



**DOE - EM - SRP - 2010**

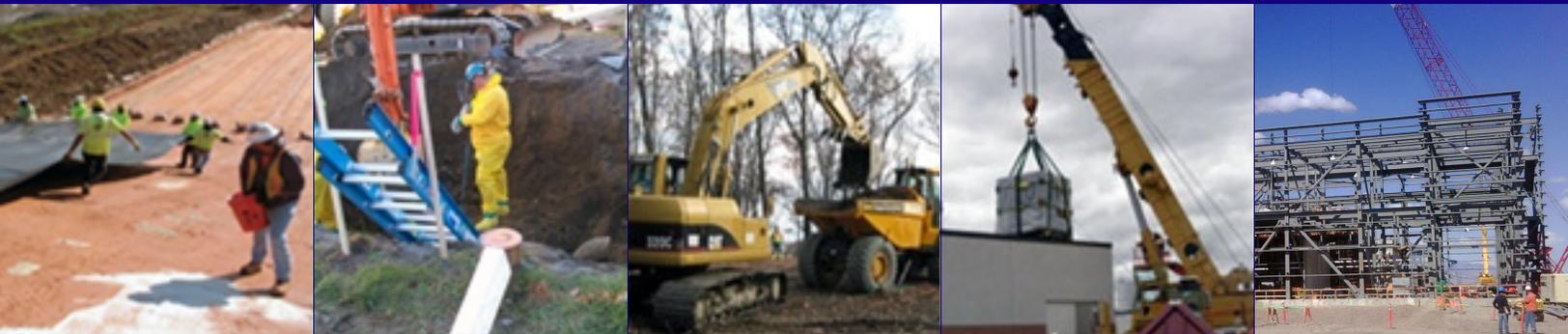
**2nd Edition**

**Environmental Management**

*Safety ▪ Performance ▪ Cleanup ▪ Closure*

# STANDARD REVIEW PLAN (SRP)

## CONSTRUCTION PROJECT SAFETY AND HEALTH PLAN REVIEW MODULE



**CORPORATE CRITICAL DECISION (CD) REVIEW AND  
APPROVAL FRAMEWORK ASSOCIATED WITH NUCLEAR FACILITY CAPITAL AND  
MAJOR CONSTRUCTION PROJECTS**

MARCH 2010

OFFICE OF ENVIRONMENTAL MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON D. C. 20585

**OFFICE OF ENVIRONMENTAL MANAGEMENT**

**Standard Review Plan (SRP)**

**Construction Project Safety and Health Plan**

**Review Module**

<b>Critical Decision (CD) Applicability</b>					
<b>CD-0</b>	<b>CD-1</b>	<b>CD-2</b>	<b>CD-3</b>	<b>CD-4</b>	<b>Post Operation</b>
			✓		



**March 2010**

This Review Module has been piloted at the INL IWTU Project.  
Lessons learned from the pilot have been incorporated in Review Module.

## FOREWORD

The Standard Review Plan (SRP)<sup>1</sup> provides a consistent, predictable corporate review framework to ensure that issues and risks that could challenge the success of Office of Environmental Management (EM) projects are identified early and addressed proactively. The internal EM project review process encompasses key milestones established by DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Assets*, DOE-STD-1189-2008, *Integration of Safety into the Design Process*, and EM's internal business management practices.

The SRP follows the Critical Decision (CD) process and consists of a series of Review Modules that address key functional areas of project management, engineering and design, safety, environment, security, and quality assurance, grouped by each specific CD phase.

This Review Module provides the starting point for a set of corporate Performance Expectations and Criteria. Review teams are expected to build on these and develop additional project-specific Lines of Inquiry, as needed. The criteria and the review process are intended to be used on an ongoing basis during the appropriate CD phase to ensure that issues are identified and resolved.

