

Corporate Process Requirement No: CPR400.1.3

Sponsor: Dori Ellis, 4000, Acting

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PRICE-ANDERSON AMENDMENTS ACT (PAAA) NUCLEAR AND WORKER SAFETY REQUIREMENTS

Subject Matter Expert: [Darlene Moore](#); SNL/CA Counterpart: N/A

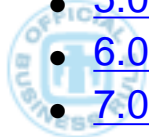
Issue B

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[Change History](#)

This document contains the following sections:

- [1.0 Purpose](#)
 - [2.0 Statement of Applicability](#)
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1.0 PURPOSE

The purpose of this corporate process requirement (CPR) is to provide a tool to improve nuclear and worker safety and health at Sandia National Laboratories (SNL). This CPR identifies Sandia Corporation (Sandia) responsibilities and the process for identifying, reporting, and correcting Price-Anderson Amendments Act ([PAAA](#)) nuclear and worker safety issues and [nonconformances](#).

Members of the Workforce (MOWs) are responsible for reporting nuclear and worker safety issues and nonconformances according to Sandia business rules in corporate reporting processes.

2.0 STATEMENT OF APPLICABILITY

This CPR applies to all activities performed by Members of the Workforce for the Department of Energy (DOE).

- The nuclear safety requirements apply to activities on either [Sandia-controlled premises](#) or non-Sandia-controlled premises.
- The worker safety requirements apply to activities that are in furtherance of a DOE mission, on DOE sites which are Sandia-controlled premises and those non-Sandia-controlled premises that are owned, leased or controlled by DOE.

Covered activities include those that have the potential to result in:

- Radiological harm – including activities at facilities where nuclear material is not present, but could potentially cause radiological harm at a later time (e.g., facilities that prepare the nonnuclear components of nuclear weapons).
- An occupational exposure to ionizing radiation or radioactive material.
- Occupational injuries and illnesses or unsafe work conditions.

For purposes of this document, Members of the Workforce are:



- Sandia employees.
- Sandia contractors as specified in CPR400.1.1/MN471001, *ES&H Manual*, [Section 1B](#), "What Is the Scope."

Requests for exceptions beyond those stated in the above mentioned documents must be submitted in writing to the Corporate Sponsor of this process requirement in accordance with CPR001.1, *Corporate Business Rules System Standard*, [Section 3.7](#), "Exceptions to the Corporate Business Rules." Consequences for violating Corporate Business Rules shall be determined in the same manner as other [disciplinary actions](#) outlined in [CPR300.4.3](#), *Employee Conduct and Corrective Discipline*.



3.0 PROCESS REQUIREMENTS

The Nuclear Safety Rules and the Worker Safety and Health Program (hereafter referred to as the Safety Rules) define [DOE safety requirements](#), based in the Code of Federal Regulations (CFR). The Safety Rules are enforceable through the DOE Office of Enforcement (OE). Reporting the Safety Rules issues and [nonconformances](#) is managed through the [Sandia Safety and Security Regulatory Support Office \(SSRSO\)](#). In general, the Safety Rules requirements include:

Safety Rules	Code of Federal Regulations (CFR)
Radiological protection requirements for activities involved in the use of radioactive materials or radiation-generating devices	10 CFR 835
Quality assurance requirements for conducting activities, including providing items or services that may affect nuclear safety	10 CFR 830
Safety basis requirements (for hazard category 1, 2, and 3 DOE nuclear facilities). Hazard assessments are performed on facilities below category 3 per CPR400.1.1/MN471001, <i>ES&H Manual</i> , Chapter 13	10 CFR 830

Worker Safety and Health Program requirements that reduce or prevent occupational injuries, illnesses, and accidental losses by providing DOE contractors and their workers with safe and healthful workplaces	10 CFR 851
DOE contractor employee standards that assure protection from reprimand, retaliation, or duress for employees who identify and report nuclear and/or safety concerns	10 CFR 708

4.0 IMPLEMENTATION

In order to ensure communication and implementation of the Safety Rules, the majority of the requirements are contained in the corporate business rules listed in [Section 7.2](#) of this document, “Implementing Documents.”

To prevent Safety Rules [nonconformances](#) MOWs should:

- Identify activities that could potentially harm workers.
- Evaluate each identified activity using [Integrated Safety Management System \(ISMS\)](#) principles for ensuring implementation of safety.
- Incorporate appropriate hazard mitigation in work controls.
- Take training such as PAAA100 and PAAA200 for additional Safety Rules guidance.

