

# Blue Grass Army Depot – Hazardous Waste Permitting Update



KENTUCKY ENERGY &  
ENVIRONMENT CABINET

Public Meeting

April 21, 2021

Dale Burton | Ted Malone | Monica Alden

Division of Waste Management, Hazardous Waste Branch

# Important Acronyms

RCRA	Resource Conservation and Recovery Act
BGCAPP	Blue Grass Chemical Agent-Destruction Pilot Plant
BGAD	Blue Grass Army Depot
BGCA	Blue Grass Chemical Activity
RWCS	Rocket Warhead Containerization System
MDB	Munitions Demilitarization Building
ACWA	Assembled Chemical Weapons Alternatives
VRCM	Vertical Rocket Cutting Machine
CLA	Chemical Limited Area



# BGAD Hazardous Waste Permit Sections

Permit Section	Owner	Operator
Entire Facility Section (F)	U.S. Department of the Army	All persons, as listed below
Conventional Storage Section (N)	U.S. Department of the Army	U.S. Department of the Army Blue Grass Army Depot (BGAD)
Chemical Storage Section (C)	U.S. Department of the Army	U.S. Department of the Army Blue Grass Chemical Activity (BGCA)
BGCAPP EDT Section (E)	U.S. Department of the Army	Bechtel Parsons Blue Grass Joint Venture (BPPG)
Mustard Agent (H) Sampling Operations (M)	U.S. Department of the Army	U.S. Department of the Army Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)
GB Sampling Operations Section (G)	U.S. Department of the Army	U.S. Department of the Army Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)
Open Burn, Open/Buried Detonation Section (P)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Army Depot (BGAD)
<b>BGCAPP Main Plant (A)</b>	<b>U.S. Department of the Army</b>	<b>Bechtel Parsons Blue Grass Joint Venture (BPPG)</b>
D-100 Controlled Destruction Chamber Section (D)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Army Depot (BGAD)
<b>Transport and Storage of Nerve Agent Wastes (R)</b>	<b>U.S. Department of the Army</b>	<b>U.S. Department of the Army Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)</b>



# Proposed Permit Modifications

The Kentucky Division of Waste Management has public noticed tentative approval of four major permit modification requests. The public comment period for these modifications ends a week from today, at midnight on April 28, 2021

1. Rocket Warhead Containerization
2. Treatment of VX Rockets
3. Addition of Vertical Rocket Cutting Machines
4. ACWA Transport and Storage of Nerve Agent-related Wastes in the Chemical Limited Area



