

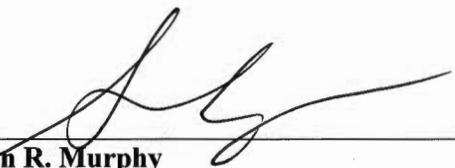
**Quality Management Plan**  
for the  
**Department of Energy Idaho Operations Office**  
**Independent Spent Fuel Storage Installations**  
**Operations Phase**



**United States Department of Energy**  
**Independent Spent Fuel Storage Installation**

**June 2014**

## Concurrence and Approval



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**Shawn R. Murphy**  
QAS Preparer

6-15-2014  
Date



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**Barbara Beller**  
DOE-ID Licensing Manager

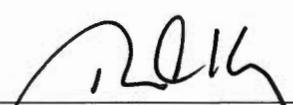
6-17-2014  
Date



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**Steve Ahrendts**  
DOE-ID ISFSI Facility Director

6/17/2014  
Date



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**Randy T. Kay**  
DOE-ID ISFSI Quality Assurance Manager

6/18/2014  
Date

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**APPENDIX A—ACRONYMS AND DEFINITIONS**

# Quality Management Plan for the Department of Energy Idaho Operations Office Independent Spent Fuel Storage Installations Operations Phase<sup>1</sup>

## SECTION 1 INTRODUCTION

### 1.1 Purpose

It is the policy of the U.S. Department of Energy (DOE) to institute, implement, and maintain an effective quality assurance (QA) program in all aspects of its work to ensure the safety and protection of workers, the public, and the environment. It is the responsibility of the DOE Idaho Operations Office (DOE-ID) personnel and the Contractor QA Staff (QAS) personnel involved in Nuclear Regulatory Commission (NRC) licensing activities to comply with the mandatory requirements of the *DOE-ID NRC Licensing Procedure Manual* and the *ISFSI Quality Assurance Procedure Manual*. Compliance with these implementing documents and compliance by the Idaho Contractor with their QA program implementing documents ensures that the Independent Spent Fuel Storage Installations (ISFSIs) and Spent Nuclear Fuel (SNF) stored there is handled, shipped, stored, inspected, tested, operated, maintained, modified, and decommissioned<sup>a</sup> in a manner that ensures the health and safety of workers and the public, and protects the environment. (**Safety Analysis Report (SAR) Subsection 11.0, first paragraph**)

This DOE-ID Quality Management Plan (QMP) has been developed with the above objectives in mind and to ensure compliance with the baseline QA program requirements established by the ISFSI Safety Analysis Reports (SARs), which reference the Office of Civilian Radioactive Waste Management (OCRWM/RW) *Quality Assurance Requirements and Description* (QARD Rev. 10; DOE/RW-0333P). Compliance with the ISFSI QA Program is mandatory. This QMP identifies those QA program elements that apply to the ISFSI QA Program and specific authority for the DOE-ID ISFSI QA Program. It also describes internal and external organizational requirements and responsibilities, including those delegated to the Idaho Contractor. (**NRC IFI-98-201-04**)

Should conflicts between this QMP and the ISFSI license basis documents arise, they shall be resolved in favor of the approved ISFSI license basis documents in all cases.

### 1.2 Background

Through delegation (designation order for ISFF) by DOE Headquarters, DOE-ID manages selected NRC-licensed ISFSIs until a repository is ready to accept the DOE-owned SNF and the ISFSIs are decommissioned.

Currently DOE-ID is the licensee for three ISFSIs: Fort St. Vrain (FSV) Independent Spent Fuel Storage Installation, Three Mile Island Unit 2 (TMI-2) Independent Spent Fuel Storage Installation and the Idaho Spent Fuel Facility (ISFF) Independent Spent Fuel Storage Installation.

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1. This QMP addresses the operating phase of the ISFSI and will be revised as necessary prior to entering a decommissioning phase for the FSV and TMI-2 facilities or the construction phase for the ISFF facility (EM-FMDP-13-055).

DOE-ID manages the ISFSI QA Program in accordance with the following SARs:

- U.S. Department of Energy Idaho Operations Office, *Fort St. Vrain Independent Spent Fuel Storage Installation Safety Analysis Report* (FSV SAR; Docket No. 72-09; Current Revision).
- U.S. Department of Energy Idaho Operations Office, *Safety Analysis Report for the INEEL TMI-2 Independent Spent Fuel Storage Installation*, (TMI-2 SAR; Docket No. 72-20, Current Revision).
- U.S. Department of Energy Idaho Operations Office, *Safety Analysis Report for the Idaho Spent Fuel Facility (ISFF) Independent Spent Fuel Storage installation* (ISFF SAR, Docket No. 72-25, Current Revision).

