DoD Chemical Demilitarization Program

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100% of Stockpile Now Under Contract for Destruction

Original Stockpile: 31,500 Tons
Current Stockpile: 22,807 Tons
Tons Destroyed: 9,036 Tons
Percent Destroyed: 28.7%
As of: June 14, 2004

- **Umatilla, Oregon**
  - UMCDF1
  - HD-TC
  - GB - P, R, B
  - VX - P, R, M, ST

- **Pueblo, Colorado**
  - PCAPP3
  - HD - C, P
  - HT - C

- **Pine Bluff, Arkansas**
  - PBCDF1
  - HD - TC
  - HT - TC
  - GB - R
  - VX - R, M

- **Anniston, Alabama**
  - ANCDF2
  - HD - C, P, TC
  - HT - C
  - GB - C, P, R
  - VX - P, R, M

- **Blue Grass, Kentucky**
  - BGCAPP3
  - HD - P
  - GB - P, R
  - VX - P, R

- **Tooele, Utah**
  - TOCDF2

- **Johnston Atoll (JACADS)**
  - 0 Tons

- **Newport, Indiana**
  - NECDF1
  - VX - TC

- **Aberdeen, Maryland**
  - ABCDF2
  - HD - TC

**Hawaii**

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**Operation**
- 1 PMECW

**Systemization CWDF**
- 1 PMECW

**Operational CWDF**
- 2 Director Operations

**Design/Const CWDF**
- 3 PMACWA

**States Participating in Chemical Stockpile Emergency Preparedness Program.**
Summary

- Safely destroyed over 1.4 million items containing 9,036 tons of chemical agent, representing 28.7% of original stockpile (as of 30 May 04)
- Every Chemical Weapons Convention (CWC) milestone met to date
- 3 facilities operational (Tooele, Aberdeen, Anniston)
- 3 facilities in systemization (Umatilla, Newport, Pine Bluff)
- Contracts awarded for Pueblo and Blue Grass (PMACWA) and design is underway
- NSCMP Mobile Systems Approved for Operations - Three Mobile Munitions Assessment Systems (MMAS) Units, Rapid Response System (RRS), Single Chemical Agent Identification Sets (CAIS), Access and Neutralization System (SCANS) and Explosive Destruction System (EDS) Three Phase 1 Units
- NSCMP Pine Bluff Munitions Assessment System (PBMAS) and Pine Bluff Ton Container Destruction Facility (PBTCDF) operational. Currently, operations are suspended due to monitoring interference from a Pine Bluff Arsenal pesticide remediation effort near the sites. Anticipating a return to operations in mid-June 2004.
Accomplishments

Chemical Stockpile Disposal

- **TOCDF** - Completed VX ton container campaign, successfully completed the Metal Parts Furnace Agent Trial Burn (ATB)
- **ANCDF** - Completed processing of drainable GB M55 rockets, completed GB gelled/crystalline M55 rocket ATB, currently ahead of schedule
- **UMCDF** - Completed Integrated Operations Demonstration
- **PBCDF** - Received state approval of liquid incinerator and deactivation furnace surrogate trial burns
- **ABCDF** - Re-started operations following improvements to drain stations and ton container clearance operations
- **NECDF** - Closed public comment period on Environmental Assessment addressing disposal hydrolysate at DuPont; CDC/EPA initiated independent assessment per Congressional request

Non-Stockpile Chemical Materiel

- Started chemical agent identification set (CAIS) operations at Pine Bluff Munitions Assessment System
- Commenced disposal of Aberdeen Proving Ground (APG) empty ton containers
- Completed destruction of M441 shipping and firing tubes recovered at Umatilla
- Completed QL destruction at the Pine Bluff Integrated Binary Production Facility and began destruction of DC Building
- Submitted Resource Conservation and Recovery Act permit application for the Pine Bluff Explosive Destruction System (EDS) to the State of Arkansas and held public meeting
- Completed multiple round testing at APG for the EDS Phase 2 Unit 1
- Conducted ribbon cutting ceremony for Munitions Assessment and Processing System at APG
Projections

Chemical Stockpile Disposal
- **TOCDF** - Complete VX 155mm projectile campaign and start VX spray tanks processing
- **ANCDF** - Gain approval to process gelled/crystalline rockets, start GB 8-inch projectile processing
- **UMCDF** - Begin chemical agent destruction operations
- **JACADS** - Complete final sampling and removal of contaminated coral, thereby completing all necessary on-island work
- **PBCDF** - Continue preparation for start of agent operations
- **ABCDF** - Initiation of supplemental decontamination unit, limited ton container cleanout operations
- **NECDF** - Completion of systemization and Operational Readiness Review, installation of ton container line enhanced steam decontaminator, reach decision on disposal of hydrolysate at DuPont

Non-Stockpile Chemical Materiel
- Begin EDS Phase 1 operations at Dugway Proving Ground
- Complete design of the Binary Destruction Facility at Pine Bluff Arsenal
- Begin multiple round testing at APG for EDS Phase 1 Unit
- Begin field testing of Lewisite sludge decontamination solutions for the Pine Bluff Ton Container Destruction Facility
- Conduct EDS Phase 2 Operational IPR
- Conduct EDS Phase 1 Multiple Round Testing IPR
- Complete Pine Bluff EDS Environmental Assessment and Finding of No Significant Impact
Johnston Island

