

Environmental Management Systems (EMS) Implementation at Chemical Demilitarization Facilities

James D. Wood, P.E., EMS-LA Linda L. Baetz, EMS-LA

U.S. Army Center for Health Promotion and Preventive Medicine

Charles A. Shaheen

Program Manager for Chemical Demilitarization



Chemical Demilitarizaton Program

- PMCD Role Tech Oversight and Direction of Chemical Stockpile Disposal Program
- Defense Authorization Act (PL 99-145)
 - Directed DA to Destroy Chemical Stockpile
- Chemical Weapons Convention
 - International Treaty Mandating Stockpile Destruction
 - U.S. Ratification 25 April 1997
 - Facility Compliance Audits



PBCDF Background

- GOCO Tenant Activity (High Temp Incineration Facility) at Pine Bluff Arsenal, Arkansas
- Contractor Washington Demil Company (WDC)
 - Contract Awarded in 1998
 - WDC Responsibilities Construct, Test, Operate, and Close PBCDF
- PBCDF Status and Schedule
 - Dec 2002 Construction Substantially Complete
 - Systemization Period 16 Months
 - Chemical Weapons Destruction 57 Months



Executive Order 13148

- Signed by President 21 April 2000
- Part 2 Goals
 - Sec. 201 Environmental Management
 - Sec. 202 Environmental Compliance
- Part 4 Promoting Environmental Management and Leadership
 - Sec. 401 Agency and Facility Environmental Mgt Systems
 - Sec. 402 Facility Compliance Audits



DA EMS Policy Guidance

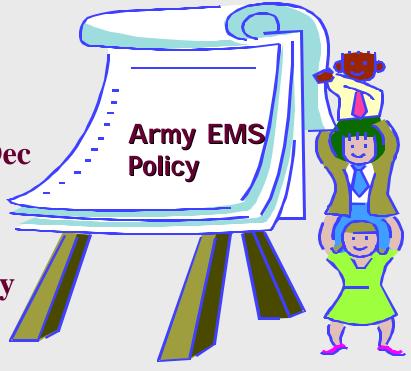
★Army Policy Memorandum was signed on 13 July 2001

►ISO 14001 is Army EMS Goal

EMS must be implemented by 31 Dec

2005

EMS must conform to ISO 14001 by 2009







What is the ISO 14001 EMS Framework?

- **✓** Environmental Policy
- **✓** Planning
- **✓** Implementation and Operation
- **✓** Checking and Corrective Action
- **✓** Management Review



Why did PMCD Adopt ISO 14001?

- **✓** Aligns PMCD (Acquisition Program) with DA Installation Management EMS Strategy
- **✓** Existing EMS standard easier to implement
- **✓** Externally (and internationally) recognized
- **✓** Moves PMCD Army to industry best practices



PBCDF EMS Implementation

- **✓ WDC Utilized Existing Contract Requirement** (Env Compliance Plan) as EMS Manual
- ✓ Final WDC Env Policy 21 May 2002
- ✓ Env Significant Aspects & Impacts Associated with 3 Operations (LIC, DFS, Lab)
- **✓** PMCD Provided Contract Support (EMS Implementation Consultants) to PBCDF



PBCDF EMS Implementation (Cont.)

- **✓ PBCDF Adopted Objectives/Targets and Established Env Programs 26 Aug 2002**
- ✓ Procedures Developed & Posted (Equation ASP Software Allowed PMCD Remote Review)
- ✓ Existing PBCDF Systems (e.g., Document Control, Operational Control, Records Mgt, Emergency Response) Incorporated into EMS



PBCDF EMS Implementation (Cont.)

- ✓ EMS Training Integrated into Existing PBCDF Systems for Training, Awareness, and Competence
- ✓ EMS Audit Program Internal and External (USACHPPM EMS Auditors)
- ✓ Management Review Systems Expanded to Include EMS Elements



Rationale for USACHPPM External EMS Audits at Chem Demil Facilities

- **✓** USACHPPM has established reputation performing compliance audits (ECAS/EPAS)
- **✓ USACHPM has RAB-certified EMS auditors**
- ✓ External EMS audit by USACHPPM provided additional credibility to PMCD EMS Self-declaration of Chem Demil Facilties (w/o the expense of 3d party Registrar EMS audit)



PBCDF External EMS Audit (Performed by USACHPPM)

▶ Phase I – Remote Desktop Review of PBCDF EMS Documentation (Using Equation

ASP Software)

► Phase II – On-site Review of EMS **Documentation and Interviews**

EMS Audit Report Issued (Documented Minor Nonconformances)





PBCDF: Post-EMS Audit

- ✓ PBCDF Proposed Recommended Corrective Actions for Nonconformances (Reviewed/Approved by PMCD & USACHPPM)
- **✓ PMCD and USACHPPM Tracked Progress** of PBCDF Corrective Actions
- ✓ PBCDF Issued "Certificate of ISO 14001 Conformance" (Jointly by PMCD and USACHPPM)





Summary

- ✓ PMCD committed to EMS implementation at Chem Demil facilities prior to 31 Dec 2005 (Executive Order 13148)
- **✓** PMCD selected ISO 14001 as their EMS Framework
- ✓ PMCD plans to use USACHPPM RAB-certified EMS auditors for external EMS audits at Chem Demil facilties
- **✓ PBCDF** was the prototype EMS implementation effort



Questions?