

OA ES&H Evaluation Reports

Inspection of Environment, Safety, and Health (ES&H) Management at the U.S. Department of Energy (DOE) Oak Ridge (OR) National Laboratory during July 2004.

Insufficient training for work planners and insufficient requirements for ES&H subject matter expert involvement contribute to the implementation deficiencies.

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A possible contributing factor to these deficiencies is insufficient training or qualification requirements for work plan authors.

The lack of formal requirements for SME involvement and approval of work packages as well as lack of consistent training requirements for all work plan authors may exacerbate safety vulnerabilities.

More rigorous review of requirements, including OSHA training requirements, contractual requirements, and requirements in programs, such as hazard communication and respiratory protection programs, is needed to ensure effective flowdown of required controls to the construction workforce.

Opportunities for improvement: Develop a formal training and qualification program for LSMs.

Independent Oversight Lessons Learned Report - Environment, Safety, and Health Evaluations, July 2004

OA found significant weaknesses in the design of safety systems at several sites that could have rendered the systems unable to perform their safety function for some design basis accidents, indicating a need for improvement in the rigor and attention to detail of the design and design review processes for safety systems.

DOE site offices need to better define the roles and responsibilities of SMEs who have ES&H responsibilities.

DOE should establish processes for the flowdown of ES&H requirements applicable to Federal staff. NNSA Policy Letter NAP-5, *Policy Letter for Standards Management*, which was issued in October 2002, includes appropriate expectations for managing requirements applicable to Federal staff (e.g., Federal Employee Occupational Safety and Health program requirements, and requirements for implementing line management oversight functions).

Inspection of Environment, Safety, and Health (ES&H) at the U.S. Department of Energy (DOE) Kansas City Plant (KCP) site during April and May 2004.

Construction safety programs have not met DOE performance expectations in certain areas, such as activity-level hazards analyses for fixed price contractors, safety permits, and ensuring subcontractor compliance with OSHA required safety and training programs and construction safety requirements when performing work.

Weaknesses need to be addressed in activity level hazards analyses for fixed-price and service subcontractors, definition and verification of safety training requirements, implementation of safety programs required by OSHA and DOE, clarification of some safety permitting processes such as the construction safe work permit, and greater adherence of construction subcontractors to the safety requirements.

Line managers do not have a mechanism to verify the adequacy of a worker's safety training before the worker begins work for which specific training is a prerequisite.

KCSO does not have clearly defined program for training and qualification of personnel who perform line management oversight activities.

Inspection of Environment, Safety, and Health (ES&H) and Emergency Management Programs at the U.S. Department of Energy's (DOE) Savannah River Site (SRS) in January and February 2004.

None

Inspection of Environment, Safety, and Health (ES&H) Management at the Pacific Northwest Laboratory, December 2003.

Establish training and/or qualification requirements for "skill of the craft" activities to ensure that all researchers, including those with less laboratory work experience or training (e.g. visiting students), perform routine work with the same level of hazard awareness and hazard controls.

Inspection of Environment, Safety, and Health Management and Emergency Management of the Idaho Operations Office and Idaho National Engineering and Environmental Laboratory, Summary Report, September 2003

Idaho Operations has not yet provided the training to ensure that responsibilities are communicated and understood, and it does not have a structured self-assessment program.

Inspection of Environment, Safety, and Health Management of the Idaho Operations Office and Idaho National Engineering and Environmental Laboratory, Summary Report, Volume I, September 2003

There are weaknesses in the institutional unreviewed safety question (USQ) process and its implementation. Some USQ screening functions are assigned to personnel who do not have sufficient training in the USQ process.

INEEL Research Center (IRC) needs to better document management expectations for certain aspects of hazard identification, analysis, and control.

Inspection of Environment, Safety, and Health Management at the Y-12 National Security Complex April 2003

All subject matter experts are participating in a technical qualification program and are on track to meet initial training and qualification commitments.

The training and qualifications of individuals preparing safety basis documents were generally adequate, although BWXT has not established formal requirements in this area. The OA team reviewed training and qualifications of selected members of the facility safety engineering organization who were assigned to prepare documented safety analyses. No formal qualification or training requirements had been established for these individuals.

