



# PEO AMMUNITION

**PEO Ammunition**  
Global Demilitarization Symposium  
8 DEC 2015



# Material Enterprise



## Strategic Partners

**Human Capital TRADOC**

**Readiness FORSCOM**

**Joint IED Defeat Organization**



**Maneuver Support CoE**

**Services & Infrastructure IMCOM**

**OUSD (AT&L)**

**Maneuver CoE**

### ASA (ALT)

### JM&L LCMC

### AMC

**PEO CS&CSS**

**PEO Ground Combat Systems**

**PEO Missiles and Space**

**PEO Soldier**

**PEO Aviation**

**PEO Ammunition**

**JM&L LCMC**

**JMC**

**ARDEC**

**ACC**

**TACOM**

**Army Research Laboratories**

**AMCOM**

**CECOM**

**DAC**

**DCMA**

**USASAC**

**US Army Security Assistance Command**

### Single Manager Conventional Ammunition (SMCA)

**US Marine Corps**

**US Special OPS**

**EDCA**

**US Army**

**Joint Ordnance Commanders Group**

**US Air Force**

**US Navy**

**Fires CoE**

**Industry Partners**



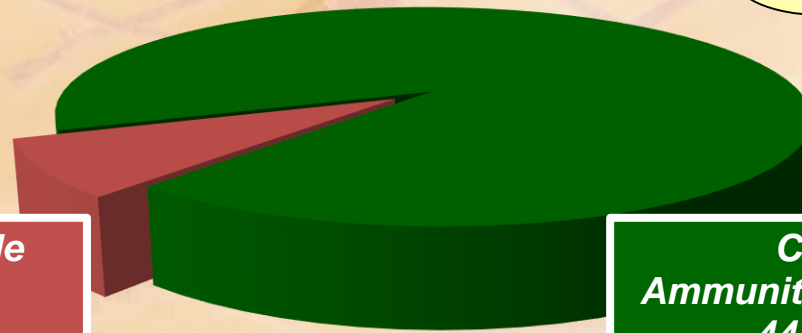
# Demilitarization Mission

**DODI 5160.68, SMCA, Dec 2008: Demilitarization & Disposal Mission: Perform Life-Cycle Management for Demilitarization of Conventional Ammunition for the Department of Defense**

**Total Demilitarization Stockpile  
482,125.40 tons**

As of: SEP 2015

**31% of CONUS  
Ammo Stockpile**



**Missile Demil Stockpile  
295,245 items  
38,651.46 tons**

**Conventional  
Ammunition Demil Stockpile  
443,473.96 tons**

## Strategic Goals

- Implement design for demi for all new and modified conventional ammunition products
- Continuously improve the effectiveness and efficiency of demil capabilities
- Reduce the stockpile by 6% annually; achieve 100K tons by 2030
  - This goal is evolving: no longer just trying to reduce the demil stockpile to achieve an arbitrary level. G4 wants to operationalize the overall Army storage requirement.



# Demil Alternatives

Spotters  
Warmers

Artillery  
Propelling  
Charges  
for Egypt

Use items to  
support  
training/testing

Cross Level  
within DoD

Offer to Other  
Government  
Agencies

Foreign  
Military Sales

Free transfer  
to foreign  
militaries

Into Demil  
Account (B5A)

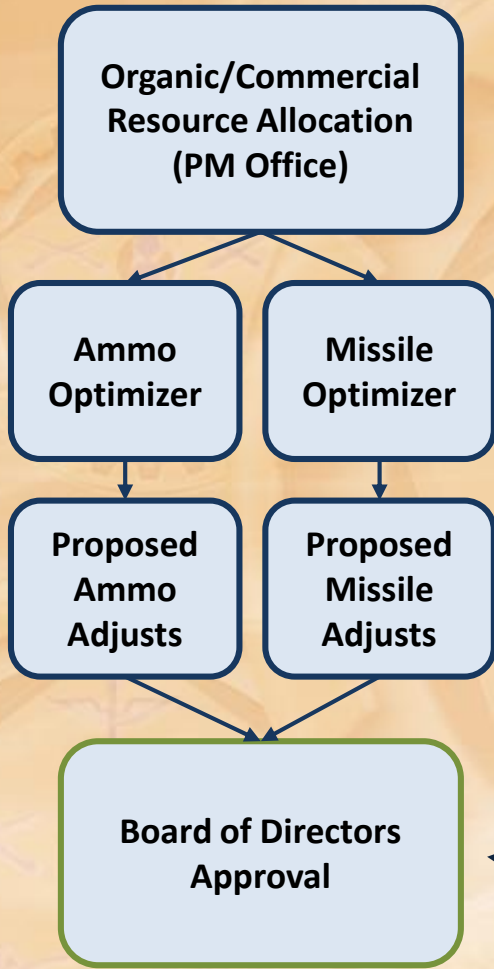
Artillery Projectiles  
for Avalanche  
Control

