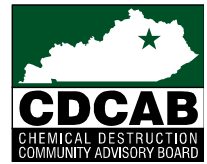




Doug Hindman  
Chair

Chemical Demilitarization Citizens' Advisory Commission  
Chemical Destruction Community Advisory Board  
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Reagan Taylor  
Craig Williams  
Co-Chairs

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**Kentucky Chemical Demilitarization Citizens' Advisory Commission (CAC) and  
Chemical Destruction Community Advisory Board (CDCAB) Meeting  
Summary of Action Items and Discussions  
Sept. 14, 2016  
Eastern Kentucky University (EKU)  
Richmond, Kentucky**

**Attendees**

**CAC:** Diane Kerby and Craig Williams

**CDCAB:** David Benge, Jeff Brubaker, Joe Elliott (for Col. Norbert Fochs), Jeanne Hibberd, Ron Hink, Mike Hogg, Sheila Johnson (for Lt. Col. Scott Gould), Leslie Kaylor, Diane Kerby, Howard Logue, Tara Long, Darcy Maupin, Brian Makinen, Reagan Taylor, April Webb, Craig Williams, Ethan Witt (for U.S. Sen. Mitch McConnell's office)

**Media Attendees:**

*The Richmond Register:* Ricki Barker  
*Lexington Herald-Leader:* Greg Kocher

**Meeting Synopsis**

The meeting provided information on the following:

- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Update
- Destruction and Removal Efficiency Compliance Approach
- Economic Development Working Group (EDWG) Update
- Explosive Destruction Technology (EDT) Permitting Activities

**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 action items of government representatives 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 (ORO) at (859) 626-8944 or bgoutreach@iem.com.

**Action Items**

None.

**Outline of Key Issues and Discussions**

***Welcome and Introductions – Sarah Parke, Manager, ORO***

Parke welcomed the attendees, reviewed the meeting agenda and noted the following action items from the June 8, 2016, CAC/CDCAB meeting:

<b>Action Item</b>	<b>Steps Taken</b>	<b>Date/Status</b>
Blue Grass Chemical Activity (BGCA) to provide projected payroll numbers	Information provided at the Sept. 14, 2016, Kentucky Chemical Demilitarization Citizens’ Advisory Board (CAC) and Chemical Destruction Community Advisory Board (CDCAB) meeting (below)	Complete
Confirm 2017 CAC/CDCAB meeting dates	Information provided in the Sept. 14, 2016, CAC/CDCAB meeting packets	Complete

***Opening Remarks – Reagan Taylor and Craig Williams, Co-Chairs, CDCAB***

Taylor welcomed attendees and said he appreciated their attendance. C. Williams said Doug Hindman would not be able to attend the meeting and Tonita Goodwin is moving farther away than the 50-mile limit from the munitions storage location required for the group by federal statute. Goodwin is submitting a letter of resignation and a new member will need to be selected. He appreciated everyone’s attendance as well.

**Key Updates**

***BGCAPP Project Update – Jeff Brubaker, Site Project Manager (SPM), BGCAPP, and Ron Hink, Project Manager, Bechtel Parsons Blue Grass (BPBG)***

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or bgoutreach@iem.com.***

Brubaker began by recognizing the Pueblo Chemical Agent-Destruction Pilot Plant's successful Sept. 7 initiation of plant operations and said they have done very well in their first seven days. He noted they had experienced no significant challenges, but they were taking a very deliberate and slow approach to operations, as BGCAPP also will do. He wished them the best on their approximately four-year duration destruction operation. Brubaker then updated the group on BGCAPP progress, noting systemization was more than 57 percent complete, dummy munitions have arrived for testing and training purposes and plant conveyors were being tested. Brubaker also said the last of the utility systems, including the Utility Building boilers and the Standby Diesel Generators, will soon be brought on line and about 60 Enhanced On-site Containers are being refurbished. He showed a photograph of the plant and described the buildings, and said work has begun on the haul routes for bringing the munitions from storage to the plant. Hink updated the group by saying a lot of progress has been made at the EDT site since the last meeting and the facility looks almost complete. He said the more than 4,000 supercritical water oxidation (SCWO) welds are almost complete and BPBG is waiting to receive some exotic-material valves in October to complete the final 24 welds to finish the project. He said the SCWO weld issue "is really behind us at this point." Brubaker discussed hydrolysate disposal contingency planning and said the objective remains unchanged – operate the plant as designed and constructed – but the project will also work to prevent any future operational shortfalls from negatively affecting chemical agent destruction. He said the CAC and CDCAB will be involved in the process. He then described the EDT site buildings, noting the EDT project recently accepted dummy munitions into the Service Magazine for training purposes, occupancy of the Outside Operations Support Facility occurred last month and he expects treaty mustard-sampling site plan approval later this year. He showed the EDT roadmap and said complete construction of the EDT site is anticipated by February or March 2017. He said there should be about six months of systemization and integrated operations demonstration and the start of EDT operations is scheduled to occur in late summer or early fall 2017. Hink noted safety focus is strong and there have been no lost-time accidents. He provided economic information to the group then discussed projected payroll and personnel through the end of the project. Brubaker said the numbers were an effort to cover everyone involved with the chemical weapons destruction project and was based on the most optimistic schedule, about one and one-half years in advance of the current program schedule, for destruction of the chemical munitions. He noted Blue Grass Army Depot (BGAD) personnel would continue their missions after the destruction project is complete. Hink discussed workforce diversity and Brubaker recapped recent community involvement.

