



U.S. DEPARTMENT OF
ENERGY



A Basic Overview of the

Worker Safety and Health Program (10 CFR 851)

*Outreach & Awareness Series to
Advance DOE Mission*



February 2015

Office of Environment, Health, Safety and Security (AU)

U.S. Department of Energy

Worker Safety and Health Program Rule (10 CFR 851)

OVERVIEW

The Department of Energy (DOE) is undergoing a major operational and mission renaissance in response to the President's and the Secretary's priorities. These mandates include rapid implementation of the economic recovery package, enhancing energy security, restoring science leadership, reducing greenhouse emissions, and enhancing the Nation's nuclear security.

Realizing these objectives involve the creation of hundreds of new positions and jobs resulting in hiring and recruitment of thousands of new skilled workers throughout the DOE complex. Many of these new workers may be unfamiliar with the way safety and health requirements are implemented at DOE worksites.

This pamphlet is developed as part of the Office of Environment, Health, Safety and Security's (AU) outreach and awareness campaign to proactively advance safe execution of the DOE mission. It is intended to provide an abbreviated summary of regulatory requirements and performance expectations provided in Title 10, Code of Federal Regulations, Part 851, *Worker Safety and Health Program*. The Worker Safety and Health Rule serves as the Department's overarching regulatory framework to protect the safety and health of thousands of contract workers just as the Occupational Safety and Health Administration does for private sector workers. The safety of workers and safe execution of the DOE mission is a DOE line management responsibility. However, its ultimate success depends greatly on collective and informed collaboration of many stakeholders, including DOE Headquarters; Field Offices; Labor Unions; safety, environment, health, and security professionals; and Federal and contractor organizations and workers.

HSS stands ready to provide programmatic consultation, scientific subject matter expertise, and technical assistance related to a wide range of worker safety and health issues and topics. Please do not hesitate to contact us with any questions or need for assistance.

Matthew B. Moury

Associate Under Secretary for Environment, Health, Safety and Security

U.S. Department of Energy



Table of Contents

What is the Worker Safety and Health Rule?	1
Who does the Worker Safety and Health Rule Apply to?	2
What does the Rule Require of Management?	3
What does the Rule Require of Workers?	4
What are the Training and Information Requirements?	5
What are the Basic Elements of the Worker Safety and Health Program?	5
What Resources are Available to Assist with Development and Implementation of an Effective Worker Safety and Health Program?	6
Who Should I Contact if I Have a Concern or Question?	6
Table 1: 10 CFR 851 Performance Expectations	7

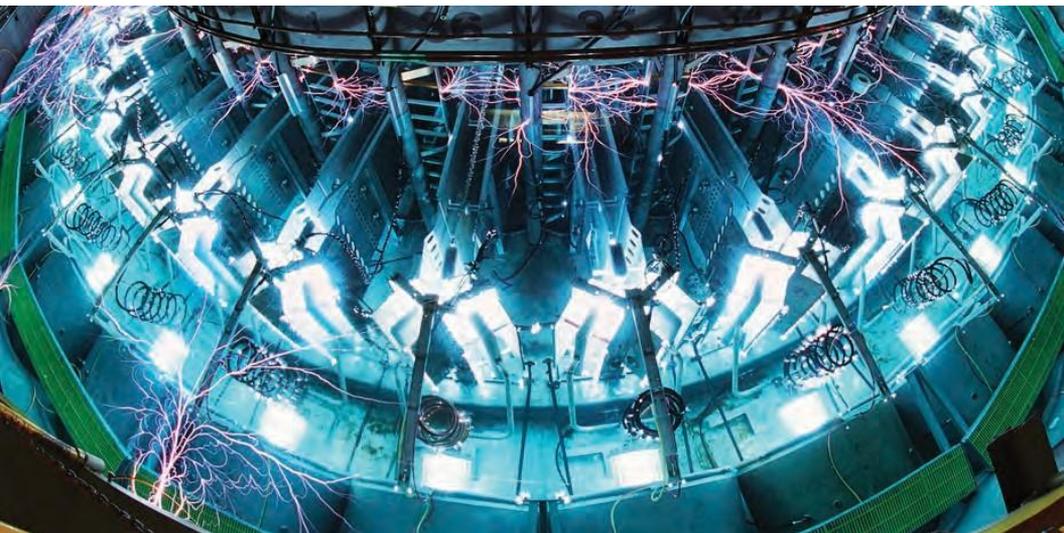
What is the Worker Safety and Health Rule?

