked about his experience with metals. Mr. Lyden replied that he was very comfortable with metals. Ms. Marti Long asked if he had any references and he replied that he would compose a list of references and get them to the board. Ms. Miller asked about his expenses and Mr. Lyden replied that he would not charge the RAB for mileage or commuting time. He stated that he would only charge for direct project work or purposes and of course any subcontractors that he brought in to coordinate with.

5. At this time Mr. Patterson asked that the presenters step out of the room so that the RAB could talk privately. Mr. Patterson said unfortunately they were only able to have the two presenter's at that evenings RAB meeting, but reminded the members that they still had the option to use previous providers that presented at the time they hired Creative Solutions. Also other potential providers could come in and present to the RAB, including those on the list provided by Ms. Craig. Mr. Thomas Smith asked whether or not they were still looking into the area's universities. Mr. Patterson answered that Kent State University said that they did not have the resources to complete the project for the RAB. Ms. Willis stated that she was concerned that Mr. Lyden said that he doesn't have the information

needed for the position but that he could access it. Mr. Patterson reminded the RAB that they had not seen a fee schedule from URS. Mr. Smith remarked that with all of the services that URS offered that their fees would probably be larger. Plus the fact that their overhead must be larger than Kelly-Buck's. Mr. Kevin Cooper asked what the current budget was. Mr. Patterson replied that after the new TAPP grant it would be \$25,000 plus the remainder of last years. Mr. Caryl Griswold commented that he liked the more personalized services. Mr. Smith stated that he would like more information from Kelly Buck with regards to him providing risk assessments. Mr. Landor stated that he wished to see a fee schedule from URS as well as a list of references from Kelly-Buck. Mr. Patterson stated that he would get that information and mail it out with copy of RAB minutes, then the RAB members could review all of the information and send in absentee ballots. He reminded the board that the eco risk assessment at Winklepeck could be the primary focus as the findings could carry over to the rest of the plant. He stated that if the board delayed too long, these projects would be too far gone for the TAPP provider to help them. If the focus is on one project that would save the board money. Mr. J.J. Leet asked if URS was aware of what the budget would be. Mr. Patterson answered in the affirmative. Ms. Willis asked who the point of contact for URS would be. The answer was given that Ms. Bishop stated that she would be. Mr. Cooper asked Mr. Patterson if he felt that they should concentrate on Winklepeck. Mr. Patterson replied that the choice was up to the RAB, and that they were welcome to apply for anything that falls under the TAPP. Mr. Leet stated that URS probably has more background, and when the RAB goes to them with information they can compare it other things, whereas Kelly-Buck would have to do a lot more research. Mr. Cooper asked what part of the Creative Solution comments could the new providers use. Mr. Patterson replied a very limited amount, Ms. Eileen Mohr added that they could look at the comments that the agency (OhioEPA) has made, but the comments provided by the last provider were not very extensive. Ms. Barbara Andreas asked if the new provider would be looking at previous work, or were they going to actually perform field-testing. Mr. Patterson answered that the providers were not allowed to do field testing under the TAPP. At this point Mr. Patterson made the motion that the information brought up will be given to the RAB members and that at that time they vote on the providers. Ms. Andreas seconded the motion and it passed unanimously. Mr. Patterson made the motion that the principle topic be the Winklepeck Burning Grounds, Mr. Griswold seconded the motion and it passed unanimously. Note for the record, Ms. Mohr and Mr. Patterson abstained from the last two votes.

6. USACE, History of Groundwater Summary

Mr. Patterson at this point introduced Mr. Paul Zorko of the US Army Corps of Engineers. Mr. Zorko has 18 years experience and is a licensed Geologist. He passed out historical surface water and ground water data that included tables, graphs, and maps, maps of groundwater wells, groundwater information, and stream sampling data. His presentation centered on a summary of historic stream sampling and ground water sampling analytical results. There were 8 sampling points, six of which represent influent and effluent points of Eagle, Hinkley, and Sand Creek, with two additional points (PF-8 and PF-534) which are the effluent points of two streams originating on the plant. The stream data comes over 12 events in a 12-year period. A few metals, several explosive compounds that are common to the plant were found. The tables show individual results, the average, and the standard deviation. Graphs show plots of the data. Oil and grease for one example. They represent influent and effluent points. Data is old and recorded in a different fashion than today. Data now is more modern and controlled. Because

of this the average result will be a little higher than what is actually there. Water is coming on to the plant and the oil and grease is sort of higher than what they are when they go off the plant. He stated that the plant has sort of a filter affect. RDX had a hit in the incoming water, but data is old, lab may make mistakes, subsequent testing has shown that there has really been very little explosives either coming on or leaving the plant.

