

LA-UR-17-28307

Approved for public release; distribution is unlimited.

Title: PAA, WSH, and CIS Overview Self-Study #47656

Author(s): Schroeder, Rachel Anne

Intended for: Training

Issued: 2017-09-14

Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By approving this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

PAA, WSH, and CIS Overview

Self-Study #47656



September 2017

This training course was prepared by Los Alamos National Security, LLC (LANS) under Contract DE-AC52-06NA25396 with the U.S. Department of Energy, National Nuclear Security Administration (DOE/NNSA). All rights in the material are reserved by DOE and LANS pursuant to the contract. This training course is presented with the understanding that the information and materials provided were developed based on specific circumstances present at the Los Alamos National Laboratory at the time of publication. Those circumstances may or may not be similar to conditions present at other locations represented by participants in this course. The course materials and information will need to be adapted accordingly. NEITHER THE DOE/NNSA, NOR LANS, NOR ANY OF THEIR EMPLOYEES, MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY INFORMATION, APPARATUS, PRODUCT, OR PROCESS DISCLOSED AND WILL NOT BE LIABLE FOR DIRECT OR INDIRECT DAMAGES RESULTING FROM USE OF THIS MATERIAL.

Instructional Designer

Technical Advisors

Rachel Schroeder

Alyssa Schreiber

Editor/Compositor

Lisa Rothrock

Course Number: 47656

September 2017

Controlled Document Number: PAAA_WSH_CIS Overview_47656_SS,R2.0

Contents

Introduction	1
Course Overview	1
Course Objectives	1
Target Audience	2
Course Limitations.....	2
About This Self-Study Course	2
Acronyms	2
Definitions.....	3
A Brief PAAA History	5
Module 1: DOE Enforcement Program	6
Overview	6
Objectives.....	6
Background of DOE Enforcement Program.....	6
PAAA, WSH, and CIS Enforceable Regulations.....	9
Module 2: Implementation of LANL PAAA Program.....	10
Overview	10
Objectives.....	10
Overview of LANL's Internal Compliance Program and Processes	10
Noncompliance Screening.....	11
Closure of Noncompliance Reports	13
Roles and Responsibilities	13
Resources	14
References	15
Appendix A: Description of PAAA, WSH and CIS Enforceable Regulations.....	16
Quality Assurance–10 CFR 830, Subpart A	16
Safety Basis Requirements–10 CFR 830, Subpart B	17
DOE Contractor Employee Protection Program–10 CFR 708	19
Worker Safety and Health–10 CFR 851	20
Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations–10 CFR 824	21

Introduction

Course Overview

This course presents an overview of the Department of Energy's (DOE's) regulatory requirements relevant to the Price-Anderson Amendments Act (PAAA, also referred to as nuclear safety), worker safety and health (WSH), and classified information security (CIS) that are enforceable under the DOE enforcement program; describes the DOE enforcement process; and provides an overview of Los Alamos National Laboratory's (LANL's) internal compliance program relative to these DOE regulatory requirements.

The LANL PAAA Program is responsible for maintaining LANL's internal compliance program, which ensures the prompt identification, screening, and reporting of noncompliances to DOE regulatory requirements pertaining to nuclear safety, WSH, and CIS to build the strongest mitigation position for the Laboratory with respect to civil or other penalties.

Note: DOE divides its enforcement program into the three separate programs of (1) nuclear safety, (2) WSH, and (3) CIS, whereas at LANL, the "PAAA Program" includes all three programs.

Course Objectives

Upon completing this course, you will be able to describe

- the regulatory requirements that are enforceable under the DOE enforcement program;
- the procedural rules governing the enforcement process that are established in 10 CFR 820, 10 CFR 851, and 10 CFR 824;
- the key areas/criteria of the regulatory requirements that are enforceable under the DOE enforcement program;
- an overview of the DOE enforcement process;
- the key functions of the LANL's internal compliance program (the PAAA Program);
- the process and responsibilities for identifying and screening issues for potential noncompliances;
- the process and responsibilities for reporting noncompliances and related corrective actions;

Introduction

- the process and responsibilities for tracking and closure of noncompliance reports; and
- the process and responsibilities for responding to Office of Enforcement (OE) inquiries and enforcement actions.

