#### **Community Interest Group Members and Project Staff Attendees**

John Chokran Rick Miller Jo Anderson, Pennsylvania Army National Guard Joan Renninger Jeff Brewer, U.S. Army Corps of Engineer, Baltimore District Linda Chokran Kim Harriz, Army National Guard Directorate Debra Deis Jim Rice Larry Herr John Rossey Major Cory Angell, Pennsylvania Army National Guard John Gerhard, Weston Solutions, Inc. Randall Hurst Lou Samsel Donald Kleinfelter Jay Saylor Ryan Steigerwalt, Weston Solutions, Inc. Mike Kneasel Dorman Shaver Deb Volkmer, Weston Solutions, Inc. Joseph Smith Jr. Linda McKinne Mike McKinne **Ruth Smith** Josh McKinney

#### Other Attendees

Galen D. Kleinfelter JoEllen Litz, Lebanon County Commissioner Jay Megonnell Dreama O'Neal, Pennsylvania Army National Guard Tom Powers, Stony Coalition Anthony Shaver

#### **Handouts from the Meeting**

- 1. Agenda
- 2. Draft Meeting Minutes, Community Interest Group, Ricochet Area Munitions Response Site in State Game Lands 211, PA, October 6, 2010
- 3. Table 5-7 Evaluation of Alternative 5 for AOCs with High Risk, Tobyhanna Artillery Range Formerly Used Defense Site Final Feasibility Study (as part of the Introduction to Feasibility Study Report presentation)
- 4. Fact Sheet June 2011: Draft Final Remedial Investigation Report Summary
- 5. Community Interest Group/Public Meeting Evaluation Form

#### Welcome

Jo Anderson, Pennsylvania Army National Guard, welcomed the group, introduced the project team and guest speaker Jeff Brewer of the U.S. Army Corps of Engineers (USACE), and presented the agenda. The agenda is provided in Appendix A. A motion was made, seconded, and carried to approve the October 6, 2010 meeting minutes.

Kim Harriz, Army National Guard Directorate, said the project team did not expect eight months to lapse between meetings. She had received feedback from a few people since the October 6, 2010 meeting inquiring about the lapse in communications on the project. She referred to a March 2011 e-mail transmitted about the draft final remedial investigation report coming out in May and scheduling a meeting once the report was available. However, the meeting was scheduled for June to accommodate everyone's schedule, including the availability of the meeting facility. She asked if there was any further feedback from the community regarding frequency of communication regarding the project.

John Rossey – How long is this going to take? When are you going to finish the study and move on?

Kim Harriz – The schedule will be discussed later in the meeting. The investigation is completed. The feasibility study (FS) is an analysis of alternatives to mitigate the risk because explosive hazards were identified. We'll talk about the FS, proposed plan, and process in the presentation later.

In terms of communications, we are planning to send the folks on the mailing list a monthly e-mail project update. Comments and questions are also welcome during the presentations and there is a meeting evaluation form for any questions you have and to provide comments on how we can better communicate project updates.

### **Overview of Draft Final Remedial Investigation Report**

John Gerhard, Weston Solutions, Inc., summarized the results of the Draft Final Remedial Investigation (RI) Report. The RI report presentation is provided in Appendix B. The presentation included an overview of the RI objectives, results, and recommendations. The objectives were to find the nature and extent of munitions and explosives of concern (MEC) and, if present, assess the safety hazards associated with those munitions. A MEC hazard assessment was completed to assess the explosive safety hazards of those ordnance items and land use. Another part of the RI was to characterize the nature and extent of munitions constituents (MC). Examples of MC are metals and potential explosives from the ordnance items. The RI report also evaluated MC data in a baseline risk assessment.

It was expected to see a greater accumulation of munitions on the back side of Second Mountain heading towards Stony Creek; however, there was a greater accumulation of MEC and munitions debris on the back side of Second Mountain and it diminished greatly going up Sharp Mountain. Buried discarded munitions were found at the Cold Spring Firing Point at the Cold Spring Reservation, at the location of a Pennsylvania Game Commission food plot area. Fire from Cold Spring Firing Point was back towards Fort Indiantown Gap impact area.

When conducting an RI an objective is to find the worst areas and subdivide those areas to manage those areas differently than other areas. The RI identified three areas: Ricochet Area Munitions Response Area (MRS), Cold Spring MRS, and Sharp Mountain MRS.