On February 9, 2006, the Department of Energy (DOE) published in the Federal Register Title 10, Code of Federal Regulations (CFR), Part 851, *Worker Safety and Health Program* (the Rule) pursuant to DOE's authority under the Atomic Energy Act of 1954 and subsequent reorganization acts.

The Rule establishes the framework for DOE Contractor's non-radiological worker safety and health programs just as the Occupational Safety and Health Administration (OSHA) does for the private industry. 10 CFR 851 provides DOE contractor workers with safe and healthful workplaces in which hazards are abated, controlled, or otherwise mitigated in a manner that provides reasonable assurance that workers are protected from the hazards associated with their jobs. To accomplish this objective, the Rule establishes management responsibilities, workers rights, required safety and health standards, and training for the hazards of their jobs as well as how to control the hazards.

The Rule can be viewed at:

<http://www.gpo.gov/fdsys/pkg/CFR-2012-title10-vol4/pdf/CFR-2012-title10-vol4-part851.pdf>



Department of Energy, Sandia National Laboratory

Who does the Worker Safety and Health Rule Apply to?

The Rule applies to work performed by contractors at DOE sites. A contractor means any one under contract with DOE, including subcontractors at any tier, and any affiliated entity such as a parent organization. Contractor activities include design, construction, operation, maintenance, decontamination and decommissioning, research and development, and environmental restoration related work.

The Rule requires DOE contractors to perform work in a manner that protects the safety and health of workers, without regard to whether the workers are employed by a contractor engaged in a nuclear or a non-nuclear activity.

The Rule does not apply:

- At sites regulated by OSHA or sites operated by Naval Nuclear Propulsions;
- An organization working at a DOE site that is regulated by OSHA. For example, other federal organizations and organizations conducting work on a DOE site under a “Community Re-Use” arrangement. In this case, DOE contractors should inform the OSHA covered organization’s representatives about the site hazards and the DOE contractor’s worker safety and health program prior to the commencement of work in order to protect those workers and to avert those workers from creating hazards to DOE contractor workers;
- Radiological hazards which are covered by 10 CFR Part 835;
- Activities performed at a non-DOE site; or
- Transportation activities to and from a DOE site.
- DOE Federal Employees (Federal employees are covered by DOE Order 440.1B)



Department of Energy, Hanford Site - Richland

What does the Rule Require of Management?

The Rule requires management to:

- Establish written policy, goals and objectives for the safety and health program;
 - Provide DOE a copy of their written Worker Safety and Health Program (WSHP) describing the methods they will use to implement the requirements of the Rule;
 - Use qualified safety and health staff (e.g., certified industrial hygienist, safety professional) to direct and manage the program;
 - Assign worker safety and health program responsibilities, evaluate personnel performance and hold personnel accountable for workers safety and health performance;
 - Provide mechanisms to involve workers and their elective representatives in development of the worker safety and health program goals, objectives, and performances measures and in the identification and control of hazards in the workplace;
 - Establish 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;
 - Provide for prompt response to such reports and recommendations;
 - Provide for regular communication with workers about workplace safety and health matters;
 - Establish procedures to permit workers to stop work or decline to perform an assigned task because of a reasonable belief that the task poses an imminent risk of death, serious physical harm, or other serious hazard to workers, in circumstances where the workers believe there is insufficient time to utilize normal hazard reporting and abatement procedures; and
 - Inform workers of their rights and responsibility by appropriate means, including posting the DOE-designated Worker Safety and Health Poster in the workplace where it is accessible to all workers.
- A copy of the poster, in English or Spanish, may be obtained at:

<http://www.energy.gov/ehss/downloads/job-safety-and-health-poster>



Department of Energy, Savannah River Site - Salt Waste Processing Facility (SWPF)

What does the Rule Require of Workers?

