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**Chemical Demilitarization Citizens' Advisory Commission (CAC) and
Chemical Destruction Community Advisory Board (CDCAB) Meeting
Summary of Action Items and Discussions
Dec. 8, 2009
Eastern Kentucky University
Richmond, Kentucky**

Meeting Synopsis

The meeting provided information on the following:

- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Update
- BGCAPP Technology: Destruction Process
- U.S. Army Element, Assembled Chemical Weapons Alternatives (ACWA) Program Assessment of Alternatives to Provide Continuous Chemical Weapons Destruction
- Explosive Destruction Technologies Working Group (EDTWG) and Monitoring Working Group (MWG) Update

Meeting Summary Structure

This meeting summary is not intended to be a verbatim record of conversations, but instead will provide an overview of the discussions and next steps committed to by the government and various members of the CAC and CDCAB. Key action items identified in the meeting and a synopsis of the major questions and comments discussed during the various updates are noted below. Copies of slides and handouts presented during the meeting can be obtained from the Blue Grass Chemical Stockpile Outreach Office at (859) 626-8944 or bgoutreach@bah.com.

Action Items

Action Item: The CAC/CDCAB requested an e-mail with the link to the project Web site employment page.

Responsible Entity: John Schlatter, Bechtel Parsons Blue Grass (BPBG) public communications manager

Timeline: March 9, 2010

Action Item: The CAC/CDCAB requested an updated schedule briefing, based on the revised project funding, at the next CAC/CDCAB meeting.

Responsible Entity: Jeff Brubaker, BGCAPP site project manager, and Mark Seely, BPBG project manager

Timeline: March 9, 2010

Action Item: The CAC/CDCAB requested a third technology briefing, to cover the progress of a munition through the facility, for presentation at the next CAC/CDCAB meeting.

Responsible Entity: Ron Hawley, BPBG plant manager

Timeline: March 9, 2010

Outline of Key Issues and Discussions

Welcome and Introductions – Stephanie Parrett, Blue Grass Chemical Stockpile Outreach Office, Outreach Manager

Stephanie Parrett welcomed the attendees, reviewed the meeting agenda and noted the action items from the Sept. 8 CAC/CDCAB meeting, which consisted of the following: the EDTWG to convene before the Dec. 8, 2009 CAC/CDCAB meeting and the distribution of the two risk analyses regarding the safety of the community and workforce, the Blue Grass Storage Risk Update and the Blue Grass Construction Worker Analysis, to the CAC/CDCAB chairs. The EDTWG meeting was held and will be discussed later in the meeting, and the analyses have been provided to the members by the chairs.

Opening Remarks – Doug Hindman, CAC Chair, and Craig Williams, CDCAB Co-Chair

Doug Hindman thanked participants for attending and said he thought progress was being made.

Craig Williams said he was impressed with the Oct. 28 Chemical Stockpile Emergency Preparedness Program exercise, which bolstered his confidence in the emergency response arena, and he had written an op-ed article to the *Richmond Register* on that subject. He thanked everyone for attending the meeting and noted Judge-Executive Kent Clark was unable to attend.

Key Updates

BGCAPP Update – Jeff Brubaker, BGCAPP, Site Project Manager (SPM) and Mark Seely, BPBG, Project Manager

Slides of this presentation are available by contacting the Blue Grass Chemical Stockpile Outreach Office at (859) 626-8944 or bgoutreach@bah.com.

Jeff Brubaker presented Year-In-Review information to the group, including major milestones of 2009 such as the operation and closure of Operation *Swift Solution*, and additional BGCAPP project funding approved through the Department of Defense. He discussed explosive destruction technology (EDT) planning and said ACWA was moving forward with plans to do an assessment of the mustard projectiles, to be completed in 2010, and they were researching locations for an EDT site on the Blue Grass Army Depot. He then recapped 2009 congressional and other group site tours, and stated that the workforce has grown to 165 craft workers on site and about 320 employees off site, from 93 craft workers and 237 off-site employees in late 2008.

Mark Seely gave a look ahead at what to expect at BGCAPP in 2010, including the following: continued construction on the Munitions Demilitarization Building (MDB), Control and Support Building (CSB) and the Utility Building (UB); shipments of parts of the initial Blue Grass-Specific Equipment to the BGCAPP site; continued testing on Blue Grass Specific Equipment; contract awards for the balance of construction; formal application submittal for the Occupational Safety and Health Administration Voluntary Protection Program. In addition, Seely discussed local hiring, said the project was one of the top ten employers in Madison County, and noted the project's community involvement.