The density map of MEC showed the site has a lot of munitions debris and some MEC. At the Ricochet Area MRS 66 percent of the munitions were found on the surface, 25 percent at 3 inches, and 9 percent at half a foot or deeper. The items were found on their side, horizontal, so they had ricocheted in the area. Parts were lost as the munitions ricocheted and tumbled; fuzes were sheared off. At the Cold Spring, Mark 2A4 primers were found at a 1 ft depth.

Part of the RI is determining receptors that are on site. Receptors are persons, animals, or plants that are exposed to a hazard. The RI identified site receptors to be hunters, hikers, anglers, Appalachian Trail maintenance personnel, Pennsylvania Game Commission personnel and contractors, and firefighters.

By studying various categories the MEC Hazard Assessment (MEC HA) determines a score in which receptors may become in contact with munitions. The score determines hazard level (1 though 4, with 1 being the highest hazard).

Ricochet Area MRS was identified as a Hazard Level Category 3. This is not the worst case but it is not a low risk area either. The Ricochet Area MRS contains high explosives and receptors are in the area. MEC was located on the surface and subsurface, and there is a possible migration of unexploded ordnance (UXO).

Cold Spring MRS was identified as a Hazard Level Category 4. This area does not have high explosives, but it does have receptors within the area.

Another part of the RI was MC sampling. Samples were collected from under UXO and discarded military munitions (DMM) where MC are likely to be present. None of the UXO or DMM was cracked or leaking and the samples were analyzed for explosives and metals using EPA approved Solid Waste 846

Methods. In addition, background or reference samples were collected and analyzed for metals and compared to the MC screening against the data at the site.

Jim Rice – Why did it take so long to get the results? The results were done last summer and then it wasn't until March 2011 to re-sample.

John Gerhard – We had to wait until the trail was accessible because of the conditions from winter. The laboratory takes 30 days to provide results and the data needs to be validated. And then we thoroughly evaluate the data and pull our report together. Unfortunately, that took a long time. Also, one high concentration of arsenic was detected and it was determined that additional sampling was needed.

Kim Harriz – And there was a lot of discussion that it was such an anomaly; it had some repercussions; and we really needed to verify if it was actually a result that we had to address. The sampling couldn't be done in January or February 2011, but we sampled as soon as possible. Although we think the arsenic in that sample was a valid result, we think it was probably a piece of metal or a piece of rust got into the sample extraction. We wanted to see if it was representative. By re-sampling we saw that it wasn't representative of the entire area, because we have one sample that indicates a high arsenic concentration and five other samples that show results representative of background.

Tom Powers – What is the arsenic from?

John Gerhard – The munitions on site do not have had arsenic in them. Arsenic has a myriad of uses – pesticides and herbicides. We don't know the exact source of that arsenic; there is also naturally occurring arsenic in regions.

Lou Samsel – Isn't arsenic used in mining operations and for gold extraction?

Kim Harriz – And it even could be part of the bedrock. Natural arsenic could have actually been taken out with the extraction. It wasn't just arsenic because it was associated with iron. It was arsenic and iron, so that may be indicative of a bedrock source.

John Gerhard – Yes, it was consistent that those two metals were higher in that sample than the other samples. And then the arsenic and iron were lower in the additional follow-up samples.

The human health risk assessment was based on the MC data. Potential risks associated with MC to human receptors were evaluated. No chemicals exceeded risk screening guidelines; therefore, further evaluation was not needed.

The ecological risk values were based off of certain animals and birds: woodcock, weasel, shrew, dove, vole, and hawk. The results of the ecological risk assessment indicated a risk from copper at one location that could affect the dove, shrew, and woodcock populations. The limits of copper was exceeded at only one location for copper and, across the site, copper does not pose a problem. And the ecological risk for the populations from MC in soil is considered low.

Kim Harriz – Typically, a risk assessment for ecological receptors is done more to get an overall feel of what might be going on. A much larger release and a much greater impact than a single constituent at a single location would be needed to actually dictate an actual ecological risk.