Workers are required to comply with the Rule's requirements and the worker safety and health program that are applicable to their own actions and conduct.

Workers have the right, without reprisal, to:

- Participate in activities described in the Rule on official time and have access to:
 - DOE safety and health publications;
 - The worker safety and health program for their workplace;
 - The standards, controls, and procedures applicable to their workplace;
 - The safety and health poster that informs the worker of relevant rights and responsibilities;
 - Information on the recordkeeping log (OSHA Form 300). Access is subject to Freedom of Information Act requirements and restrictions; and
 - The DOE Form 5484.3 (the DOE equivalent to OSHA Form 301) that contains the employee's name as the injured or ill worker.
- Be notified when monitoring results indicate the worker was overexposed to hazardous materials;
- Observe monitoring or measuring of hazardous agents and have the results of their own exposure monitoring;
- Have a representative authorized by employees accompany the DOE or their authorized personnel during physical inspection of the workplace for the purpose of aiding the inspection. When no authorized employee representative is available, the DOE or their authorized representative will consult with employees on matters of worker safety and health;
- Request and receive results of inspections and accident investigations;
- Express concerns related to worker safety and health;
- Decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious physical harm to the worker coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures; and
- Stop work when the worker discovers employee exposure to imminently dangerous conditions or other serious hazards; provided that any stop work authority must be exercised in a justifiable and responsible manner in accordance with procedures established in the approved worker safety and health program.

What are the Training and Information Requirements?

The Rule requires contractors to develop and implement a worker safety and health training and information program to ensure that all workers exposed or potentially exposed to hazards are provided with training and information on the hazards. Also, contractors are required to provide:

- Training and information for new employees before or at the initial assignment to a job;
- Periodic training as often as necessary to ensure that workers are adequately trained and informed;
- Additional training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists; and
- Training and information to workers who have worker safety and health program responsibilities that is necessary for them to carry out those responsibilities.

What are the Basic Elements of the Worker Safety and Health Program?

The following requirements reflect what the Department considers the essential elements of a successful worker safety and health program:

- Management responsibilities and worker rights (851.20);
- Hazard identification and assessment (851.21);
- Hazard prevention and abatement (851.22);
- Safety and health standards (851.23);
- Functional areas (851.24);
- Training and information (851.25); and
- Recordkeeping and reporting (851.26).

The Department recognizes that the worker safety and health program must be an integrated part of other related site-specific worker protection activities and the integrated safety management system [851.11(a)(3)(ii)]. Specifically, an acceptable worker safety and health program integrates the workplace hazards with other site hazards such as radiation, nuclear security, and emergency response.

What Resources are Available to Assist with Development and Implementation of an Effective Worker Safety and Health Program?

- 10 CFR 851 *Worker Safety and Health Program* Rule (Feb 2006):
 - <http://www.gpo.gov/fdsys/pkg/FR-2006-02-09/pdf/06-964.pdf>
- DOE G 440.1-1B, *Worker Safety and Health Program for DOE (including the National Nuclear Security Administration) Federal and Contractor Employees*:
 - <http://www.directives.doe.gov/directives-documents/0440.1-BOrder-b>
- The Office of Health, Safety, and Security (AU) 10 CFR 851 Web Pages:
 - <http://www.energy.gov/ehss/worker-safety-and-health-program-10-cfr-851doe-o-4401b>
- Introduction to 10 CFR 851 Video:
 - http://www.energy.gov/exit?url=http%3A//youtu.be/FUsOuzi_TzU
- Frequently Asked Questions (FAQs):
 - <http://www.energy.gov/ehss/downloads/10-cfr-851-worker-safety-and-health-program-frequently-asked-questions-updated>

Contractor Worker Safety and Health Poster:

- Available in both English and Spanish :
 - <http://www.energy.gov/sites/prod/files/2014/08/f18/Job%20Safety%20%26%20Health%20Poster%2008052014%20Rev%201.pdf>

Who Should I Contact if I Have a Concern or Question?

