Kentucky Chemical Demilitarization Citizens' Advisory Commission

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CDCAB
CHEMICAL DESTRUCTION COMMUNITY ADVISORY BOARD

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Chemical Demilitarization Citizens' Advisory Commission and Chemical Destruction Community Advisory Board Meeting Summary of Action Items and Discussions Dec. 16, 2014 Eastern Kentucky University (EKU) Richmond, Kentucky

Attendees

Kentucky Chemical Demilitarization Citizens' Advisory Commission (CAC):
Tonita Goodwin (nominated member), Mark Klaas, Harry Moberly and Craig Williams

Chemical Destruction Community Advisory Board (CDCAB): Jeff Brubaker, David Benge, Joe Elliott (for Col. Lee Hudson), Tonita Goodwin, Jeanne Hibberd, Mike Hogg, Terry House, Leslie Kaylor, Mark Klaas, Brian Makinen, Jon Maybriar (for April Webb), Harry Moberly, Lt. Col. Andrew "Jack" Morgan, Doug Omichinski, Chester Powell, Carl Richards, Craig Williams and Ethan Witt (for Rep. Andy Barr's (R-Ky.) office)

Media Attendees:
Lexington Herald-Leader: Greg Kocher

Meeting Synopsis

The meeting provided information on the following:

- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Year in Review
- Changes to Munitions Drain Systems
- Design Working Group (DWG) Update
- Organisation for the Prohibition of Chemical Weapons 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 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

Action Item: Blue Grass Chemical Activity (BGCA) will provide the Economic Development Working Group (EDWG) with local skill sets for upcoming positions.
Responsible Entity: Lt. Col. Andrew "Jack" Morgan, BGCA Commander.
Timeline: By March 18, 2015.

Action Item: Informational presentation on the carbon filtration system.
Responsible Entity: Doug Omichinski, Bechtel Parsons Blue Grass (BPBG) Project Manager.
Timeline: At the March 18, 2015, CAC/CDCAB meeting.

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 Sept. 16, 2014, CAC/CDCAB meeting:

Action Item	Steps Taken	Date/Status
The Economic Development Working Group (EDWG) will work with the Blue Grass Chemical Activity (BGCA) on future workforce numbers.	Lt. Col. Andrew "Jack" Morgan met with Craig Williams and provided him information. Williams presented a slide on this topic to the group at this meeting (below).	BGCA will provide the EDWG with local skill sets for upcoming positions.
Bechtel Parsons Blue Grass will coordinate with local trade and technical schools to communicate hiring needs.	Doug Omichinski communicated project relationships with local and area educational institutions and an area educational consortium. The project plans to continue and expand these relationships.	Complete/Ongoing

CDCAB Co-Chair Craig Williams presented a slide on BGCA workforce numbers to the group. He said employment will peak to about 220 around 2020, then decline to about

134. He said he does not want to lose those workers and will factor them into the EDWG effort. Morgan said current employment is 121 and should be at 166 at the end of the fiscal year. He said BGCA will do a lot of hiring locally. Williams asked if priority would be given to veterans. Morgan said they are working on that and are tied into Fort Campbell, Fort Knox and local colleges in this regard.

Opening Remarks – Craig Williams, Co-Chair, CDCAB

Williams thanked everyone for their attendance and noted the media roundtable prior to the meeting. He gave regrets from several members who could not attend and told the group of CDCAB member Terry House's hearing loss. Williams then notified attendees of Tonita Goodwin's nomination to the position Robert Miller previously held. He said he feels her economic development experience will benefit the group and is hopeful of hearing from the governor's office on her confirmation shortly.

Key Updates

BGCAPP Project Update – Jeff Brubaker, Site Project Manager, BGCAPP, and Doug Omichinski, Project Manager, BPBG

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

Brubaker and Omichinski delivered a year-in-review presentation to the group. Brubaker began by highlighting the project's recent 90-percent construction completion milestone, noting it as an exclamation point to the year's successes, and said mechanical construction is projected to be complete by the end of 2015. Brubaker and Omichinski showed the *Year-in-Review* video and gave project highlights by season, including placement of the Munitions Demilitarization Building Clean-Air Exhaust Stacks, several notable site tours, the submittal and acceptance/approval of several permitting actions for the Blue Grass Static Detonation Chamber (SDC) facility, completion of the Container Handling Building structural steel, completion of the Laboratory readiness review and receipt of testing standards, completion of the Occupational Safety and Health Administration's three-year inspection under the Voluntary Protection Program with recertification pending, completion of site roadway paving, the SDC 90-percent design review with the Kentucky Department for Environmental Protection (KDEP) and start of excavation for the SDC facility. Omichinski noted project safety, said the current recordable incident rate was the lowest the project has had and reaffirmed his commitment to zero accidents. He said the craft employment number is currently 780 and that number would decrease next spring as construction winds down. Omichinski noted the project is a large contributor to the community. Brubaker said 2014 was a very busy year, with 2015 to continue that trend, and discussed upcoming events, including the National Research Council study on Criteria for Successful Treatment of Hydrolysate

at Blue Grass and the associated public meeting, design changes for munitions processes, options for rocket-motor disposal, Control Room expanding to 24/7 operations and the final permit approvals for and the arrival of the SDC.

