

Kentucky Department for Environmental Protection Kentucky Division of Waste Management

DEMIL DISPATCH BGAD Project

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2021 Possible

Finish Date for

BGAD CW Disposal

By: Shannon Powers

Even with an anticipated increase in funding for the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) over the next several years, the chemical weapons stored at the Blue Grass Army Depot (BGAD) cannot be destroyed before 2021.

During the June Chemical Destruction Community (Continued on back page)

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One of the Eurotainers containing hydrolysate from Operation Swift Solution is being weighed before shipment to Veolia Environmental Services in Texas on Feb. 26. Bringing the whole operation to completion, a clean closure verification letter was sent to the Blue Grass Army Depot from the Division of Waste Management in early June.

Explosive Detonation Technology Working Group Meets Twice

By: Shannon Powers

The Explosive Detonation Technology (EDT) Working Group has met twice since the idea to form the group came after the introduction of the National Resource Council's report on EDTs was introduced during the March Chemical Destruction Community Advisory Board (CDCAB) meeting. The report was requested by Assembled Chemical Weapons Alternatives (ACWA) to see if an EDT would be feasible for

processing some of the munitions at Blue Grass Army Depot (BGAD) since an EDT was used in the current design of BGAD's sister ACWA site at Pueblo Chemical Depot in Colorado for the destruction of leaking or reject mustard-filled munitions.

The first meeting of the working group, held on May 6, discussed the benefits of accepting an EDT into the Blue Grass Chemical AgentDestruction Pilot Plant (BGCAPP). One of the issues discussed concerned BGAD's mustard projectiles that are of the same types and manufacturing lot numbers of those that gave the incineration demilitarization facility in Tooele, Utah, problems with removing the bursters. Tooele had to find an alternative method for treating those specific munitions. Even though

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Bill Lunsford joined the BGAD Section on May 1 as an engineer assistant II. He comes to the section after working in the automotive industry. The Nicholasville native is the youngest of 13 children.

Bill Lunsford Joins BGAD Section

On May 1, Bill Lunsford started his new position as an Environmental Engineer Assistant II for the Blue Grass Army Depot (BGAD) Section of the Hazardous Waste Branch.

The Nicholasville native is a 1997 graduate of the University of Kentucky with a Bachelor of Science in electrical engineering. His previous job was as a design engineer of hybrid electric vehicle components for Hitachi Automotive Products.

He resides in Versailles with his wife of 15 years, Amber, and their 8-year-old son, Eddie. Lunsford enjoys fishing and gardening.

Explosive Detonation Technology Working Group Meets Twice

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BGCAPP will be using a nonincineration method for destroying the chemical weapons at BGAD, the designers of the plant are hoping to be able to head off any possible complications like the ones at Tooele by incorporating an EDT into the design plan.

Using an EDT in the BGCAPP could possibly treat non-contaminated and certified agent-free M55 rocket motors, which are separated early in the plant's neutralization process. Another benefit would be shortening the plant's operations by eight months if all mustard projectiles could be processed through the EDT during the same time as the VX and GB campaigns are going through the Munitions Demilitarization Building.

The working group's second meeting took place on June 2 and included a presentation on the National Research Council's report by the heads of the subcommittee on the study, Dr. Richard J. Ayen and Douglas Medville. There were three major globally used EDTs that were reviewed by the

representatives for the working group: TC-60 by CH2MHill, a controlled detonation chamber; DAVINCH by Kobe Steel, detonation of ammunition in a vacuum integrated chamber and Dynasafe by UXB International, a static kiln. The council looked at each of the technologies for maturity, efficacy, throughput, safety, regulatory acceptability, secondary waste issues, destruction verification and process flexibility (i.e., the ability to treat rocket motors and mustard projectiles).

While each EDT was found to have its own history of minor problems and each appears to have the capability to overcome these problems, further testing and evaluation are necessary in order to see if they are capable of destroying all the mustard projectiles on BGAD. So far, the DAVINCH and Dynasafe technologies have received higher marks than the TC-60.

The working group will continue to meet until all the matters concerning putting an EDT into the BGCAPP design can be resolved.

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Advisory Board (CDCAB) meeting, Joe Novad, deputy program manager for the Assembled Chemical Weapons Alternatives, explained there was a 50 percent chance the weapons could be destroyed by that date leaving only the closure of the plant to be done by 2023. Various monetary, technological and logistical studies were taken into consideration while developing this date estimate, Novad said.

Originally, all the chemical weapons were supposed to be destroyed by the extended international treaty deadline of 2012. The Pentagon has acknowledged it cannot meet that deadline, so Congress has demanded that operations be completed by 2017.

Novad acknowledged that with the extra funding and with continuous operations at BGAD, the 2021 deadline was the best that could be done at this time.