If you have a concern or question you should contact:

- Your Supervisor;
- Your site Safety and Health Professional;
- Your Employee Concern Program;
- The Office of Worker Safety and Health Policy, AU-11;
Phone: 301-903-6061
- The Office of Worker Safety and Health Enforcement, EA-11.
<http://energy.gov/ea/office-worker-safety-and-health-enforcement>

Table 1 below provides a simplified overview of 10 CFR 851 performance expectations. This table can be used as a starting point by any organization to perform a self-assessment of its worker safety and health program.

Table 1: 10 CFR 851 Performance Expectations

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Subpart A – General Provisions				
Subpart B – Program Requirements				
Development and approval of the worker safety and health program [851.11(a)]	Has a worker safety and health program been prepared and submitted to DOE for approval?			
DOE evaluation and approval [(851.11(b)) Updates [851.11(c)]	Has the plan been approved by the DOE?			
	Has the plan been updated on an annual basis and submitted to the DOE for approval?			
Labor organizations [851.11(d)]	Have the labor organizations been notified of the development and implementation of the worker safety and health program?			
Subpart C – Specific Program Requirements				
Management Responsibilities and Worker Rights and Responsibilities (851.20)				
Policy, Goals, and Objectives [851.20(a)(1)]	Are there written policy, goals, and objectives for the worker safety and health program?			
Qualified Staff [851.20(a)(2)]	Are there technical qualification standards to ensure the safety and health professionals are qualified to manage the worker safety and health program?			
Accountability [851.20(a)(3)]	Are the safety and health roles, responsibilities and authorities clearly delineated for workers at all levels?			
Employee Involvement [851.20(a)(4) & (b)(5)]	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?			
Access to Information [851.20(a)(5) & (b)(2), (3), (4), (5), (6), (10)]	Can the workers readily access information relevant to the worker safety and health program?			
Reporting of Events and Hazards [851.20(a)(6),(7) & (b)(7)]	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? Are there established procedures for prompt response to the reports and recommendations made by workers?			
Regular Communications [851.20(a)(8)]	Are there established procedures for regular communication, such as weekly safety meetings, with workers about workplace safety and health matters?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.

Table 1: 10 CFR 851 Performance Expectations (Continued)

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Subpart C – Specific Program Requirements (Continued)				
Management Responsibilities and Worker Rights and Responsibilities (851.20) (Continued)				
Inform Workers of Rights [851.20(a)(10)]	Are there established procedures to inform workers of their rights and responsibilities by appropriate means, such as training?			
Stop Work Authority [851.20(a)(9) & (b)(8),(9)]	Are there established procedures to permit workers to stop work or decline to perform an assigned task which is not safe to perform?			
Hazard Identification and Assessment (851.21)				
Identify and Assess Risks [851.21(a)]	Are there established procedures to identify workplace hazards and to assess the risk of associated worker injury or illness?			
Assess Workers Exposures [851.21(a)(l) & (c)]	Are there established assessments of chemical, physical, biological, and safety workplace hazards?			
Document and Record Hazard Assessments [851.21(a)(2) & (3)]	Are the hazard assessments documented for the identified chemical, physical, biological, and safety hazards? When recording observations, testing and monitoring results, does the recording process and results follow the quality assurance plan consistent with DOE O 414.1C <i>Quality Assurance</i> .			
Analyze Designs for Potential Hazards [851.21(a)(4)]	Are safety professionals involved in hazards analysis during conceptual, preliminary, and final design to ensure that the facility was designed in accordance with national safety and health standards and within regulatory requirements, including 10 CFR 851, 29 CFR 1910, and 10 CFR 835?			
Evaluate Operations, Procedures, and Facilities to Identify Workplace Hazards [851.21(a)(5)]	Are workers and supervisors involved in a team environment with the safety professionals in evaluating operations, procedures, and facilities? Do workers and supervisors conduct daily workplace evaluations to identify workplace hazards?			
Job Activity-Level Hazard Analysis [851.21(a)(6) & (8)]	Is Job Hazard Analysis (JHA) being conducted for situations including 1) 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? Are the workers and their supervisor involved in the JHAs? Are JHAs being performed by subcontractors as part of their workplace safety program?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.