While most aspects of the USQ procedures and training programs are adequate, further enhancements are needed to improve the quality of USQDs. For example, procedures contain broad requirements that are consistent with DOE requirements and guides, but do not include sufficient detailed guidance and direction on expected USQD content.

Establish training and qualification requirements for members of the facility safety engineering organization. Include training on preparation of documented safety analyses, USQDs, and screenings.

Inspection of Environment, Safety, and Health Management at the Sandia National Laboratories - New Mexico February 2003

In the ES&H portion of the inspection, the OA team did not identify any instances of an individual doing work for which training had expired; however, the emergency management portion identified instances of personnel with questionable qualifications

Inadequate response to lapsed training requirements could allow individuals to continue to perform assigned work without a basis for assuring competence.

Inspection of Environment, Safety, and Health Management at the Pantex Plant November 2002

Although an environmental subcontractor had developed a corporate level hazard communications plan, the plan had not been tailored to the Pantex Plant, had not been provided to BWXT, and had

not been implemented at the Pantex Plant as required by contract. Further, training required by the plan had not been provided to the subcontractor staff at the Pantex Plant.

An environmental subcontractor had not established a fall protection program with sufficient detail to meet the requirements (29 CFR 1926), and did not provide fall protection training required by that regulation.

Some H&S training requirements for construction subcontractors were not adequately identified in work documents (e.g., activity hazards analyses, H&S plans, and safety work permits), and training records were not maintained.

Inspection of Environment, Safety, and Health Management at the Nevada Test Site October 2002

The OA team identified numerous longstanding industrial safety and hygiene deficiencies in Mercury and Area 6 maintenance shops that indicated failure to follow established procedures and inadequate implementation of OSHA and site requirements. These deficiencies could cause injury and may cause unnecessary exposure to spray paints and dust from carpentry operations.

Inspection of Environment, Safety, and Health Management at the Lawrence Livermore National Laboratory July 2002

Additional attention is needed in hazard communications (HAZCOM) training. Employees receive an institutional-level HAZCOM training course as part of their initial staff orientation. However, such HAZCOM training is minimal and does not fully satisfy the HAZCOM training requirements specified in 29 CFR 1910.1200, nor does it provide workers with sufficient practical knowledge concerning labeling 25 and access to material safety data sheets.

Although most aspects of LLNL's training programs are excellent, the steps needed to verify workers are current on job-specific ES&H training requirements are complex, error prone, and need to be streamlined.

The verification process can be complicated and cumbersome because the IWS forms often refer to other documents and forms containing additional training requirements that are easily overlooked, some of which may not apply to all involved workers or stages of the activity.

However, in a number of facilities reviewed, this OA inspection identified examples of failure to document hazards and/or required training, failure to identify all individuals needing training, failure to ensure training plans were updated, and failure to verify training was completed and current.

Inspection of Environment, Safety, and Health Management at the Argonne National Laboratory – East
May 2002

Currently, most work management processes are fragmented and expert based, relying too much on the experience and training of foremen and workers to identify and control job-specific hazards.

Inspection of Environment, Safety, and Health Management at the Los Alamos National Laboratory
April 2002

Determine the impact on ESH-13 from the nearly 1,000 new personnel being hired at LANL and take appropriate action to ensure that ES&H training needs are met for these new personnel, including evaluations of the potential efficiencies of computer-based training.

In the area of occupational safety, no institutional requirements have been issued for performing initial or baseline surveys of CMR work areas or operations to identify and evaluate potential worker health risks as specified by DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, and required by work smart standards. At CMR, the exposure assessments and worker health risk surveys are not currently being performed as required by this DOE order.

Inspection of Environment, Safety, and Health Management at the Hanford Site
March 2002

Weaknesses in the standing AJHA program, procedural guidance, and training and qualification programs contribute to the observed weaknesses in implementation of the AJHA process.

Enhance individual competency by resolving recurring training and qualification program deficiencies and enhancing training and qualification programs.