

US EPA ARCHIVE DOCUMENT

Meeting DNSC's Mercury Challenge



Presented to
Mercury Stakeholder Meeting

June 14, 2007

Briefing Outline

- Who we are
- Stockpile Mercury History
- Mercury Management EIS
- Hawthorne Warehouse

Costs

Who We Are...

- Defense National Stockpile Center (DNSC)
 - Field Activity of Defense Logistics Agency
 - Headquartered at Ft. Belvoir, Va
 - 6 Staffed Depots and 18 storage locations

- DNSC operates the *National Defense Stockpile Program*
 - Store and sell metallurgical ores and materials
 - Program established in 1940s to lessen U.S. dependence on foreign sources of supply in times of war or national emergency

DNOSC's Future

- Congress determined that NDS is no longer necessary
 - 95% of commodities declared excess
 - Sales totaling \$6.6 Billion since 1993
 - Sales expected to be completed and all storage locations closed by 2020
 - As commodities are sold, the number of storage facilities and employees are reducing per timeline
 - A reconfiguration study is being prepared by the National Academy of Science to determine if a stockpile is required. The Final report is due September 30, 2007

National Defense Stockpile Mercury

- Commodity grade elemental mercury
- 4, 436 metric tons stockpiled
 - Somerville, New Jersey 2, 617 MT
 - Warren, Ohio 1, 262 MT
 - New Haven, Indiana 557 MT
- Safely stored for over 50 years
 - Sales discontinued in 1994
 - Mercury Management Environmental Impact Statement (MM EIS) developed to address long-term management

DNOSC Mercury Stockpile

- ▶ No Defense requirement for mercury
- ▶ DNOSC sales suspended in 1994
- ▶ 4,436 metric tons of mercury in inventory
- ▶ Long-term solutions needed for mercury management



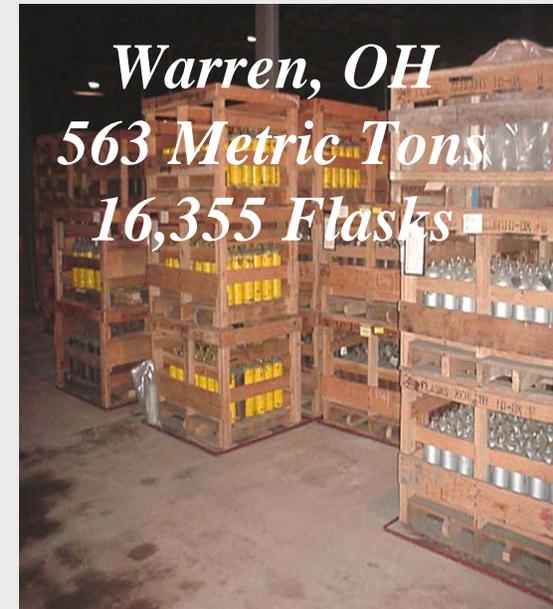
Mercury Storage



Flasks on wooden pallet

- ▶ 76 lb sealed, steel flasks
- ▶ Wooden pallets
- ▶ Inspected by trained professionals
- ▶ Security measures in place