John Gerhard – The recommendations from the RI were the Ricochet Area MRS was recommended for further remedial alternative evaluation as part of a feasibility study to be protective of human health from an explosive safety standpoint. Cold Spring MRS was also recommended for further remedial evaluation in the FS to be protective of human health. [Note that subsequent to the meeting the Ricochet and Cold Spring MRS' were combined for administrative efficiencies]. And Sharp Mountain MRS is recommended for no further action based on the absence of MEC during the investigation.

Kim Harriz presented an overview of the timeline moving forward with the project. Final comments from the Pennsylvania Department of Environmental Protection (PADEP) and Pennsylvania Game Commission were expected very soon. Preliminary comments were minor. Upon receipt of the comments the RI report will be finalized by the end of July 2011.

The FS is the next phase where remedial alternatives are identified and evaluated. The Ricochet Area MRS is a level 3 site indicating that there is some risk. The level four site saying there is some risk but it is extremely low. The Army National Guard is reviewing the first draft of the FS report. The next step is the proposed plan. As a result of the feasibility study, the Pennsylvania Army National Guard and the Army National Guard Directorate, in conjunction with the Pennsylvania Game Commission as landowner, are going to pick one of the remedies based on Weston's analysis that is considered best for the site to mitigate the risk.

Once the alternative is selected, a proposed plan will be prepared that explains the preferred alternative. With the proposed plan, the public has the opportunity to let your opinions be known. There is a formal 30-day comment period where the public is asked to write comments on the selected alternative. The FS report is made available to the public to review and provide feedback. Public input will be weighed against other input and considered for selecting the final remedy. After the public comment period, a record of decision or a decision document will be prepared.

And when the final remedy is selected and it's officially signed off by PADEP and the Army National Guard, a remedial design will be prepared for the selected alternative. And then the remedial action will take more or less time depending on what the specific alternative is.

Kim Harriz – The most extreme remedial action would be surface and subsurface clearing of all items. That remedial action would take over a year to complete. That does not include the time to complete all the administrative paperwork that accompanies that action.

Tom Powers – Would that include closing the area off for a long-term basis?

Kim Harriz – It would be similar to what was done for the investigation that established exclusion zones around work areas. Because there's always the chance that they may find a MEC item. They're not going to close and lock the gate while they're working. The exclusion zones will move to the areas where the work is being conducted.

#### **Unexploded Ordnance (UXO) Safety Presentation**

Jeff Brewer, an ordnance and explosive safety specialist (OESS) with the U.S. Army Corps of Engineers – Baltimore District presented and overview of UXO safety. On projects like the Ricochet Area MRS, USACE perform oversight work to make sure the contractor is doing the work correctly and safely and conduct quality assurance. When contractors finish an area a USACE representative double checks it to make sure everything was done right. The UXO safety presentation is provided in Appendix C.

Military activities began in the area around 1931 and it has been a very active site with a lot of military units and different ordnance.

The presentation pictured possible ordnance items that could be found on most military bases: smoke grenades, slap flares, 60-milimeter (mm) mortars, 81-mm mortar, 75-mm projectiles, 4.2 inch mortar 105-mm projectile, 155-mm projectile, and 8-inch projectile.

One presentation slide demonstrated the possibility that what looked like a common item was actually ordnance. With items found in Nantucket, area residents thought they were old fence posts from the

Page 5 of 9

# Meeting Minutes, Community Interest Group Ricochet Area Munitions Response Site in State Game Lands 211, Pennsylvania June 30, 2011 • East Hanover Township Building, Grantville, PA

military base. Actually, they were rockets sticking out of the ground emphasizing that common items and ordnance can look the same.

When finding ordnance, the military endorses the "3 Rs" program: Recognize, Retreat, and Report:

- Recognize the potential danger from ordnance.
  - Do not move any closer to the item.
- Retreat from the item.
  - Approximately 25 ft from the item mark the area so responders know the general area of its location but do not step on the item.
  - Do not operate cell phones or radios near UXO. Make all cell phone/radio transmissions from outside a 300 ft safety zone. Some ordnance fuzes operate in the same way as cell phones and sensors to automatic door openers. If it's a high explosive round 300 ft is the distance to go for general safety.
  - Tell others to stay away.
- Report the suspect item to 911, Fort Indiantown Gap Range Operations (717-861-2152/2153) or Fort Indiantown Gap police (717-861-2727).
  - Provide your name, who you work for (if needed), phone number, location of suspect UXO and your location (if different), description of ordnance, and any equipment, facilities, or other assets that may be threatened.