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<sup>1</sup> *The entire EM SRP and individual Review Modules can be accessed on EM website at <http://www.em.doe.gov/Pages/Safety.aspx>, or on EM's internet Portal at <https://edoe.doe.gov/portal/server.pt> Please see under /Programmatic Folder/Project Management Subfolder.*

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## ACRONYMS

CD	Critical Decision
CPSHP	Construction Project Safety and Health Plan
DOE	Department of Energy
EM	Environmental Management
FPD	Federal Project Director
JHA	Job Hazards Analysis
LOI	Lines of Inquiry
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PPE	Personal Protection Equipment
RM	Review Module
SRP	Standard Review Plan

## I. INTRODUCTION

The authorization to proceed with construction of a new facility is given at the Critical Decision (CD)-3 phase of the project management cycle, after completion of the final design. Between CD-3 and CD-4 stages of the project, procurement and construction/assembly of facility structures, systems and equipment is conducted. These activities can present significant hazards to workers and involve a complex set of events that must be carefully planned and sequenced.

In preparation for the CD-3 approval, the Federal Project Director (FPD) must ensure that the contractor is ready to proceed with construction. This involves verification that management systems are in place, adequate planning is conducted, procedures and training is completed, and construction hazards are adequately evaluated and controlled.

To ensure that workers are protected during construction activities, all capital projects must have a construction safety management program in place to ensure compliance with mandated codes and standards. A Construction Project Safety and Health Plan (CPSHP) must be developed, approved, and implemented. The CPSHP is a requirement of 10 CFR 851, *Worker Safety and Health Program and DOE O 413.3A, Change 1, Program and Project Management for the Acquisition of Capital Assets*.

## II. PURPOSE OF THE REVIEW MODULE

The Construction Project Safety and Health Plan (CPSHP) Review Module is a tool that assists DOE federal project review teams in evaluating the technical sufficiency of the project readiness in ensuring worker safety during construction after Critical Decision-3 approval. This Review Module provides performance expectations and criteria to ensure:

- A construction safety management program is in place to ensure compliance with mandated codes and standards
- An effective and efficient self-assessment process is implemented to find, provide feedback, and fix less than acceptable safety and health performance by the contractor and its subcontractors
- New design and construction projects and major modifications to existing projects are evaluated for sound construction principles, maintainability, and code compliance.
- Management is actively involved in oversight and evaluation of working conditions.
- Notification and written submission of incident reports and injury or illness notifications are accomplished in accordance with mandated requirements.

### III. ROLES AND RESPONSIBILITIES

A critical element of the review of the CPSHP and its implementation is the qualifications, training and most importantly the experience of the personnel selected to conduct the review. To the maximum extent possible, the personnel selected to participate in the reviews should have “on the ground”, first hand experience (as opposed to an oversight role) in worker safety and construction management.

The core review team personnel should include individuals possessing qualification and experience, including areas such as: worker safety and health policy; hazard identification, assessment, and abatement; construction safety; training; occupational medicine; and industrial hygiene. The table below provides a compilation of CPSHP review roles and responsibilities.

Position	Responsibility
Field Element Manager	Provides support and resources to the FPD and Review Team Leader in carrying out the CPSHP review. This review can be conducted as part of the Construction Readiness Review.
	Facilitates the conduct of the CPSHP review. Assigns office space, computer equipment, and support personnel to the team as necessary to accomplish the review in the scheduled time frame
Federal Project Director	Coordinates with the Review Team Leader in the selection of technical areas for the review and in developing the review criteria.
	In conjunction with the Contractor Project Manager, develops the briefing materials and schedule for the review activities.
	Coordinates the review team pre-visit activities and follows up review team requests for personnel to interview or material to review.
	Coordinates the necessary training and orientation activities to enable the review team members to access the facility and perform the review.
	Unless other personnel are assigned, acts as the site liaison with the review team. Tracks the status of requests for additional information.
	Coordinates the Federal site staff factual accuracy review of the draft report.
	Leads the development of the corrective action plan if required. Tracks the corrective actions resulting from the review.
Review Team Leader	In coordination with the Federal Project, selects the areas to be reviewed.
	Based on the project complexity and hazards involved, selects the members of the review team.
	Verifies the qualifications: technical knowledge; process knowledge; facility specific information; and independence of the Team Members.
	Leads the CPSHP review pre-visit, if needed.
	Leads the review team in completing the Lines of Inquiry for the various areas to be reviewed.
	Coordinates the development of and forwards to the Federal Project Director, the data call of documents, briefings, interviews, and presentations needed for the review.
	Forwards the final review plan to the Field Element Manager for approval
	Leads the on-site portion of the review.