Small Cal Ammo  
to FBI





# Annual Execution Process



## Priorities

- Safety concerns
- Policy mandates
- Stockpile Tons
- Cost per ton
- Contract requirements

***Collaborative Planning Across Organizations within the Board of Directors***

- PD JS (Chair)
- PM Demil
- AMCOM
- JMC



# Demil Methods

15k tons



Open Burn/Open Detonate

15k tons



Explosives Removal

18k tons



Thermal Treatment

34k tons



Disassembly

82k tons  
total in FY15



# Re-use of Demil Stocks

## PM CAS M483 Re-use

Downloaded M483A1 Projectile Metal Parts are used to create five new projectiles



M42/M46 DPICM Grenades

## PM Precision Fires MLRS Re-use



PODS for GMLRS

Rocket Motors – Low Cost rocket Trainer



Provides extended range at lower cost than existing projectiles!

## PM MAS Tank Ammo Re-use



Steel Cartridge Cases



Propellants – M30, JA-2



## Other Services Re-use



US Navy Torpedoes – Otto Fuel, batteries



USAF Cluster Bombs – FZU-39 Altimeter fuzes, CB411 containers

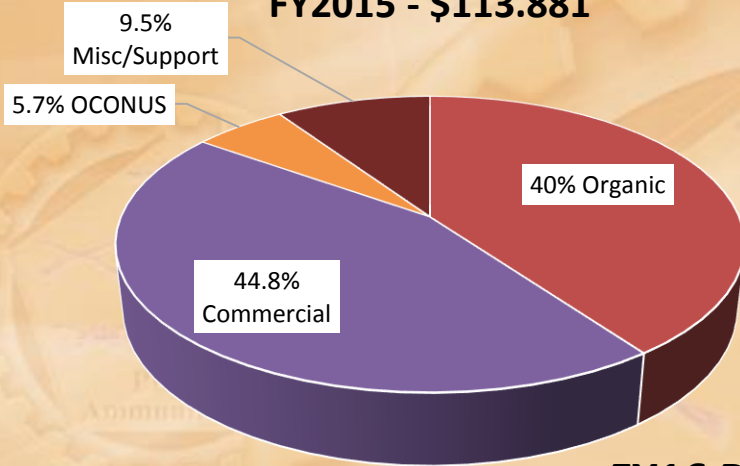


New production cost avoidance in hundreds of millions \$\$, demil cost avoidance also

