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**Chemical Destruction Community Advisory Board (CDCAB) Meeting**  
**Summary of Action Items and Discussions**  
**June 11, 2007**  
**Eastern Kentucky University**  
**Richmond, Kentucky**

**Meeting Synopsis**

The meeting was designed to provide an update on the following:

- Introduction of Assembled Chemical Weapons Alternatives (ACWA) Acting Program Manager
- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)
- Secondary Treatment Technology
- Systems Contractor Overview
- Chemical Stockpile Emergency Preparedness Program (CSEPP)
- CDCAB Working Group Reports

**Meeting Summary Structure**

This meeting summary is not intended to be a verbatim record of conversations, but instead is meant to provide an overview of the discussions and next steps committed to by the government and various members of the 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](mailto:bgoutreach@bah.com).

**Action Items**

**Action Item:** Redesign Working Group will schedule and conduct a meeting prior to the September 11 CDCAB meeting.

**Responsible Entity:** Craig Williams

**Timeline:** September 11, 2007 CDCAB meeting

**Action Item:** Secondary Waste Working Group will schedule and conduct a meeting prior to the September 11 CDCAB meeting.

**Responsible Entity:** Craig Williams

**Timeline:** September 11, 2007 CDCAB meeting

**Action Item:** The Economic Development Working Group (EDWG) will update the CDCAB on its current activities. The outreach office staff will distribute the information provided by the EDWG.

**Responsible Entity:** Rob Rumpke

**Timeline:** September 11, 2007 CDCAB meeting

**Action Item:** The CDCAB and Kentucky Citizens' Advisory Commission (CAC) will visit the pilot plant construction site prior to the September 11 CDCAB meeting.

**Responsible Entity:** Rebecca Toy

**Timeline:** September 11, 2007 CDCAB meeting

**Action Item:** BGCAPP will provide a list of full-scale supercritical water oxidation (SCWO) facilities in operation.

**Responsible Entity:** Ken Liberty

**Timeline:** September 11, 2007 CDCAB meeting

## **Outline of Key Issues and Discussions**

### ***Welcome and Introductions* – Rebecca Toy, Blue Grass Chemical Stockpile Outreach Office**

Ms. Toy welcomed the attendees, reviewed the meeting agenda and noted that the following action items from the March 13 CDCAB meeting: add CDCAB members to the Economic Development Working Group's Workforce Development subcommittee's mailing list; determine a date for the Plant Manager Round Table; provide feedback and input on the draft recommendation regarding off-site shipment of agent hydrolysate and citizens to bring technology concerns to the April CAC meeting.

The board members provided updates on the action items. Rob Rumpke, EDWG chair, reported that the EDWG conducted the Plant Manager Round Table on May 8. Craig Williams, CDCAB co-chair, reported that the CAC and CDCAB recommendation on off-site shipment of agent hydrolysate had been submitted to Kevin Flamm, acting program manager, ACWA. Doug Hindman, CDCAB member and CAC chair, stated that the commission held a special evening meeting on April 19 for citizens who had concerns about the timeline extension.

## ***Opening Remarks – Kent Clark and Craig Williams, CDCAB Co-Chairs***

Mr. Williams welcomed attendees and thanked the community for joining the meeting and being involved. Mr. Williams reported that Byron Bond submitted a letter of resignation to the CDCAB. He noted that the board accepted his resignation and thanked him for his time and dedication to the board and the chemical weapons destruction program. He called attention to the spring 2007 Blue Grass *Exchange* and asked that the board take a look at the technology article. He also invited the board and the community to a fundraising event for Madison County's Kentucky Environmental Foundation and the Chemical Weapons Working Group. The event is entitled "Hold the Mustard (as in mustard gas)" and is scheduled for June 19 at Madison Garden Restaurant in Richmond, Ky. Carl Richards, who was sitting in for Kent Clark, co-chair and Madison County Judge-Executive, thanked everyone for coming.

## **Key Updates**

### ***Introduction of Acting Program Manager, Assembled Chemical Weapons Alternatives – Kevin Flamm, Acting Program Manager***

Jim Fritsche introduced Mr. Flamm to the CDCAB and provided some background on his experience. Mr. Fritsche noted that Mr. Flamm attended high school in Boyd County and is a graduate of the University of Kentucky. He stated that Mr. Flamm most recently served as the Program Manager for the Elimination of Chemical Weapons within the U.S. Army Chemical Materials Agency where he oversaw the destruction of chemical weapons stockpiles in Alabama, Arkansas, Indiana, Maryland, Oregon and Utah. Mr. Fritsche also noted that Mr. Flamm served as the Project Manager for Alternative Technologies and Approaches, leading the Aberdeen and Newport neutralization projects.

Mr. Flamm updated the board with the status of the hiring process for the permanent ACWA program manager. He noted that the job announcement was posted on June 2 and would be open for 30 days. He stated that the aggressive goal for naming a program manager was August 3. Mr. Flamm reinforced his perspective that ACWA is poised for success, particularly in light of the recently approved Acquisition Program Baseline. Mr. Flamm stated that the funding is no longer an issue and that the project must demonstrate its ability to execute.

