

EBV Explosives Environmental Company

Joplin, MO

Commercial Disposal of Explosive Wastes

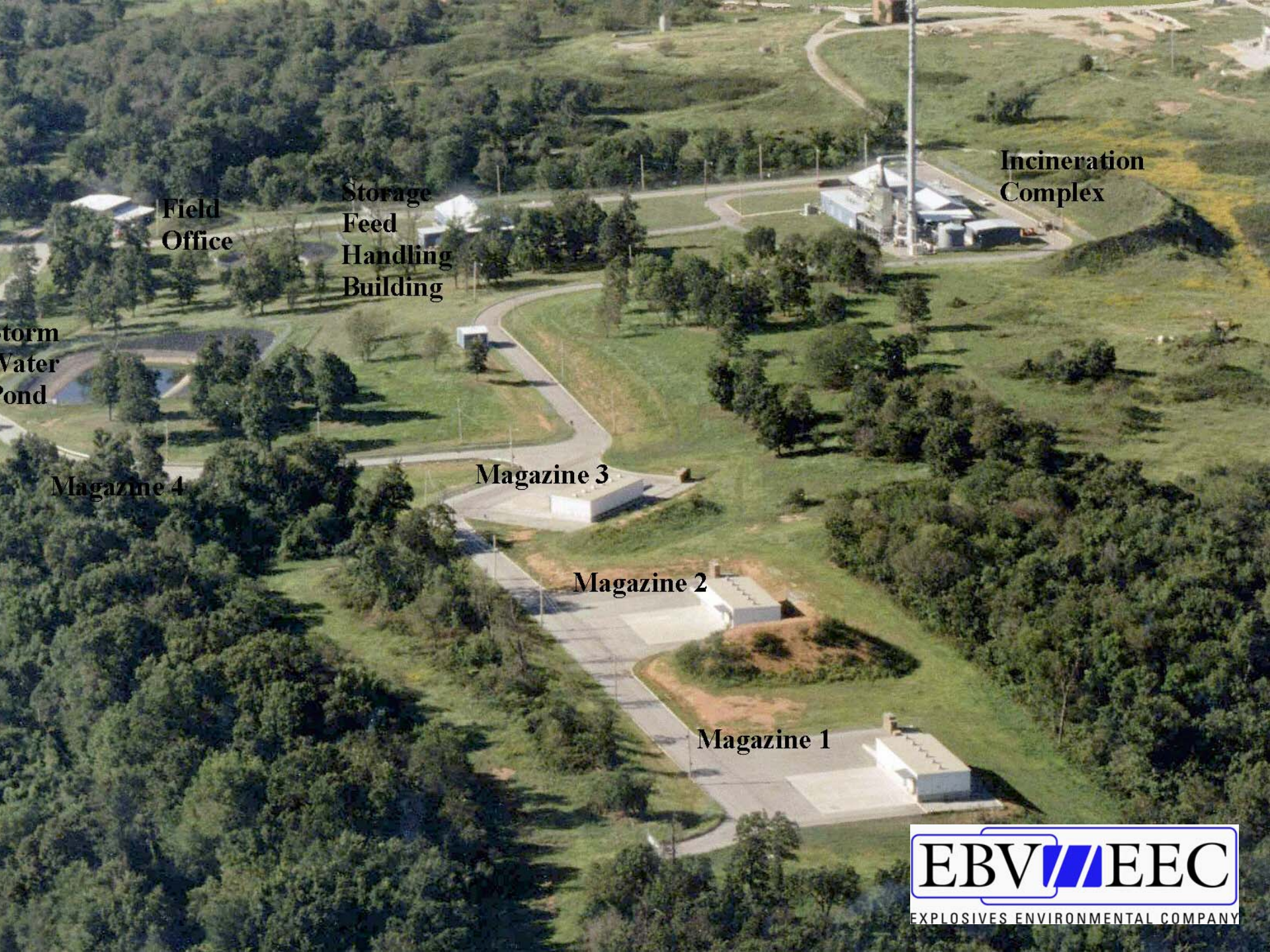


Celebrating 10 Years of Explosives Waste Disposal Service

- EBV EEC's Joplin, MO, TSDF celebrates 10 years of operations (formerly ICIEEC)
- Only commercial HW incinerator in US specifically designed to incinerate explosive materials and devices
- Over 25 million lbs of explosive materials and devices incinerated over past 10 years

