



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## Public Scoping Meeting

David Levenstein  
EIS Document Manager



*EM* Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## About Tonight's Scoping Meeting

- Scoping is a required step in the National Environmental Policy Act (NEPA) process for preparing an environmental impact statement (EIS).
- Scoping is the process of determining the subjects that will be considered and evaluated in an EIS.
- Public comments – both oral and written – received during the scoping period are taken into account when decisions are made about the issues and alternatives to be analyzed in an EIS.
- The scoping period for the Mercury Storage EIS began with publication in the *Federal Register* of DOE's Notice of Intent to prepare the Mercury Storage EIS on July 2, 2009; ends on August 17, 2009.
- This is one of eight public scoping meetings being held in potentially affected communities during the scoping period.

### NEPA

*The National Environmental Policy Act establishes a process for decisionmakers to use in considering the potential environmental impacts (both positive and negative) of major actions before making decisions. It requires a Federal agency to consider the potential environmental, human health, and socioeconomic effects of a proposed action and a range of reasonable alternatives for implementing the action, including the option of taking no action at all. The resulting environmental impact statement (EIS) is a detailed environmental analysis of the proposed action.*



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Mercury Management Is A Global Issue*

- Mercury is a dense, silver-colored metallic element that is liquid at room temperature.
- Mercury is highly toxic to humans, ecosystems, and wildlife
- The U.S. and the European Union (EU) are among the top exporters of mercury.
- The U.S. recently joined the EU in setting a date to ban their mercury exports, thereby reducing the supply of commodity mercury into the world market.
- The EU adopted a mercury export ban that takes effect in 2011, and Congress passed legislation to ban U.S. mercury exports by 2013 in the Mercury Export Ban Act.





# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Mercury Export Ban Act of 2008*

- Act requires DOE to provide storage and long-term management of mercury generated in the United States
- Milestones
  - DOE issues guidance on procedures and standards – October 1, 2009
  - Ban on export of mercury from U.S. effective – January 1, 2013
  - DOE mercury storage facility ready to accept mercury – January 1, 2013
  - DOE mercury storage facility RCRA permitted – January 1, 2015





# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## NEPA Process

- DOE needs to develop a capability for the safe and secure long-term management and storage of elemental mercury as required by the Act. Accordingly, the Department needs to identify an appropriate facility or facilities to host this activity.
- This EIS is being prepared as required by NEPA
- Published Notice of Intent to prepare Mercury Storage EIS in July 2, 2009 *Federal Register*; this begins the NEPA process
- Currently conduction scoping meetings at 8 locations
- EPA is cooperating agency

Add NEPA process  
diagram here.



*EM* Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Mercury To Be Stored at the DOE Long-Term Storage Facility*

- Must meet waste acceptance criteria (WAC)
- Elemental mercury that is 99.5% pure
- Elemental mercury from domestic sources:
  - chlor-alkali manufacturing
  - mercury reclamation and recycling
  - mercury generated as byproduct of gold mining
- Total estimated amount from commercial sources is 7,500 to 10,000 metric tons over 40-year long-term storage period
- DOE also has 1,200 metric tons of elemental mercury



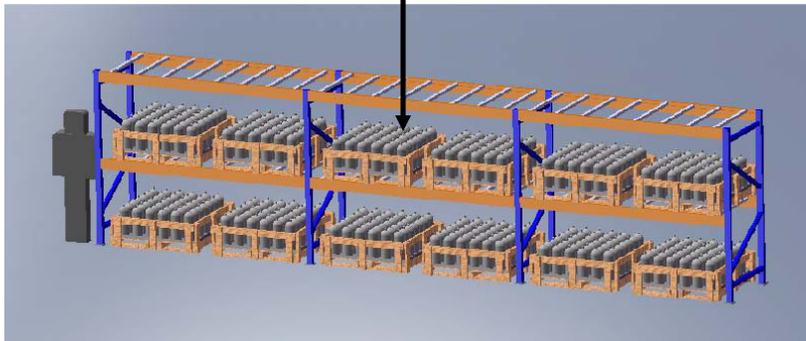


# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



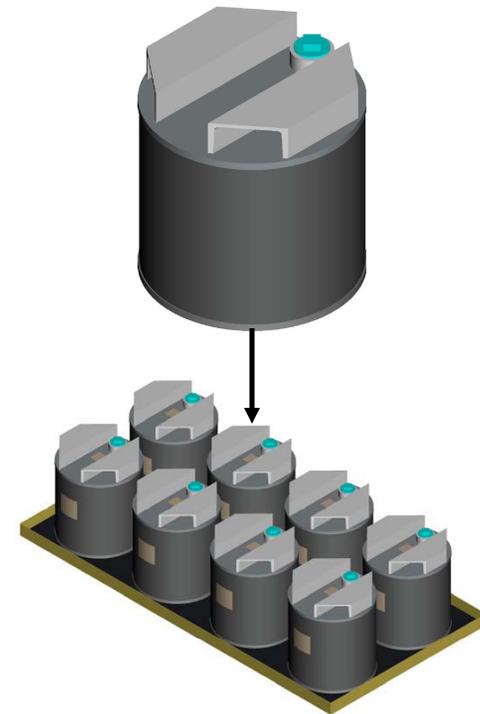
## Mercury Storage Containers (Industry Standard – DOT Approved)