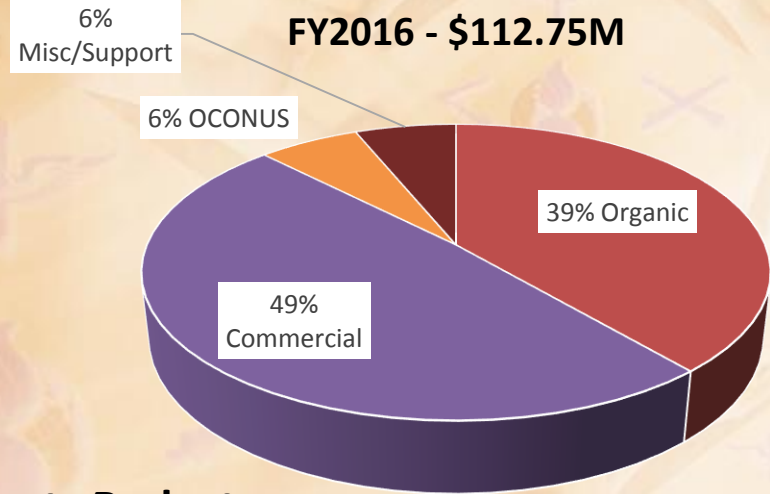


# Demil Funding

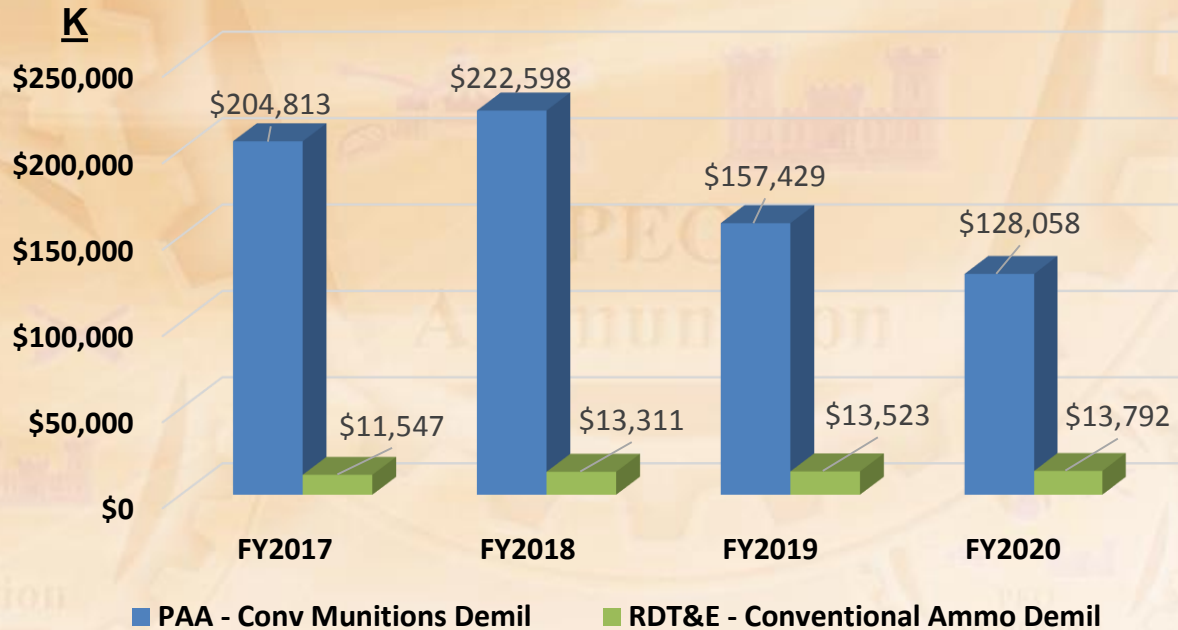
**FY2015 - \$113.881**



**FY2016 - \$112.75M**



**FY16 Presidents Budget**

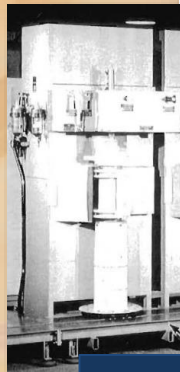




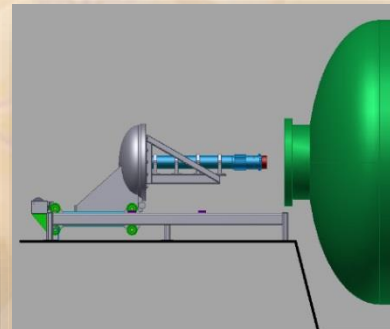


# Current Challenges and Opportunities

- Safety
- Design For Demil
- R&D – Improvements to existing equipment
- R&D – Identification of Novel Omnivorous Capabilities
- R&D - Targeted Capability Gaps



