



Chemical Demilitarization Citizens' Advisory Commission
Chemical Destruction Community Advisory Board
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Doug Hindman
Chair

Reagan Taylor
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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
March 9, 2016
Eastern Kentucky University (EKU)
Richmond, Kentucky**

Attendees

CAC: Doug Hindman, Harry Moberly and Craig Williams

CDCAB: David Benge, Robert Blythe, Dale Burton, Joe Fryman (for U.S. Rep. Andy Barr, R-Ky.), Jeanne Hibberd, Doug Hindman, Ron Hink, Mike Hogg, Wade Hollinger, Terry House, Sheila Johnson (for Lt. Col. Andrew "Jack" Morgan), Leslie Kaylor, Howard Logue, Tara Long, Darcy Maupin, Harry Moberly, David Rowlette, George Shuplinkov (for Col. Lee Hudson), Craig Williams and Ethan Witt (for U.S. Sen. Mitch McConnell, R-Ky.)

Media Attendees:

The Richmond Register: Bill Robinson
Lexington Herald-Leader: Greg Kocher

Meeting Synopsis

The meeting provided information on the following:

- Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Update
- Supercritical Water Oxidation (SCWO) Module Piping Welds Status Briefing
- Economic Development Working Group (EDWG) 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: Definition of local payroll.

Responsible Entity: Ron Hink, Project Manager, Bechtel Parsons Blue Grass (BPBG).

Timeline: By June 8, 2016.

Action Item: Cost and schedule projection of SCWO welds issue.

Responsible Entity: Ron Hink, Project Manager, BPBG.

Timeline: By June 8, 2016.

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 Dec. 9, 2015, CAC/CDCAB meeting:

Action Item	Steps Taken	Date/Status
Report updates on the supercritical water oxidation (SCWO) system weld issue.	Information provided at the March 9, 2016, Kentucky Chemical Demilitarization Citizens’ Advisory Board (CAC) and Chemical Destruction Community Advisory Board (CDCAB) meeting (below).	Complete
Address group concerns regarding National Academies of Science, Engineering and Medicine’s (NASEM) language on SCWO functionality formally through the committee. Clarify language in NASEM’s Recommendation 7-10.	Conference call held with NASEM committee Feb. 18 and additional information provided at March 9, 2016, CAC/CDCAB meeting (below).	Complete

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

Doug Hindman welcomed attendees and thanked them for their time. Craig Williams said Reagan Taylor, Brian Makinen and Tonita Goodwin were unable to attend the meeting and Wade Hollinger, deputy site project manager (SPM), BGCAPP, would represent Jeff Brubaker for this meeting. He noted there were a lot of items to cover during the meeting, but in the end believed everyone would find things are still on a very positive trajectory. He said people ask him why he is still involved in this program and he believes it is all important, and that the model of transparency of interaction with the contractor and with the Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) is something of which to be proud.

Key Updates

BGCAPP Project Update – Wade Hollinger, Deputy SPM, BG CAPP, and Ron Hink, Project Manager, BPBG

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

Hollinger provided updates on main plant progress, noting the preliminary testing of equipment, upcoming installation of Depot Area Air Monitoring System (DAAMS) equipment and start of Medical Facility occupancy. Hink explained the plant physical work as shakeout, referring to items such as system flushing and pressure testing, ventilation balancing and continuity testing. In reference to the National Academies of Sciences, Engineering and Medicine (NASEM) hydrolysate study, Hollinger said the project asked for clarification of the language in Recommendation 7-10. He gave some background on the issue and said the NASEM explanation gave the percentage of “reasonable” possibility of implementing a contingency plan as 10 to 30 percent. Hollinger said PEO ACWA is firmly committed to the SCWO technology and has confidence in it, but if operations show it cannot keep up with the rest of the plant, a back-up plan would be necessary. Hollinger then discussed the progression of the waste code bill through the Kentucky government and said it is awaiting a full House of Representatives vote. Hollinger said the project is continuing rocket motor testing and treatability studies. He said the Blue Grass Army Depot’s (BGAD) Controlled Detonation Chamber (CDC) test was successful. He said Redstone Arsenal testing is ongoing while the Anniston, Alabama, Static Detonation Chamber (SDC) test is upcoming, and the project is still evaluating the testing data. Hink said BPBG is evaluating commercial destruction options and will provide an update on that at the next meeting. Hink then updated the group on the Explosive Destruction Technology (EDT) project, noting the steel and siding are on the EDT Enclosure Building, the EDT Service Magazine coatings are complete and the foundation work for the support building is progressing. He discussed the project’s safety efforts and said he wants to make sure there are no safety issues or gaps in the transition from construction to systemization. Hollinger reported on the project’s economic impact

numbers and gave statistics. He discussed workforce diversity and said there has not been a great deal of change from last year. He said the project is about par with area population of minorities. Hink updated the group on site tours and community stewardship since the last meeting in December.