If Safety Rules nonconformances do occur, as determined by the manager, then follow requirements, including:

- Prompt identification and reporting of the nonconformances as described in CPR400.1.1/MN471001, *ES&H Manual*, [Section 18G](#), “Identifying, Reporting, and Correcting Nuclear Nonconformances.”

- [CPR001.3.11](#), Corporate Corrective Action Process:
 - Conduct a causal analysis, including “extent-of-condition review” if needed.
 - Identify comprehensive corrective actions that preclude recurrence.
 - Ensure verification of corrective action and validation of effectiveness, as required.
 - Communicate lessons learned.



Issues and nonconformances with corporate requirements are subject to review by the Safety and Security Issues Review [Committee \(SSIRC\)](#) to determine if they are also noncompliances with the Safety Rules. SSIRC reviews issues, assessments, events, reports, and findings, primarily identified in corporate reporting processes and databases such as the Occurrence Management System, Integrated Reporting Management System (IRMS), and the Corporate Corrective Action Tracking System (CATS). Based on recommendations from the Committee, the SSRSO manager determines whether reported issues are Safety Rules noncompliances and which reporting criteria they meet.

- Nonconformances and Safety Rules noncompliances are documented in the Sandia Safety Rules local database for tracking and trending.
- Safety Rules noncompliances that meet the DOE [Noncompliance Tracking System](#) (NTS) criteria are also reported to the NTS. The Sandia NTS reports are available on the [SSRSO website](#).



The SSRSO Manager shall notify the appropriate members of line management of the issue disposition along with any required actions. The following table illustrates possible issue dispositions, required management notifications, and the minimum required actions.

Disposition	Notification To¹	Minimum Required Actions¹
Not a Safety Rules Noncompliance	<ul style="list-style-type: none"> ● No notifications required 	None


Safety Rules
Noncompliance

- Reportable to
Sandia's
Safety Rules
local tracking
system

- Senior Manager for
owning organization
- Owing organization
manager

With copy to:



- Division ES&H
Coordinator
- Center ES&H
Coordinator,
Organization Manager,
and Report Author in
the case of 12870 or
12300 Assessments

Owning organization managers
ensure that:

- Causal analysis is
performed.
- Comprehensive corrective
actions are implemented to
prevent recurrence.
- Corrective action
completions are verified
and are periodically
validated for effectiveness
- Lessons learned are shared
through Sandia's feedback
and improvement
programs.
- The evidence file includes
the causal analysis,
corrective action plan, and
evidence of corrective
action closure (follow
record-keeping
requirements within the
organization).
- A copy of these items in the
evidence file is forwarded to
the SSRSO Manager.

See CPR400.1.1/MN471001,
ES&H Manual, [Section 18G](#),
“Identifying, Reporting, and
Correcting Nuclear Safety
Nonconformances.”



<p>Safety Rules Noncompliance</p> <p>- Reportable to DOE NTS</p>  	<p>Director of the owning line organization</p> <p>With copy to:</p> <ul style="list-style-type: none"> • Vice President • Senior Manager for the owning organization • Division ES&H Coordinator • Center ES&H Coordinator, Organization Manager and Report Author in the case of 12870 or 12300 Assessments 	<ul style="list-style-type: none"> • Root causal analysis is required with extent-of-condition review • Follow remaining actions as described above in the "Noncompliance - Reportable to Sandia's Safety Rules local tracking system" • Owing organization managers shall also periodically validate that corrective actions are still in place and continue to be effective <p>Note: Based on the type of issue, the SSRSO Manager shall determine if additional validation of effectiveness of the corrective actions is required.</p>
<p>¹The required actions communicated in the notification are the responsibility of the person being notified. Traditionally, these actions are coordinated by the Division ES&H Coordinator.</p>		

5.0 ENFORCEMENT

The DOE has adopted an enforcement process that provides positive incentives for contractors that critically self-assess activities, identify, report, and comprehensively correct noncompliance conditions in a timely manner. Sandia determines if there are noncompliance issues and the DOE determines if the issues are a violation of the Nuclear Safety Rules or Worker Safety and Health Program and if the issues warrant additional investigation.

The Sandia SSRSO coordinates all external interactions related to Safety Rules

enforcement. Certain costs associated with enforcement actions are non-recoverable and must be documented. The SSRSO has the responsibility to arrange for an employee representative to be available during an enforcement inspection. The SSRSO also is responsible for the enforcement action posting requirements.

Additional information is available in [PG470208](#), *The Price-Anderson Amendments Act (PAAA) Nuclear and Worker Safety Requirements Program Plan*, and at Sandia's SSRSO [website](#).