Several groups can respond to a suspect UXO sighting: police or fire departments, Federal Bureau of Investigation, Military Explosive Ordnance Disposal teams, and civilian UXO contractors. In addition to the military there are several civilian schools to train a UXO technician. Schools teach the qualifications set by the Department of Defense Explosive Safety Board Technical Paper-18. This is where the Department of Defense explains the requirements for civilian UXO technicians per position. The UXO technician work experience is like an apprenticeship program. For the first three years, a Tech I (one) can't do anything on site unless a Tech II or someone above that level is with them. Those who trained at a military bomb disposal school is automatically a Tech II because of the military experience. At least 8 years of experience is required to be a Tech III which would be a team leader. It also takes 8 years to be quality control or safety personnel. It takes 10 years to be a senior supervisor.

The USACE hires only military trained personnel with at least 10 years or more in the business. The military experience is needed to do the oversight and the management control on the project. USACE only handles military munitions; however, they do not respond to improvised explosive device (IED) calls.

Question – Can a Tech I explode the ordnance?

Jeff Brewer – A Tech I can do all the work as long as they are under supervision. A Tech I can run the locators, dig for the item, pull it out and take it to the demo pit, set the charges and do all the work but has to be immediately supervised by the appropriate level technician.

Kim Harriz – What would you recommend if these folks have any souvenir ordnance of their own?

Jeff Brewer – Officially, souvenir ordnance need to be checked out. You can contact the local bomb disposal unit and they can look at it. They can x-ray it, they can set up for disposal of it, they can tell you if it is safe, they can maybe tell some of its history if you're unfamiliar with it. The best thing to do is get it checked out, that's the safest thing to do.

#### **Introduction to Feasibility Study Report**

Ryan Steigerwalt, Weston Solutions, Inc, used the Tobyhanna Artillery Range Formerly Used Defense Site as an example of the feasibility study report. The Tobyhanna site example is similar to the Ricochet Area site but on a larger scale. The feasibility study report presentation is provided in Appendix D.

In general, a feasibility study develops alternatives based on the recommendations from the RI and evaluates those alternatives. Usually for a munitions investigation there's usually three remedial alternatives:

- No Action Nothing is done. Provides a baseline to judge all the other alternatives.
- Containment and Controls Same as land use controls.
- MEC Removal Actions Eliminating the explosive hazards when found.

The first step of the feasibility study is like a research project. It's finding all the potential technologies that may be used on the project site. Technologies are broken down into three categories: MEC detection, MEC removal, and MEC and munitions debris disposal. Each technology is evaluated or screened based on its effectiveness, implementability and cost. This assists to identify technologies that are really viable options to go forward with remediation.

The next step is developing potential alternatives. Tobyhanna had five alternatives:

- No Action The baseline to evaluate the other alternative.
- Land Use Controls Reducing site risk through public awareness: signs, brochures, or website information people can download.
- Surface Removal with Land Use Controls Everything on the surface or breaching ground surface would be removed. MEC and munitions debris would be removed from site or detonated in place pending if it's an explosive hazard.
- Subsurface Removal to 1 foot with Land Use Controls This was a viable alternative because 95 percent of all the UXO was within the top foot. Tobyhanna is rocky, similar to the Ricochet Area. It is a viable alternative also because Tobyhanna is comprised of glacial till so penetration depths weren't that great. This alternative has two subcomponents to the process: digital mapping and dig surveys. "Mag and dig" is using hand-held metal detectors finding the anomalies and munitions items. And then the digital component uses a few extra steps that include the data analysis and actually going back to the anomaly locations and doing the removal and disposal.
- Subsurface Removal to Instrument Detection Depth with Land Use Control This is similar to the 1 ft removal but going all the way to whatever is detected. It's not just going to be in that top foot, if things are deeper technicians are going to dig for it and remove and dispose of it.

Each remedial alternative is evaluated according to nine criteria:

- 1. Overall protection of human health and the environment Describes what the alternatives can do to protect humans and the environment.
- 2. Compliance with applicable or relevant and appropriate requirements (ARARs) Determine which state and federal laws, rules, and regulations apply.
- 3. Long-term effectiveness and performance Determine if remediation will last a long time.
- 4. Reduction of toxicity, mobility, or volume Determine if remediation will reduce explosive hazard volume. In munitions projects toxicity and mobility are not as paramount as volume.
- 5. Short-term effectiveness Worker and public safety. Also, protecting cultural and ecological resources.
- 6. Implementability Test the remedial alternative to verify how well it works the usability of the system. It is one of the key evaluations that drive the cost.