As indicated in the ISFSI SARs, DOE-ID has delegated certain day-to-day ISFSI QA Program functions to the Idaho contractor.

DOE-ID is responsible for licensing commitments that have not been directly delegated to the Idaho Contractor, and remains directly accountable for the fulfillment of all NRC and license requirements. DOE-ID retains ultimate responsibility for compliance with the ISFSI QA Program.

Implementation of the ISFSI QA Program is accomplished through the following implementing documents:

- DOE-ID ISFSI QA implementing documents and other adopted DOE-ID implementing documents applied to a subset of the SAR Section 11 criteria as appropriate to the DOE-ID QA oversight functions. The appropriate criteria are in SAR Sections 11.0, 11.1, 11.2, 11.5, 11.6, 11.16, 11.17, and 11.18.
- Idaho Contractor QA Program implementing documents applied to all criteria invoked by Section 11 of the SAR as described by PLN-466, *Quality Assurance Program Plan for ISFSI Management*. (NRC IFI 98-201-05)

### 1.3 Scope

This QMP provides for effective management of QA oversight activities associated with ISFSI facilities under NRC-license granted to DOE-ID. This QMP addresses the operating phase of the ISFSIs and will be revised as necessary prior to **restart of the Idaho Spent Fuel Facility project or executing the decommissioning plans. (NRC Inspection Report No. 72-0009/97-207, significant observation in report Page 10).**

This QMP describes:

- The internal and external organizational requirements and responsibilities.
- The SAR and QARD-based QA program elements applicable to the ISFSI QA Program (**SAR Subsection 11.0 third subparagraph**).
- SAR and QARD requirements implemented by DOE-ID for QA assessment functions (**OPE-SNF-98-423 12/18/98**).

- SAR and QARD requirements implemented by the Idaho Contractor (**IFI-98-201-04 and SAR Subsection 11.0 third subparagraph**).

Table 1 lists the ISFSI QA Program sections and their applicability to DOE-ID management of the ISFSIs and the Idaho Contractor's day-to-day operation of the ISFSIs. (**IFI-98-201-04 and OPE-SFP-98-423, dated 12/18/98**)

## **1.4 Authority and Responsibility for the QA Program**

The Manager of DOE-ID has the ultimate authority and responsibility for the ISFSI QA Program. The DOE-ID ISFSI Facility Director is the DOE-ID line management employee responsible for achieving and maintaining quality.

The DOE-ID ISFSI QA Manager (DOE-ID QAM) is responsible for providing guidance and direction to the DOE-ID line organization and its Idaho Contractor on QA matters relating to INL NRC licensing activities, ISFSI QA Program implementation, as described in the ISFSI SARs, and effectively assuring conformance to quality requirements. (**SAR Subsection 11.1.3 third subparagraph**)

The DOE-ID QAM is responsible for performing independent audits of the Idaho Contractor's ISFSI QA Program. This audit activity shall assess both the achievement of quality by the Idaho Contractor management and the verification of quality by the Idaho Contractor QA personnel. (**SAR Subsection 9.1.2.2 first subparagraph**) The assigned DOE-ID ISFSI QA Manager meets the minimum qualifications established by the SARs at Subsection 9.1. (**NRC IFI 97-207-02**)

DOE-ID delegates certain day-to-day QA program functions to the Idaho Contractor as indicated in the ISFSI SARs. (**SAR Subsection 9.1.2 first subparagraph**) The Idaho Contractor is required to implement DOE/RW-0333P as stipulated in the contract. (**SAR Subsection 11.0 third subparagraph**)

The DOE-ID QAM is responsible for responding to the U. S. NRC concerning the ISFSI QA program. Normal responses are by the ISFSI Licensing Manager, ISFSI Facility Director, or Manager of DOE-ID (Licensee) with the necessary information being supplied by the DOE-ID QAM prior to the response being forwarded to the U. S. NRC. When the DOE-ID QAM corresponds directly with the U. S. NRC, all correspondence will be concurred with by the ISFSI Licensing Manager, ISFSI Facility Director, or Manager of DOE-ID. (**SAR Subsection 11.1.3 seventh subparagraph items 11 & 12**)