***BGCAPP Site Update – Jim Fritsche, Site 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](mailto:bgoutreach@bah.com).***

Mr. Fritsche welcomed Mark Seely, Bechtel Parsons Blue Grass project manager, to the BGCAPP team and introduced him to the CDCAB.

Mr. Fritsche declared that the updated ACWA cost and schedule estimate, known as an Acquisition Program Baseline, was approved.

He explained that construction was ongoing at the future pilot plant site. He reported that \$89.2 million in MILCON funds would help keep the project moving forward for the remainder of fiscal year 2007. Mr. Fritsche reported that of these MILCON funds, \$77 million was assigned to the systems contractor for design and construction and \$12.2 million was assigned to chemical destruction support projects at the Blue Grass Army Depot.

Mr. Fritsche pointed out that the project has implemented a design-build strategy to increase efficiency. He stated that technical design work specific to chemical demilitarization is wrapping up in Pasadena, Calif. and that design work for common and pre-engineered facilities will take place in Kentucky beginning in 2008.

He also provided CDCAB board members and attendees with a technology overview of neutralization, the primary treatment and SCWO the secondary treatment.

Robert Miller, CDCAB member, asked if there were any other contingencies, other than funding, that might affect the start date for operations.

Mr. Fritsche indicated that the leadership team is conscious of the fact that BGCAPP is a sunset or time-fixed project and that staffing is something that is closely monitored.

Mr. Hindman asked Mr. Fritsche to comment on why the schedule was lengthened.

Mr. Fritsche stated that the schedule has been stretched to make the program more affordable on an annual basis. He noted that the Cost Analysis Improvement Group determines the projections based on historical data from baseline chemical demilitarization sites. He stated that historically, none of the stockpile sites have spent more than \$150 million per year.

Craig Williams, CDCAB co-chair, questioned the operations time period in the revised schedule. Mr. Williams stated that the operational period seemed long, based on a schedule of 24 hours a day, seven days a week.

Mr. Flamm explained that the operations schedule has been identified as a potential area where the schedule can be pulled back to the left. He noted that everyone believes that the schedule can be improved.

***Secondary Treatment Technology Overview – Ken Liberty, Environmental Engineer, FOCIS / SAIC***

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Mr. Liberty provided a briefing on the SCWO technology. He defined the three phases of water (solid, liquid and gas). He then explained that when water is heated and pressurized to a certain condition there is a critical point at which the gas and liquid phases become indistinguishable. Operating at a temperature and pressure above the critical point creates supercritical water.

Mr. Liberty gave examples of SCWO reactions and explained the SCWO process. He explained that the process involved adding the right amount of air, water, fuel and waste; bringing up the temperature and then cooling the temperature.

Mr. Liberty described how BGCAPP was addressing the potential problems with corrosion by designing a liner for the SCWO reactor that could be easily replaced and by blending agent and energetic hydrolysate to lessen corrosion of the reactor. He also explained that the project planned to address various salt clogging concerns by feeding additives to control the salt, adding a low temperature water quench at the reactor outlet and occasionally flushing the reactor to remove accumulated salts.

Mr. Liberty addressed concerns regarding the SCWO unit's use of high temperature and pressure by noting that BGCAPP's SCWO unit had received the American Society of Mechanical Engineers code stamp, which means that it has been proven safe. The project's SCWO design includes built-in safety features such as temperature probes, a removable liner to keep process fluids away from the vessel shell, relief valves to exhaust tanks, and skids enclosed in polycarbonate panels for personnel protection.

He explained that model SCWO units had previously been successfully tested with hydrolysates and simulants and that a 12 month testing period was planned at the SCWO fabrication site prior to shipping to the Blue Grass pilot plant. Once the SCWO units arrive in the Blue Grass, further systemization and testing will be completed until operating conditions and confidence levels are established.

Mr. Liberty affirmed that SCWO is a secondary treatment step and that it has been tested for several thousands of hours in the ACWA program. He declared that

performance testing had been completed on the SCWO units using hydrolysate simulants with a near full-scale unit to demonstrate up to 100 hours of continuous operations.

He noted that the National Research Council has recommended that the ACWA program continue with the existing BGCAPP design, including SCWO. He also stated that there are six full-scale SCWO plants in operation today worldwide; in addition, companies, universities and government agencies were looking at SCWO as an opportunity to employ "Green Chemistry."

Bill Scott, a community resident, asked about the usable life of a SCWO unit and if it needed to be recertified for safety after a period of time.

Mr. Liberty said that the liner is the only piece of the SCWO units that erodes. In regards to safety recertification, he stated that as long as the operating conditions did not change, the units did not have to be recertified.

Kelley McBride, Madison County CSEPP, asked where the full-scale SCWO facilities were located.

Mr. Liberty explained that a couple of the facilities were located in Asia and Japan. He plans to provide the exact locations to McBride and CDCAB members.

Mr. Miller asked what the dangers were if someone came into contact with the secondary waste, the byproduct of hydrolysate.

Mr. Liberty affirmed that the secondary waste would have no acute toxicity or immediate danger to physical health.