C. Williams asked BGCA Deputy Director Sheila Johnson if the access road project for transporting munitions from storage to the BGCAPP facility was being executed on schedule and if the funding was adequate to proceed in synchronization with the BGCAPP schedule. Johnson said yes.

C. Williams asked if there was impact to the BGCAPP schedule from the SCWO welds issue. Hink said for such a challenge, the process went well. It still remains one of the plant's critical paths, but it is not pushing the operations date.

C. Williams asked for more information on rocket motor disposal and testing. Brubaker said the BGAD and Anniston Static Detonation Chamber feasibility testing has been completed and final results are being received, but preliminary data looked positive. Proposals for the disposal of rocket motors have been solicited and evaluated, and the project has agreed to accept and evaluate an additional proposal from Anniston. He said more discussion on the topic is expected at the December CAC/CDCAB meeting. Brubaker said he believed more than one facility will be used, that a single facility may not be able to keep up based on the proposed destruction rate in the plant. C. Williams asked the status of the consideration of doing additional rocket motor separation and testing. Brubaker said no decision has been made and it will probably be discussed at the December meeting. C. Williams said he expected it would follow the historical process of being brought before the working group and Brubaker agreed.

C. Williams said it was extremely helpful to have the projected payroll and personnel broken out into the tables on slide 14.

David Bengé asked how much it cost to repair the SCWO welds. Brubaker said the total cost is around \$15 million, which included materials and labor, with the vast majority of the cost being labor. Bengé asked if there was any penalty for the company that did the welds. Brubaker said the company that did the welding is no longer in business and the financial compensation details are still being worked out. Bengé asked if Brubaker was comfortable with the current welds. Brubaker said he was very satisfied with the quality in place at this point in time.

***Destruction and Removal Efficiency (DRE) Compliance Approach – Dr. John Barton, Chief Scientist, BPG***

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or [bgoutreach@iem.com](mailto:bgoutreach@iem.com).***

Barton provided information on how the plant will demonstrate chemical agent destruction to the Kentucky Department for Environmental Protection (KDEP) now the munitions washout system has been eliminated. He said two mitigation approaches were determined: 1) promote a change to the Kentucky Revised Statutes (KRS) to adopt a DRE instead of a Destruction Efficiency (DE), and 2) create an integrated product team (IPT) to recommend a path forward for demonstration testing. For the EDT project, the stack exhaust (post-carbon filters) from the Thermal Oxidizer will be monitored and ash/dust from the detonation chamber will be collected and analyzed as a courtesy to KDEP. KDEP has been briefed on this approach and a tentative agreement has been reached and incorporated into the draft permit. Barton said the main plant process was

previously discussed with the Secondary Waste Working Group. As more agent will be going through the Energetics Neutralization Reactors and Metal Parts Treaters (MPT), due to the agent residue clinging to the insides of non-washed munitions, it will be a significant challenge to demonstrate DE. He said this was also the conclusion of a National Academies of Sciences, Engineering and Medicine report. DRE can be demonstrated, so the two main-plant DRE recommendations are: 1) to lower agent clearance levels in agent and energetics hydrolysate and 2) demonstration testing must include sampling and analysis of post-carbon stack exhaust. He said the project had not previously planned or been required to do post-carbon stack exhaust monitoring, but has added it. Barton said the DRE test concept for the main plant has not yet been vetted by KDEP. He believes it is technically viable and they will accept it, but discussions need to be held. Four tests will be done, one for each agent/munition.

C. Williams asked if there would be monitors between the carbon filter banks and how sensitive they would be compared to the DRE sampling post-stack. Barton said detection limits would be well below what they need to demonstrate stack compliance and there would be continuous mid-bed detection that would show any agent break-through before the stack. He noted compliance limits are minimum limits to demonstrate compliance with the KRS and it was not likely to see those levels in operations.

C. Williams asked about the concentration of VX or GB in projectiles. Barton explained the thickening of agent and the formation of heel and said it would take longer to drain those munitions efficiently. C. Williams asked if the residence time in the MPTs would be increased. Barton said only if necessary, that the time in cycle was already enough for GB, but VX might take an additional 15 minutes, depending on drain efficiency. He said time-cycle changes are flexible for the MPT without impact to the schedule.