Hindman asked for the definition of "recordable injury" and Seely replied it was more than a first aid, but was specific to the level of care and prescription drugs required—even prescribing certain levels of ibuprofen can make an injury recordable. Robert Miller asked about the policy on employees reporting injuries and Seely said it was very important and employees were absolutely encouraged to self-report.

Robert Blythe asked about the definition of "local labor" and Seely replied that the phrase was defined as within the state of Kentucky or being a member of the Kentucky trades (for example, workers may be from the Cincinnati area if they are members of a Kentucky union).

Williams asked about the remaining design packages and Seely replied they were the Container Handling Building, Electronic Security System, Entry Control Facility, Hydrolysate Storage Area and the Standby Diesel Generators.

Sheila Pressley asked about pressure on Bechtel to be more "green" and Seely replied that it is an initiative of ACWA, Bechtel and the other joint venture members; that Bechtel has a corporate manager of sustainable development who helps all Bechtel projects develop sustainable processes like recycling; and that this is part of the way they do business now.

Terry House asked if the CAC/CDCAB members could receive an e-mail when jobs are available so they could distribute them to local area applicants and Seely said they would send a link to the project Web site employment page.

Nora Shepherd asked for a new project schedule showing the effect of the updated funding, which Seely said the project would provide at the next CAC/CDCAB meeting. Williams said not to expect much change from the current schedule by the next meeting, but expects to see more major movement after a year or two.

BGCAPP Technology: Destruction Process – Ron Hawley, URS Corporation, Plant General Manager

Slides of this presentation are available by contacting the Blue Grass Chemical Stockpile Outreach Office at (859) 626-8944 or bgoutreach@bah.com.

Ron Hawley gave the group an overview of the BGCAPP site by showing a computer graphic video "flyover." He described site structures and their functions and the basic procedure of munitions processing through the processing facility. He noted a major part of construction is the pipe racks that will carry fluids, compressed air and other materials around most of the major structures. He said the weapons will only be moved from storage to the BGCAPP facility during daylight hours and in good weather, and focused on the fact that workers will not be involved with the direct handling of the chemical munitions except monitoring and off-loading them from the Enhanced On-site Containers (EONC) and loading them into the automated destruction process. Workers would also load rocket motors into containers and secure lids and enter the facility for maintenance activities.

Williams asked what would happen if an EONC tested "hot" and Hawley replied it would go into a portion of the facility designed for that situation and workers in protective gear would handle it there. Miller asked about monitoring in the Container Handling Building and Hawley said they have monitors in that area and they have to test the EONCs every seven days, if held that long.

Williams asked if the solution used for decontamination would go to the Energetics Batch Hydrolyzer before going to the Supercritical Water Oxidation (SCWO) process and Hawley said it goes through the same agent verification process as the process hydrolysate does before it goes to the SCWO.

Miller asked about the number of people at one time in the processing building and Hawley replied normally there would be only seven or eight in the unpack area. All other areas would be non-manned except for maintenance and air monitoring activities. Miller then asked, of the total operation, what the area most sensitive for potential injury would be and Hawley replied it would be the MDB.

Williams asked where the control room was located and Hawley said it was in the CSB, which is joined to the MDB. Williams then asked Hawley to explain the negative pressure cascade ventilation system, which he did, stating the system pulls air through the facility from cleaner areas to more contaminated areas and the air then goes through a set of filter banks. He said the control room and medical facilities have positive-pressure air

systems, where the air is filtered before entry to the facility, so those crucial employees would not have to mask in the event of an emergency.

House asked about the treatment of process water and Hawley said they would be using a reverse osmosis system, with some brine from the SCWO going off site for disposal. Williams said he thought about 70 percent of the water was recycled back into the process system, based on a previous presentation.

Jeanne Hibberd asked if there was a no-fly zone over the facility and how that security was monitored. Williams said the air space was restricted and he did not know about enforcement, but said it was a military operation with nothing to do with the BGCAPP facility.

Williams asked for a third and final technical segment to get the CAC/CDCAB members up to speed on the complete process – a “day-in-the-life of a munition” presentation.

***U.S. Army Element, Assembled Chemical Weapons Alternatives (ACWA)
Program Assessment of Alternatives to Provide Continuous Chemical Weapons
Destruction – Kevin Flamm, ACWA, Program Manager***

***Slides of this presentation are available by contacting the Blue Grass Chemical
Stockpile Outreach Office at (859) 626-8944 or bgoutreach@bah.com.***

Kevin Flamm shared with the group that he had been asked to address safe, feasible, cost-effective approaches to eliminating the gaps in the United States' chemical weapons processing created by the completion of the CMA mission and the start of Pueblo project operations, and the completion of the Pueblo processing and the start of Blue Grass operations. He discussed the need to show the Organisation for the Prohibition of Chemical Weapons (OPCW) that weapons are being destroyed, and to continue to maintain the United States' leadership leverage on other countries in related areas. He said the alternatives to eliminate the gaps in chemical weapons processing will not replace the Blue Grass and Pueblo facilities; but would rather augment them, and acceleration of completion of operations may be a bonus. He focused on the fact that the Levinstein (mustard) projectiles are problematic and the BGCAPP facility would not be able to process projectiles with stuck bursters in them, where the EDT systems would be able to. He said there is little data to support processing nerve agent in EDTs.