Harry Moberly said he thought the NASEM language suggested SCWO might not work, so CAC/CDCAB members scheduled a conference call with them to quantify "reasonable possibility." He was not reassured by their answers, but said he was reassured by listening to Conrad Whyne, program executive officer, because PEO ACWA is committed to making SCWO work. He said he does not think "reasonable possibility" means a lot, but he no longer has those concerns after listening to Whyne. Hindman added the group keeps talking about transparency and their relationship with PEO ACWA and NASEM, and when the group raised the question, PEO ACWA was available and willing to talk with group representatives to get to an answer. Williams said he was unable to be on the call, but was reassured with Hindman and Moberly's recall of the meeting. Williams said one of the questions he submitted in advance of the call was if the SCWO Plan B was executed and the Kentucky Department for Environmental Protection (KDEP) was on board, he thinks the CAC/CDCAB should be involved with and kept informed on where the material will go, how it will be treated and engagement with the receiving community ahead of time so there will be no issue and controversy.

Terry House asked if the other destruction sites were still sending some of their equipment that can be recycled for BGCAPP use. Hollinger said that has been done, that the other sites are closed and BGCAPP has received all it was to receive.

Williams asked about the footprint of the DAAMS installation. Hollinger said it included eight stations outside the BGCAPP site, some distance away from the facility, but inside the depot's restricted area.

Williams then asked about the treaty compliance aspect of the rocket motor testing. He proposed for the sake of discussion the scenario that the BGAD facility could handle their destruction, but their throughput rate is less than would keep up with the pace of BGCAPP destruction operations. He wanted to know if the accumulation of rocket motors under the above scenario would be a treaty issue. Hink said yes, that the rocket end caps and fins need to be destroyed to make sure the rockets could no longer be used as a weapon.

Williams asked if throughput data vs. generation information at BGAD or the SDC was available. Hollinger said they only had a limited number of motors for testing, so sustained throughput data was difficult to calculate. He said prudence may dictate having more than one disposal option. The project is looking at buffer storage capacity and potentially more than one outlet: commercial, in-house or government options. There is not a clear answer yet, but they will provide it when it becomes clear.

Williams asked, in the interest of keeping as much of the work as possible on-site, if the Blue Grass SDC could function as a secondary reception site, in addition to the BGAD

CDC. Hollinger said that is a possibility, and that is why the project is working with Anniston. Williams said for the record, open burn/open detonation should be avoided if possible.

Williams then asked about the EDT schedule. Hink noted some performance challenges with the subcontractor, but said it was too early to say that the project could not meet the end date. He said they were "still in the fight" and he would keep the group updated. Williams noted the federal mandate for operations to be complete by 2017 and said U.S. Sen. Mitch McConnell will be eagerly looking forward to something getting started in 2017.

Williams acknowledged the project's financial support of the April 21 and 22 Idea Festival, which is geared toward middle- and high-school students.

Robert Blythe asked if there has been any change in minority participation as the project moved from construction into systemization and operations. Hink said that is tracked, and the project actively seeks out those populations with specific hiring efforts.

House said he asked what "local payroll" meant a couple years ago and was shocked to find out it didn't mean Kentucky at all, but Kentucky and the surrounding states. He wonders what it still means. He made note of his concern about the payroll drop-off in the four years after the payroll peak in 2020, and what will happen to Madison County after the project is complete. He said he went to Anniston, Alabama, and said the community was "devastated, with no activity," after their project closed, and that worries him about Madison County. He hopes the BGCAPP facility can be repurposed for something useful after its closure. Williams asked for clarification of local payroll. Hink said he would find out and report back with that information.

Hollinger presented the EDT Roadmap as a tool to help coordinate the various activities necessary to initiate SDC operations, and noted there are many approvals that have to be provided to BPBG by outside organizations in order for it to be successful. He stated it is not a schedule, but rather a timeline of major events with project partners that need to be tracked and occur in the proper sequence for the project to start. He emphasized the roadmap is very forward-leaning and represents the best-case scenario.