Position	Responsibility
	Ensures the review team members complete and document their portions of the review. Coordinates the characterization of the significance of the findings.
	Coordinates the review team handling of factual accuracy comments by Federal and Contractor personnel on the draft report.
	Remains available as necessary to participate in the closure verification of the findings from the review report.
Review Team Member	Refines and finalizes the Lines of Inquiry for the appropriate area of the review.
	Develops and provides the data call of documents, briefings, interviews, and presentations needed for his or her area of the review.
	Completes training and orientation activities necessary for the review. Conducts any necessary pre visit document review.
	Participates in the on-site review activities, conducts interviews, document reviews, walk downs, and observations as necessary.
	Based on the criteria and review approaches in the Review Plan, assesses whether his or her assigned criteria have been met.
	Documents the results of the review for his or her areas. Prepares the review report.
	Makes recommendations to the Review Team Leader for characterization of findings in his or her area of review.
	Resolves applicable Federal and Contractor factual accuracy comments on the draft review report.
	Prepares the final review report for his or her area of review.
	Concurs in the findings for his or her area of the review.

#### IV. REVIEW SCOPE AND CRITERIA

The scope of the CPSHP Review Module (RM) is focused on the key management and technical aspects of worker safety management program which are derived from Department of Energy (DOE) and Occupational Safety and Health Administration (OSHA) worker safety requirements to ensure worker safety during construction. This RM provides the review team with a template from which they may derive and pursue Lines of Inquiry (LOIs) that are applicable to the specific type of facility being constructed. The scope of the CPSHP RM is reflected in the performance expectations and criteria (or LOIs) that are presented in topical areas. These review topical areas are consistent with the 10 CFR 851 requirements. The initial application of the CPSHP RM should be used prior to CD-3 approval for start of construction. The CPSHP RM should also be used for periodic reviews during CD-3 construction activities.

For projects currently in early CD phases prior to CD-3 approval, a written Construction Project Safety and Health Plan must be developed as required by DOE O 413.3A. For projects already in CD-3 and have not developed a Construction Project Safety and Health Plan, the review teams should review the adequacy of the existing worker safety and health documents (plans, procedures, etc) to determine if they meet the intents of a Construction Project Safety and Health Plan.

Appendix A of the CPSHP RM provides overall worker safety performance expectations and review criteria consistent with 10 CFR 851. Based on project-specific reviews, these performance objectives and review criteria will provide consistent guidance to review teams to develop their project-specific LOIs. The performance expectations and criteria are grouped and summarized below.

### ***General Requirements***

This review area focuses on Section 851.11 of 10 CFR 851 Subpart B. It deals with development, approval, and updating of the worker safety and health program.

### ***Management Responsibilities***

This review area focuses on Section 851.20 of 10 CFR 851 Subpart B. It deals with management responsibilities of safety and health of their workforce.

### ***Worker Rights and Responsibilities***

This review area focuses on Section 851.20 of 10 CFR 851 Subpart C. It deals with workers' rights and responsibilities at the workplace to ensure their safety and health.

### ***Hazard Identification and Assessment***

This review area focuses on Section 851.21 of 10 CFR 851 Subpart C. It deals with areas such as establishment of hazards assessment procedures, determination of project hazards and controls, Job Hazard Analysis, and work planning.

### ***Hazard Prevention and Abatement***

This review area focuses on Section 851.22 of 10 CFR 851 Subpart C. It deals with areas such as hazard abatement program and hierarchy of hazard controls.

### ***Safety and Health Standards***

This review area focuses on Section 851.23 of 10 CFR 851 Subpart C. It deals with areas such as establishing and maintaining the applicable safety and health standards for the workplace and activities to control the recognized hazards.

### ***Functional Areas***

This review area focuses on Section 851.24 of 10 CFR 851 Subpart C. It deals with whether the worker safety and health program address the functional areas listed in Appendix A of 10 CFR 851 that are applicable to the hazards of the project.

### ***Training and Information***

This review area focuses on Section 851.25 of 10 CFR 851 Subpart C. It deals with worker safety and health training and information program to ensure that workers can perform their duties in a safety and healthful manner.

### ***Recordkeeping and Reporting***

This review area focuses on Section 851.26 of 10 CFR 851 Subpart C. It deals with adequacy of recordkeeping and reporting program on information including hazard inventories, worker exposures, and worker exposure controls.