### ***EDWG Update – Craig Williams, Co-Chair, CDCAB***

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or [bgoutreach@iem.com](mailto:bgoutreach@iem.com).***

C. Williams reviewed the progress of the phases of the group's economic development plan. He said Phase I has been executed and Phase II will remain as articulated in the EDWG white paper. C. Williams said a modification will need to be made to Phase III, as it looked at potential outside uses for the BGCAPP site after its mission was complete. The group agreed it was outside their authority to make decisions for future use of BGAD property and their focus will shift to attracting businesses to the county who can make use of the skilled BGCAPP workers at project's end, with more attention to companies already related to the project. They decided to try to raise the money to submit proposals to agencies that might be interested in looking at Phase III. C. Williams said the group is considering a Lexington company, MyPM. He said the MyPM work would take six weeks and cost \$6,400. C. Williams had asked if the funding provided by the Program Executive Office, Assembled Chemical Weapons Alternatives to the CAC annually could be used for this project. He said the request was denied due to language in the

Memorandum of Understanding and probably will be again upon appeal. C. Williams said the group is looking at different ways to prevent significant economic downturn at end of project.

David Makinen requested that a provision be placed in the re-use agreement that the plant not be used as a hazardous waste treatment, storage and disposal facility after closure, that he does not want additional hazardous waste in the community and on the roads.

**Resource Conservation and Recovery Act (RCRA) Class 3 Modification Request for the Addition of EDT and RCRA Class 3 Modification Request for Hazardous and Solid Waste Amendments Organic Air Emissions – John McArthur, Environmental Manager, BPBG**

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or [bgoutreach@iem.com](mailto:bgoutreach@iem.com).***

BPBG Environmental Manager John McArthur said modifications to environmental permits have been requested due to the addition of the EDT facility to the BGCAPP site and gave the group information about the public meeting being held on this topic at 6:30 p.m. this day. He provided information on the EDT project, including why the facility was necessary, what was being constructed and a schedule of milestones. He summarized by saying the draft permits are currently in the public comment phase with a final permit expected to be issued after the public comment period closes.

**Treaty Sampling Operations – Todd Williams, Environmental Manager, BGCAPP**

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or [bgoutreach@iem.com](mailto:bgoutreach@iem.com).***

T. Williams discussed the fact that treaty sampling for the mustard munitions will need to be done differently from main-plant munitions as the EDT process will not access the agent cavity for munitions destruction. He said to fulfill treaty requirements, the projectile cavities must be accessed to verify the presence of mustard agent, and a process has been developed for this. He noted the steps of the general process, said it would be performed by Edgewood Chemical Biological Center (ECBC) personnel and that it was only to verify the presence of mustard agent. T. Williams showed a sample of a 100-pound bomb plate with a drill bit of the type that would be used to access the projectile cavities, noting the safety features. He said the sampling process would be conducted in the BGCA Chemical Limited Area. T. Williams said the permit application for this project has been declared technically complete by KDEP and noted the public meeting.

C. Williams asked how often the munitions would be moved for the sampling operation. T. Williams said a one-time operation was requested, to be done near the end of the EDT project. The sampled rounds would then be processed. He noted ten projectiles and one Department of Transportation bottle have currently been treaty tagged, but treaty personnel have the option to select more at any time.

Jeanne Hibberd asked what would happen if ECBC found something they didn't expect. T. Williams replied the operation is only for the validation of the presence of mustard agent.

**BGAD Public Notice for 3 Draft Permits – Dale Burton, Professional Geologist, KDEP, and Todd Powers, Professional Engineer, KDEP**

***Slides of this presentation may be obtained by contacting the ORO at (859) 626-8944 or [bgoutreach@iem.com](mailto:bgoutreach@iem.com).***

Burton discussed the combined public notices for the proposed EDT permit, the proposed mustard sampling permit and the proposed U.S. Environmental Protection Agency (EPA) permit for organic air emissions for EDT. He said each permit application has been determined to be complete and the public notification process has begun, to include the public meeting, and will conclude Sept. 21. Burton said KDEP will review all comments and process the applications for finalization and signature and expected the process to be complete by Oct. 15. He provided a slide showing the additions to each permit and noted the owner of all of the permits was the U.S. Army for BGAD, but the operator is different for each one. Powers, permit writer, highlighted some of the requirements for the EDT permit, such as continuous air filtration and monitoring for agent when storing mustard projectiles, and discussed treatment conditions. Burton provided more information on the mustard sampling operation. He then discussed the EPA permit and said Kentucky is not yet authorized by the EPA for some parts of organic emissions, so the EPA drafted a permit to cover those requirements. Burton noted equipment identified as not safe to monitor is excluded from some of the requirements.

***Closing Remarks – Reagan Taylor and Craig Williams, Co-Chairs, CDCAB***

Taylor said he was glad to be at the meeting and asked everyone to be safe leaving and on the weekend.

C. Williams said a public hearing on the above permit applications would only occur if there is interest shown in doing such. He asked if anyone there was interested in having a hearing and no one responded. C. Williams noted the public still has until Sept. 21 to submit comments and said he appreciated everyone's efforts on the permitting topic.

***Next CAC and CDCAB Meeting***

The next meeting is scheduled for Wednesday, Dec. 14, 2016, at 1:30 p.m. at the ECU Carl D. Perkins Building, Rooms A and B.

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