6.0 ROLES AND RESPONSIBILITIES

The roles and responsibilities outlined below address Sandia-specific roles regarding compliance with the Safety Rules.

6.1 Laboratory Deputy Director

The Laboratory Deputy Director has delegated ownership of the Safety Rules enforcement process program to the Vice President of Infrastructure Operations and Business Management.

6.2 Vice President, Infrastructure Operations and Business Management

The Vice President of Infrastructure Operations and Business Management is the Safety Rules enforcement process Program Owner and has authority and responsibility for:

- Establishing and maintaining the SSRSO department.
- Monitoring Sandia's compliance with negotiated schedules to avoid violations of Safety Rules.
- Resolving disputes regarding determinations made by the SSRSO Manager.
- Activating the Safety Rules Evaluation Team (SRET) to review issues and events from a corporate viewpoint, as appropriate.

Note: See [PG470208](#) for specific roles and responsibilities of the SRET.

6.3 Division Vice Presidents

Are responsible for:

- Implementing the Safety Rules requirements.
- Hosting a center-wide awareness activity if two or more nuclear safety NTS reportable events, that have similar causes, occur within a twelve-month period; or when full implementation of past corrective actions should have prevented the incident.
- Ensuring that the issues and results of center-wide awareness activities are presented at the next scheduled Laboratory Leadership Team (LLT) meeting. The lessons learned should also be communicated through the Division representative to the Radiological Protection Safety Committee (RPSC) and the Line Implementation Working Group (LIWG), as appropriate.

Note: The center-wide awareness process shall be initiated by the SSRSO Manager who shall notify the Division Vice President and the Division ES&H Coordinator when the criteria discussed above has been met.

6.4 Safety and Security Issues Review Committee (SSIRC)

The SSIRC provides advice and recommendations to the SSRSO Manager on the disposition of reported issues as outlined in [Section 4.0](#), "Implementation."

6.5 Safety and Security Regulatory Support Office (SSRSO) Manager

Is responsible for:

- Assisting line organizations in analyzing issues and assessments for conformance with the Safety Rules.
- Coordinating all external interactions and internal interpretations related to Safety Rules.

- Determining if reported issues are Safety Rules noncompliances and which Safety Rules reporting system is appropriate.
- Coordinating a meeting with management and a representative from Sandia's Legal Division, as appropriate, if there are Safety Rules determination disputes. The Laboratory Deputy Director, the Safety Rules Owner, and Sandia's Legal Division representative shall make the final determination.
- Notifying the affected Division Vice President, the Division ES&H Coordinator and Executive Staff, when Safety Rules center-wide activity criteria have been met.
- Arranging for an employee representative to be available during a Worker Safety and Health Program enforcement inspection and ensuring enforcement action posting requirements are followed.



6.6 Owners of Sandia Functional Programs that Implement Safety Rules

Functional program owners who support activities that integrate Safety Rules requirements are responsible for ensuring that:

- Safety Rules requirements are reviewed to ensure that their program adequately addresses applicable requirements.
- Safety Rules requirements are communicated to the appropriate line organizations, departments, and programs.
- Safety Rules nonconformance issues are reported according to Sandia guidance.
- Results of issues, events, and assessment findings are made available or forwarded to the SSRSO Manager.



6.7 Line Management

Senior Managers, as well as the Director or Vice President of the owning line organization, as appropriate, are responsible for ensuring that:

- Processes used by the MOWs in their facilities and operations incorporates applicable corporate requirements for nuclear and worker safety.





- Safety Rules reporting requirements are followed according to CPR400.1.1/ MN471001, *ES&H Manual*, [Section 18G](#), “Identifying, Reporting, and Correcting Nuclear Safety Nonconformances.”
- For those issues that are determined to be a noncompliance with Safety Rules requirements, the specific actions from the SSRSO Manager are followed.

6.8 Members of the Workforce

Are responsible for:

- Promptly reporting all nonconformances with Sandia business rules, with regards to Safety Rules requirements, to line management or the ES&H Coordinator using an existing reporting process as outlined in CPR400.1.1/MN471001, *ES&H Manual*, [Chapter 18](#), “Reporting, Investigating, and Correcting ES&H Events.”



6.9 Legal Division

The Legal Division Representative is responsible for:

- Advising the SSRSO Manager on issues related to Safety Rules noncompliances.
- Notifying the SSRSO Manager of any notices concerning PAAA or applicable [DOE Nuclear Safety](#) or [Worker Safety and Health Program](#) requirements, as appropriate.
- Providing a representative for Safety Rules nonconformance determination disputes, as appropriate.