- 7. Cost There is a ROM (rough order of magnitude) estimate developed for each alternative and that's compared against others.
- 8. State (support agency) acceptance PADEP's and the Pennsylvania Game Commission's opinion of the selected remedial alternative.
- 9. Community acceptance The public's opinion of the selected remedial alternative.

Mike McKinne – Let's say you go through all this, you issue a report, and then whoever is going to fund this, federal or state, says let's hold on to it because we can't fund the remediation. What happens then to a parcel that's a high risk? We're not going to make money for at least 10 years. What happens to that parcel for the next 10 years?

Kim Harriz – We anticipate the Ricochet Area remedial alternative will be funded. There is a program to mitigate risk between the time of the investigation and the time to actually complete the response action. We would look at the particular situation and decide what would need to be done. We don't have a situation like Tobyhanna where there is a really high risk. The program for the Ricochet Area would be extensive public outreach between the time we made a decision on the remedy and when we actually begin the remediation.

John Gerhard – The state did some time critical removals at Tobyhanna in areas they deemed necessary. The federal government couldn't fund that all at once. So they broke it up into chunks in high risk areas and tried to fund those sooner than later. But it will take some time to accumulate the funds.

Ryan Steigerwalt – In the interim they implemented some of the land use controls. Public awareness programs were implemented to get the word out. The public still had access to the park and game lands and the public awareness program implemented with informational signs so people knew what they were dealing with when they came to the park.

Question – What is that land at Tobyhanna being used for now? Is it state park? Have people been banned from the area?

Ryan Steigerwalt – Half of the Tobyhanna Artillery Range is state park and half is state game lands. People have not been banned from the area.

Jeff Brewer – I just came from Tobyhanna today. Our procedures at Tobyhanna, especially doing demo, are to clear everybody out at that particular period of time. If we're in an area where there are trails and people are walking our technicians are looking for them. If hikers see the workers, the technicians have to stop working until the hikers leave the area. And we have had some cases where people were stubborn and didn't want to leave the area. Then we called the park service and they came and escorted the people out of the area. We have a job to do and it is for the general public's safety. For the most part we just stop working and people are just real nice and they just walk on through. We're not shutting areas down and things like that.

Question – Why does it cost \$94,000 for No Action? I would have done it for half that. "Nothing" is very expensive.

Ryan Steigerwalt – There's documents that have to be developed. Everything has a document and we have to provide a "No Action" alternative.

Jo Ellen Litz – Do any of the areas that you have surveyed or evaluated have drilling underneath or would drilling be prohibited underneath an area that has ordnances on it? And what about drilling into the Marcellus Shale?

Ryan Steigerwalt – If there was drilling at Tobyhanna they'd have to have some sort of construction support to make sure that the footprint of the area was safe. Also, as they're drilling down to be certain

there aren't any items below the drill rig. So there would be some sort of measures taken if there were construction activities. Permission from the landowner to drill would be required and then call UXO technicians for support. Depending on the situation and hazard, have UXO technicians on hand in case something comes up or is recovered. Or in a low-risk situation, UXO technicians may be "on call" so they could respond to an unknown UXO or explosive hazard.

Jeff Brewer – For drilling, on-site support requires two UXO technicians on site and they will check the drilling location. Depending on the area, probes can be used in the drilled holes to check for UXOs. The Tobyhanna munitions are down only about a foot deep so instruments will detect them. If something is being built and earth is being moved that's when the UXO technicians go on an on-call situation. USACE can give the earth movers operators some MEC training regarding what to look for when digging. The Department of Defense or a company like Weston could be on-call and come out and handle the found munitions.

Question – When you made the fire break in 2001 across the top of Second Mountain did you sweep for UXOs? I just wondered before they actually started dozing or moving stumps did they sweep for unexploded ordnance.

MAJ Corey Angell – I wasn't here when they cut that and I'm not too familiar with it. There was a lot of earth moved then and I'm not sure if they swept before then or not.

Jeff Brewer – At Tobyhanna any work done like that is part of the scope of work.