Target Audience

This course, *PAAA, WSH, and CIS Overview Self-Study* (#47656), or the equivalent training as determined by the LANL PAAA Program Manager, is required or suggested as follows:

If you are a . . .	this course is . . .	according to . . .
Manager at LANL	Required	<i>LANL Management Qualification Standard</i>
Worker at LANL	Suggested	<i>P141, Price-Anderson Amendments Act (PAAA), Worker Safety and Health (WSH) and Classified Information Security (CIS) Compliance Procedure</i>

Course Limitations

This course does not address detailed training needs for personnel responsible for performing Issues Management Coordinator (IMC) responsibilities. These training requirements can be found in LANL procedure P322-4, *Issues Management*.

About This Self-Study Course

PAAA, WSH, and CIS Overview Self-Study (#47656) consists of an introduction, two modules, and a resources section.

To obtain course credit, click on the link at the end of this document.

Acronyms

AEA	Atomic Energy Act
CFR	Code of Federal Regulations
CIS	classified information security
DOE	Department of Energy
ECP	Employee Concerns Program
FNOV	final notice of violation
IM	issues management
IMC	issues management coordinator
LANL	Los Alamos National Laboratory
NNSA	National Nuclear Security Administration

Introduction

NOV	notice of violation
NTS	Noncompliance Tracking System
OE	Office of Enforcement
ORPS	Occurrence Reporting and Processing System
PAAA	Price-Anderson Amendments Act
PNOV	preliminary notice of violation
QAP	Quality Assurance Program
SME	subject matter expert
SSIMS	Safeguard and Security Information Management System
TSR	technical safety requirement
WSH	worker, safety, and health

Definitions

Enforcement Action	A preliminary notice of violation (PNOV), Final Notice of Violation (FNOV), or compliance order; does not include a consent order, settlement agreement, enforcement letter, special report order, or advisory note.
Enforcement Conference	A conference held between OE and LANL to discuss an investigation, usually after an investigation report is issued by OE.
Enforcement Outcome	A general term referring to the result of an enforcement evaluation or investigation of an event or condition involving noncompliances.
Fact Finding	Short, onsite, data-gathering efforts by OE intended to facilitate a decision about whether to conduct a formal investigation.
Indemnification	Situations in which the government acts as an insurer against any findings of liability arising from the nuclear activities of LANL within the scope of its contract.
Intentional/Willfully Noncompliance or Misrepresentation	A determination that a worker intentionally violated, or was aware of a violation of a safety or security requirement and attempted to conceal the violation or made no reasonable attempt to eliminate or abate the conditions that gave rise to the violation (also known as willful noncompliance).
Issue	A failure to meet a documented requirement that results in a risk to performance.
Noncompliance	A Laboratory-identified failure to comply with a nuclear safety, WSH, or CIS requirement; a condition that does not meet a DOE regulatory requirement.
Noncompliance Tracking System (NTS)	The DOE-managed database used to report PAAA and WSH noncompliances that meet DOE-established criteria.

Introduction

Nonreactor Nuclear Facility	Those facilities, activities, or operations that involve, or will involve, radioactive and/or fissionable materials in such form and quantity that a nuclear or a nuclear explosive hazard potentially exists to workers, the public, or the environment but does not include accelerators and their operations and does not include activities involving only the incidental use and generation of radioactive materials or radiation, such as check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, and use of electron microscopes and x-ray machines.
Notice of Violation (NOV)	Document setting forth the conclusion of the DOE that one or more violations of nuclear safety, WSH, and/or CIS regulatory requirements have occurred. An NOV can be preliminary or final.
Nuclear Facility	Any LANL nonreactor nuclear facility where an activity is conducted for, or on behalf of, DOE and the National Nuclear Security Administration (NNSA) and includes any related area, structure, facility, or activity, to the extent required, to ensure the implementation of the requirements contained in DOE nuclear safety rules.
Programmatic Issue	Generally involves some weaknesses in administrative or management controls or their implementation to such a degree that a broader management or process control problem exists.
Safeguard and Security Information Management System (SSIMS)	The DOE-managed database used to report CIS incidents and/or noncompliances that meet DOE-established thresholds.
Repetitive Noncompliance	Two or more events or conditions, separated in time, that have comparable causes/circumstances and involve substantially similar work activities, locations, equipment, or individuals, so that it would be reasonable to assume that corrective actions for the first occurrence should have prevented the subsequent event/condition.
Violation	A DOE determination that a contractor has failed to comply with an applicable nuclear safety, WSH, or CIS regulatory requirement.