Mercury Stockpile Storage Locations & Quantities

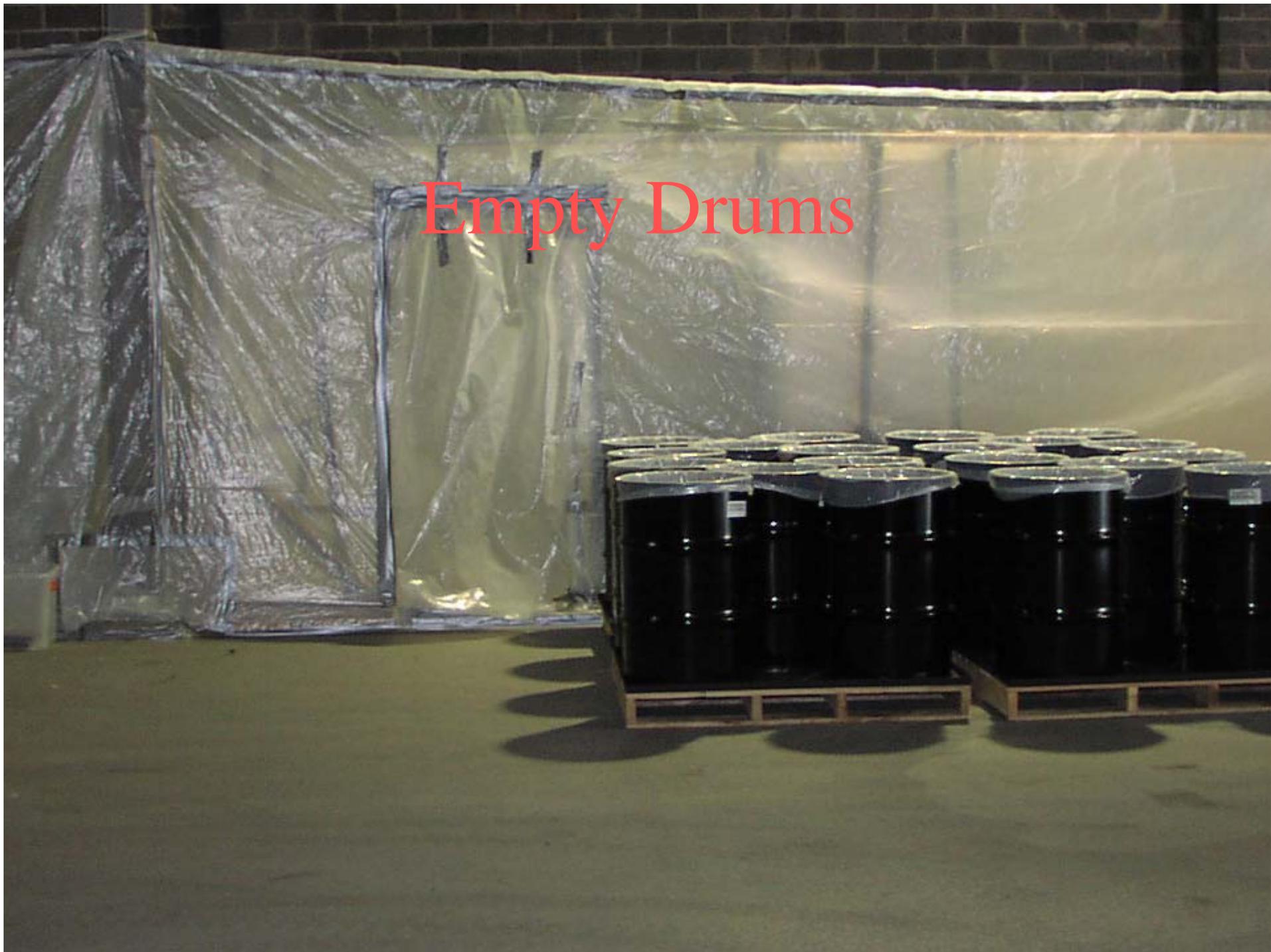


*Somerville, NJ
2,617 Metric Tons
75,880 Flasks₈*

Production set
up



Empty Drums



Containment Area WHSE 4E



Placement Process





6-mil plastic bag

Over-packing



- Inspect
- Clean
- Reflask where necessary
- Overpack everything

Current Mercury Storage Configuration

- Steel flasks
- Absorbent pads
- Plastic liners
- Epoxy-coated drums
- Drip pans
- Air & liquid tight/locking ring