76 lbs Flasks



Pallets of Flasks on Drip Trays

1 Metric Ton Container



Containers on Drip Tray



**EM** Environmental Management

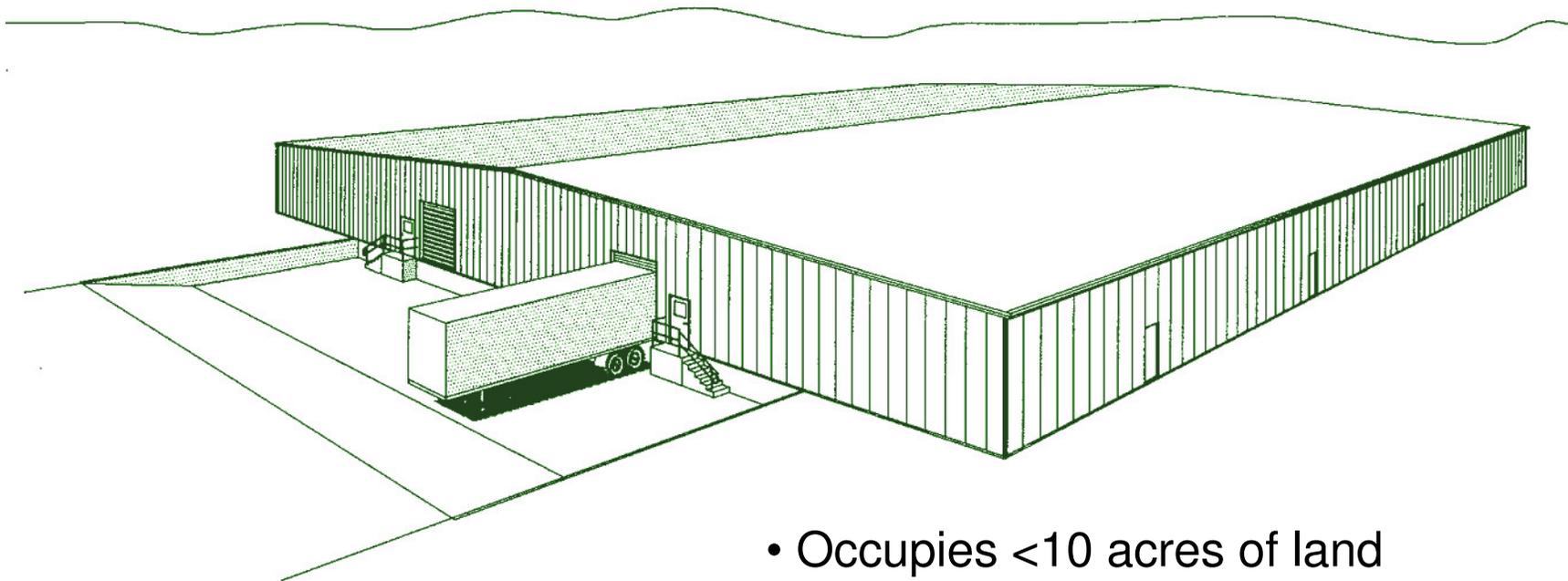
safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Mercury Storage Building – Exterior* (Meets RCRA Requirements)



- Occupies <10 acres of land
- Modular construction
- Could be a series of smaller buildings