A Brief PAAA History

A Brief History Leading to the Price-Anderson Amendments Act of 1988 (PAAA)

The Atomic Energy Act of 1946 (AEA) created a framework for the operation of nuclear plants under government control. In 1954, the AEA Amendments Act removed the government monopoly on operating nuclear plants by creating a licensing system for private operators. However, private operators were concerned about the potential harm to the public (and the liability) associated with a worst-case nuclear accident, so they did not invest in the nuclear power industry. In addition, no insurance company was willing to indemnify a company against such a huge potential liability.

Consequently, Congress introduced the Price-Anderson Act in 1957. The Act required companies to obtain the maximum possible insurance coverage against accidents and ensured a further government commitment to cover any claims in excess of the private insurance. Companies were relieved of any liability beyond the insured amount for any incident involving radiation or radioactive releases, regardless of fault or cause.

The scope of the Act includes (but is not limited to) nuclear incidents in the course of the operation of DOE nuclear and radiological facilities and the transportation of nuclear fuel to and from a covered nuclear facility.

The Price-Anderson Amendments Act of 1988 (PAAA) expanded the mandatory Price-Anderson coverage and required DOE to undertake enforcement actions against indemnified contractors for violations of nuclear safety requirements.

The DOE Office of Enforcement commenced enforcement of the nuclear safety rules in 1995. The Office's responsibility has since increased.

In 2005, the Department published 10 CFR Part 824, *Procedure Rules for the Assessment of Civil Penalties for Classified Information Security Violations*, to implement Section 234B of the AEA. Section 234B stipulates that a contractor or subcontractor to the DOE who violates any rule, regulation, or order relating to the safeguarding or security of Restricted Data, other classified information, or sensitive information shall be subject to a civil penalty.

The Bob Stump National Defense Authorization Act for fiscal year 2003 required DOE to promulgate rules to enforce Occupational Safety and Health requirements, and in 2006, DOE issued the Worker Safety and Health Program rule, 10 CFR Part 851, which includes the enforcement process to be applied to worker safety violations. Part 851 went into effect in 2007, and enforcement began in February 2007.

Module 1: DOE Enforcement Program

Overview

This module presents a background of the DOE enforcement program and provides an overview of the regulatory requirements relevant to nuclear safety, WSH, and CIS that are enforceable under the DOE enforcement program.

Objectives

Upon completion of this module, you will be able to describe

- an overview of the DOE enforcement program and process;
- the regulatory requirements that are enforceable under the DOE enforcement program;
- the procedural rules governing the enforcement process that are established in 10 CFR 820, 10 CFR 851, and 10 CFR 824; and the key areas/criteria of the regulatory requirements enforceable under the DOE enforcement program.

Background of DOE Enforcement Program

The AEA of 1954 provides indemnification to DOE contractors that manage and operate nuclear facilities in the DOE complex. Associated subcontractors and suppliers are included under this coverage. The indemnification is provided for public liability from the nuclear activities of the contractor that are within the scope of their contract. In 1988, the PAAA was enacted to continue this indemnification.

As part of its agreement to provide indemnification, Congress requires DOE-indemnified contractors, subcontractors, and suppliers to be subject to civil penalties for violations of DOE's nuclear safety, WSH, and CIS regulatory requirements.

DOE's enforcement philosophy is to encourage early identification, timely self-reporting, and prompt correction of deficiencies and violations of worker safety and health, nuclear safety, and CIS requirements.

The Role of Office of Enforcement

DOE has established the Office of Enforcement (OE) to manage and implement its safety and security enforcement program. The goals of this program are to promote overall improvement in the DOE's nuclear safety, WSH, and CIS by fostering a culture that seeks to attain and sustain compliance with DOE's regulatory requirements.

Noncompliance Reporting Systems

OE has established two systems that allow contractors to self-identify noncompliances directly to DOE:

- the Noncompliance Tracking System (NTS) for reporting nuclear safety and WSH noncompliances and
- the Safeguards and Security Information Management System (SSIMS) for reporting CIS noncompliances.