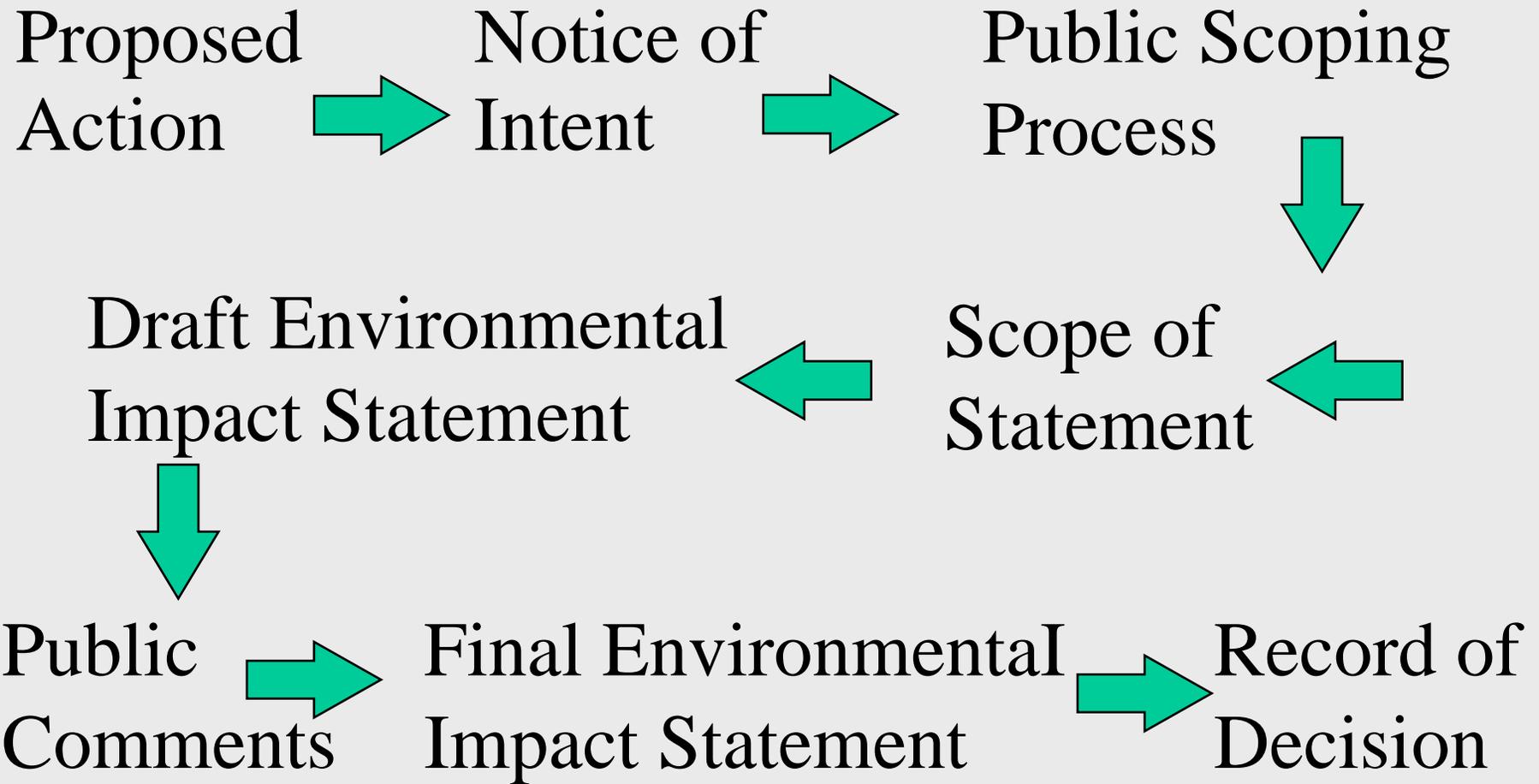


Mercury Site Requirements

- Sealed warehouse floors
- Regular monitoring
- Adequate lighting
- Fire protection
- Security
- Protective equipment and supplies
- Emergency procedures