EBV EEC Facilities

- **Demil Facilities**
 - **M483 ICM Projectile Download & Demil Process**
 - **Demil and Disassembly**
 - **Repackaging**
- **Incineration Equipment**
 - **Rotary Kiln Incinerator**
 - **Car Bottom Furnace**
- **4 Storage Magazines**



Field
Office

Storage
Feed
Handling
Building

Incineration
Complex

Storm
Water
Pond

Magazine 4

Magazine 3

Magazine 2

Magazine 1



EBV EEC Demil Capabilities

- M483 ICM Projectile Disassembly
- Repackaging/Safing of Mortar Ctgs
- Delinking of Small Caliber Ammo
- Munitions Disassembly Equipment Development
- Munitions Sawing

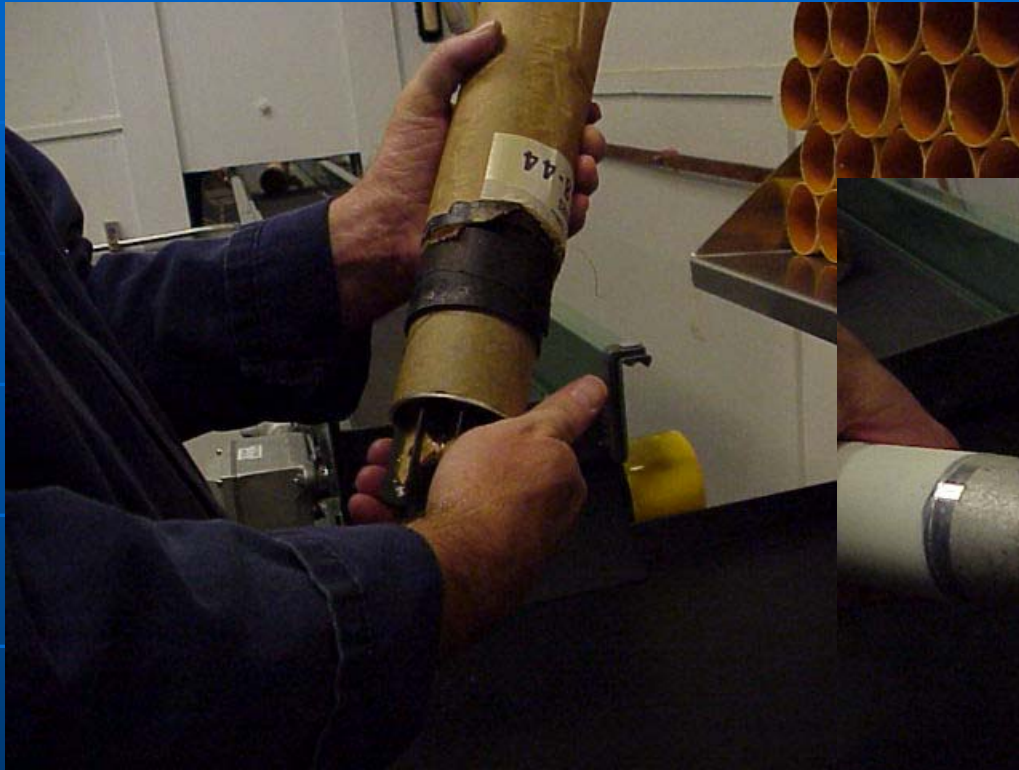
M483 ICM Projectile Demil





**Recyclable
Materials
Recovered
from ICM
Projectiles
93% R³**

60mm Illuminating Ctg Demil



Unpack of 60mm Ctg

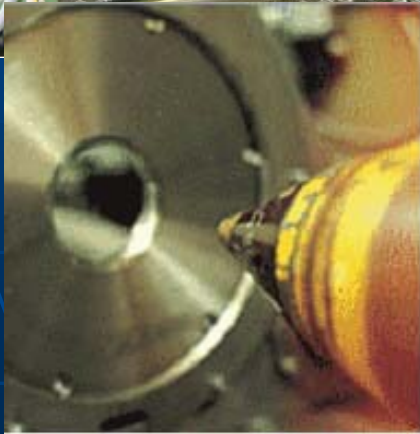
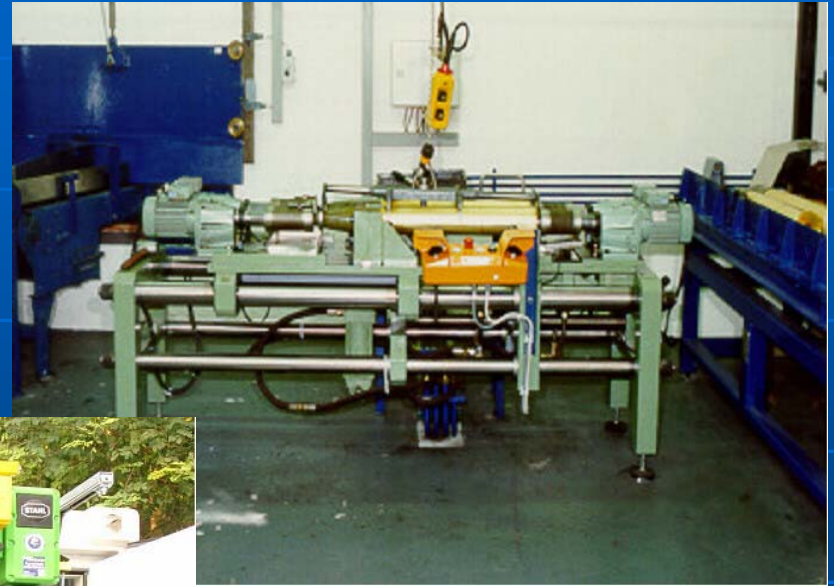
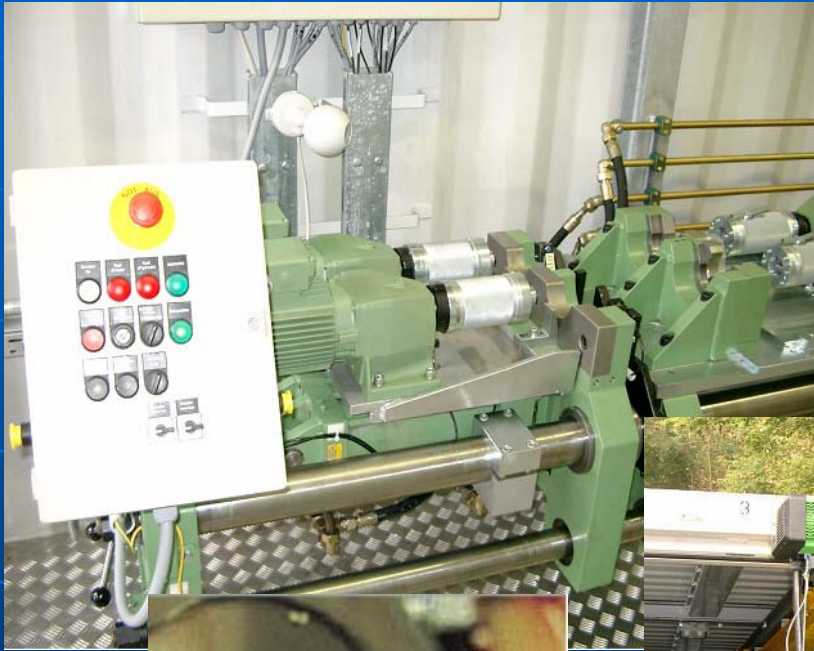