# 1. Rocket Warhead Containerization

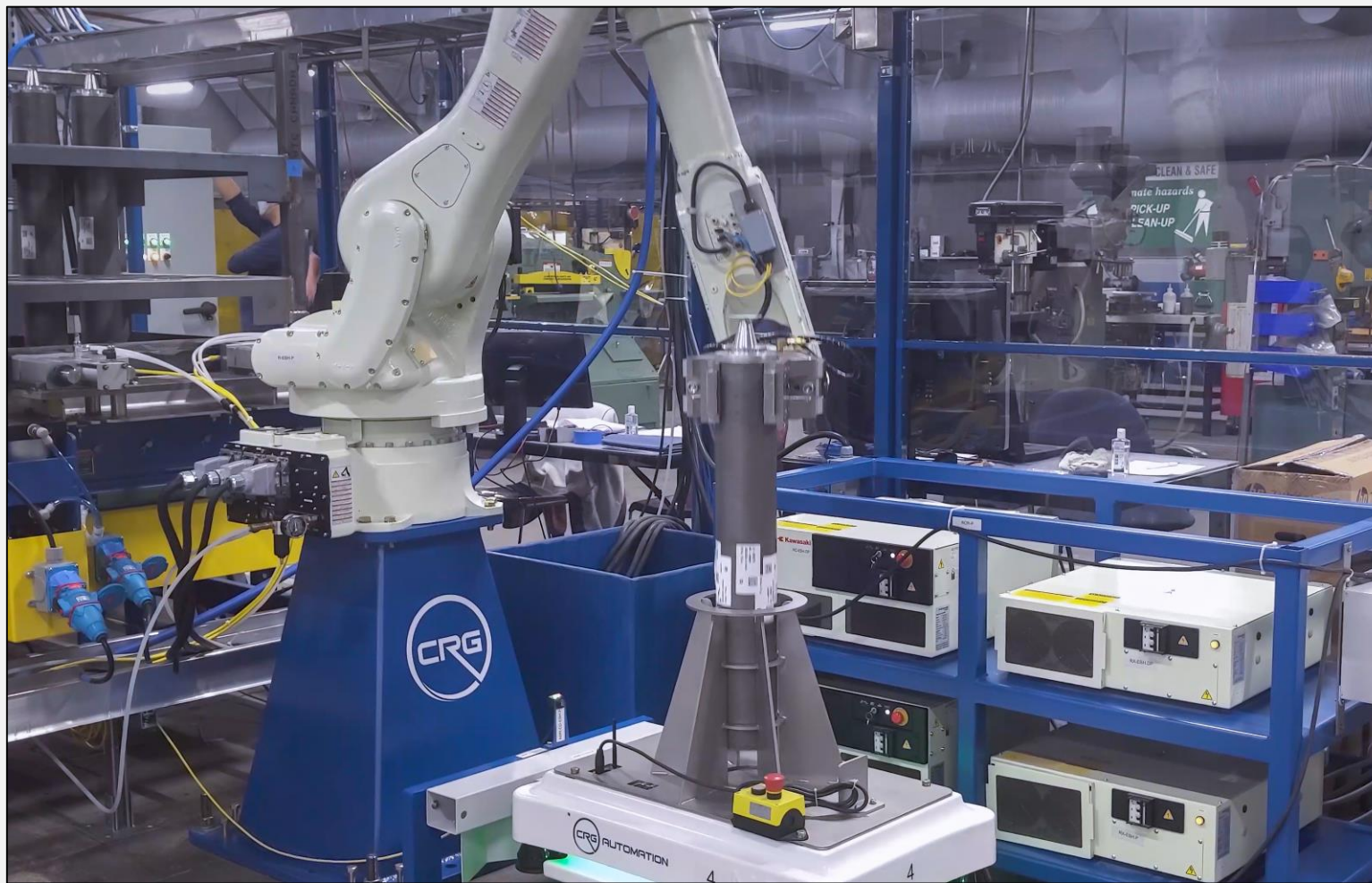
Details of the proposed permit action are contained in an application entitled Class 3 Hazardous Waste Storage & Treatment Permit Modification Request, Change in Rocket Management and Miscellaneous Permit Updates dated November 16, 2020.

This permit modification request includes the following items:

- Elimination of equipment in the Munitions Demilitarization Building (MDB) associated with the destruction of energetics in the nerve agent rockets.
- Elimination of equipment in the Supercritical Water Oxidation (SCWO) Process Building (SPB) associated with destruction of energetics hydrolysate
- Addition of a Rocket Warhead Containerization System (RWCS).

# Rocket Warhead Containerization

ACWA Photo





# Rocket Warhead Containerization

ACWA Photo



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## 2. Treatment of VX Rockets

Details of the proposed permit action are contained in an application entitled Class 2 Hazardous Waste Storage & Treatment Permit Modification Request, Treatment of VX Rockets dated December 17, 2020.

This permit modification request includes the following items (for a complete list please see the application or the fact sheet):

- Transport of M55 rockets containing the nerve agent VX from Blue Grass Chemical Activity (BGCA) to the Container Handling Building Treatment of M55 rockets containing VX in the Munitions Demilitarization Building (MDB).
- Treatment of drained VX agent in the MDB and subsequent management of VX agent hydrolysate in the Hydrolysate Storage System tanks.