Reporting nuclear safety and WSH noncompliances in NTS and reporting CIS noncompliances in SSIMS allow contractors to obtain consideration for nuclear safety, WSH, and CIS enforcement discretion, as well as penalty mitigation.

Enforcement Actions

If the DOE/NNSA suspects a noncompliance that poses a significant safety or security risk, they may initiate the enforcement process by conducting an inquiry into an incident or event. Based on their inquiry, the OE may conduct an onsite investigation or fact finding. A contractor report of a noncompliance does not automatically initiate enforcement action by DOE/NNSA. Enforcement actions are based on the significance of the noncompliance.

DOE/NNSA requests, reviews, and evaluates all available information before determining whether the noncompliance has the requisite safety or security significance to warrant detailed enforcement action. Decisions regarding the level of severity of the noncompliance, the type of enforcement action, and the nature of any civil penalty are dependent on the

- safety or security significance of the noncompliance,
- initiative taken by the contractor to identify and report the incident, and
- timeliness and effectiveness of corrective actions.

LANL will receive formal notice from DOE of its intent to conduct an onsite investigation.

Enforcement Action Outcomes Available to DOE/NNSA

Based on the facts and the significance of the noncompliances identified during the inquiry and/or investigation, the resulting enforcement action may include any of the following:

- a PNOV, with or without civil penalty;
- an FNOV, with or without civil penalty;
- a consent order/settlement agreement;
- a compliance order;
- a special report order;
- an enforcement letter, which is not a formal enforcement sanction in that it imposes no requirements, enforcement citation, or penalty on the contractor;
- an advisory note; and/or
- a referral to the Department of Justice for criminal prosecution.

Civil Penalties

NNSA has the authority to assess civil and criminal penalties to the indemnified contractor for violation of nuclear, WSH, or CIS rules. Monetary fines can be mitigated when the noncompliance is self-identified, reported, and corrected in a timely manner.

Civil penalties are monetary sanctions designed to emphasize the need for lasting remedial action, deter future violations, and underscore the importance of contractor self-identification, reporting, and correction of noncompliances.

Reference

DOE's *Safety and Security Enforcement Process Overview* provides an in-depth discussion of the enforcement process.

PAAA, WSH, and CIS Enforceable Regulations

Compliance focuses on certain regulations set forth in the Code of Federal Regulations (CFR). Enforceable regulatory requirements are shown in the table below and are summarized in the following pages. Refer to Appendix A for additional information on each of the enforceable regulations listed below, including examples of noncompliances for each.

Regulations 10 CFR 820, 824 and 851 establish the procedure rules governing enforcement against DOE contractors that are covered by the regulations.

Enforceable Regulations		
Designation	Title	Type
10 CFR 820	<i>Procedural Rules for DOE Nuclear Activities</i>	Nuclear
10 CFR 830, Subpart A	<i>Quality Assurance</i>	Nuclear
10 CFR 830, Subpart B	<i>Safety Basis Requirements</i>	Nuclear
10 CFR 835	<i>Occupational Radiation Protection</i>	Nuclear
10 CFR 708	<i>DOE Contractor Employee Protection Program</i>	Nuclear/WSH/CIS
10 CFR 851	<i>Worker Safety and Health (WSH)</i>	WSH
10 CFR 850	<i>Chronic Beryllium Disease Prevention Program</i>	WSH
10 CFR 824	<i>Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations</i>	CIS

Module 2: Implementation of LANL PAAA Program

Overview

This module presents an overview of the implementation of LANL's internal compliance program and the key functions of the LANL PAAA Program. This module also describes roles and responsibilities associated with the LANL PAAA Program.

Note: DOE divides its safety and security enforcement program into the three separate programs of (1) nuclear safety, (2) WSH, and (3) CIS, whereas at LANL, the PAAA Program includes all three of these programs.

Objectives

Upon completion of this module, you will be able to describe

- the key functions of the LANL's internal compliance program (the PAAA Program),
- the process and responsibilities for the identification and screening of issues for potential noncompliances,
- the process and responsibilities for reporting of noncompliances and related corrective actions,
- the process and responsibilities for tracking and closure of noncompliances reports, and
- the process and responsibilities for responding to OE inquiries and enforcement actions.