John Rossey – When do you expect to sign-off at Tobyhanna? I realize you'll never ever get it all out. When do you plan on the final FS on that? And who makes the decision? Was it just one, two, or three people? Was the Pennsylvania Game Commission involved?

Jeff Brewer – This is actually the final. There were several people that sign-off on the remedial action. Tobyhanna is unique because it has multiple areas. Each area is remediated as funding is made available. Every grid that they clear someone like me come in and checks it off and includes it in our reports. And when the remediation is completely done they do a final report. The report goes to a committee for review. The Department of Defense looks at the reports. Personnel and higher up at USACE review the reports. The Pennsylvania Game Commission as the landowners/stakeholders will receive those reports.

John Rossey – Like the Marcellus shale thing, everything is rigged. It's like we don't have a say. You know you've got four people making decisions for thousands. I don't know why. I mean, is it four guys sitting in a room? We are the stakeholders. I just get upset with this, you know. Everything's rigged.

Kim Harriz – The Army National Guard Directorate has the ultimate responsibility for making the decision but they are required to get concurrence from PADEP and the Pennsylvania Game Commission. And the Pennsylvania Game Commission actually controls the project. The Army National Guard wouldn't do anything the commission didn't want us to do. The proposed plan is the process where we take public input and integrate that into the choice that we make. I'm the direct point of contact for you with the National Guard and I can assure you that we will consider your input and it will be summarized in the final decision document. However John, that may not be exactly what you want done.

John Rossey – I understand that. But again, you've gone a whole additional year. Everybody's holding hands back there driving deer and bear; nobody got blown up. And this has been going on for three years now and where does it all end? Where does it end?

Kim Harriz – Well, you'll definitely see a solution when we do the proposed plan. That will be within the year. So you'll see the direction that people are going, but it's definitely going to end in a five year plan. It's not a really high risk site.

John Rossey – I think this is just an opportunity for Fort Indiantown Gap to take the land. They're building the MPTR Range. Is that off the table still? Are you taking Stony? That's where they're clearing right now.

MAJ Corey Angell – They are actually leveling that out to build an unmanned aerial vehicle (UAV) runway. Because our current UAV runway is in cantonment and it mixes with the traffic pattern for the helicopters. We're not going to take Stony. Right now you can see that with that runway being put in that's pretty much a commitment that area will not be utilized for a firing range. We're not going to fire on the runway where aircraft is being landed. We wouldn't need the buffer zone that was required for the previous range any longer because we're using it as the UAV runway. UAVs are heavily used overseas.

Queston – Everybody here is very concerned about the Gap's history with trying to take Stony and it's generated a lot of hate and discontent.

MAJ Corey Angell – And that's why I mentioned this. Hypothetically, in the future a commander could implement that template for the range that was planned before. But right now this current command has no intention of doing so. In fact, where that range was supposed to go they are putting in a new UAV landing strip; which is a positive sign for the Stony Valley Coalition. At least, here, now, and in the near future that's a positive sign that our command is committed to not building that range because they are putting in the new UAV landing strip. It is an effective use of land for us and it's not going to require us to have any additional land for a buffer. That's positive for Stony Valley.

#### **Announcements**

Jo Anderson – Please complete the evaluation form tonight or send an e-mail. We're looking for ideas on presentations for future meetings; please include your ideas on the evaluation form.

Our butterfly walks are scheduled for this weekend (July 1-3, 2011) and next weekend (July 8-10, 2011). Anybody interested see me afterwards and I can give you some details.

I'm sure you are all aware our new The Adjutant General (TAG) has been appointed by the Governor. He is Major General Wesley Craig. You can read his biography on the DMVA website. Just click on his name on the upper right hand corner to read his biography.

Kim Harriz – We do have a couple CDs of the Draft Final RI Report if anyone is interested in having a copy. The Draft Final RI Report is also up on the project website now.

#### Adjournment

Jo Anderson adjourned the meeting at 8:33 p.m.

#### **List of Appendices**

Appendix A – Agenda

Appendix B – Overview of Draft Final Remedial Investigation Report

Appendix C – Unexploded Ordnance (UXO) Safety Presentation

Appendix D – Introduction to Feasibility Study Report

Appendix E – Fact Sheet June 2011: Draft Final Remedial Investigation Report Summary