### ***Reference Sources***

This review area focuses on Section 851.27 of 10 CFR 851 Subpart C. It deals with whether the worker safety and health program address the applicable reference sources based on the hazards of the project.

### ***Variances***

This review area focuses on Section 851.31 of 10 CFR 851 Subpart D. It deals with whether the contractor has a process to request variance from safety and health standards.

### ***Program Functional Areas***

This review area focuses on Appendix A of 10 CFR 851 on applicable program functional areas for the project. They include: construction safety; fire protection, explosive safety; pressure safety; firearms safety; industrial hygiene; biological safety; occupational medicine; motor vehicle safety; electrical safety; and nanotechnology safety. For construction safety, specific hazards are also highlighted such as hosting and rigging and seasonal hazards.

## **V. REVIEW PLANS AND DOCUMENTATION**

The results of a CPSHP review will be used by the DOE FPD and ultimately the Acquisition Executive to help determine whether project funds may be authorized for construction. It is important to clearly document the methods, assumptions and results of the CPSHP review. This review can be conducted as part of the overall construction readiness review as described in the Construction Readiness Review Module. The overall Standard Review Plan (SRP) provides guidelines for preparing a Review Plan and a final report.

The following activities should be conducted as part of the Review Plan development and documentation/closure of the review:

- Subsequent to the selection, formation and chartering of the review team and receipt and review of the prerequisite documents, assignment of responsibilities for the development of specific LOIs should be made.

- The review team members should develop specific LOIs using the topics and areas listed in the Appendix A of this module.
- The individual LOIs should be compiled and submitted to the review team leader authorizing the review for concurrence prior to starting the review.
- The project-specific review plan should be compiled with a consistent and uniform numbering scheme that provided for a unique identifier for each line of inquiry, arranged by subject area (e.g. Management-Personnel and Qualifications, Management-Processes and Systems, Technical-Civil, etc.) such that the results of each LOI can be documented and tracked to closure.
- The LOIs should be satisfied via document review and personnel interviews or a combination of these methods. The results of the review should be documented and tracked.

## **VI. REFERENCE MATERIAL**

- 10 CFR 851, *Worker Safety and Health Program*
- 29 CFR 1926, *Safety and Health Regulations for Construction*
- DOE P 450.4, *Safety Management System Policy*
- DOE M 450.4-1, *Integrated Safety Management System Manual*
- 48 CFR 970.5204-2, *ISMS DEAR Clause*,
- DOE Order DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Assets*
- DOE G 440.1-2, *Construction Safety Management Guide*
- DOE G 440.1-8, *Implementation Guide for use with 10 CFR 851, Worker Safety and Health Program*
- DOE-STD-1090-2007, *Hoisting and Rigging Standard*
- SLAC Site-Specific Safety Plan, March 2008
- SWPF 10 CFR 851 Worker Safety and Health Plan, March 2008
- SWPF Construction Health and Safety Plan, July 2008
- ANSI/ASSE A10.39-1996 (R2005), *American National Standard for Construction and Demolition Operations Construction Safety and Health Audit Program*

**APPENDIX A - PERFORMANCE OBJECTIVES AND CRITERIA**

*Legend of Construction Project Safety and Health Plan Review Topics*

Review Topical Area	Identifier
Program Requirements	PR
Management Responsibilities	MR
Worker Rights and Responsibilities	WR
Hazard Identification and Assessment	HA
Hazard Prevention and Abatement	HP
Safety and Health Standards	SH
Functional Areas	FA
Training and Information	TI
Recordkeeping and Reporting	RR
Reference Sources	RS
Variances	VA
Program Functional Areas	FA

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
<b>Program Requirements (10 CFR 851 Subpart B)</b>		
PR-1	Has a worker safety and health program been prepared and submitted to DOE for approval?	
PR-2	Has the plan been approved by DOE?	
PR-3	Has the plan been updated on an annual basis and submitted to DOE for approval?	
PR-4	Have labor organizations been notified of the development and implementation of the worker safety and health program?	
<b>Management Responsibilities (10 CFR 851 Subpart C)</b>		
MR-1	Are there written policy, goals, and objectives for the worker safety and health program?	
MR-2	Are there technical qualification standards to ensure that safety and health professionals are qualified to manage assigned responsibilities of worker safety and health program?	
MR-3	Are the safety and health roles, responsibilities and authorities clearly delineated for workers at all levels?	