House said the impact of the jobs that went away in Anniston, Alabama, was apparent on their trip to view the Anniston SDC. This reminded him of the importance of the work of the economic subcommittee.

David Benge said the 1,580 employees of the project were more than he had thought and asked how many of those were craft workers. Brubaker replied about 780 were craft. Williams said the numbers will change dramatically as construction declines and systemization ramps up, and employment then should be about 1,000 people. Brubaker clarified it would be around 1,100. House asked if the number was higher because part of it was systemization employment. Brubaker said start-up employment is about 300, and some people are supporting the SDC effort. He noted next year will be a significant one for operations personnel supporting the main plant.

Williams asked when the SDC project would start and end. Brubaker said start-up would be around March 2017 and closure would be at the end of 2017, which would be ahead of the main plant start-up. This will be a positive in having time to transition workers over to the main facility.

Williams asked if the coordination and necessary support from BGCA is in synchronization with BGCAPP. Brubaker and Morgan responded that they are working out the details and they are on track and working together. He noted the loan of an Enhanced On-site Container trailer from the BGCAPP project, which is enabling him to test roads and turning radiuses, for example. Williams then asked if funding and other infrastructure requirements are in place. Morgan replied everything is in good shape and everything is contracted for, excluding the fence around the site, which will be done closer to commencement of operations.

Harry Moberly expressed his appreciation for the project leadership and how it is operating and working with the community. Williams echoed Moberly's sentiment.

A member of the public asked if jobs would be government general schedule, wage grade or contractor. Morgan replied BGCA jobs will be permanent government jobs and Omichinski said BGCAPP jobs will be contracted within the joint venture.

Changes to Munitions Drain Systems **– Neil Frenzl, Resident Engineering Manager and John Barton, Chief Scientist, BPBG**

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

Frenzl and Barton discussed design changes that were found to be needed for the drainage portions of the destruction process. Frenzl said testing uncovered several issues that needed to be resolved within the rocket and projectile handling systems, including: air entrapment, drain-piping corrosion, undersized strainers and possible hydrogen collection from GB munitions. The project assembled a tiger team to address these issues and came up with a series of recommendations and a proposed revised approach, which included the deletion of the standard water wash-out as unnecessary. Frenzl noted he was very confident with the Energetics Batch Hydrolyzer (EBH) process. Brubaker said after reviewing the other sites' performance data, it looks as if there may be a solidification problem with about 10 percent of the Blue Grass GB rockets. They will be prioritized to the end of the campaign. Barton said the EBHs are very robust and can handle the agent load from an undrained rocket such as an overpacked leaker. He reaffirmed confidence in the EBH process. Frenzl then said the impact on the Metal Parts Treater (MPT) is minor, but the project is still reviewing it. He discussed how reject projectiles will be handled and that these changes may create some additional agent vapor that would be processed through the cascading ventilation system. Barton explained the carbon filtration system and said there is a huge excess of carbon for the plant's projected requirements. Frenzl said additional testing and result validation will be performed and the project will ensure it is meeting or exceeding the state's required 99.9999 (six-nines) percent destruction efficiency and is working with KDEP through the whole process. Barton added that Kentucky's revised statutes require verification of destruction to the six-nines standard (where 99.9999% of the agent is destroyed). He noted the Blue Grass processes will be much better than that; that the six nines is just what has to be demonstrated to KDEP. In closing, Frenzl said engineers and operators are developing the design documentation to implement tiger team recommendations, basic calculations and risk considerations are in progress and stakeholder and KDEP communications are ongoing.

Harry Moberly asked if the ventilation system was open to the outside. Frenzl said no, it is closed and facility air will go through carbon filters.