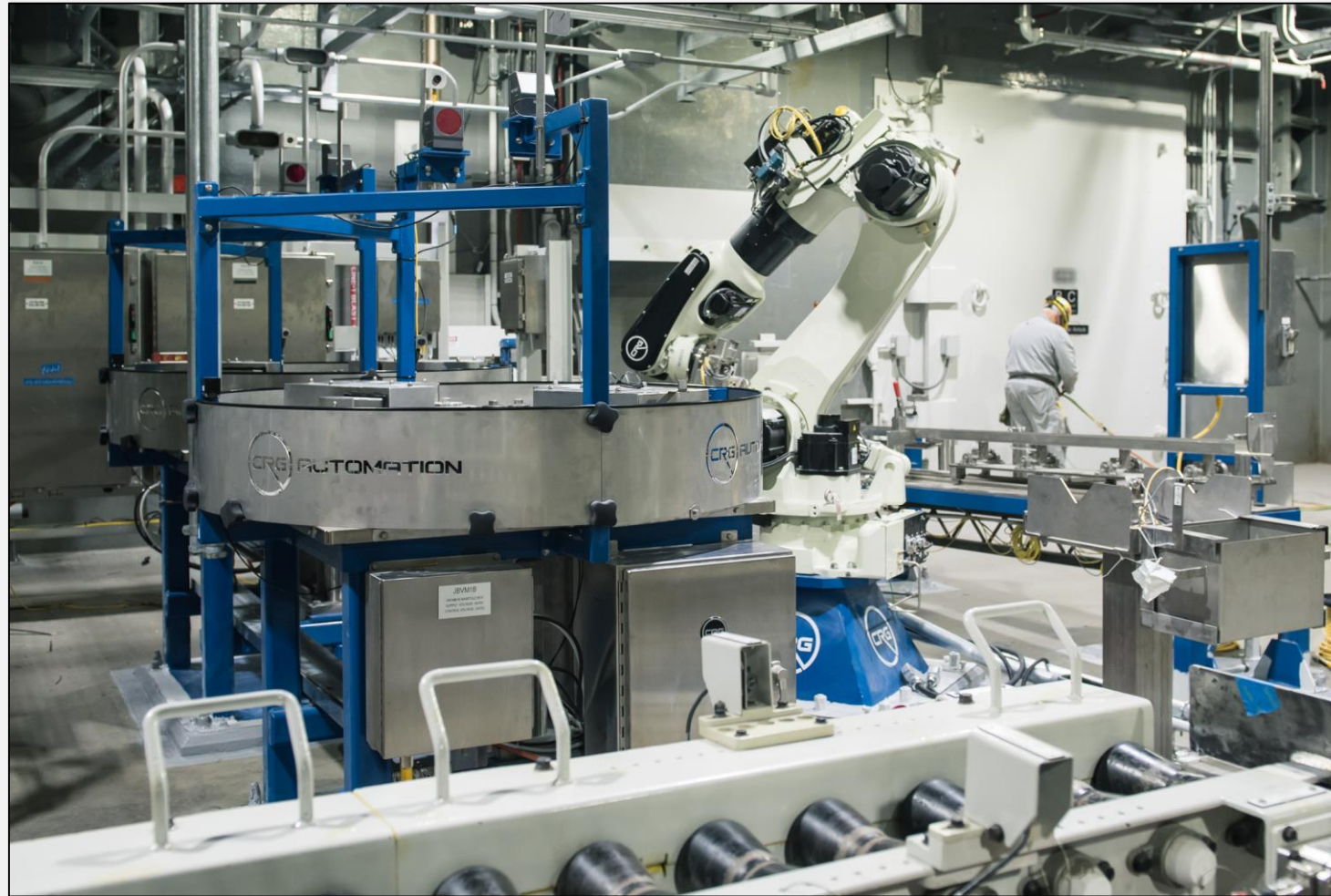
## 3. Addition of Vertical Rocket Cutting Machines

Details of the proposed permit action are contained in an application entitled Class 2 Hazardous Waste Storage & Treatment Permit Modification Request, Vertical Rocket Cutting Machines and Rocket Non Destructive Examination dated November 19, 2020. This permit modification request includes the following items:

