

Integrated Hazard Analysis and Hazard Identification Toolbox

CSTC Project 2001-C

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SAIC

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Integrated Hazard Analysis (IHA)

- Most difficult of our two tasks
- Divergent ideas of needs and path forward
- Spent first 6 months developing our path forward
- DOE/EH has funded a contractor to develop guidance with technical review and oversight of the team

IHA Path Forward

- Link Technologies will develop draft guidance
- CSTC 2001-C subteam will review and comment
- DOE/EH staff will review and comment
- Comments from entire CSTC and DOE complex

IHA Objectives

- Identify opportunities for integrating hazard analysis requirements
- Identify noteworthy field practices for ensuring consistency of hazard analysis
- Identify methods for streamlining chemical hazard analysis and integrating with other hazard analysis activities

IHA Strategies

- Identify good practices and lessons learned within DOE or other agencies based on current initiatives, procedures or approaches
- Westinghouse Savannah River Company's consolidated hazard analysis process (CHAP)
- Y-12 integrated hazard analysis pilot
- NRC integrated safety analysis activities and guidance (10 CFR 70)
- Others materials already collected by the CSTC IHA subteam.

IHA Strategies (cont'd)

- Evaluate hazard analysis requirements applicable to DOE contractors
 - CSTC CUSHR team's findings on hazard analysis
 - Identify all hazard analysis requirements from external regulations, DOE orders and DOE rules
 - Perform gap analysis of facility and task oriented hazard analysis requirements
 - Identify overlaps (or inconsistencies) regarding required hazard analysis inputs, documentation, and the review and approval process

IHA Strategies (cont'd)

- Develop suggested practices on integrating chemical hazards analysis with other required hazards analysis activities:
 - Illustrative example(s) of hazard analysis activities
 - Tabular compilation of hazard analysis requirements that includes their applicability and expected outcomes
 - Suggested methods for enhancing communication and sharing of hazard analysis data, consolidating hazard analysis activities, streamlining documentation, etc.

IHA Strategies (cont'd)

- Develop guidance document, as needed, depending on the findings of this effort and recommendations by the CSTC sub-team on integrated hazard analysis. This may include enhancements to the Chemical Hazards Management Handbook, preparation of a separate guidance document, or other means to be determined.

IHA Schedule

- Gap analysis of hazard analysis requirements-10/1
- Informal visits to SRS and Y-12-Mid October
- White paper for Workshop -10/15
- Compilation of Good Practices and Lessons Learned-11/1
- Development of IHA illustrative example-11/15
- Development of suggested practices-12/7
- Guidance document?-(TBD based on need)

Hazard ID Toolbox

- Presently available on the Chemical Safety Web page on DOE web site
- Integrated with other elements on site
- Work in progress
- Other links or information added as made available

New Tools

- Examples of three tools from three different sites (LANL, PNNL, INEEL)
- Tools provide links, description and point of contact

INEEL S&H Database

- Relational database of 9,400 requirements
- Requirements from OSHA, ANSI, NFPA, and other regulatory sources
- Allows requirements to be tracked from source documents to implementation
- POC: Dave Quigley, dq1@inel.gov

LANL Hazard ID Tool

- Uses input on workplace hazards
- Provides ESH requirements
- Provides training requirements
- Provides reading materials
- POC: Reanna Sharp-Geiger,
reanna@lanl.gov

PNNL Standards Management

- Provides laboratory standards, procedures and guidelines
- POC: John Piatt, john.piatt@pnl.gov