Overview of LANL's Internal Compliance Program and Processes

LANL has established the PAAA Program Office (the PAAA Program) to lead the Laboratory's internal compliance program for nuclear safety, WSH, and CIS regulatory requirements. The PAAA Program consists of the PAAA Manager and PAAA enforcement coordinators, who carry out the program.

P141, *Price Anderson Amendments Act (PAAA)*, *Worker Safety and Health (WSH)*, and *Classified Information Security (CIS) Compliance Procedure*, is the implementing institutional procedure for the program functions.

The four key aspects of the LANL PAAA Program are

- noncompliance screening,
- reporting of noncompliances and related corrective actions,
- tracking and closure of noncompliance reports, and
- responding to OE inquiries and enforcement actions.

The PAAA Program serves as the primary regulatory interface with OE and should be engaged in all communications with OE.

Noncompliance Screening

The PAAA Program has implemented a noncompliance screening process that follows a graded approach and is designed to ensure institutional consistency. A wide range of information sources is considered and screened against the relevant DOE regulatory requirements to determine whether a noncompliance to those requirements occurred.

Examples of the primary information sources include, but are not limited to the following:

- issues in the Issues Management (IM) tool;
- Occurrence Reporting and Processing System (ORPS) reports, including related fact findings;
- security incident notification and inquiry reports;
- internal and external assessment findings;
- employee concerns; and
- trending information.

A noncompliance screening is required by P322-4, *Issues Management*, for all issues entered into the IM tool.

As part of the graded approach in the noncompliance screening process, additional rigor will be used for screening ORPS-reportable events and key assessments. The PAAA Program works closely with the parties responsible for screenings, including the LANL subject matter expert (SME) organizations (e.g., Occupational Safety and Health, Radiation Protection, Safety Basis, Quality, and Security) to discuss current issues and trends and to identify potential noncompliances associated with relevant DOE regulatory requirements.

The PAAA Program also works with the SME organization to discuss trends, key assessments, and/or other current issues/events for potential programmatic or repetitive regulatory noncompliances.

Overall, the noncompliance screening process must be conducted in a timely manner. When a noncompliance is identified during the screening process, the regulatory requirements cited as noncompliances should be well considered and directed at the event or issues at hand. Noncompliance screening conclusions (determinations) should be documented, objective, clear, and supported by facts.

Reporting Noncompliances and Related Corrective Actions

The Laboratory will report all regulatory noncompliances associated with

- ORPS events that meet DOE-established noncompliance reporting criteria for nuclear safety or WSH,
- security incidents that meet DOE-established noncompliance reporting criteria for CIS, and
- issues or assessments determined to be programmatic or repetitive noncompliances/intentional violation or misrepresentation/substantiated management reprisal.

Noncompliance reporting criteria for nuclear safety, WSH, and CIS are outlined in DOE's *Safety and Security Enforcement Coordinator Handbook*. (See <https://www.energy.gov/ea/downloads/safety-and-security-enforcement-coordinator-handbook>.)

Corrective Actions

Corrective actions are included as part of the NTS and SSIMS reports. DOE enforcement actions and penalties may depend, in part, on the timeliness and effectiveness of corrective actions. Therefore, it is important that the corrective actions address the causes of the issue, are appropriate and timely, and are designed to prevent reoccurrence.

The IM tool is the primary system of record for Laboratory corrective actions. The development, implementation, and tracking of corrective actions are outlined in P322-4, *Issues Management*.

Closure of Noncompliance Reports

When corrective actions are completed and closed in the IM tool, the PAAA Program also closes the corrective action in NTS. Once all corrective actions associated with an NTS report have been completed, the PAAA Program works with the appropriate organizations to confirm that the corrective actions were completed and that the objective evidence adequately supports the completion.

The PAAA Program supports the Los Alamos Field Office(s) during its validation of the NTS report corrective actions and related objective evidence.

Roles and Responsibilities

LANL roles and responsibilities associated with the program functions are found in P141. Some of the key roles and responsibilities of the program functions are presented below.

Responsible Line Managers (RLMs)

RLMs are responsible for

- identifying and reporting events and issues owned by their organizations that may have potential noncompliances with nuclear safety, WSH, and CIS regulatory requirements; and
- developing and implementing corrective actions to address nuclear safety, WSH, and CIS noncompliances associated with events and issues owned by their organizations.