<sup>2</sup> The site should provide the technical bases and assumptions that support the answers provided to each Line of Inquiry. If possible, the review teams should independently verify the technical bases and assumptions.

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
MR-4	Are the workers and their representatives involved in the development of the worker safety and health program goals, objectives, and performance measures and in the identification and control of hazards in the workplace?	
MR-5	Can the workers readily access information relevant to the worker safety and health program?	
MR-6	Are there established procedures for workers to report, without reprisal, job-related fatalities, injuries, illnesses, incidents, and hazards and make recommendations about appropriate ways to control those hazards?	
MR-7	Are there established procedures for prompt response to the reports and recommendations made by workers?	
MR-8	Are there established procedures for regular communication, such as weekly safety meetings, with workers about workplace safety and health matters?	
MR-9	Are there established procedures to permit workers to stop work or decline to perform an assigned task which is not safe to perform?	
MR-10	Are there established procedures to inform workers of their rights and responsibilities by appropriate means, such as training?	
<b>Worker Rights and Responsibilities (10 CFR 851 Subpart B)</b>		
WR-1	Do the workers have the rights to access information such as worker safety and health program, standards, controls, and procedures; safety and health poster; and DOE safety and health publications?	
WR-2	Do the workers have the rights to get notification on monitoring results if they are overexposed to hazardous materials?	
WR-3	Do the workers have the rights to observe monitoring or measuring of hazardous agents and have the results of their own exposure monitoring?	
WR-4	Do the workers have the rights to participate in physical inspection?	
WR-5	Do the workers have the rights to request and receive results of inspections and accident investigations?	
WR-6	Do the workers have the rights to express concerns related to worker safety and health?	
WR-7	Do the workers have the rights to decline assigned work if they feel the work is unsafe?	
WR-8	Do the workers have the rights to stop work if the work is unsafe?	
<b>Hazard Identification and Assessment (10 CFR 851 Subpart C)</b>		
HA-1	Are there established procedures to identify workplace hazards and to assess the risk of associated worker injury or illness?	
	Do the procedures identify methods to assess worker exposure to chemical, physical, biological, or safety workplace hazards through appropriate workplace monitoring? <b>(HA-1.1)</b>	
	Do the procedures identify methods to document assessment for workplace hazards using recognized exposure assessment and testing methodologies and using of accredited and certified laboratories? <b>(HA-1.2)</b>	
	Do the procedures identify methods to record observations, testing and monitoring results? <b>(HA-1.3)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Do the procedures identify methods to analyze designs of new facilities and modifications to existing facilities and equipment for potential workplace hazards? <b>(HA-1.4)</b>	
	Do the procedures identify methods to evaluate operations, procedures, and facilities to identify workplace hazards? <b>(HA-1.5)</b>	
	Do the procedures identify methods to perform routine activity-level job hazard analyses (JHA)? <b>(HA-1.6)</b>	
	Do the procedures identify methods to review site safety and health experience information? <b>(HA-1.7)</b>	
	Do the procedures identify methods to consider interaction between multiple sources of workplace hazards (e.g., radiological, industrial hygiene, chemical, etc.)? For example, is the level of Personal Protection Equipment (PPE) prescribed in response to the particular, multiple hazard sources likely to expose the worker to new hazards associated with heat stress, reduced dexterity/visibility, etc.)? <b>(HA-1.8)</b>	
HA-2	Do the established JHA procedures specify evaluation 1) of existing operations and procedures that have not been adequately evaluated in the past or when there is no current hazard analysis available; 2) in response to employee identified potential hazards; and 3) for existing operations and procedures that have resulted in injuries, illnesses, or near misses?	
HA-3	Do the established JHA procedures specify worker involvement in performing JHAs?	
HA-4	Do the established JHA procedures specify how JHAs will be performed by subcontractors as part of their workplace safety program?	
HA-5	Does the contractor's written worker safety and health program specify that hazard identification and assessments must be initially performed to obtain baseline information and as often thereafter as necessary to ensure compliance with the 10 CFR 851 Subpart C requirements?	
HA-6	Do the JHA procedures describe how the contractor's work control processes integrate so hazards specific to planned activities are adequately addressed?	