Before

After

**Key Points:**
- Completed primary closure in December 2003
- Scheduled to complete contaminated coral removal and final sampling in June 2004
- On track to completely depart Johnston Island by June 2004
- On track to initiate contract closeout by September 2004
- Scheduled to complete phase II Human Health Risk Assessment by December 2004
- On track to closeout Resource Conservation and Recovery Act permit in May 2005

**JACADS** completed destruction 2,031 tons of GB, VX, and Mustard Agent in Nov 00.
Tooele and Anniston

**Key Points:**
- 100% of the GB stockpile, entire rocket stockpile, and VX ton containers have been destroyed at TOCDF
- Currently processing VX 155mm projectiles
- Completed Metal Parts Furnace Agent Trial Burn April 7, 2004
- Processing schedule being revised

**Issues/Challenges:**
- Difficulty achieving desired production rates
- Mustard strategy implementation
- Secondary waste processing
- Airborne exposure limit implementation

**Key Points:**
- 33,063 GB M55 rockets have been destroyed at ANCDF.
- Completed processing of drainable GB M55 rockets
- Completed gelled rocket Agent Trial Burn April 4, 2004; Agent Trial Burn report submitted May 7, 2004, to State of Alabama for review
- Currently in scheduled maintenance outage
- Preparing for GB 8-inch projectile campaign

**Issues/Challenges:**
- Timely implementation of metal parts furnace discharge airlock modifications
- Minimize downtime associated with gelled rocket processing
- Airborne Exposure Limit implementation

**TOCDF and CAMDS** have destroyed 6,627 out of 13,617 tons of GB, VX, and Mustard Agent (May 30, 2004).

**ANCDF** has destroyed 176 out of 2,253 tons of GB, VX, and Mustard Agent (May 30, 2004).
Umatilla and Pine Bluff

**UMCDF** will destroy 3,717 tons of GB, VX and Mustard Agent.

**Key Points:**
- Working towards a July 2004, operations start date
- All systems for GB M55 rockets ready for operations
- Currently undergoing Operational Readiness Review process
- Preparing for Liquid Incinerator 2 surrogate trial burn and Brine Reduction Area (BRA) performance test

**Issues/Challenges:**
- Meet Oregon startup approval requirements in relation to U.S. Army requirements
- Pollution Abatement Filtration System Class 3 permit modification request approval (decision scheduled for May 20, 2004)
- BRA performance test requirements
- Airborne Exposure Limit implementation

**PBCDF** will destroy 3,849 tons of GB, VX and Mustard Agent.

**Key Points:**
- Operations start date revised; Systems Contractor negotiations are ongoing to incentivize to a 1st Quarter FY05 start of agent operations
- Liquid Incinerator and Deactivation Furnace System Surrogate Trial Burns approved by the Arkansas Department of Environmental Quality
- Currently undergoing preparations for start of agent operations

**Issues/Challenges:**
- Staffing shortfalls in operations and maintenance
- Airborne Exposure Limit implementation
Aberdeen and Newport

**Key Points:**
- 252 ton containers have been drained at ABCDF
- Shipping hydrolysate/waste water to Dupont for treatment and disposal
- Mustard agent destruction at ABCDF to be completed 1st Quarter FY05
- TCC limited operations to begin 4th Quarter FY04, full operations to begin 2nd Quarter FY05
- Closure estimated to be 24 months

**Issues/Challenges:**
- Completion of drain station modifications
- Maintenance requirement to support operations is significantly higher than expected
- 1X waste management
- Airborne Exposure Limits implementation
- Achievement of full rate destruction

**Key Points:**
- Operational Concept: VX neutralization onsite followed by post-treatment and disposal at commercial TSDF
- Partnering with ACWA to demonstrate enhanced steam decontamination system in lieu of Ton Container Cleanout line
- Start of agent operations on/about September 7, 2004, not later than 5 weeks after receipt of the Department of Health and Human Services report on Dupont

**Issues/Challenges:**
- Validating ability to clear hydrolysate made from greater than eight weight percent VX
- Public acceptance of off-site treatment and disposal of caustic hydrolysate
Pueblo and Blue Grass

Key Points:
- Review of intermediate design underway
- Draft Research, Development & Design stage I permit issued by Colorado Department of Public Health and Environment in April 2004.
- Design alternatives analysis underway

Issues/Challenges:
- Airborne Exposure Limits implementation

Key Points:
- Design efforts on-going
- Research, Development & Design permit application submitted to Commonwealth of Kentucky in March 2004

Issues/Challenges:
- Airborne Exposure Limits implementation

• PCAPP Will Destroy 2,611 tons of Mustard Agent.
  • Operational Concept: Neutralization Followed by Biotreatment.

• BGCAPP Will Destroy 523 tons of GB, VX and Mustard Agent.
  • Operational Concept: Neutralization Followed by Supercritical Water Oxidation.
Conclusion

- Disposal operations ongoing at 3 sites, working to achieve better processing rates
- Working to start operations at 2 additional sites during calendar year 2004
- Risk issues include Airborne Exposure Limits, multi-agent monitoring, stockpile degradation and secondary waste