Issues Management Coordinator (IMC)

The IMC

- completes noncompliance screening in the IM tool with assistance from SME organizations, the RLM, the facility operations director, and/or the PAAA Program (as necessary);
- documents noncompliance citations and attach screening evidence in the IM tool;
- verifies that objective evidence has been attached in the IM tool to support closure of corrective actions; and
- communicates with the PAAA Program when NTS-reportable corrective actions are completed or due dates are extended.

Subject Matter Expert (SME)

SMEs

- perform noncompliance screenings for ORPS reports and key assessments in their area of expertise and provide the screening to the PAAA Program in a timely manner;
- provide support to the PAAA Program and IMCs to identify specific noncompliance citations to the relevant DOE regulatory requirements;
- monitor activities in their subject area of expertise and ensure that issues identified through their programs or areas of expertise are screened for noncompliances;
- review noncompliance data in their respective subject areas, identify adverse trends, and provide review results to the PAAA Program; and
- work with the PAAA Program to confirm that NTS-reportable corrective actions are completed and that objective evidence adequately supports the completion.

Workers

Workers are responsible for

- informing their managers about events and issues that may have potential noncompliances with the nuclear safety, WSH, and CIS regulatory requirements.

Resources

LANL PAAA Program Office

The LANL PAAA Program is responsible for providing institutional support by executing the Laboratory's internal compliance program and processes for nuclear safety, WSH, and CIS in accordance with P141.

For more information, contact the LANL PAAA Program Office:

Phone: 667-4875

Email: PAAA@lanl.gov

Location: TA-03, Building 0261

Mail Stop: MS A147

Website: <http://int.lanl.gov/org/padops/admaser/paaa/index.shtml>

References

10 CFR 708, *DOE Contractor Employee Protection Program*

10 CFR 820, *Procedural Rules for DOE Nuclear Activities*

10 CFR 835, *Occupational Radiation Protection*

10 CFR 824, *Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations*

10 CFR 830, Subpart B *Safety Basis Requirements*

10 CFR 830, Subpart A *Quality Assurance*

10 CFR 850, *Chronic Beryllium Disease Prevention Program*

10 CFR 851, *Worker Safety and Health Program*

DOE's *Safety and Security Enforcement Coordinator Handbook* (Latest Revision)

DOE's *Safety and Security Enforcement Process Overview* (Latest Revision)

LANL Procedure P141, *Price Anderson Amendments Act (PAAA), Worker Safety and Health (WSH), and Classified Information Security (CIS) Compliance Procedure*

LANL Procedure P322-4, *Issues Management*

Price Anderson Amendments Act

Appendix A: Description of PAAA, WSH and CIS Enforceable Regulations

Quality Assurance–10 CFR 830, Subpart A

Quality Assurance (10 CFR 830, Subpart A) establishes quality assurance requirements for conducting activities, including providing items or services that affect, or may affect, the nuclear safety of DOE nuclear and radiological facilities. The operating contractor responsible for a DOE nuclear or radiological facility must submit a Quality Assurance Program (QAP) document to DOE for approval. The QAP document must address the management, performance, and assessment criteria shown in the following table.

PAAA enforcement of 10 CFR 830, Subpart A, requirements applies to nuclear and radiological facilities and activities. However, accelerators (e.g., the Los Alamos Neutron Science Center) are exempt from these requirements.

10 CFR 830, Subpart A, Quality Assurance Program Criteria	
Management Criteria	
#1	Program
#2	Personnel Training and Qualification
#3	Quality Improvement
#4	Documents & Records
Performance Criteria	
#5	Work Processes
#6	Design
#7	Procurement
#8	Inspection & Acceptance Testing
Assessment Criteria	
#9	Management Assessments
#10	Independent Assessments

Example—Noncompliance with 10 CFR 830, Subpart A, Procurement

A contractor awarded a contract to a supplier to fabricate 48 nuclear fuel storage containers. The procurement specification required the vendor to have an approved QAP document. During fabrication of these nuclear fuel storage containers, it was determined that the vendor had an unacceptable QAP document. Despite the procurement requirement that the vendor have an approved QAP document, the contractor allowed the vendor to continue fabrication of the items. Subsequent inspections of the nuclear fuel storage containers found that 41 of the 48 failed to comply with the procurement technical specifications. These issues represent noncompliances to 10 CFR 830.122(g), Procurement.

