

Option 2: Contained Burn System Technical Proposal

Contained Burn System Key Advantages

- Proven Technology
 - Proven Feed System
 - Proven Thermal Treatment System
 - Proven Pollution Abatement System
- Minimizes Material Handling
 - Capability to Treat in Existing Packaging = Least Amount of Handling and Personnel Exposure of Any Technology
 - If Propellant is Removed From Existing Packaging, it is Only Handled Once
 - Significant Risk Reduction
- High Throughput
- Allows For Convenient Thermal Treatment of Contaminated Packaging
- Personnel are Located Remote to Facility During Feeding and Thermal Treatment Process
- Contains All Combustion Products For Treatment in Pollution Abatement System
- Advanced Pollution Abatement System to Meet the Highest Possible Emissions Standards (Best Available Control Technology)
- No Large Secondary Waste Stream Created
 - No Water Discharge
 - High Mass Reduction – Very Low Ash Production
- Simple Operation and Controls with Robust Safety Interlocks
- Low Maintenance
- Permitted in Other States Under RCRA Subpart X
- Similar Feed System and Thermal Treatment System Approved by DDESB Within Last 18 Months

ESI/EDE is separately proposing using a Contained Burn System coupled with a highly efficient pollution abatement system for destruction of the stored M6 propellant and CBI safely and in an expeditious manner. This system, although more expensive than the proposed kiln system, has a couple of significant advantages:

1. M6 propellant and CBI can be thermally treated in the existing packaging configurations which significantly reduces personnel handling, exposure, and risk as well as eliminating a major potentially contaminated secondary waste stream.

2. This system has been permitted in other states under RCRA, subpart X, and is typically exempt from the constraints, time and costs associated with hazardous waste incinerator permit requirements.

Contained Burn technology can be thought of as “open burning indoors.” Materials are prepared and ignited similar to traditional open burning operations but the exhaust gasses are completely contained and cleaned prior to release. The design of the pollution control system to scrub the off gases is tailored to the chemistry of the materials being treated.

This well proven technology consists of a simple feed mechanism and the Contained Burn Chamber (CBC) coupled with a highly efficient pollution abatement system to both capture and remove exhaust emissions of concern to meet the required emission levels. This proposal includes priced options for additional pollution controls which can be employed according to available budget to meet the highest possible standards for emissions.

A layout of the proposed system, with all priced pollution abatement system options shown, is provided in the figure below.