- Substitution of four Vertical Rocket Cutting Machines for the two existing rocket cutting machines in the MDB
- Addition of Rocket Non-Destructive Evaluation technology to evaluate M55 rockets for chemical agent liquid leaks prior to processing in the Vertical Rocket Cutting Machines

# Vertical Rocket Cutting Machine

ACWA Photo

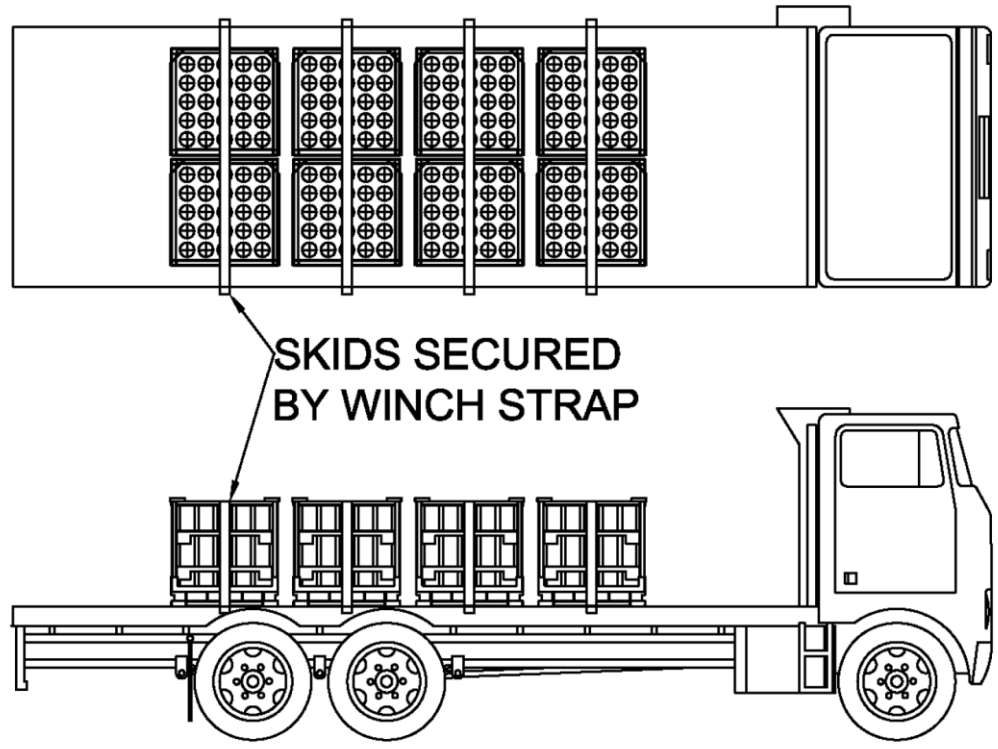
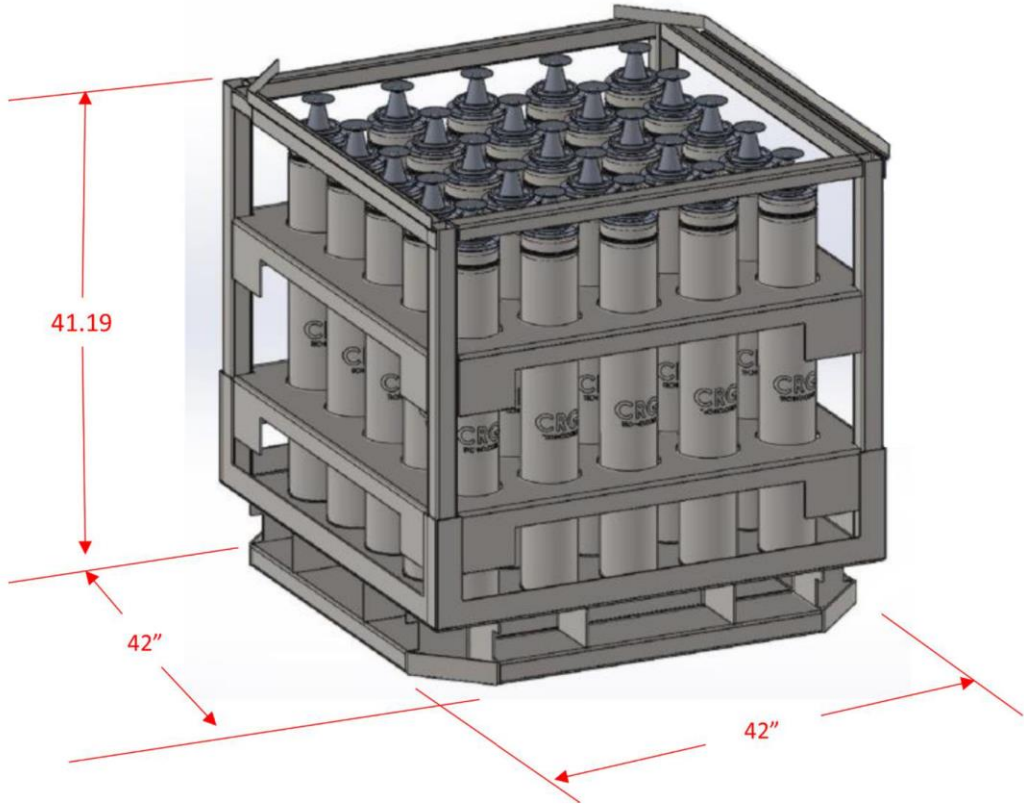


