EXTERNAL EVENTS

The WILDCARD of EMERGENCY MANAGEMENT

EFCOG Chemical Safety & Lifecycle Management Task Group (CS&LMTG)
and
DOE Chemical Safety Topical Committee (CSTC) Activities

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Energy Facility Contractors Group (EFCOG) Chemical Safety Task Group

- Formed in 1991
- Improve cost effectiveness of DOE Operations
- 9 Working Groups
- Chemical Safety Task Group is a recent addition to the Integrated Safety Management (ISM) Working Group

Chemical Safety Topical Committee (CSTC)

- Chartered in 1998
- Outreach program dedicated to chemical safety management
- Annual Chemical Management workshop in DC; video linked to complex
- Several projects undertaken each year to address chemical management issues & concerns

DOE-HDBK-1139, Volume 2

Chemical Safety Handbook Vol. 2

"Chemical Safety and Lifecycle Management Handbook"

Team Members

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Billy Lee		DOE-EH52
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History

- Handbook Vol. 2 needed revision
- CSTC 2004 Team B recommendation-
  Chemical Safety and Lifecycle Management
- *Why?*

To Improve Chemical Safety throughout the DOE Complex by, reducing inventories, reducing waste, and identifying and reducing unnecessary risk!!!!!

Objective

- Rewrite Handbook Vol. 2 describing “Chemical Safety and Lifecycle Management”
- Complete the rewrite by March 2006

Where we are

- *Completed the body of the handbook*
- *Working on the Foreword and Appendix*
- *Expect the handbook completed for review by Summer 2006*

Key Points

- ISM requires that safety must be built into all aspects of our work at DOE. A Lifecycle approach to chemical safety does that.

- An effective chemical safety program must cover all aspects of the chemical lifecycle. It must include other disciplines such as emergency management, procurement, and environmental management.

Key Points

- We know that all too often these different functions are “stovepiped,” with the result being reduced efficiency, increased risk and costs.

- A lifecycle approach to chemical safety links all phases of chemical management, from procurement through disposition. Chemical disposition costs and options, whether re-use, recycle, or disposal, should be evaluated before the chemical is purchased.

Key Points

- Establishing a single point of contact for all chemical issues to improve consistency, coordination, and communication in chemical safety.

The Bottom Line

The implementation of "Chemical Safety and Lifecycle Management" will result in better protective actions and an overall reduction in chemically related incidents.

Other EFCOG/Chemical Safety Topical Group Products

- DOE-HDBK-1139, Volume 3 – *Consolidated Chemical User Safety and Health Requirements*
- DOE-HDBK-1163 – *Integration of Multiple Hazard Analysis Requirements and Activities*
- Use and Misuse of Chemical Reactivity Spreadsheets
- Determining Health Hazard Ratings when no Toxicological Data is Available

DOE-HDBK-1139, Volume 3

Consolidated Chemical User Safety and Health Requirements

- Consolidates existing core safety and health requirements for chemical-related activities
- Includes “pointers” to the sources of requirements
  - Shows <u>what</u> the requirements are and <u>where</u> each comes from
- Chapters cover 10 topics
  - Emergency Management is included
- Currently being updated

DOE-HDBK-1163

Integration of Multiple Hazard Analysis Requirements and Activities

- Resource to support planning, technical review, or conduct of hazard analysis activities
  - Clarify requirements
  - Discuss best practices
- Overall goal
  - Improve cost effectiveness
  - Clarify roles and responsibilities
  - Enhance technical quality

DOE-HDBK-1163

Integration of Multiple Hazard Analysis Requirements and Activities (Continued)

- EPHAs are discussed
  - Concludes EPHA process needs to stay separate from safety hazard analysis activities

Chemical Reactivity Spreadsheets

- Peer reviewed and accepted for publication in Chemical Safety and Health
- Highlights
  - Accurate hazard identification critical to any safety program
  - MSDS Limitations
  - Chemical Reactivity Worksheets
  - Short, Consolidated Spreadsheets
  - Reactivity Matrices

Chemical Reactivity Spreadsheets

- How Hazards Misidentified
  - Assumptions
  - Hazards Not Identified
  - Binary Mixtures
  - Three or more component interaction
- Paper is referenced in new Hazards Assessment guidance

Determining Health Hazard Ratings

- Submitted for peer review and publication in Chemical Safety and Health
- Discusses
  - Importance of Health Hazard Rating
    - Emergency Planning
    - Worker Protection
  - Approaches
    - Inappropriate
    - Problematic
    - Appropriate

EH Chemical Safety Website

- Copies Available at

  http://www.eh.doe.gov/chem_safety/library/Doe_reg.html

- And

  http://www.eh.doe.gov/chem_safety/bmgtprac.html