Safety Basis Requirements—10 CFR 830, Subpart B

Safety Basis Requirements (10 CFR 830, Subpart B) establishes safety basis requirements for Hazard Categories 1, 2, and 3 DOE nuclear facilities. Operations and work at Hazard Category 1, 2, or 3 nuclear facilities must be performed in accordance with the facility's safety basis and, in particular, with the hazard controls that ensure adequate protection of workers, the public, and the environment. Regulation 10 CFR 830, Subpart B, addresses the areas shown in the following table. Enforcement of 10 CFR 830, Subpart B applies only to Hazard Categories 1, 2 and 3 nuclear facilities. Regulation 10 CFR 830, Subpart B, *Safety Basis*, is not applicable to radiological facilities.

Areas of 10 CFR 830, Subpart B	
Performance of Work	Documented Safety Analysis
Safety Basis	Technical Safety Requirements
Unreviewed Safety Question Process	Preliminary Documented Safety Analysis
Safety Basis Requirements	DOE Approval of Safety Basis

Example—Noncompliance with 10 CFR 830, Subpart B

At LANL, during an intentional confinement penetration, a required notification to the operations center was not made at the time of the penetration. As a result, the required differential pressure readings at the time of the penetration and during the time the penetration was open were not completed as required by specific administrative control in the technical safety requirements (TSRs). After the penetration was sealed when the drilling was complete, still no differential pressure readings were taken, so the work was paused and a TSR violation was declared. These issues represent noncompliances to 10 CFR 830.201, Performance of Work.

Occupational Radiation Protection–10 CFR 835

Occupational Radiation Protection (10 CFR 835) establishes radiation protection standards, limits, and program requirements for protecting individuals from ionizing radiation resulting from the conduct of DOE activities. Enforcement of 10 CFR 835 applies to Hazard Categories 1, 2, and 3 nuclear facilities, radiological facilities, and radiological and nuclear affecting activities. The major subparts of 10 CFR 835 address the areas shown in the table below.

Major Subparts of 10 CFR 835	
Management & Administrative Requirements	Reports to Individuals
Standards for Internal & External Exposure	Radiation Safety Training
Monitoring of Individuals & Areas	Design & Control
Entry Control Program	Radioactive Contamination Control
Posting & Labeling	Radioactive Sealed Source Control
Records	Emergency Exposure Situation

Example—Noncompliance with 10 CFR 835, Reports to Individuals

Although multiple, positive urinalysis results were obtained throughout the calendar year indicating that workers No. 1 and No. 5 at a particular site had experienced intakes of plutonium and americium-241, the contractor failed to recognize that internal intakes by the two workers had occurred. As a consequence, the internal dose evaluation program as implemented was not adequate to ensure that personnel intakes of radioactive material were identified and evaluated in a manner to be able to ensure that all dose control requirements and annual dose limits specified by 10 CFR 835 were met.

Example—Noncompliance with 10 CFR 835, Radiation Safety Training

A radiological control technician assigned to work in a hot cell at a particular site had not received training specific to the hot cell facility. He had not received any on-the-job training on manipulator repair, had not participated in or observed a manipulator removal, and had not been informed of the behavior or of the physical and radiological characteristics of the europium source within the hot cell. A noncompliance was identified under 10 CFR 835.

DOE Contractor Employee Protection Program–10 CFR 708

The *DOE Contractor Employee Protection Program* (10 CFR 708) establishes procedures for processing complaints by employees of contractors performing work at DOE-owned or DOE-leased facilities. DOE policy establishes that contractor employees at DOE facilities should be able to do the following without fear of reprisal:

- provide information to DOE, Congress, or their contractors regarding violations of law, danger to health and safety, or matters involving mismanagement, gross abuse of funds, or abuse of authority;
- participate in Congressional proceedings; or
- refuse to participate in illegal or dangerous activities.

Any retaliatory action by DOE contractors against employees could result in enforcement action. Complaints of discriminatory retaliation may be filed with the Employee Concerns Program (ECP). Employees can report a concern by

- calling the ECP's 24-hour help line at 665-9999;
- calling 667-7506;
- writing to mail stop MS D449;
- writing to ecp@lanl.gov; or
- speaking to ECP personnel in person at TA-00, Building 787, Room 1001B (125 Central Park Square, 1st floor).