## 4. Transport and Storage of Nerve Agent-Related Items

Details of the proposed permit action are contained in an application entitled Module IX: Transportation and Storage of Nerve Agent-Related Items from the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) dated December 2020. This permit modification request includes the following items:

- Transfer of permit responsibility of Chemical Limited Area (CLA) igloos from the Blue Grass Chemical Activity (BGCA) to the Assembled Chemical Weapons Alternatives (ACWA). This will be done in steps, as igloos are emptied of original stockpile munitions.
- Transport of containerized VX and GB rocket warheads and other associated wastes via flatbed trucks from the BGCAPP Main Plant to the CLA Igloos and then from the CLA igloos to an SDC unit for destruction.
- Storage of containerized VX and GB rocket warheads and other associated wastes in the CLA igloos.

# 4. Transport and Storage of Nerve Agent-Related Wastes





## 4. Transport and Storage of Nerve Agent-Related Items



# Schedule for Permit Action

March 12, 2021	KY Division of Waste Management determination that applications are complete and sends out draft permits and fact sheet
March 14, 2021	Comment period begins with advertisement in the newspapers
April 21, 2021	Virtual public meeting and public hearing
<b>April 28, 2021</b>	<b>End of comment period</b>
May 21, 2021	Tentative date for final action (response to comments and permit modifications issued)





# Future Permitting Actions

In addition to the current permitting action, the Division is currently reviewing the following major permit modification requests:

- Application to ship hydrolysate to a permitted off-site treatment facility
- Application to store uncontaminated rocket motors in existing BGAD igloos
- Application to destroy nerve agent in the Static Detonation Chamber (SDC 1200), including construction of an upgraded off-gas treatment system
- Application to destroy nerve agent in another (larger) Static Detonation Chamber (SDC 2000)

Questions?



# Blue Grass Army Depot – Hazardous Waste Permitting Update



KENTUCKY ENERGY &  
ENVIRONMENT CABINET

Public Hearing


April 21, 2021

April Webb, Hazardous Waste Branch Manager

Division of Waste Management, Hazardous Waste Branch

# How to Submit Comments

If you would like to make a comment, you have three options:

1. Type your comment in the chat bar. The chat button is the icon  on the upper right of your screen, or
2. Make an oral comment when prompted by the hearing officer, or
3. Email your comment to Brandon May, [brandon.may@ky.gov](mailto:brandon.may@ky.gov)

Please include your name, who you are representing, and your comment

**All comments must be received by midnight on April 28, 2021**

Thank you for your time and attention.