



# DEMIL DISPATCH

BGAD Project

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## BGCAPP Under Construction

By: Bill Buchanan

The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) construction is under way on the Blue Grass Army Depot. Keeping a promise to hire local labor, Bechtel Parsons Blue Grass has contracted the Allen Company of Winchester to perform initial site preparation operations at

the proposed BGCAPP demilitarization facility.

Trees have been cut, stumps have been removed and soil has been cut and filled to bring the existing footprint of the Munitions Demilitarization Building (MDB) up to grade. The soil around the MDB has been excavated down to the bedrock and the foundation is being built up with dense grade aggregate before the first concrete will be poured.

The access road from KY-52 is in the process of being cut and stream crossings and retaining walls are being built to prepare the road for use. Once the road is complete, the fence within the restricted area will be channelized to allow for enhanced security and for additional contractors to enter through the construction gate, which will only provide access to the construction site.

Much progress has been made since the operations began in the spring and the BGCAPP is well on its way to realization.



Numerous local independent contractors deliver dense grade aggregate for placement on the foundation pads of the Munitions Demilitarization Building and the Container Storage Building. When complete, these pads will contain over 65,000 cubic yards of aggregate and will extend down to solid rock to ensure a strong foundation for the buildings.



This contractor is using a roller to compact dense grade aggregate in a drainage swale. The swale was designed to prevent water from naturally ponding under the BGCAPP site and weakening the soil foundation.

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# Approval Tentative for T-61 Major Modification to Haz Waste Permit

By: Eric Ringo

The Kentucky Environmental and Public Protection Cabinet, Division of Waste Management has tentatively approved Major Modification 2 to the Hazardous Waste Management Permit at the Blue Grass Army Depot (BGAD), at 2091 Kingston Highway, Richmond, Ky. Condition T-61, concerning the date for treatment and disposal of the chemical munitions, was modified due to a challenge by BGAD. This permit modification does not affect the Blue Grass Chemical Agent-Destruction Pilot Plant Research, Development and Demonstration Permit.

BGAD currently operates hazardous waste storage and treatment facilities. Some units are permitted, and some units are on interim status. The permitted hazardous waste storage facilities consist of 48 storage igloos that are designed to receive and store hazardous waste beyond a 90-day accumulation time. Modification 1 added 46 storage igloos for storing chemical munitions and chemical related hazardous waste. Modification 1 became effective on Oct. 20, 2005.

BGAD challenged condition T-61 in writing within the required 90 days according to 401 KAR 34:040, Section 2. BGAD's challenge was based on language in the Kentucky Revised Statutes that requires the hazardous waste subject to land ban storage prohibitions to be identical

to the list in the Codified Federal Regulations (CFR). After discussion between legal representatives of both parties, with scheduled updates to a hearing officer, both parties agreed to standard regulatory language.

The old condition T-61 read: PART VI - Land Disposal Restrictions - General Restrictions: Storage Time (1) The Permittee may store Chemical Related Hazardous Waste for up to one (1) year. (2) The Permittee may store chemical munitions, the existing GB one ton containers, the existing H and VX DOT bottles, and related hazardous waste that can not be decontaminated to a level suitable for shipping, until April 29, 2012 to facilitate proper treatment and or disposal. (3) The Permittee shall submit to the Hazardous Waste Branch manager, within 30 days of the effective date of this permit, a plan and schedule for the proper treatment and disposal of chemical munitions by April 29, 2012. The plan shall include the method that is to be used to destroy each type of munition and agent. The schedule shall include start and completion dates for the following: construction of demilitarization facilities, systemization of the demilitarization facilities, and destruction of each of the GB, VX, and H campaigns. (4) The Permittee shall submit to the Hazardous Waste Branch manager

annual reports by June 30 of each year detailing the progress made implementing the plan and schedule for the year and any changes made to the plan. (5) The plan and schedule are subject to approval by the Cabinet and will be incorporated into this permit.

The new T-61 reads: Condition T-61 Land Disposal Restriction-General Restrictions (1) Prohibitions and Treatment Standards: A restricted waste identified in 401 KAR Chapter 37 may not be placed in a land disposal unit without further treatment unless the requirements of the specified regulations are met. (2) General Restrictions: 401 KAR Chapter 37 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage or disposal unit. The Permittee shall maintain compliance with the requirements of 401 KAR Chapter 37. Where the Permittee has applied for an extension, waiver or variance under 401 KAR Chapter 37, the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such application. (3) Prohibitions and Treatment Standards: The storage of

hazardous wastes restricted from land disposal under 401 KAR Chapter 37 is prohibited unless the requirements are met.

## Igloo Vents Conditionally Opened

By: Eric Ringo

On Aug. 31, the Kentucky Division of Waste Management gave conditional approval for the Blue Grass Chemical Activity (BGCA) to open the front and rear vents of the 48 permitted hazardous waste storage units, known as igloos, in the Chemical Limited Area (CLA).

The vents were closed five years ago as a result of recommendations to reduce risks associated with the storage of chemical munitions. BGCA personnel began noticing molds on the wood pallets used to store the munitions. The Army concluded that the closed vents contributed to the moldy conditions.

The Division took a cautious position on the igloo vents issue and included Condition T-46 of the Blue Grass Army Depot (BGAD) Hazardous Waste Permit Modification 1, which was issued on Sept.

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# No Further Action Taken on BGAD's Area of Concern T

By: David Remley

The Kentucky Division of Waste Management's Hazardous Waste Branch recently completed a review of the results obtained from its investigations at BGAD's maintenance shops, also known as Area of Concern (AOC) T. The investigations at AOC T consisted of the collection of historical and anecdotal data, visual inspections of the concrete floors within the buildings, and the chemical analysis of soil samples collected from beneath the floors and at four drainage outfalls. These investigations were conducted to determine whether AOC T is contaminated, specifically from volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) or metals.

During the review, the division evaluated BGAD's request for no further action at AOC T. The division found that all sampling results for VOCs, SVOCs and metals are below screening limits. Therefore, the division approved BGAD's request for no further action at AOC T. However, due to the ongoing nature of the activities at AOC T and the possibility that releases could occur in the future, the division has reserved the right to require additional investigations should new information indicate it does not comply with applicable requirements. Under its permit requirements, BGAD must notify the division of

future releases from AOC T.

In order to finalize the no further action status of AOC T, the permit will be modified. The draft permit

modification will be made available to the public for review and comment. The division will evaluate any and all comments and determine if revisions are necessary.

Following the response to comments and any necessary revisions to the draft permit, the modification of T-61 will be approved as final by the division.

## Igloo Vents Conditionally Opened

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30, 2005. The condition reads: Igloo Vents. (1) The chemical storage igloo vents (front and rear) shall remain normally closed until appropriate analysis of risks of reopening the vents versus leaving the vents normally closed are conducted, or other such measures are implemented to mitigate the risk. (2) The vents shall remain normally closed until a concurrence letter from the Cabinet is received.

Inspectors from the division investigated the pallet issues, and a study of the types of molds and how they affected wood was requested. The study revealed that the mold was of several species including specific molds that aggressively attack wood.

The Division requested and received a detailed plan from the BGCA to inspect the condition of pallets in the igloos and to develop a prioritized plan to address degraded pallets. The BGCA developed and completed a comprehensive inspection using a durometer, an instrument used to test materials for hardness.

An annually renewed chemical storage work plan was approved by the division on July 1 to allow BGCA to begin addressing associated problems by re-warehousing and repalletizing munitions. Good, uncontaminated wood pallets were shipped to BGAD from the Umatilla Army Depot in Oregon.

Once the risk assessment and work plan were reviewed and approved, the division granted approval to open the igloo vents but retained the right to revoke this approval if additional information, analysis, conclusions, or events indicate that closed

vents may provide greater protection to human health and the environment.

There are three igloos of particular interest because of their content and proximity to the Blue Grass Chemical Agent-Destruction Pilot Plant site and the influx of construction workers based there.

The Division decided to place a condition on its vent opening approval regarding these three igloos. The condition states that those igloos will be checked on a more frequent schedule than the other igloos.

## Hettinger Named New Project Geologist

Christopher Hettinger is the new addition to the Hazardous Waste Branch. He has been assigned to the BGAD team and currently has his nose in manuals and reports. He is looking forward to the meetings and working with counterparts to this project.

He is a transfer from the Superfund Branch, Petroleum Cleanup Section, following his recent return from active duty in Southwest Asia or, as most Westerners call it, the Middle East. He will be a valuable asset with his  
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# Hettinger Named

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military knowledge of GB, VX, H as a chemical officer. His Kentucky National Guard Unit ran a redeployment camp for soldiers returning to the United States. His additional duty assignment as the Environmental Compliance Officer grew into a full time job as the camp was dismantled and returned to a desert. He says that he learned much of the culture and how that region of the world conducts business.

“If you think you have a tough job here, then you need to try an environmental field overseas,” he said.

He took a little two week vacation to Iceland at the

latter part of August. As a geologist, he said it was a dream come true to see things only read about in textbooks. Iceland has more basalt and igneous formations than one could imagine. Highlights included a run in Reykjavik, rafting a Class IV rapid on a glacial river from Myrdalsjokull, hiking on an outlet glacier of the Vatnajokull, rafting another Class IV outside of Varmahlid and all the hot spring baths.

He is now back to the life of a state employee and enjoys the 7.5 hour work days and that he can go home to his own place. He is currently residing in Frankfort with his black lab/pit bull mix.



**Chris Hettinger, seen here after rafting a Class IV rapid on a glacial river from Myrdalsjokull, Iceland, has transferred from the Superfund Branch to the Hazardous Waste Branch. Hettinger just got back from military service in Kuwait and has taken over the geologist position vacated by Tim Barrett, who took a position with private industry after returning from his tour of duty in Afghanistan.**