7. Ms. Craig asked if the hit was just an example but not the norm. She asked if Mr. Zorko could give them an example of the risk posed by the concentrations. Mr. Zorko answered that he is a geologist and is just presenting the information. The groundwater sampling data that was taken was when the plant was active. It gives an idea of what is going on. Ms. Mohr said that the board was welcome to look at the Ohio Water Quality Standard, for metals (not explosives) so that they could have something to compare the data to. Mr. Zorko showed a chart dealing with groundwater data. 1988 first group, 77-91 second group, information from 14 monitor wells in 1998 in a single sampling event. This group of information was residential data. There was a column for average and standard deviation limits, groundwater concentration levels, and filtered and unfiltered samples. Ms. Craig asked if the detection levels were different in different groups. Mr. Zorko answered yes and explained that the data had different reporting criteria, and that detection levels changed over time. Ms. Craig asked if there was any analysis that Mr. Zorko had done to see why the detection levels are changing. Mr. Zorko replied that there were four different types of wells, such as supply, bedrock, filtered, and unfiltered. Ms. Craig commented that the media was changing not the background. Ms. Craig (referring to the chart) asked if the group 6 background was located on the top of the chart. Mr. Zorko replied that it was at about 215 parts per million. The numbers are pretty high because this is a monitoring well. There are suspended solids in it. The instrument is giving you a total figure because it doesn't know if it is in the water or the sediment. Ms. Mohr interjected that risk assessments are normally run on unfiltered samples, however the unfiltered samples are highly turbid. She stated that meetings had been conducted to see what values would be used for risk assessment. It was decided to use the filtered samples because that was more representative of what would actually be in drinking water. Ms. Craig asked if they were filtered via a laboratory. Ms. Mohr responded yes, that the water was filtered before acidification. Ms. Craig asked how this was analogous to what people were drinking in their homes. Ms. Mohr stated that the water is not comparable (drinking) compared to monitoring wells. Ms. Craig asked if they were getting suspended sediment in the water. Ms. Mohr replied yes but not like the monitoring wells. Mr. Zorko interjected by saying that the wells in bedrock are more likely to be representative to what you would find in drinking wells. He stressed the importance of knowing how each well was developed and how it was screened. The way a monitoring well is installed is different than how a drinking well is installed to avoid a biased sample. Mr. John Jent commented that the board had to keep in mind that on the chart, group 1 were residential wells, group 2 were water supply wells from RVAAP, group 3 background bedrock filtered, group 4, bedrock unfiltered, group 5 unconsolidated filtered, and group 6 unconsolidated unfiltered. Mr. Milan Markov asked if the monitoring wells are just drilled and then pumped? And at what stage is the well considered to be what is optimal. Mr. Zorko answered that filtered samples were used because this was a really good indicator as to what is in the well. Mr. Markov asked if you could pump it clear. Mr. Zorko replied that clear is the operative word. At this point Mr. Patterson intervened and stated that the wells are being installed in an attempt to reach the first water level. At this point RVAAP is trying to find out what is

getting into the first level water and what is already in it. Mr. Markov asked if the principle then for making a monitoring well is that you don't want to develop it as a regular drinking well. Mr. Zorko replied in the affirmative stating that the way a monitoring well is constructed and monitored is completely different than a drinking well. Mr. Markov stated that a monitoring well must be designed to search for what exactly you are looking for. Mr. Abercrombie asked why there hasn't been any surface water sampling since 1992. Mr. Patterson replied that there are samples done yearly, but more and more will be conducted for each AOC. Surface water is not showing much at all. USG found high diversity among the aquatic insects in the surface water at the plant, which gives a good indication of how good the water is. At this point Mr. Zorko closed at 8:10 p.m.

8. 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 May 17, 2000, and will be hosted by Windham Township at the Windham Town Hall Building at 6:00pm.
9. There being no further business Mr. Patterson moved to adjourn at 8:14 p.m., seconded by Mr. Landor, and carried.

Respectfully Submitted,

Denise L. Gilliam
RAB Secretary