



# Toxic Chemical Reduction Strategies to Implement EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*

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# Overview



- EO 13423 background and update
- DOE implementation efforts
- Summary of Toxic Chemical Reduction Recommendation
- DOE Order 450.1A requirements
- Next Steps: Assisting with toxic reduction efforts



# EO 13423 Background



- President Bush signed Executive Order (EO) 13423 on January 24, 2007
  - Integrates and updates policies and requirements of five existing Greening the Government EOs and two Federal Memoranda of Agreement
  - Establishes new Departmental goals
- The Council on Environmental Quality issued detailed implementation Instructions on March 29, 2007



# Sustainable Practices



The Secretary shall implement within the Department sustainable practices for:

- i. energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction
- ii. renewable energy, including bioenergy
- iii. water conservation
- iv. acquisition
- v. pollution and waste prevention and recycling
- vi. reduction or elimination of acquisition and use of toxic or hazardous chemicals
- vii. high performance construction, lease, operation, and maintenance of buildings
- viii. vehicle fleet management
- ix. electronic equipment management



# Environmental Management Systems



- EO requires DOE to implement Environmental Management Systems (EMSs) “at all appropriate organizational levels” and use them:
  - as the primary management approach for addressing EO 13423 requirements
  - to ensure establishment of objectives and targets to ensure implementation of EO 13423
  - to ensure collection, analysis, and reporting of information to measure performance in implementation of EO 13423



# Implementation Steps at DOE



- Secretary wants DOE to lead all Federal agencies in implementation performance
- Secretary designated EE-1 “Senior Agency Official” to lead implementation
  - “Transformational Energy Action Management” (TEAM) Initiative to implement EO
  - Focus on use of Energy Savings Performance Contracts as means to achieve the EO goals
- EO is not self-implementing; work through Directives process to establish updated goals and expectations
  - Revise DOE O 450.1 and O 430.2A



# Goals: Toxic Chemicals



## EO Requirements:

- Reduce the quantity of toxic and hazardous chemicals and materials which DOE acquires, uses, and disposes of
- By January 24, 2008, DOE is to develop, at all appropriate organizational levels, written goals and support actions to reduce the release and use of toxic and hazardous chemicals



# Toxic Reduction: DOE Response



- Formed CSTC project to address this requirement at the Chemical Safety Workshop in March
- CSTC developed recommendations for complying with EO toxic reduction requirements
- Draft DOE O 450.1A contains requirement and goal language supporting EO goal (and recommendation language)



# Relevant Draft 450.1A Requirements



- EMS shall address toxic chemical reduction
- PSO's, Field Office Managers, and Contractors shall implement this at the site level
  - HSS to provide guidance
- O 450.1A includes goal and strategies to reduce the acquisition, use, and release of toxic and hazardous chemicals and materials
  - Goals and strategies are considered requirements of the Order



# Toxic Reduction Goal



- Establish operational assessments (OAs) of activities using toxic chemicals
- Based on OAs, establish EMS objectives and targets to minimize the acquisition, use, and disposal of toxic chemicals and materials, i.e.:
  - Solvent-less or more benign solvents
  - Designing processes to reduce or eliminate the use/generation of hazardous substances
- Ensure implementation of centralized chemical inventory tracking system that integrates information throughout the chemical lifecycle



# CSTC Recommendation and 450.1A



- CSTC approach is EMS-focused, largely accomplished through 450.1A
  - Site-specific, not corporate; no list of target chemicals or DOE-wide reduction goals
- CSTC does go beyond 450.1A as well:
  - Annual reporting of goals, and progress in meeting the goals, through the Pollution Prevention Tracking and Reporting System (covered in DOE M 231.1)
  - Develop and share information and tools to make the use of non-toxic or less-toxic alternatives more feasible



# Next Steps



- Finalize and distribute recommendation
  - Within DOE, pending approval/changes based on HSS management review
  - Externally (OFEE, other agencies)
- Develop criteria and methodology for FY08 toxic chemical reduction reporting
- Develop information resources and tools to assist sites with toxic reduction efforts



# Executive Order 13423



Questions? Comments?

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