Flamm referenced the Army's Explosive Destruction System (EDS) and said it would not be a very viable approach for the Blue Grass project due to its low throughput of approximately 12 nerve agent munitions per week. He discussed siting and the possibility of having to re-warehouse some conventional munitions, depending on site placement on the depot. He said mustard projectiles only made up 15 percent of the Blue Grass stockpile, and even if all the mustard projectiles were destroyed by EDT, 85 percent of the Blue Grass weapons would still be processed at BGCAPP.

House asked if explosive projectiles would be disassembled with the other munitions, and Flamm replied the mustard projectiles would be processed first with EDT, then the rockets would be processed at the BGCAPP site.

Flamm noted that ACWA, in conjunction with CMA, planned to complete a non-invasive assessment of the mustard stockpile to see if problems could be identified. He then discussed the four different EDT systems: EDS; Static Detonation Chamber (SDC); Transportable Detonation Chamber (TDC); and Detonation of Ammunition in a Vacuum-Integrated Chamber (DAVINCH). He also referenced the National Research Council (NRC) report that assessed these technologies as being appropriate for the Blue Grass project. He said he felt the process augmentation with EDT could enhance BGCAPP destruction goals and that selection would need to be made early, as vendor data would be needed for the permitting process. He discussed environmental considerations, said a complete assessment would be out in January, and said ACWA was not looking for a deviation from the environmental standards being applied to the BGCAPP project.

Flamm noted that he met with congressional staff on this topic and will be making a recommendation to the Office of the Secretary of Defense on Dec. 15. He said this project would not be taking funding from BGCAPP, but would need separate funding, and a decision would need to be made by January 2010 in order to go ahead with the process to eliminate gaps in the chemical demilitarization program, as the end of CMA operations/start of Pueblo operations gap is driving the issue.

Miller said EDT could process nerve agent as well as mustard and asked why the technology couldn't be used in parallel to accelerate the agent destruction process. Flamm replied Kentucky statute says the technology must be demonstrated in the U.S. before deployment. The program will have mustard data but no nerve agent data. Hibberd asked if all of the technologies had been tested on mustard and Flamm replied they had. Williams asked if EDS had processed nerve agent in the U.S. and Flamm replied it had.

House asked if there had been new leakers and if they had been contained, and if there was a process for destroying them. Todd Williams replied they were contained and overpacked. Flamm said if a portion of the mustard stockpile is known to be problematic, all of that stockpile could be processed to eliminate the risk to the workforce.

Williams said he was having problems with the fact that the gap decision was being driven by the Pueblo site and the BGCAPP gap would come much later, plus the schedule is an estimated schedule, which could possibly move to the left and fill the gap. Flamm noted the Pueblo site's use of EDT could shift their schedule to the left as well.

Hindman said he was concerned about the growing uses of EDT. Flamm said it was only to augment the BGCAPP technology; there were no other available technologies to destroy weapons safely in environmentally sound manner in the necessary time frame and he felt it was a workforce risk issue. Miller asked how EDT would obviate the risk to the workforce and Flamm said it would eliminate handling "reject" munitions in the

facility, that there is no technique to manually extract stuck bursters. Miller asked if there would be additional risk from transport and Flamm said no, it would be the same as if processing the munitions through BGCAPP.

Hibberd asked if the EDT would affect the air and Flamm discussed the EDT pollution abatement systems and filtration. Williams noted EDTs have exhaust functions, which he said would have to be tailored for Kentucky Department for Environmental Protection regulations and the community.

EDTWG and MWG Update – Craig Williams, CDCAB, Co-Chair

Beginning with the EDTWG, Williams gave an overview of the three previous meetings and recapped some of the discussions that were conducted during the meetings, which included the following: determination that the group would provide criteria points they wished the government would consider, and the group determined it was not appropriate to recommend specific technology as it could prejudice the selection process. He noted the group was initially asked to provide input on EDT in late 2010/early 2011 but the date has now been moved to Dec. 15. He said that Mr. Andrew Weber, Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs, presented information on this subject to the OPCW at The Hague the same day as the last EDTWG meeting and wondered why the EDTWG did not hear about the subject earlier. He discussed basing projects on schedules that are not necessarily reliable and said EDT deployment could impact community faith in the project.