7.0 REFERENCES

7.1 Requirements Documents

[10 CFR 708](#), *DOE Contractor Employee Protection Program*.

[10 CFR 820](#), *Procedural Rules for DOE Nuclear Activities*.

[10 CFR 830](#), *Nuclear Safety Management*.

[10 CFR 835](#), *Occupational Radiation Protection*.

[10 CFR 851](#), *Worker Safety and Health Program*.

7.2 Implementing Documents

[CPSR001.3](#), *Integrated Laboratory Management System (ILMS)*.

[CPR001.3.2](#), *Corporate Quality Assurance Program*.

[CPR001.3.5](#), *Audits*.

[CPSR400.1](#), *Environment, Safety, and Health Policy Statement Requirement*.

CPR400.1.1/MN471001, *ES&H Manual*, [Section 18G](#), "Identifying, Reporting, and Correcting Nuclear Safety Nonconformances."

[CPR400.1.1.14](#)/GN470080, *Implementing the Unreviewed Safety Question (USQ) Process for Nuclear Facilities*.

[CPR400.1.1.32](#)/MN471016, *Radiological Protection Procedures Manual*.

[CPR400.1.1.38](#)/GN470101, *Preparation and Review of Documented Safety Analyses (DSAs) to Meet 10 CFR 830, Subpart B*.

[CPR400.1.2](#), *Integrated Safety Management System (ISMS) Description*.

CPR500.2.1, *Procurement Manual*, [Section 8](#), *Quality-Significant Procurement*.

7.3 Related Documents

[CPR001.3.7](#), *Nuclear Weapon Safety*.

[CPR100.3.1](#), *Standards and Calibration*.

[CPR400.1.1.11](#)/GN470072, *Nuclear Criticality Safety*.

[PG470208](#), *Worker Protection Program (WPP)*.



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CHANGE HISTORY



CPR 4001.3, PRICE-ANDERSON AMENDMENTS ACT (PAAA) NUCLEAR AND WORKER SAFETY REQUIREMENTS

November 29, 2006

Note: Over 75% of this CPR is either new or has changed and should be read in its entirety.

August 11, 2005

Administrative Changes Only



- **Change:** Subject Mater Expert from Francine Vigil to Darlene Moore.
- Under topic heading, “3.0 Process Requirements”:
 - **Delete:** Note that states, the preferred method of identification is through assessments rather than events. Prompt identification is essential in the event that the nonconformance is reportable to the DOE Noncompliance Tracking System (NTS).
 - **Delete:** The specific process requirement for, open and prompt reporting of PAAA Nuclear Safety Rule nonconformances, for all PAAA Nuclear Safety Rule nonconformances.
 - **Delete:** Note that states, that if a nuclear safety nonconformance is identified, report the issue using existing reporting processes as described in CPR400.1.1/ MN471001, *ES&H Manual*, Section 18G, “Identifying, Reporting, and Correcting Nuclear Safety Nonconformances.”
- Under topic heading, “4.0 PAAA Implementation”:
 - **Change:** “No further action” in the, **Disposition** column of the section table to “Not PAAA”.
 - **Change:** “Owning organization manager With copy to:



- Division ES&H Coordinator
- Center ES&H Coordinator
- Radiological Protection Safety Committee (RPSC) Representative
- Division Quality Assurance Working Group (QAWG) Representative”

to “no notifications required” in the **notification to** column of the section table under not PAAA.



- **Add:** Owning organization manager With copy to:
 - Division ES&H Coordinator
 - Center ES&H Coordinator
 - Radiological Protection Safety Committee (RPSC) Representative
 - Division Quality Assurance Working Group (QAWG) Representative

to the **notification to** column of the section table under noncompliance – reportable to Sandia’s local tracking system.

- Under topic heading, “5.0 Roles and Responsibilities”:



- **Change:** Executive Vice President (EVP) to Laboratory Deputy Director.
- **Change:** Vice President, Energy, Information, and Infrastructure Surety to Vice President, Business Management and Enabling Services.
- **Delete:** the Risk Management Oversight Council (RMOC) as a forum for presenting issues and results of center-wide awareness activities.

June 29, 2005
Administrative Changes Only

This document has been revised to:

- **Change:** Executive Policy Sponsor from Les Shephard to Frank Figueroa



Administrative Changes Only February 22, 2005

This document has been revised to:

Change:

- Title of section 5.2 from Vice President, Human Resources and Protection Services to Vice President, Energy, Information, and Infrastructure Surety.



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