Mr. Williams added that it was his understanding that there would be a total of three units at the Blue Grass facility with two operating and one on standby to ensure uninterrupted process. Mr. Liberty confirmed this assumption.

***Systems Contractor Overview – Gary Cough, Construction Manager, Bechtel Parsons Blue Grass***

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Mr. Cough provided the board with a construction status update. He noted that the Bechtel Parsons Blue Grass team currently employs 403 personnel with 77 staff members being located in Kentucky. He noted that 18 to 22 subcontractor construction workers were located on the construction site each day. He reaffirmed the systems

contractor's commitment to safety and stated that as of April 30 more than 1.94 million job hours had been worked without a lost-time injury.

Mr. Cough noted that approximately \$21 million had been spent so far on construction with 97.5 percent of the awards going to Kentucky firms.

He provided updates on construction by phases and identified the goods and services that are required to setup and maintain a construction jobsite. He noted that the design and fabrication of the Access Control Building and Vehicle Control Barrier were underway.

Mr. Cough provided the board with contact information for procurement and employment opportunities with Bechtel Parsons Blue Grass.

***Chemical Stockpile Emergency Preparedness Program (CSEPP) – Carl Richards, Director, Madison County Emergency Management Agency***

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Mr. Richards provided an update on the Madison County CSEPP program by highlighting recent accomplishments and initiatives.

He noted the program conducted its third annual Safety Fair in May with approximately 1,900 people attending the event. He stated that CSEPP's goal for face-to-face contacts is 5,000 per year and that they were close to meeting that goal. He also stated that the program had run over 50 advertisements in various publications; created and printed three new brochures; upgraded the Web site and continued partnership and training opportunities with Eastern Kentucky University and Berea College nursing program students. He also noted that Madison County residents' knowledge of zone awareness had raised from 4 to 20 percent from 2004 to 2006.

Mr. Richards stated that bids are currently being accepted for the outdoor siren expansion project and that they have begun to upgrade the tone alert radio system and expect to complete the project in 2009.

He provided information on the communications upgrade project which includes replacing the 800 MHz system, which currently receives over 3.5 million uses per year. He explained that the construction process would take 18 months and noted that the program was accepting bids on a new reverse 911 system.

Mr. Richards reported that more than 500 people had participated in a training opportunities offered by CSEPP from May 2006 to April 2007.

He added that the CSEPP staff is implementing plans and procedures for all hazards and new maps of Madison County are being incorporated into current plans. He also noted that the Joint Information Center and Joint Information System were operating under the National Incident Management system guidelines. Mr. Richards also noted that there were plans to construct a new Joint Information and Federal Response Center near the Madison County Emergency Operations Center. The land is being donated by the Madison County Advanced Life Support Ambulance Service.

He declared that no findings had been noted in the 2006 CSEPP annual exercise and that training and tabletop exercises were ongoing.

Mr. Richards confirmed that collective protection systems had been installed at Pattie A. Clay Regional Medical Center and that installation was in progress at Eastern Kentucky University and the Madison County Jail.

Mr. Miller asked if there were areas within Madison County where the outdoor sirens could not be heard.

Mr. Richards responded that there were some areas where the sirens could not be heard and that the program is completing a propagation study for the immediate and protection action response zones to determine the need for additional outdoor sirens.

Mr. Scott asked who funded the CSEPP program, and Mr. Richards responded that the funds are appropriated through the U.S. Army, Federal Emergency Management Agency and Kentucky Division of Emergency Management.

***CDCAB Working Group Report and Discussion of Other Topics – Craig Williams, Chair, Secondary Waste Working Group***

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Mr. Williams announced that the final recommendation on off-site shipment of agent hydrolysate had been submitted to ACWA. Mr. Williams recommended that the Secondary Waste Working Group and Design Considerations Working Group meet and a BGCAPP tour for CDCAB and CAC members be conducted before the next CDCAB meeting. He also suggested that if the project proved execution capability, the board and the community would be in a position to argue for additional funds.

Mr. Hindman added that if the SCWO units were deleted from the BGCAPP design there would be significant impacts to the permit. Mr. Williams stated that the Kentucky Department for Environmental Protection has a process to evaluate the status of the

permit. Tim Thomas, CDCAB member, confirmed that both Mr. Hindman's and Mr. Williams' summaries were correct.

Mr. Scott asked Mr. Williams to comment on the transportation of agent hydrolysate that is taking place at the Newport facility.

Mr. Williams responded that federal lawsuits were being filed both locally and nationally and that a preliminary injunction will be filed on Wednesday, June 13 in a federal court.

### ***CDCAB Meeting Feedback and Suggestions***

No feedback or suggestions were provided regarding the June 11 and September 11 meetings.

### ***Next CDCAB Meeting***

The next meeting is scheduled for September 11, 2007 at the Eastern Kentucky University's Carl D. Perkins Building, Quads A and B.

### ***Closing Remarks – Craig Williams, Co-Chair***

Mr. Williams stated that it was inspiring to see the construction status and welcomed Mr. Seely to the BGCAPP project. Mr. Richards thanked everyone for their time and effort.