Table 1: 10 CFR 851 Performance Expectations (Continued)

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Subpart C – Specific Program Requirements (Continued)				
Hazard Identification and Assessment (851.21) (Continued)				
Review Safety and Health Experience [851.21(a)(7)]	Is site/project safety and health experience information reviewed for trends and lessons learned, including accident investigations, injuries, and illnesses and analysis of related data?			
Hazard Prevention and Abatement (851.22)	Does the current hazard abatement program ensure that workers are protected from exposure to workplace hazards? Is the hazard abatement program consistent with the following selection approach – hazard elimination; passive engineering controls; active engineering controls; administrative controls; and then personal protective equipment?			
Safety and Health Standards (851.23)	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?			
Functional Areas (851.24)	Does the worker safety and health program address the functional areas listed in Appendix A that are applicable to the hazards of the site?			
Training and Information (851.25)	Is there a worker safety and health training and information program to ensure that workers can perform their duties in a safe and healthful manner?			
Recordkeeping and Reporting (851.26)	Is there an adequate recordkeeping and reporting program to document and retain record on information including hazard inventories, hazard assessments, worker exposure monitoring, and worker exposure controls?			
Subpart D – Variances				
Temporary Variance (851.31(d)(1))	Is the application being submitted 30 days before the effective date of the new safety and health standard?			
	Is there a statement explaining why you are unable to comply with the standard or portion(s) thereof by its effective date?			
	Is there a detailed statement explaining the factual basis and representations of qualified persons that support the statement?			
	Is there a statement explaining the steps taken and plans to take, with specific dates if appropriate, to protect workers against the hazard?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.

Table 1: 10 CFR 851 Performance Expectations (Continued)

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Subpart D – Variances (Continued)				
Temporary Variance (851.31(d)(1)) (Continued)	Is there a statement explaining when you expect to comply with the standard, and what steps you have taken and plan to take with specific dates if appropriate, to come into compliance with the standard?			
	Is there a statement of the facts that you would show to establish that:			
	– You are unable to comply by the effective date because of unavailability of professional or technical personnel?			
	– Or, you are unable to comply by the effective date because materials or equipment needed to come into compliance with the standard?			
	– Or, you are unable to comply by the effective date because necessary construction or alteration of facilities cannot be completed by the effective date of the standard?			
	Is there a statement of the facts that you would show to establish that you are taking all steps to safeguard the workers against the hazards covered by the standard?			
	Is there a statement of the facts that you would show to establish that you have an effective program for coming into compliance with the standard as quickly as practicable?			
Permanent Variance (851.31(d)(2))	Is there a description of the conditions, practices, means, methods, operations, or processes used or proposed to be used?			
	Is there a statement showing how the conditions, practices, means, methods, operations, or processes used, or proposed to be used, would provide workers a place of employment which is as safe and healthful as would result from compliance with the standard that you are seeking a variance from?			
National Defense (851.31(d)(3))	Is there a statement showing that the variance sought is necessary to avoid serious impairment of national defense?			
	Is there a statement showing how the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a safe and healthful place of employment in a manner that is consistent with the standard from which a variance is sought?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.

Table 1: 10 CFR 851 Performance Expectations (Continued)

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Appendix A - Program Functional Areas				
Construction Safety	Has a written Construction Project Safety and Health Plan been developed and approved prior to commencement of construction activities?			
	Are Job Hazard Analyses (JHAs) being implemented for all construction activities?			
	Is there a designated representative on site at all times during active construction?			
Fire Protection	Is the fire safety and emergency response program implemented and maintained?			
	Is the program in compliance with applicable building codes and National Fire Protection Association (NFPA) codes and standards?			
Explosive Safety	Is there an established explosives safety program and is it being implemented consistent with DOE M 440.1-1A <i>Explosives Safety Manual</i> ?			
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 and sound engineering principles?			
Firearms Safety	Are there established firearms safety policies and procedures for security operations and training to ensure proper accident prevention controls are in place?			
Industrial Hygiene	Does the industrial hygiene program require conducting initial or baseline surveys and periodic resurveys and/or exposure monitoring of all work areas or operations to identify and evaluate potential worker risk?			
	Is the program being managed and implemented by a professional and technically qualified industrial hygienist?			
	Does the program coordinate with planning and design personnel?			
	Does the program coordinate with occupational medicine, environmental, health physics and work-planning professionals?			
	Are there policies and procedures to mitigate the risk from identified and potential occupational carcinogens?			
Biological Safety	Is there an established biological safety program to address biological hazards?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