Jeanne Hibberd asked if the recent Kentucky budget cuts would affect KDEP's portion of the project. Dale Burton said their funding is through PEO ACWA and is not being affected by any of the current changes from the new administration in Frankfort.

Hindman said the roadmap shows SDC construction but no operations. Hollinger said the roadmap was created with the initiation of SDC operations as the target.

SCWO Module Piping Welds Status Briefing – Neil Frenzl, Resident Engineering Manager, BPBG

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

Frenzl gave background on this issue. He said initial weld issues were found in the Munitions Demilitarization Building (MDB), but SCWO equipment was not seen as an issue at that time because it had gone through radiographic inspection. They did not find defective welds on the SCWO vessels themselves, which were fabricated by different suppliers than the piping systems. Project employees did a 100 percent re-review of the radiographic film in San Diego and found an acceptance rate of about 31 percent. They decided to bring the film to Kentucky. He said a team of Level 3 inspectors went over the film again, getting similar results. He provided a timeline of their findings and actions and noted they found a lack of oversight on the subcontractor side. He said the original mitigation plan was to move forward with reshooting indeterminate welds and create a backlog of welding repairs to be performed. They discovered unlisted piping components in the equipment and welds that were previously accepted via radiography but failed visual inspection during the repair process. He said the project then considered all welds suspect and therefore rejected them all. Frenzl showed piping pieces and explained the weld defects they discovered. He said unlisted piping components were custom fittings that could have been used, but would have had to be first tested and qualified. The subcontractor did not perform this step. Frenzl gave the current path forward of refabricating all piping, making all necessary repairs to allow testing to proceed as quickly as possible and to continue other mitigating actions as parallel paths. He said they have completed 1,044 welds and there are about 2,900 remaining. He also said they are ordering and scheduling parts and materials, and efforts are ongoing to mitigate impacts to the agent destruction operations schedule. Frenzl said the certification and inspection of the rework is separate of who is doing the work, with multiple layers of checks and oversight. There is a less-than one percent reject rate on the new welds. Frenzl said it was not possible to determine the timeline to solve the issue yet, that it would depend on sourcing and receiving materials, and they would provide that information when it was determined.

Williams asked if the initial radiographs were reviewed by General Atomics (GA). Frenzl said initially by one of the GA subcontractors, and the original subcontractor weld inspector said things were fine. Williams noted the project went back and re-reviewed the radiographs and found only 31 percent were acceptable. He said he appreciated that someone spotted something wrong and took appropriate action and that person was not retaliated against as a whistle-blower.

Williams then asked who is paying for the rework. Frenzl said initially, the taxpayer. Williams asked if the cost would revert to the original subcontractor. Frenzl said that issue was with legal right now and he can't comment on it, but the matter is being pursued.

Moberly asked who accepted the welds originally. Frenzl said even BPBG personnel accepted them, that welds that looked good on film eventually turned out to not be acceptable in reality. When the welds were reshot with the proper technique and good film, it was very obvious. Moberly asked who shot the film. Frenzl said the fabricator responsible for the work contracted with another firm to do the non-destructive evaluation, and they can be held accountable for their mistakes. Williams asked if the fabricator went outside their own company for this. Frenzl said yes, it was not the same company.

Hindman asked if the whole piping system would have to be redone and how much it would cost. Frenzl said yes, and he did not know the overall repair cost yet, due to several ongoing factors such as duration of labor, but will provide that number when it becomes available. Moberly questioned Frenzl on if all welds were suspect, the subject of how the welds were found, if there was plant protocol for inspections to find issues such as this, and if there was enough inspection overall concerning the nature of this plant. Frenzl and Hink emphasized the plant culture of "technical inquisitiveness" is what caught the issue before it could affect operations, that they have done and will do a lot of testing, and based on this issue, they have done an inspection of all of the first-of-a-kind equipment as well as the affected equipment.