George Partridge, from KDEP, asked how the agent-contaminated rocket motors will be processed. Frenzl said the leaker rockets' motors were planned to be processed through the EBH and there have been no changes to that process. Partridge then asked about the purpose of the testing of the MPT with non-agent liquid-filled munitions. Frenzl said it was a heat-sink energy-use issue and the water (or other simulant) filled simulated munitions would be used to confirm uniform heating through the chamber to assure/confirm final decontamination since the remaining drain heel will be greater than originally anticipated. Partridge wanted to know how much agent will be treated in the MPT. Barton said 5 to 10 percent could remain, but the process would be run to assure

full pyrolization and assured destruction of the agent. Partridge was concerned agent coming "from different directions" could affect the six-nines process. He said at a recent project presentation to KDEP, he was told the wash-out facility would stay in place, to be used "if there were a bad day," and wanted clarification if it would be installed or not. Frenzl said the utilities would be capped as construction concludes and they will see what needs to be done for the installation of the wash-out equipment during systemization, and the project will have a Plan B in place for operations. Partridge asked if the wash-out equipment would be put in place. Frenzl said what would be needed for wash-out will be in place before operations. Williams noted the thermal process was only for projectiles and the residual agent from rockets will go through the neutralization process in the EBHs. Partridge opined the community was opposed to incineration and said it looks like the project is moving more toward that end. Williams said there is a big difference between a combustion process like the MPT and incineration.

DWG Update – Craig Williams, Co-Chair, CDCAB

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Williams gave a brief background on the DWG and said it has been reassembled because of the recent design changes. The group has had two meetings and has drafted a recommendation that will be circulated to the larger CAC/CDCAB body after today's meeting for comment, input and approval. He said the DWG recommends accepting the rocket-processing modifications for the reason pointed out earlier – that any residual agent will go through the EBH and be neutralized. For the projectile process, the group recommends that the Program Executive Office, Assembled Chemical Weapons Alternatives and BPBG continue to investigate and analyze the pending issues and provide that information as they generate it to KDEP and the DWG, so discussion can continue on the projectile-destruction approach. He asked for input from the group to be sent to Doug Hindman or himself.

Moberly asked him to elaborate on the difference between thermal treatment and incineration. Williams said incineration is an open-ended process that relies on combustion and large quantities of air. The Blue Grass thermal treatment process is using heat treatment, which is a significantly but not totally dissimilar process. Barton noted the MPT operates at a lower temperature than an incinerator and does not use oxygen at all and it is analogous to coke ovens used for coal. Williams said the two things he did not embrace originally but came to accept due to worker safety concerns are the SDC, which he is confident in, and the MPT. Partridge said the site still has thermal oxidizers. Williams explained the necessary change to the thermal oxidizer units from the bulk oxidizers, which did not pass engineering requirements and standards.

Jeanne Hibberd said she thought one reason the SDC was chosen for the destruction of the mustard munitions was it would be considered for the depot's conventional munitions disposal process. She also inquired about the number of chemical demilitarization sites

that used an EDT. Williams said there was a potential for use by the Blue Grass Army Depot and two sites had been scheduled to use an EDT. The Anniston, Alabama, site went forward with it and had a successful campaign, which fulfilled Kentucky's statute that any EDT proposed for Blue Grass had to have had full-scale use in the U.S.

Organisation for the Prohibition of Chemical Weapons 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.

Williams updated the group on his recent visit to The Hague, Netherlands, for the 19th Conference of States Parties (CSP) to the Chemical Weapons Convention (CWC) and said there was a lot of interest in Blue Grass progress and mechanisms for moving forward. He had the chance to speak in plenary in front of the 190 ambassadors. Williams informed the group of the three primary topics of the 19th CSP: 1) Syria's use of chemical weapons, both agents and industrial chemicals, 2) the announcement of Russia's projected completion moving from 2015 to 2020 and 3) the universality goals of getting the remaining few countries to sign and ratify the CWC treaty. Williams explained he said the non-government organization community here has said the Blue Grass project may finish earlier than anticipated, based on use of the SDC, but said he was careful not to say that information came from a project official and that the official schedule would not change. He then said he was invited to present on the Blue Grass challenges at the 2014 Jonathan Tucker Conference on Chemical and Biological Arms Control. He said he brought this up to let the CAC/CDCAB know he is working to represent this effort to the best of his abilities. He said he believes there would have been great discomfort with SDC and the design changes if presented some years ago, but he has been pleased with the communications from the project and thought it was a good way to move forward in a concerted effort. Williams made the point that no local contributions were used for his trips.

Group members thanked Williams for his support across the years. They then briefly discussed the Syrian situation.

Next CAC and CDCAB Meeting

The next meeting is scheduled for Wednesday, March 18, 2015, at 1:30 p.m. at the EKU Carl D. Perkins Building, Rooms A and B.

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