*EM* Environmental Management

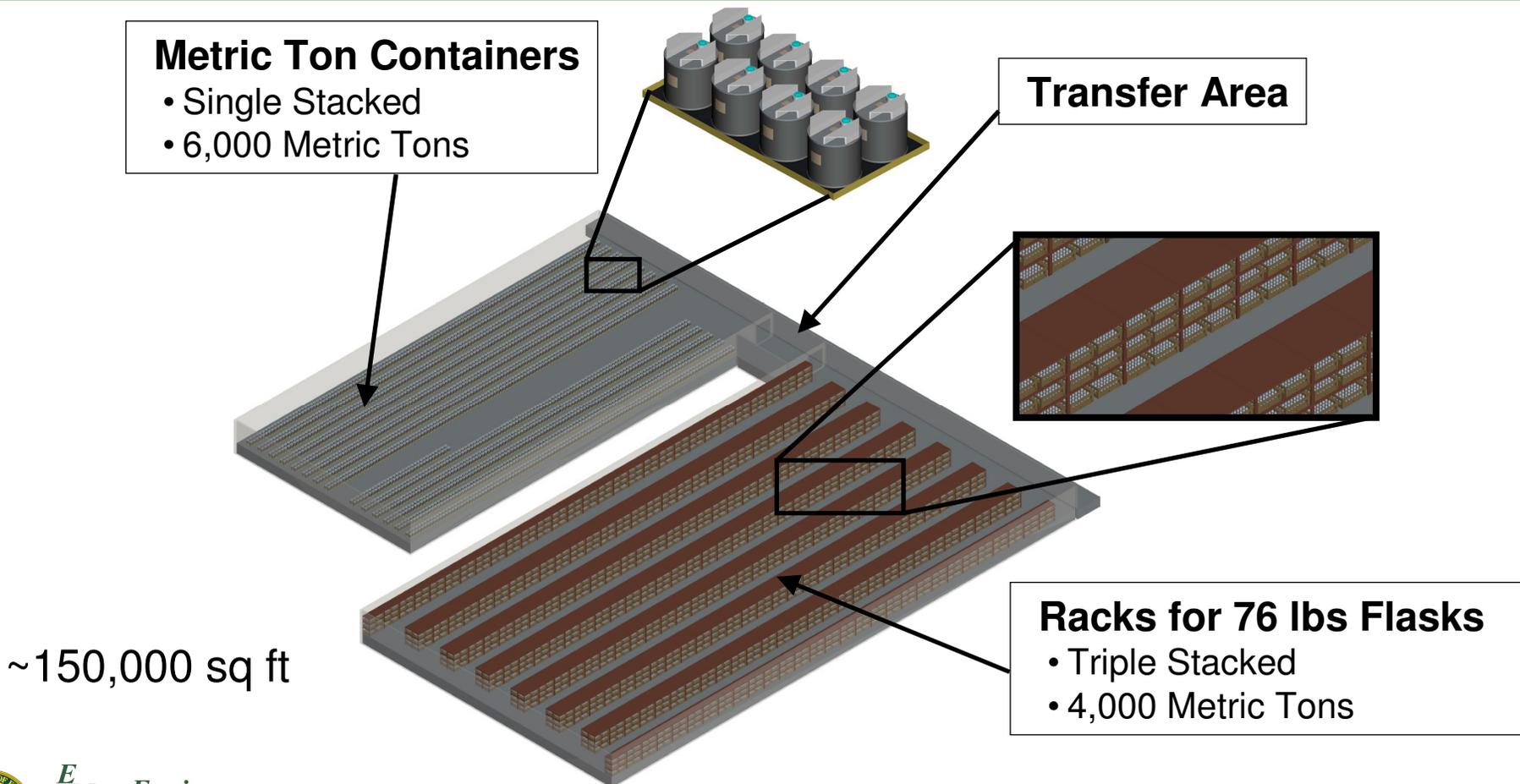
safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## Mercury Storage Building – Interior



*EM* Environmental management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Preliminary Siting Criteria*

**DOE developed preliminary criteria to use as a framework for identifying candidate locations:**

- No significant conflicts with the existing site mission and will not interfere with future mission compatibility
- An existing facility or facilities suitable for mercury storage with the capability and flexibility for operational expansion, if necessary
- The facility or facilities is or would be compliant with RCRA permitting requirements
- Supporting infrastructure
- Compatibility with local or regional land use plans
- Accessible to major transportation routes
- Has sufficient information on hand to adequately characterize the site for analysis in the EIS



*EM Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## Current Mercury Storage Alternatives

- No Action (do not accept mercury from commercial sources and continue storing DOE's 1,200 metric tons)
- Siting alternatives for a long-term mercury storage facility:



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Preliminary List of Issues To Be Addressed In The EIS*

- Potential effects on public health from construction, operation, and transportation
- Impacts on surface and groundwater
- Impacts on air quality and noise
- Impacts on plants and animals and their habitats
- Impacts on geology and soil
- Impacts on cultural resources including American Indian Interests
- Socioeconomic impacts on potentially affected communities





# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Preliminary List of Issues To Be Addressed In The EIS (continued)*

- Environmental Justice
- Land-use and visual resources
- Pollution prevention and waste management activities
- Unavoidable adverse impacts and commitments of resources
- Cumulative environmental effects
- Compliance with applicable federal, state and local statutes and regulations and international agreements
- Potential intentional destructive acts, including sabotage and terrorism





# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## Timeline



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure



# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## *Summary*

- Safe mercury management is a national and global priority.
- Congress directed DOE to establish a long-term storage facility for the Nation's elemental mercury.
- DOE's goal is to provide safe, secure, long-term mercury storage.
- Public involvement is an important component in the EIS decisionmaking process.





# Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement (Mercury Storage EIS)



## Your Comments Are Important

### How To Submit Your Comments On This EIS

*Public Involvement Is An Important Part of the EIS Decisionmaking Process*



If you provide oral comments tonight, a court reporter will record your comments.



Comment forms are available in the registration area. You may drop them off at the registration table when you leave, or you may mail, e-mail, or fax your comments to the Department of Energy addresses below.



You may submit your comments electronically by going to the website:  
[www.mercurystorageeis.com](http://www.mercurystorageeis.com)



The toll-free fax number to submit your comments is **1-877-274-5462**



Written comments on the scope of the Mercury Storage EIS should be submitted to DOE at the following address:

David Levenstein, EIS Document Manager  
U.S. Department of Energy  
P.O. Box 2612  
Germantown, MD 20874

All scoping comments are due by **August 17, 2009**.



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure