Current BGAD Permitting Activities

The Blue Grass Army Depot (BGAD) section within the Kentucky Division of Waste Management (DWM) is responsible for administering the Resource Conservation and Recovery Act (RCRA) regulations for the state of Kentucky as it applies to activities at BGAD.

Specific projects the BGAD section is currently working on include the following:

RCRA Subpart X refers to Miscellaneous Units or Hazardous Waste Management Units (HWMU) which do not fit the definition of typical HWMUs such as containers and tanks. The stand alone “Subpart X” permitting process that the section is working on with BGAD refers to the open burning, open detonation, and a Donovan Detonation Chamber. These units are currently only proposed to process conventional items such as propellant, or waste conventional munitions. Activities now occur under “interim status” which is a RCRA provision where certain activities can continue until permitted. The DWM BGAD section and the BGAD environmental office are actively engaged in the permitting process for these activities.

The Blue Grass Chemical Activity (BGCA) and DWM are working on a permit modification to the chemical storage component of the facility permit in order to conduct a propellant degradation study for nerve agent rocket motors. The basic operation for this activity will include unscrewing the chemical agent containing warhead from the propellant containing rocket motor in order to ship propellant to Picatinny Arsenal in New Jersey for the study. This study has been conducted at other chemical weapons sites, but the Chemical Materials Agency (CMA) has also proposed it for BGAD due to variation in environmental conditions from other stockpile sites. When RCRA review is satisfied for the revised application, a public notification will be issued in order to provide the public with an opportunity to comment on the draft permit modification.

The Research Development and Demonstration (RD&D) permit application for the chemical weapons destruction project will be revised later this year in order to reflect design and construction progress and project maturation. We are looking forward to these exciting activities for this very active project! The BGAD permitting group along with the Frankfort Field Office inspectors are actively engaged with the systems contractor (Bechtel Parsons Blue Grass) in many hands on site activities to ensure proper RCRA documentation for the site.

Additional RCRA permits are expected to be issued for chemical weapons destruction of blister agent (mustard, H), nerve agent (VX), and separated rocket motors. A draft environmental assessment has been generated for an explosive destruction technology (EDT) to process the mustard projectiles and DWM expects to review and provide comments. This document is a requirement of the National Environmental Policy Act (NEPA).

Finally a facility permit renewal application is also expected for submittal within the next year. This application currently includes general facility conditions, conventional storage, and chemical storage. The subpart X application mentioned above will also ultimately be incorporated into this permit.
BGCAPP Construction Updates

Structural steel progressing at Super Critical Water Oxidation (SCWO) processing building

Clean air exhaust filter stacks being moved through a lay down area

Workers weld seams in hydrolysate storage tanks

Three of five Hydrolysate storage tanks are complete as of April

Conveyors are used to transfer the chemical weapons to various stations in the munitions demilitarization building (MDB)

The rocket shear machine (RSM) which will punch and drain the warhead then shear it into multiple pieces for processing in the energetics batch hydrolyzer (EBH), is staged in the MDB
KDEPs BGAD Permitting Section Welcomes Two New Members

The Kentucky Hazardous Waste Branch would like to introduce its two newest employees.

In April, Colette Easter started her new position as Assistant Environmental Engineer II for the Blue Grass Army Depot Section of the Hazardous Waste Branch. Mrs. Easter earned a Master and Bachelors degree in Biological Systems Engineering at the Washington State University before moving to Kentucky six years ago. Mrs. Easter and her family have a small farm in Woodford County where they raise Quarter horses, cows, and are active members of the local farmers market.

Colette’s experience includes hydrology and hydrologic modeling and design, erosion control, drainage and stormwater design, environmental site assessments, water quality, and landfill permitting.

The team is pleased to have Colette and Heather as a members and are certain they will prove to be a valuable additions to the project.

The Bluegrass Army Depot permitting has hired a new Program Coordinator, Heather Alexander. The Paducah, Ky native earned a degree in Occupational Safety and Health at Murray State University.

Heather brings a wealth of experience to the team with her previous work experience that includes time spent with KY OSH as a trainee consultant, and then 10+ years of safety and environmental work in different manufacturing settings. Most recently she has spent the last 6 years as the HR Manager at General Cable in Lawrenceburg, Ky.

Heather is a proud mom of a 12 year old son, and enjoys spending time with him, either watching him play baseball or running track. She loves outdoor activities: running, playing softball, working in the yard.

Heather is very excited about her new role and looking forward to getting to know everyone, just don’t give her a test of remembering names, she says that is not one of her strengths!

Welcome to the team, we are currently entering an exciting time when permitting activity is ramping up, engagements with the facility are increasing and BGCAPP is starting to take shape and really look like the various diagrams we've been poring over for years.

Many Eyes On Chemical Weapons Storage

The Bluegrass Chemical Activity (BGCA) recently passed international inspection this past March. The international inspection was conducted by a team of representatives from other countries participating in the Chemical Weapons Convention treaty the United States signed in 1997 to halt the proliferation of chemical weapons. These inspections are commonplace for treaty members and occur at known stockpile sites to take stock of the weapons and ensure those declared under the treaty are present and accounted for. As the storage mission moves into demilitarization the focus of the inspections will shift to one of ensuring the complete destruction of the chemical munitions.

The treaty inspections are distinctly separate from the inspections performed by the state. The state inspections by Kentucky Department for Environmental Protection (KDEP) and the federal inspections by United States Environmental Protection Agency (EPA) focus on record keeping and proper storage conditions to help ensure the safe storage of the chemical munitions. BGCA also has a team of hazardous materials handlers that perform air monitoring using real-time analytical platforms (RTAPs), enhanced surety monitoring inspections (ESMI), repalletization, leak isolation, and visual monitoring of the chemical munitions storage igloos according to state regulations and Army standard operating procedures (SOPs). In addition to that Quality Assurance Specialist Ammunition Surveillance (QASAS) from the Department of the Army are assigned to inspect the condition of the chemical and conventional weapons at the depot.

As one can see there are various levels involved in the monitoring and safe storage of the chemical weapons at BGAD and thankfully this degree of vigilance will continue until their disposal at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) currently under construction at the Blue Grass Army Depot (BGAD).
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