Example—Noncompliance with 10 CFR 708

At a particular (non-DOE) site, a commission licensee discriminated against an employee for engaging in protected activities. Specifically, as determined by the secretary of labor, the licensee terminated the employee for his failure to submit to a psychological evaluation. This evaluation had been ordered in retaliation for his having engaged in protected activities. The protected activities included the identification and reporting of safety concerns.

Worker Safety and Health–10 CFR 851

The *Worker Safety and Health Rule* (10 CFR 851) establishes the requirements for a WSH program that reduces or prevents occupational injuries, illnesses, and accidental losses by providing DOE contractors and their subcontractors and workers with safe and healthful workplaces at DOE sites. Enforcement of 10 CFR 851 applies to all facilities and activities. In general, 10 CFR 851 requires contractors to

- develop a DOE-approved WSH program,
- provide a place of employment free from recognized hazards that are causing or have the potential to cause death or serious physical harm, and
- ensure that work is performed in accordance with all applicable requirements and in accordance with the WSH program for that workplace.

Contractors must also have a structured approach to their WSH program, which includes, at a minimum, provisions for specific, applicable functional areas identified in 10 CFR 851.24. Specific requirements that contractors must address for these functional areas are identified in 10 CFR 851, Appendix A. Depending on the area, requirements include but are not limited to

- establishing policies, programs, plans, and/or procedures addressing the specified functional area;
- references to specific standards and/or codes that must be met;
- training and/or qualifications for personnel; and
- hazard analyses, inventories, communications, and records.

The functional areas specified in 10 CFR 851, Appendix A, are shown in the following table:

10 CFR 851, Appendix A Functional Areas	
Construction Safety	Industrial Hygiene
Fire Protection	Biological Safety
Explosives Safety	Occupational Medicine
Pressure Safety	Motor Vehicle Safety
Firearms Safety	Electrical Safety
Chronic Beryllium Disease Prevention Program (10 CFR 850)*	
*Not specified in Appendix A; enforceable under 10 CFR 851 according to 10 CFR 850.4.	

Example—Noncompliance with 10 CFR 851

An electrician inadvertently cut an energized 277-volt electrical line using a battery-powered reciprocating saw with a 5-inch blade. The electrician was tasked to cut and remove abandoned fire protection conduit as part of the building fire protection panel replacement project. The electrical conduit contained energized conductors and was located about 2 inches adjacent to the empty fire protection conduit that was to be cut. As he made the cut into the electrical conduit, the electrician observed a spark and the lights went out. He immediately stopped work, placed the battery-powered reciprocating saw on the ceiling tile, descended the ladder he was working on and notified his foreman. The electrician and foreman then paused the work.

The electrician subsequently stated that he was not able to trace or see the fire protection conduit because it was located approximately 3 feet above the strobe and 5 feet above the fire pull box and behind drywall. Subsequent visual inspection of the work area by facility operations personnel confirmed this configuration and found the conduit behind drywall and above the ceiling to be congested with other metallic conduits. When the saw blade made contact with the energized conductors, the upstream breaker and the main breaker tripped. The operations & maintenance coordinator team lead applied a red lock and tag to the breakers that fed circuits in the damaged conduit.

Noncompliances were identified in 10 CFR 851.22, Hazard Prevention and Abatement.

Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations—10 CFR 824

Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations (10 CFR 824) implements certain subsections of the AEA of 1954. In general, any person who has entered into a contract or agreement with the DOE who violates (or whose employee violates) any applicable rule relating to the security or safeguarding of restricted data or other classified information shall be subject to a civil penalty for each violation. Regulation 10 CFR 824 also addresses certain additional authorities and limitations respecting the assessment of such penalties.

Example—Noncompliance with 10 CFR 824

DOE investigated an incident of security concern (security event) regarding the loss of control of classified matter that was discovered and reported by the contractor. As a result of the investigation, DOE concluded that the contractor violated DOE regulations related to classified matter protection and control that are covered by 10 CFR 824. Specifically, DOE cited that the contractor failed to (1) control classified matter that resulted in the security event, (2) factually reconstruct the security event, and (3) implement a comprehensive internal self-assessment process addressing the protection and control of classified matter.