**ADAM Download**  
(R&D TARGETED CAPABILITY)



**AP Rocket Motor Destruction**  
(R&D OMNIVOROUS)



**Cryofracture**  
(R&D TARGETED CAPABILITY)



**M77 Grenade Destruction**  
(R&D TARGETED CAPABILITY)



# Focus on Safety

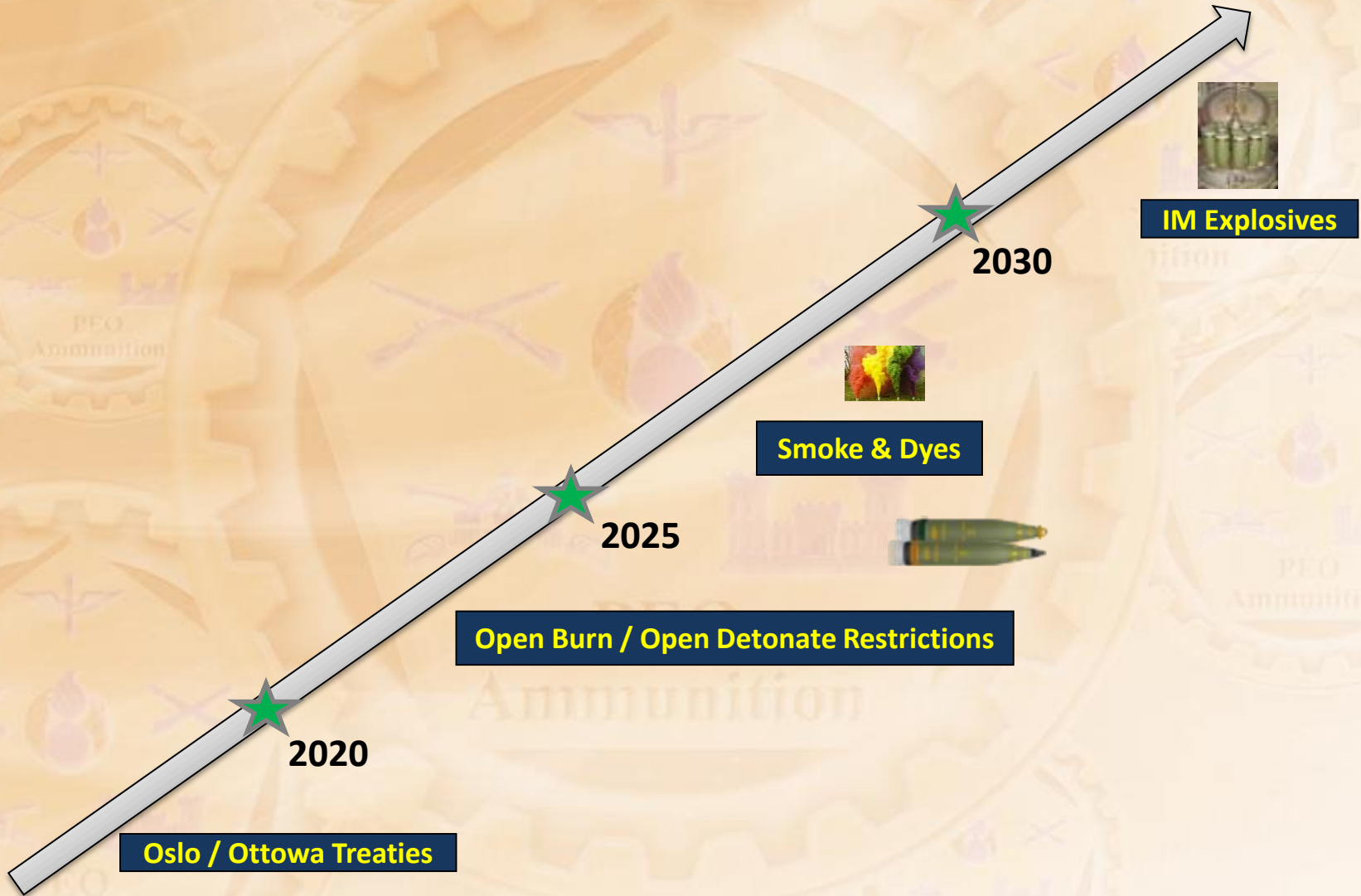
## ➤ Incidents

- 15M lbs of M6 propellant collected from demilitarization of artillery bag charges improperly stored, posing safety risk to fence-line communities
- Releases of live
  - M77 grenade submunition
  - mortar projectile,
  - practice bomb,
  - artillery projectile
  - Naval gun projectile

Several, but not all of which resulted in worker harm

**Even 1 incident is too many**

# Future Challenges and Opportunities





# Summary

- Importance of Demil not widely recognized, but essential nonetheless
- Emphasis on workforce and public safety
- Preparing for Cluster Munition generation tsunami



# Back-Up Charts

PEO  
Ammunition



# Cluster Munitions / Landmines

- Anti-Personnel Landmines (Ottawa)
  - Bans Use of AP Landmines
  - Mandates destruction of stockpiles within 4 years
  - Requires clearance of mine fields
- Cluster Munitions (Oslo)
  - Ban use of cluster munitions containing submunitions with > 5% UXO rate
  - Mandates destruction of stockpiles within 8 years (4 year extension may be requested)

US has not acceded to either treaty but has policies in effect which eliminates munitions as funding is available