Safing of Tail Fin Assembly
Prior to Incineration

Small Caliber Ammo Delinking



Disassembly Equipment Development



Munitions Cutting

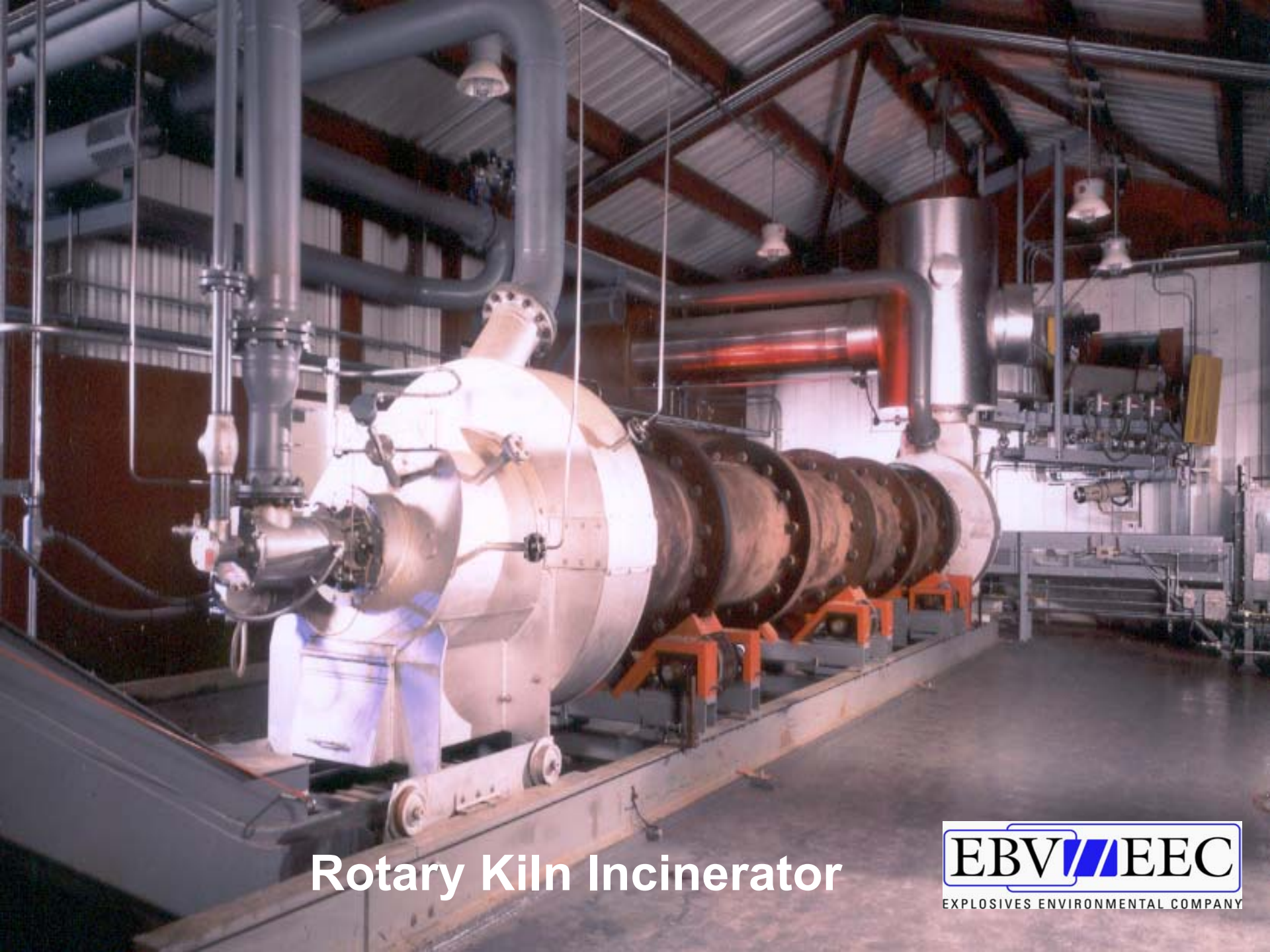


Incineration Operations

- **Rotary Kiln Incinerator**
- **Car Bottom Furnace**
- **Air Pollution Control System**
- **Recyclable Metal Recovery**
- **Types of Explosive Material Incinerated**

Rotary Kiln Incinerator

- 3 1/4" thick cast steel and 3' diameter
- 6 section, no refractory
- Internal flight or helix to convey and separate waste
- Gas fired, countercurrent design
- 350 to 750 F
- Inside protective room



Rotary Kiln Incinerator

Car Bottom Furnace

- For incineration of explosives contaminated trash including PPE, packaging, rags, mops, etc.
- For flashing of explosives contaminated metal parts, drums, equipment, etc.
- Inside capacity 4'h x 5'w x 9'l