HA-7	Do JHA procedures address a process for resolving issues between groups that participate in the development of the various hazard analyses that support construction activities?	
HA-8	Do JHA procedures describe how the contractor integrates Lessons Learned (internal and external sources) as JHAs are developed?	
<b>Hazard Prevention and Abatement (10 CFR 851 Subpart C)</b>		
HP-1	Are there established procedures to ensure that all identified and potential hazards are prevented or abated in a timely manner?	
	For hazards identified either in the design process or during the development of procedures, do the procedures ensure that controls have been incorporated into the design or procedures? <b>(HP-1.1)</b>	
	Do the procedures ensure that abatement actions are prioritized and implemented according to the risk to workers? <b>(HP-1.2)</b>	
	Do the procedures ensure implementation of interim protective measures pending final abatement? <b>(HP-1.3)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Do the procedures ensure worker protection from dangerous safety and health conditions? <b>(HP-1.4)</b>	
HP-2	Does the hazard abatement program consistent with the following selection approach: hazard elimination; engineering controls; administrative controls; and then personal protective equipment?	
HP-3	Does the hazard abatement program address hazards when selecting or purchasing equipment, products, and services?	
<b>Safety and Health Standards (10 CFR 851 Subpart C)</b>		
SH-1	<p>Has a list of safety and health standards been established and kept up-to-date for the workplaces and activities to control the recognized hazards as required by 10 CFR 851.23?</p> <p>Note: Some of the standards listed in 10 CFR 851.23 may not be applicable to Environmental Management (EM) projects.</p>	
<b>Functional Areas (10 CFR 851 Subpart C)</b>		
FA-1	Has the contractor reviewed the Program Functional Areas listed in Appendix A of 10 CFR 851, <i>Worker Safety and Health Function Areas</i> , to determine which areas are applicable to the project?	
FA-2	<p>When implementing the structured approach, does the contractor comply with the applicable standards and provisions in Appendix A of 10 CFR 851, <i>Worker Safety and Health Function Areas</i>?</p> <p>See LOIs in the Program Functional Areas.</p>	
<b>Training and Information (10 CFR 851 Subpart C)</b>		
TI-1	Does the contractor have an established training and information program, and implementation of this program, to ensure that workers can perform their duties in a safe and healthful manner?	
TI-2	Does the program include new workers, before or at the time of initial assignment to a job involving exposure to a hazard?	
TI-3	Does the program provide periodic training as often as necessary to ensure that workers are adequately trained and informed?	
TI-4	Does the program provide addition training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists?	
TI-5	Does the program include workers who have safety and health program responsibilities that is necessary for them to carry out those responsibilities?	
<b>Recordkeeping and Reporting (10 CFR 851 Subpart C)</b>		
RR-1	Is there an established recordkeeping program or procedures?	
	Does the contractor establish and maintain complete and accurate records of all hazard inventory information, hazard assessments, exposure measurements and exposure controls? <b>(RR-1.1)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Does the contractor ensure that the work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with DOE Manual 23 1.1-1A, Environment, Safety and Health Reporting Manual, September 9, 2004? <b>(RR-1.2)</b>	
	Does the contractor comply with the applicable occupational injury and illness recordkeeping and reporting workplace safety and health standards in 10 CFR851.23, unless otherwise directed in DOE Manual 231.1-1A? <b>(RR-1.3)</b>	
	Does the program ensure that information is not concealed nor destroyed concerning non-compliance or potential noncompliance with the requirements of 10 CFR 851 Subpart C? <b>(RR-1.4)</b>	
RR-2	Is there an established reporting and investigation program or procedures?	
	Are there procedures for investigating accidents, injuries and illness? <b>(RR-2.1)</b>	
	Are there procedures for analyzing related data for trends and lessons learned? <b>(RR-2.2)</b>	
<b>Reference Sources (10 CFR 851 Subpart C)</b>		
RS-1	Does the worker safety and health program address the applicable reference sources listed in 10 CFR 851.27?	
<b>Variations (10 CFR 851 Subpart C)</b>		
VA-1	Does the contractor's worker safety and health program have procedures or protocol to request variance from a safety and health standard, or portion thereof?	
<b>Program Functional Areas (Appendix A of 10 CFR 851)</b>		
FA-1 (Construction Safety)	Does the contractor have a written Construction Project Safety and Health Plan (CPSHP) prior to CD-3 approval for start of construction, as required by DOE O 413.3A? <b>(FA-1.1)</b>	