Williams asked if other work by the same subcontractor was reviewed. Frenzl said all of that work was reviewed and reworked as they found issues, and it was done at the level as if they fabricated it themselves, at the code for new construction. Robert Blythe said he felt a "little erosion of confidence and the question of who would pay for it would continue to erode confidence," likening it to the emperor's wearing no clothes. Williams said it is important to understand nobody is happy with this issue, but it was discovered and appropriate actions have been taken. He said it was worth emphasizing the fact that this discussion is happening, that the issue was brought to the commission, and he appreciates that fact. He wanted to go on the record as saying the issue is not great, but at least it's being addressed in the proper manner.

Mike Hogg asked what Frenzl thought the root of the issue was: poor workmanship based on material quality, schedule pressure or something else. Frenzl said the subcontractor used good materials and had certifications, has appeared to have done this kind of work before, the weld inspector was qualified, but what really happened was "the \$64,000 question." He said he has never dealt with this amount of suspect or bad welds in his 25-year career.

Hibberd asked Frenzl to speak about the timelines between the discovery of the first weld issue in the MDB in 2013 and when the CAC/CDCAB first learned about it late last year. Frenzl said the non-SCWO weld deficiency discovery that occurred in 2013 was not looked at in depth because it seemed to be an anomaly. It was a year before they found more deficient welds in the MDB, and they then looked at the situation further. When the SCWO issue came up, they weren't worried at first because of the requirements for radiography. Doug Hindman noted the Secondary Waste Working Group was notified shortly after the realization of the issue.

David Benge asked if the certification and inspection of the rework is separate of who is doing the work. Frenzl said yes, the project has code-qualified welders, specific procedures, independent inspectors, additional oversight from project personnel and the facility inspection coordinator comes in at end and certifies to the state as-built and ready to go. There are multiple layers of checks by independent agencies. John McArthur added there is a third-party certifier above and beyond what has been discussed so far.

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.

Williams welcomed U.S. Rep. Andy Barr's new field representative, Joe Fryman, and discussed the Feb. 25 meeting of the EDWG. He said the objective of that meeting was to discuss the Phase 1 economic development study and look at the path forward for Phases 2 and 3. Phase 1 is done but will require additional information such as pay scales for personnel, demographics and the geographical location of workforce to be incorporated into an addendum. Williams noted the study was a collaborative effort and received a national award for its thoroughness and inclusive data. He listed the elements of agreement going forward. Williams then said the group did not include BGAD as much as they should have for their view of how the end of operations would impact the depot, and he has met with George Shuplinkov several times to clarify a lot of issues and they are in agreement with moving forward. He explained the restriction to dealing with the Office of Economic Adjustment (OEA), where the impacted community cannot file an application until three years ahead of the point of impact, but said there are several other avenues that can be followed. Williams said the group may put a proposal to the Kentucky Workforce Investment Board to move forward with the next phase, and that they may look for collaboration with area universities and others, noting collaboration with BGAD is critical. He said he and the group were taking an outside view of the issue and not taking depot support of their primary missions into consideration, and thanked Shuplinkov for the clearer future vision.

House voiced his concern again about the economic impact of the project's closure and wondered how to warn people. Williams discussed the function of the OEA and that the group would need to submit an application for study funding no earlier than three years before the point of impact. He said this was not the only place to go to find money for the studies, that the group could send an application to the Kentucky and Blue Grass investment board this year to request funding for the next phase of the study. He noted the group is looking at sources right now to implement and move forward with the next phases of the study.

Benge said the group has been looking at this for a while and wondered how badly the community would be impacted by BGCAPP's closure. He posed the questions to the

group of what the other destruction communities did and how did they plan for the same event, and answered by saying they didn't.

Hibberd said the group needs to look at the money leaving at the end, but also look at the huge influx of money during the project, and noted local governments may need to look at saving some of that money toward the future need. Shuplinkov said that was discussed with the working group and they are working for a win-win situation, but need good data to benefit the county as well as depot and project employees.

Williams said when the chemical weapons are gone, obviously the chemical activity personnel will be gone as well, and that will have a tremendous impact, too. He would like to keep as many people here paying taxes to Madison County as possible, and then within the surrounding counties. Williams said the group will distribute additional information as it is generated, and will have a strong proposal at the state level to get re-engaged with this study. He said the EDWG members don't have the capacity, training and expertise to conduct that kind of report.

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

Hindman thanked everyone for their attention and Williams thanked attendees for their attendance and continued engagement.

Next CAC and CDCAB Meeting

The next meeting is scheduled for Wednesday, June 8, 2016, at 1:30 p.m. at the ECU Carl D. Perkins Building, Rooms A and B.

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