NO ADM
DUF
OPER

Car Bottom Furnace

Features Of EBV EEC APCS

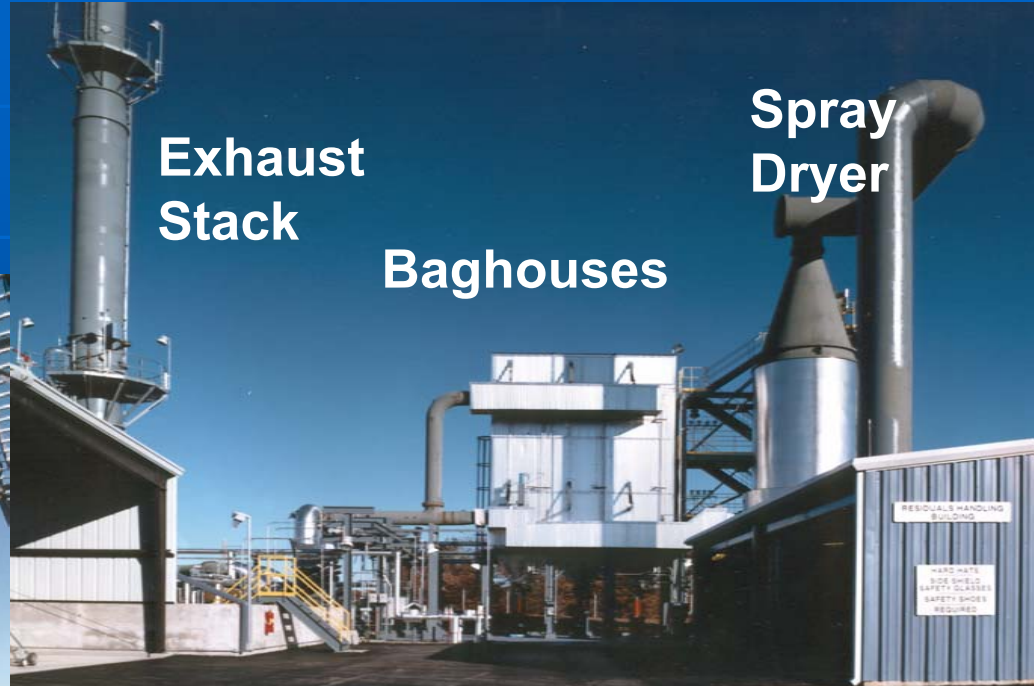
State-of-the-industry air pollution control system (APCS) meets all MACT standards including those for dioxins and chlorine

- Secondary Combustor provides >4 second residence time at 1900F to destroy organics
- Spray Dryer
 - Rapidly quenches exhaust gases
 - Neutralizes and removes acid gases, e.g., HCl through injection of soda ash in quench water – 99.6% chlorine removal
- Baghouses remove particulates

EBV EEC APCS



Secondary Combustor



Exhaust Stack

Baghouses

Spray Dryer

Ash, Recycled Metals & Packaging Inspection

- All residual ash is disposed of in a Hazardous Waste Landfill
- All recyclable metals are 100% inspected
- DCMA spot checks all recyclable metal from government contracts prior to release to scrap metal dealer
- All packaging materials are 100% inspected and stamped by the inspector
- DCMA spot check all packaging from government contracts prior to recycling or disposal



Recyclable Metal Inspection Station



Inspection of Recyclable Metals



Types of Explosives Treated

■ Military

- Fuzes
- Small Cal Ammo
- Pyrotechnics
- Bulk Explosives
- Bulk Propellants
- CAD/PAD Devices
- Grenades & ICM
- Smokes & Dyes
- Riot Control Agents

■ Commercial

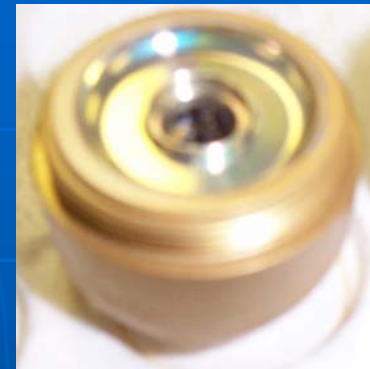
- Blasting Caps
- Det Cord
- Bulk Explosives
- Bulk Propellants
- Air Bag Materials
- Oil Well Devices
- Small Cal Ammo
- Gas Generators