	Note: This CPSHP RM provides guidance to determine the adequacy of the CPSHP. A project may not have a CPSHP if it has yet to achieve its CD-3 authorization. In this situation, the review team should review available project worker safety documents, including procedures, handbook, plans, etc.	
	Has the CPSHP been approved prior to commencement of construction activities? <b>(FA-1.2)</b>	
	For each separately definable construction activity (e.g., excavation, foundations, structural steel, roofing, etc.), does the CPSHP specify that the contractor needs to prepare and obtain approval of a job hazard analysis (JHA) and work package prior to commencement of affected work? <b>(FA-1.3)</b>	
	Do the JHA and work package identify foreseeable hazards and planned protective measures? <b>(FA-1.4)</b>	
	Do the JHA and work package address further hazards revealed by supplemental site information (e.g., site characterization data, as-built drawings)? <b>(FA-1.5)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Does the JHA and work package include drawings and/or other documentation of protective measures for which applicable OSHA standards require preparation by a Professional Engineer or other qualified professional? <b>(FA-1.6)</b>	
	Does the CPSHP identify competent persons required for workplace inspections of the construction activity, where required by OSHA standards and discuss how the contractor qualifies these individuals? <b>(FA-1.7)</b>	
	Does the CPSHP ensure that the workers are aware of foreseeable hazards and the protective measures described within the activity analysis prior to beginning work on the affected activity? <b>(FA-1.8)</b>	
	Does the CPSHP require that the workers are informed of the hazards and protective measures associated with assigned work activities? <b>(FA-1.9)</b>	
	Does the CPSHP specify that those workers failing to use appropriate protective measures are subject to the disciplinary action? <b>(FA-1.10)</b>	
	Does the CPSHP specify that during construction activities, the construction contractor must have a designated representative on the worksite who is knowledgeable of the project's hazards and has full decision making authority? Does the contractor indicate how multiple shifts, when applicable, are addressed? <b>(FA-1.11)</b>	
	Does the CPSHP specify that the contractor's designated representative must make frequent and regular inspections of the construction worksite to identify and correct any instances of noncompliance with project safety and health requirements? <b>(FA-1.12)</b>	
	Does the CPSHP specify that workers must be instructed to report to the construction contractor's designated representative, any hazards not previously identified or evaluated? <b>(FA-1.13)</b>	
	<p>Does the CPSHP discuss coordination with other contractors working in proximity to the project that may present hazards to project employees if not resolved? <b>(FA-1.14)</b></p> <p>Note: If immediate corrective action is not possible or the hazard falls outside of project scope, the construction contractor must immediately notify affected workers, post appropriate warning signs, implement needed interim control measures, and notify the construction manager of the action taken. The contractor or the designated representative must stop work in the affected area until appropriate protective measures are established.</p>	
	Does the CPSHP specify preventive measures for specific construction hazards such as the following: hoisting and rigging; scaffolding; fall protection; heavy equipment operations; trenching and excavation; confined space, seasonal hazards, and hazardous energy control (lock-out/tag-out)? <b>(FA-1.15)</b>	
FA-2 (Fire Protection)	Is there a fire safety and emergency response program to protect workers commensurate with the nature of the work that is performed? <b>(FA-2.1)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Is the program in compliance with applicable building codes and National Fire Protection Association codes and standards? <b>(FA-2.2)</b>	
FA-3 (Explosive Safety)	Is there an established explosives safety program and is it being implemented consistent with DOE M 440.1-1A, <i>Explosive Safety Manual</i> ?  Note: This Functional Program Area may not be applicable to construction projects.	
FA-4 (Pressure Safety)	Are there established safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable consensus codes and standards and sound engineering and principles?  Note: This Functional Program Area may not be applicable to construction projects.	
FA-5 (Firearms Safety)	Are there established firearms safety policies and procedures for security operations and training to ensure proper accident prevention controls are in place?  Note: This Functional Program Area may not be applicable to construction projects.	
FA-6 (Industrial Hygiene)	Does the project have an industrial hygiene program for conducting initial or baseline surveys and periodic surveys, and periodic resurveys and/or exposure monitoring of all work areas or operations to identify and evaluate potential worker health risks? <b>(FA-6.1)</b>	