STEPS IN ENVIRONMENTAL IMPACT STATEMENT PROCESS



MM EIS

- Notice of Intent - February 2001
- Draft EIS - April 2003
 - EPA rating: Lack of Objection
- Final EIS - March 2004
- Record of Decision - April 2004

MM EIS

Interagency Working Group

<u>AGENCY</u>	<u>ROLE</u>
• Defense Logistics Agency	Preparer of MMEIS
• U.S. Environmental Protection Agency Federal Activities Pollution Prevention and Toxics	Cooperating Agency
• Department of Energy	Cooperating Agency
• U. S. Public Health Service	Consulting Agency
• U.S. Geological Survey	Consulting Agency
• U.S. Department of Commerce	Consulting Agency

MM EIS

Alternatives Analyzed

- No Action
Maintain status quo
- Consolidated storage at one location
Long-term storage (40 years)
- Sales
30 years to sell entire inventory

Search for Consolidation Site

- DNSC consulted DoD Office of Economic Adjustment
- DoD polled military services
- DNSC polled Federal land-holding agencies
 - Department of Interior
 - Department of Agriculture
 - General Services Administration
- DoD Office of Economic Adjustment

Record of Decision

Consolidated Storage-Preferred Alternative

- Safe, long-term management
- Negligible to minor Environmental impacts
- Negligible to low human health risk: economies of scale
- Facilitates DNSC business plans

Site selection requirements

- Comparable to DNSC storage

Selected Location- Hawthorne Army Depot



Reasons for Selection

- Government owned facility
- Secure storage
- Trained and experienced staff
- Emergency preparedness plans in place
- Safe long-term storage

Storage Warehouses



Hawthorne Warehouse Modifications

- Comparable to DNSC storage
- Heat & smoke fire detection system - monitored continuously
- Positive contact intrusion detection on all doors, windows & vents - monitored continuously
- Floor sealant
- Ramped containment dikes

Transportation of Mercury to Hawthorne

- All shipments will comply with U.S. Department of Transportation requirements for shipment of hazardous materials
- Transportation scheduled to start in early 2007
 - GPS tracking
 - CB radios
 - Cellular telephones
- No announcement of specific shipping dates or routes for security reasons

Notification to Nevada Officials

- National Environmental Policy Act (NEPA) Notifications
 - Federal Register Notices
 - Notices of Public Meetings
 - Availability Notices for Draft & Final EIS
- Other Communications
 - Meeting/Discussions with Nevada Dept of Conservation & Natural Resources
 - Meetings with Walker River Paiute Tribe
 - Presentations at various conferences

Document Preparation Costs

- Prepare Management Plan for MMEIS 500,000
- Prepare Environmental assessment, re-flasking 200,000
- Prepare MMEIS 4,200,000
- MMEIS Support, TVA 3,000,000
- Mercury Vapor Phase Analysis 66,700
- NJIT Report 119,000

Overpacking Costs

- Pre-overpackaging costs
(Clean, inspect flasks at New Haven) \$500,000
 - Over-packaging (\$20 per flask) \$2,600,000
 - Purchase 30-gallon drums \$982,000
- Total Overpacking Cost \$4,082,000**

Current Vs Future Rental Costs

(Rent + facility Upkeep)

Location	\$/Year	\$/Sq. Ft.	\$/Lb. (Total LB)
• Somerville, NJ	442,055	5.53	0.0766 (5,766,880)
• Warren, OH	292,356	3.65	0.1050 (2,783,956)
• New Haven, IN	271,841	6.80	0.2215 (1,227,476)
• Hawthorne, NV	504,912	3.30	0.0516 (9,778,312)

DNOSC's Future Responsibilities

- Mercury is owned by the Department of Defense
-DNOSC will partner with Hawthorne
- We will comply with all federal, state, and local laws and regulations
- We will monitor to ensure mercury continues to be safely stored

DNSC's Commitment

**We are committed to
the safety of our employees,
our communities,
and the protection of the environment.**

Walker Lake, Hawthorne, Nevada



Handling mercury flasks