

DoD Chemical Demilitarization Program



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Chemical Weapons Destruction Facilities

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

Newport, Indiana
NECDF¹
VX - TC

Tooele, Utah
TOCDF²
H - P; HT - C,
HD - C,TC
~~GB - C,P,R,B,TC~~
VX - P,R,M,ST, TC
GA - TC

Aberdeen, Maryland
ABCDF²
HD - TC

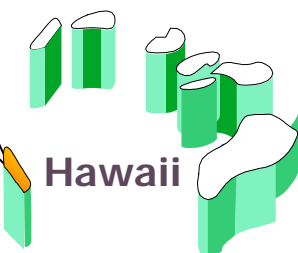
Pueblo, Colorado
PCAPP³
HD - C,P
HT - C




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

Johnston Atoll (JACADS)¹
0 Tons



-  Systemization CWDF
¹ PMECW
-  Operational CWDF
² Director Operations
-  Design/Const CWDF
³ PMACWA

 *Operations Complete*
¹ PMECW

 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



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

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



Tooele and Anniston



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

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



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

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



Umatilla and Pine Bluff



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



PBCDF will destroy 3,849 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

Key Points:

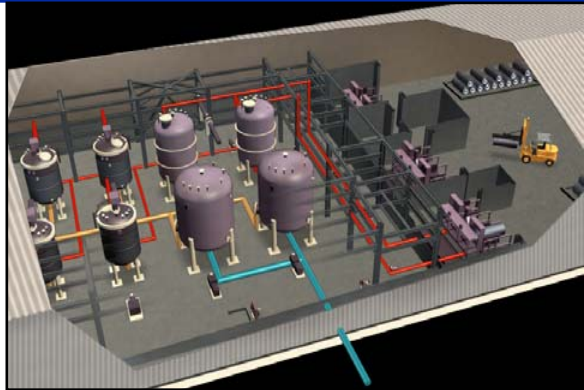
- Operations start date revised; Systems Contractor negotiations are ongoing to incentivize to a 1st Quarter FY05 start of agent operations
- Liquid Incinerator and Deactivation Furnace System Surrogate Trial Burns approved by the Arkansas Department of Environmental Quality
- Currently undergoing preparations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

Issues/Challenges:

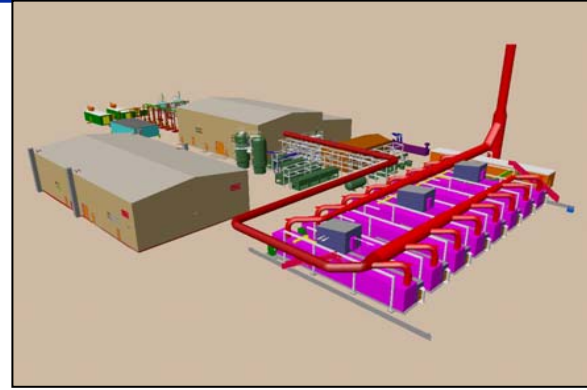
- Staffing shortfalls in operations and maintenance
- Airborne Exposure Limit implementation



Aberdeen and Newport



ABCDF has destroyed 201 tons out of 1,625 tons of Mustard Agent (May 30, 2004).



NECDF will destroy 1,269 tons of VX.

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:

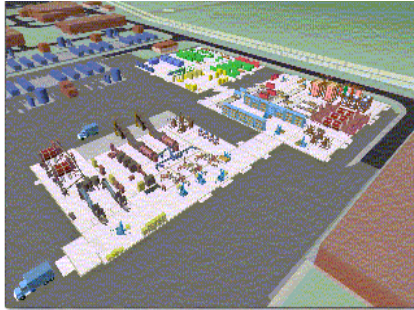
- Operational Concept: VX neutralization onsite followed by post-treatment and disposal at commercial TSDF
- Partnering with ACWA to demonstrate enhanced steam decontamination system in lieu of Ton Container Cleanout line
- Start of agent operations on/about September 7, 2004, not later than 5 weeks 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



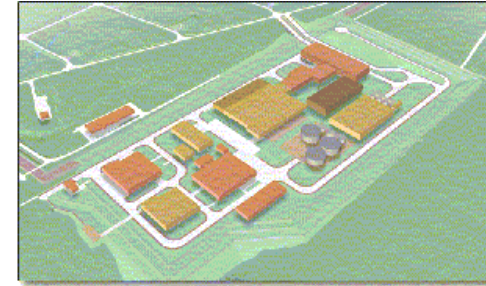
- PCAPP Will Destroy 2,611 tons of Mustard Agent.
- Operational Concept: Neutralization Followed by Biotreatment.

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



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

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



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