	Does the program coordinate with planning and design personnel to anticipate and control health hazards? <b>(FA-6.2)</b>	
	Does the program coordinate with cognizant occupational medical, environmental, health physics, and work planning professionals? <b>(FA-6.3)</b>	
	Does the program describe policies and procedures to mitigate the risk from identified and potential carcinogens? <b>(FA-6.4)</b>	
	Is the program managed and implemented by professionally and technically qualified industrial hygienists? <b>(FA-6.5)</b>	
	Does the program allow the use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-air Suits when National Institute for Occupational Safety and Health (NIOSH) approved respiratory protection equipment is not available? <b>(FA-6.6)</b>	
	Does the CPSHP discuss the workplace monitoring plan and identify what hazardous constituents are anticipated and address how and when the contractor will sample the work place to ensure there are no over exposures? <b>(FA-6.7)</b>  Each project will present different hazards; however exposures to noise, silica dusts, Hexavalent Chromium fume, paint vapors, fuel vapors, etc. are common throughout EM construction projects.	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
FA-7 (Biological Safety)	<p>Is there an established biological safety program to address biological hazards?</p> <p>Note: This Functional Program Area may not be applicable to construction projects.</p>	
FA-8 (Occupational Medicine)	Is there an occupational medicine program to provide services to workers? <b>(FA-8.1)</b>	
	Is the occupational medicine program directed by a graduate of a school of medicine or osteopathy and licensed for medical practice in the state in which the project is located? <b>(FA-8.2)</b>	
	Are the occupational health personnel (e.g., doctors, nurses, counselors, psychologists) licensed, registered, or certified? <b>(FA-8.3)</b>	
	Does the program provide the occupational medicine providers access to hazard information, such as work-related hazards, JHAs, personnel actions resulting in a change of job functions, hazards or exposures? <b>(FA-8.4)</b>	
	Does the program require the contractor to notify the occupational medicine provider when an employee has been absent because of an injury or illness for more than five consecutive workdays? <b>(FA-8.5)</b>	
	Does the program require the contractor to provide the occupational medical provider information on, and the opportunity to participate in worker safety and health meetings and committees? <b>(FA-8.6)</b>	
	Does the program require the contractor to provide occupational medical provider access to the workplace for evaluation of job conditions and issues relating to workers' health? <b>(FA-8.7)</b>	
	Does the program require the designated occupational medicine provider to plan, implement the occupation medicine services and participate in worker protection team activities? <b>(FA-8.8)</b>	
	<p>Are the records developed and maintained for each worker containing medical, health history, exposure history, and demographic data collected for occupational medicine purposes? <b>(FA-8.9)</b></p> <p>Note: All occupational medical records must be maintained in accordance with Executive Order 13335, <i>Incentives for the Use of Health Information Technology</i>.</p>	
	Does the program require the occupational medicine services provider to determine the content of the worker health evaluations by a licensed physician? <b>(FA-8.10)</b>	
	Does the program require the occupational medicine services provider to monitor ill and injured workers to facilitate their rehabilitation? <b>(FA-8.11)</b>	
	Does the program require the occupational medicine services provider to review and approve the medical and behavioral aspects of employee counseling and health promotional programs? <b>(FA-8.12)</b>	
FA-9 (Motor Vehicle Safety)	Is there an established motor vehicle safety program to protect the safety and health of all drivers and passengers in motor vehicles and powered industrial equipments, such as tractors and fork trucks? <b>(FA-9.1)</b>	

ID #	Performance Objectives and Criteria <sup>2</sup>	Met?
	Does the motor safety program address areas such as: minimum licensing requirements; training for specialty vehicle operators; requirements for maintenance and inspection; awareness campaigns; and incentive programs to encourage safe driving? <b>(FA-9.2)</b>	
FA-10 (Electrical Safety)	Is there an established electrical safety program to ensure the safety and health of the workplace, enhance electrical awareness, and mitigate potential electrical hazards to employees?	
FA-11 (Nano-technology Safety)	Is there an established nanotechnology safety program consistent with DOE P 45.1, <i>Secretarial Policy Statement on Nanoscales Safety</i> , and DOE N 456.1, <i>The Safe Handling of Unbound Engineered Nanoparticles</i> ?  Note: This Functional Program Area may not be applicable to construction projects.	