
Review of Lessons Learned from DOE's Office of Independent Oversight and Performance Assurance (OA) ES&H Evaluations

ES&H Coordinator's Meeting

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Background

- Report covered site evaluations conducted between October 2001 and December 2002
- 8 sites had been evaluated
- DOE and contractor issues included

Discussion of Lessons learned

- Focus this discussion on cross cutting issues related to management of activity level work
 - Some judgment as applicability to BNL (i.e. environmental performance)
- Topics
 - Roles, Responsibilities, Accountabilities, and Authorities
 - Requirements Management
 - Feedback and Improvement
 - Work Planning and Control
 - Maintenance
 - Subcontractors

Roles, Responsibilities, Accountabilities and Authorities

- Roles, Responsibilities, Accountabilities, and Authorities for activity level work are inconsistently implemented
 - Understanding authorization bounds of work permits
 - Performance appraisals (role understood but not used)
 - Issues noted for work that crosses complex organizational boundaries and for organizational changes
 - Subcontractor ES&H performance

Requirements Management

- Inadequate processes for translating contractual requirements into clear instructions at the working level
- Communication to subcontractors and monitoring subcontractor implementation

Feedback and Improvement

- Safety programs and performance were not being evaluated consistently and effectively
 - Activity level feedback informal and undocumented
 - Non-conservative reporting

Feedback and Improvement-cont.

- Corrective action management
 - Failure to capture all safety deficiencies in corrective action systems
 - Prioritization based on source rather than risk
 - Inadequate analysis (e.g. extent, causes, trending, etc)
 - Inadequate follow-up (effectiveness, lessons learned etc).

Work Planning and Control

- Activity level hazards not always sufficiently identified, characterized, or documented
 - Unclear or subjective thresholds for SME involvement
 - Legacy hazards and concurrent laboratory hazards not considered in work planning
 - Too broad or inadequate definition of work scope

Work Planning and Control-cont.

- Inconsistent application of DOE radiological safety standards and requirements.
 - Technical basis for not applying some controls (e.g. extremity monitoring, ALARA reviews)-basis for non-conservative decisions
 - Inconsistency with DOE requirements, e.g. (posting of soil contamination areas, bioassay programs, control of rad areas)

Work Planning and Control-cont.

- Weaknesses were evident in exposure assessment programs for non-radiological hazards
 - Outdated analysis
 - Comprehensive, risk-based sampling strategies not developed
 - Worker exposures not analyzed, insufficient hazard controls, routine monitoring, and medical surveillance

Maintenance

- Workplace surveys and exposure assessments were deficient at most sites evaluated
 - Safety deficiencies readily identified in work areas
 - Exposure assessments were deficient/most sites did not have an effective workplace evaluation program

Maintenance-cont.

- Inadequate documentation and controls needed for “skill-of-the-craft” activities
 - Routine work with hazards being managed as skill-of-the-craft
 - “Blanket”/generic work control mechanisms lack specificity
 - Concurrent skill-of-the-craft activities introduce hazards because of overlapping work scopes
 - More complex jobs broken down into multiple skill-of-the craft activities

Maintenance-cont.

- Work control procedures lacked criteria for involvement of safety professionals and for mandatory walkdowns by workers, job planners, and ES&H personnel.
- Work packages for troubleshooting and repair often lacked a clear scope of work or sufficient limits.
- Repetitive routine jobs and work packages are not always treated with sufficient rigor.

Subcontractors

- Activity level work hazards and/or controls missed or insufficiently identified by subcontractors
 - Subcontractor ES&H resources are often minimal in number and not sufficiently equipped
 - Training deficiencies (requirements and completion records)
- Subcontractor performance metrics not consistently maintained, reported, and/or trended.
 - Injury rates through CAIRS
 - Reportable occurrences