Fuzes



Artillery and Bomb Fuzes

Over 3 million fuzes processed



Small Caliber Ammunition



20mm thru 30mm
Cartridges,
Projectiles, and
Primed Cases



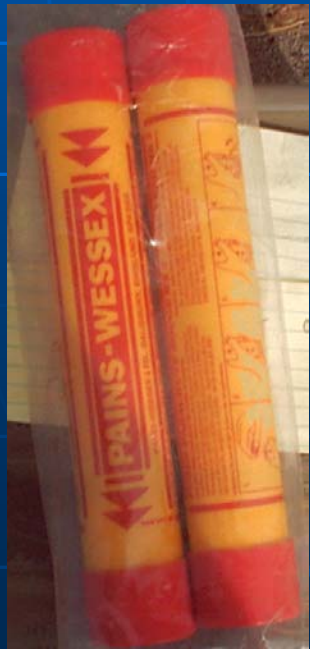
Over 10 million
rounds
processed



Pyrotechnics & Smokes

60mm Illuminating Cartridges

Over 360,000 processed



Signal Smokes Signal Flares

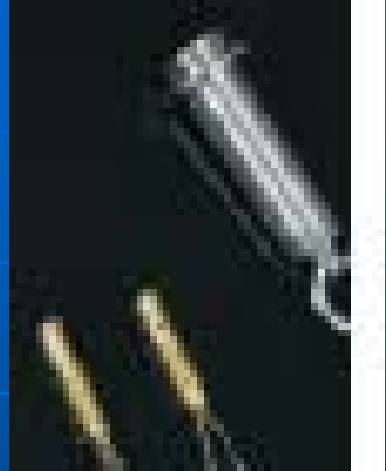


S&As, Primers, Detonators



**Millions
Processed**

CAD/PADs



Millions
Processed



Grenades



**M42 Grenades –
Over 6 million
processed**



**40 mm Practice
Grenade**

Magazine Storage

- Four magazines
- 100,000 pound NEW capacity per magazine
- Comply with DoD and ATF Security Requirements
- Intrusion Alarms and CCTV
- Key Control
- Computerized Waste Tracking



Typical Aboveground Storage Magazine



Storage Magazine From Inside

Waste Approval and Tracking

- Wastes profiled before accepted
 - Technical Data Package assembled
- Safe Handling Procedures developed
- Hazard Reviews of all new waste streams
- Waste tracked by profile number, manifest number, and/ or ALN number
- Computerized Waste Tracking System
 - DCS control
 - Burn reports
- Tracking of scrap

Fingerprinting

- Inspection of truck and manifest
- Waste sample selection
- Inspection of waste
- Compare waste to information in Technical Data Package
- Label and enter waste into Waste Tracking System

Direct Feed or Preprocessing

- Waste is transported to Feed Room or Storage Feed Handling Building
- SFHB is used for repackaging or demil
 - Can go back to Magazine or to Feed Room
- All waste is scanned into Waste Tracking System for each movement

EBVEEC Permits

- RCRA Part B Permit (expires 2012)
- Title V Air Permit (expires 2006)
- NPDES Permit (expires 2010)
 - Storm Water / Sanitary – no process discharge
- ATF License (expires 2006)
- DOT Hazardous Material License (expires 2006)
- FAA Stack Permit

What Can EBV EEC Do For You?

In addition to demil and disposal of your explosive wastes, EBV EEC can assist with:

- Ensuring packaging and transportation comply with DOT requirements
- Arranging Transportation
- Printing Manifest, LDR Form, HW Labels
- Analysis & Characterization of HW
- Completing and printing WCPs

Who Do I Contact To Find Out More?

**For a free cost estimate for demil / disposal
of your explosive wastes, contact:**

Eastern Sales Office

Dave Zoghby – 610-298-3085

Western Sales Office

Mark Zaugg – 801-295-2003

Joplin Facility

417-624-0212 Ext 409

Website: www.ebveec.com



Summary

EBV EEC's Joplin, MO, TSDF

- **10 year history in disposal of explosive waste - >25M lbs destroyed**
- **Only commercial HW incinerator in US specifically designed for explosive materials and devices**
- **Largest commercial disposer of explosive waste in the US**
- **Compliant with all state and federal SHE and Security Regulations**
- **Available for disposal of your explosive wastes**

**“EBV EEC” Also Means:
Environmentally Best Value
for disposal of
Explosives and Energetic Components**