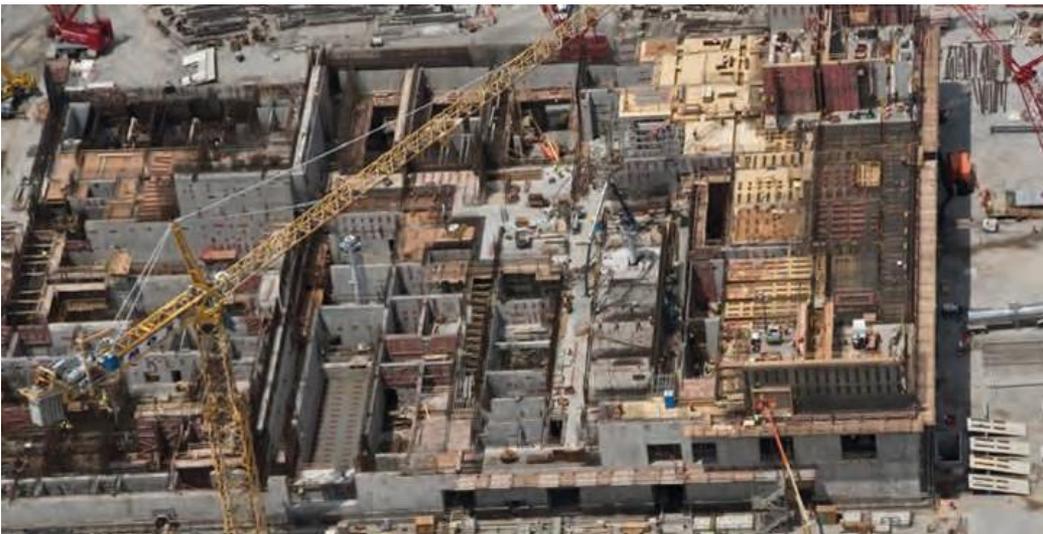
² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.

Table 1: 10 CFR 851 Performance Expectations (Continued)

Requirement	Performance Expectation ¹	Policy and Guidance Available ²		
		Yes	No	N/A
Appendix A - Program Functional Areas (Continued)				
Occupational Medicine	Is there an established occupational medicine program, including written descriptions and plans for implementation?			
	Does the program address areas including occupational medical program qualifications and requirements, medical monitoring, medical restriction notification, evaluations of morbidity and mortality, health promotional programs, and emergency preparedness?			
Motor Vehicle Safety	Is there an established motor vehicle safety program to protect the safety and health of all drivers and passengers in Government-owned or leased motor vehicles and powered industrial equipment?			
Electrical Safety	Is there an established electrical safety program to ensure the safety and health of the workforce, enhance electrical safety awareness, and mitigate potential electrical hazards to employees?			
Nanotechnology Safety	Is there an established nanotechnology safety program consistent with DOE P 456.1, <i>Secretarial Policy Statement on Nanoscales Safety</i> , and DOE P 456.1, <i>The Safe Handling of Unbound Engineered Nanoparticles</i> ?			

¹ These basic performance expectations should be supplemented by additional ones based on 10 CFR 851 requirements.

² If YES, identify specific site policy and guidance. If NO, ensure appropriate site policy and guidance is developed.



Department of Energy, Savannah River Site - Mixed Oxide Fuel Fabrication Facility Under Construction

Points of Contact

For additional information or assistance, please contact:

- **Patricia Worthington, PhD**

Director, Office of Health and Safety, AU-10
Office of Environment, Health, Safety and Security
Phone: (301) 903-5926
pat.worthington@hq.doe.gov

- **Bill McArthur, PhD, CIH**

Director, Office of Worker Safety and Health Policy, AU-11
Office of Environment, Health, Safety and Security
Phone: (301) 903-6061
bill.mcarthur@hq.doe.gov