He said the EDTWG has drafted a response to Flamm on the EDT issue, and wants to provide Flamm with the CAC/CDCAB's response. The group discussed the draft letter in depth. Williams said he has had extensive discussions with Judge-Executive Kent Clark, who he said was against processing nerve agent in EDTs.

Hibberd asked about including legacy uses in the draft and Williams said yes, it was considered, but it was not on point for Flamm's meeting. Flamm said if the EDT could be left in place for depot use, it could have influence on the community's decision. Williams said he thought the EDS would not be of interest to the depot due to slow throughput and size, and felt the group should include a bullet on that issue.

Miller asked if Williams and Flamm were in essential agreement on use of EDTs and Williams replied yes, for problem mustard munitions. The group would be willing to consider EDT for other mustard munitions and non-contaminated rocket motors (NCRM).

Miller noted that Williams' use of the term "mission creep" was used negatively and said the issue could also be called "technological extension," which is neutral. He said if changes in technology can improve a situation, which Williams said it would do, that should not undermine the community's faith. Williams said he felt it could improve the ability to complete the mission, depending on use, and didn't disagree it could be an asset, but at some point it could become a liability or a risk the community is not willing to take. Miller said he would prefer a more neutral term be used.

Hindman raised his concern with the word "possibly" in Williams' draft recommendations (EDT to "possibly to be used for remaining mustard rounds and NCRMs"). Williams noted Blue Grass deployment of EDT would not be until 2018, so that would give some flexibility instead of making a firm decision now on what EDT would be used for. Flamm stated that he also had concerns with the word "possibly." He said he feels the whole mustard stockpile should be processed this way, to avoid risk for workers and an agent change-over in the BGCAPP facility. Flamm asked the CAC/CDCAB to state in their recommendation that EDTs be used to destroy the mustard stockpile.

Miller asked what could "shut the door" on the use of EDT. Williams responded with an example of something going wrong with the technology or process after it had been in use at the Anniston, Ala., facility for a while, and said there could possibly be emissions and regulatory issues Alabama finds acceptable that Kentucky may not. Miller suggested using the phrase "without any future mitigating problems" in place of the word "possibly" and Williams agreed.

Hindman asked how accurate the knowledge would be about the problem rounds and Flamm said he was confident in information about the solid content but they will have to see if the burster problems could be seen on an X-ray. He said his concern was with "problem" versus "non-problem" rounds – he feels the whole mustard stockpile is problematic.

Hibberd asked how the group felt about NCRM destruction and Williams said he didn't want to be pinned down on a response about NCRM for the continuity of chemical demilitarization issue as it wasn't on the critical path.

Miller asked Williams' definition of "problem" rounds and Williams said overpacked rounds and a percentage of the stockpile that has been determined to be problematic based on issues with munitions with the same lot numbers at other sites. Jeff Brubaker said, from a stockpile analysis he performed 20 years ago, stuck bursters could be 30 to 40 percent of the mustard stockpile. Miller asked Williams for his objection to including all of the mustard rounds to be processed by EDT and Williams said he didn't object so much on the basis of the information and data he has already obtained, but he wanted to have enough information to make an intelligent recommendation. Miller noted the group had that time, and Williams concurred.

Flamm asked if EDS would be potentially acceptable to the community for processing nerve agent and Williams said no, there would be a nerve agent campaign regardless of EDT use, and he didn't feel the processing of 12 or fewer nerve agent projectiles a week would be a tipping point for the U.S. reputation on the international stage. Flamm asked the CAC/CDCAB to be clear, if that was their position, as EDS could be an acceptable middle ground for nerve agent destruction. Flamm then said it was possible to build an EDT vendor presentation to the CAC/CDCAB into the proposal process to avoid complications.

Williams will circulate the next draft of the CAC/CDCAB recommendations to the members for comment.

For the MWG, due to lack of time, Williams told the group they could read the report in the packet with emphasis on the "What's Next" portion. He said CMA would be coming to brief on the two most recent risk-analysis documents, and he appreciated Lt. Col. David Musgrave's commitment to monitor the GB nerve agent igloos closest to the BGCAPP site on a daily basis (the chemical activity's four-day work week).

There were no questions.

Next CAC and CDCAB Meeting

The next meeting is scheduled for March 9 at the Eastern Kentucky University's Carl D. Perkins Building, Rooms A and B.

Closing Remarks – Doug Hindman, CAC Chair, and Craig Williams, CDCAB Co-Chair

Hindman thanked everyone for their time and interest and Williams agreed.

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