**Table 1.** ISFSI QA Program section applicability.

QA Program Sections from Section 11 of the ISFSI SARs	DOE/RW-0333P Revision 10 QARD Section # and Title	Applicable to DOE-ID for Management of the ISFSIs*	Applicable to the Idaho Contractor for day-to-day Operation of the ISFSIs*		
			FSV	TMI	ISFF
11.0	No companion QARD Section	√	√	√	√
11.1	1.0 Organization	√	√	√	√
11.2	2.0 Quality Assurance Program	√	√	√	√
11.3	3.0 Design Control	N/A	√	√	√ <sup>1</sup>
11.4	4.0 Procurement Document Control	N/A	√	√	√ <sup>1</sup>
11.5	5.0 Implementing Documents	√	√	√	√
11.6	6.0 Document Control	√	√	√	√
11.7	7.0 Control of Purchased Items and Services	N/A	√	√	√ <sup>1</sup>
11.8	8.0 Identification and Control of Items	N/A	√	√	√ <sup>1</sup>
11.9	9.0 Control of Special Processes	N/A	√	√	√ <sup>1</sup>
11.10	10.0 Inspection	N/A	√	√	√ <sup>1</sup>
11.11	11.0 Test Control	N/A	√	√	√ <sup>1</sup>
11.12	12.0 Control of Measuring and Test Equipment	N/A	√	√	√ <sup>1</sup>
11.13	13.0 Handling, Storage, and Shipping	N/A	√	√	√ <sup>1</sup>
11.14	14.0 Inspection, Test and Operating Status	N/A	√	√	√ <sup>1</sup>
11.15	15.0 Nonconformances	N/A	√	√	√ <sup>1</sup>
11.16	16.0 Corrective Action	√	√	√	√
11.17	17.0 Quality Assurance Records	√	√	√	√
11.18	18.0 Audits	√	√	√	√
11.19.1	Supplement I Software	N/A	√	√	√ <sup>1</sup>
11.19.2	Supplement II Sample Control	N/A	N/A	N/A	N/A
11.19.3	Supplement III Scientific Investigation	N/A	N/A	N/A	N/A
11.19.4	Supplement IV Field Surveying	N/A	N/A	N/A	N/A
11.19.5	Supplement V Control of Electronic Management of Data	N/A	√	√	√
11.19.6	Appendix A High-Level Waste Form Production	N/A	N/A	N/A	N/A
11.19.7	Appendix B Storage and Transportation	N/A	N/A	N/A	√ <sup>1</sup>
11.19.8	Appendix C Mined Geologic Disposal	N/A	N/A	N/A	N/A
<p>* √ Indicates QARD section is applicable to the ISFSI QA Program as indicated in the ISFSI SARs.</p> <p>* N/A Indicates the QARD section is NOT applicable to the ISFSI QA Program.</p> <p><sup>1</sup> The ISFF Facility project is currently not funded. No construction, revision to the design, or start of operation will proceed until the project is authorized to proceed. This table will be reviewed and revised when the ISFF project is authorized. The decision was documented in a memorandum B. Beller to R. Kay EM-FMDP-13-055 dated October, 31,2013.</p>					

## SECTION 2 ISFSI QA PROGRAM

### 2.1 Organization

#### 2.1.1 Program Management Organizations and Responsibilities

SAR Section 11.1, "Organization," applies to program management activities of DOE-ID QA Program and the Idaho Contractor for activities related to the ISFSIs.

The Manager of DOE-ID, has the authority and responsibility for the ISFSI QA Program.

The DOE-ID ISFSI Facility Director is the day-to-day DOE-ID line management employee responsible for compliance with ISFSI operational requirements. **(FSV/TMI-2 SAR Subsection 9.1.2.2.1 first subparagraph and ISFF SAR Subsection 9.1.1.1 paragraph seven.)** The DOE-ID ISFSI Facility Director is the DOE-ID line management employee responsible for achieving and maintaining quality.

The DOE-ID Licensing Manager is the DOE-ID employee responsible for the preparation and submittal of license applications (including any necessary amendments), timely response to NRC communications and inquiries, and other licensing and interface support to the DOE-ID ISFSI Facility Director. **(SAR Subsection 9.1.2.1 third subparagraph)**

The DOE-ID QAM is the DOE-ID employee responsible for overview of work subject to the ISFSI QA Program including the QARD requirements. This overview includes verifying achievement of quality of work by DOE-IDs line organization and the Idaho Contractor through assessments, surveillances, or other means of verification, as appropriate. **(FSV/TMI-2 SAR Subsections 9.1.2.1 and 11.1.3 third subparagraph and ISFF SAR Subsection 9.1.1.2 first paragraph)**

The DOE-ID QAM and the Quality Assurance Staff (QAS) have sufficient financial and organizational independence from all other participating organizations. To satisfy the organizational and independence requirements for matters related to the ISFSIs, the DOE-ID QAM has direct access to the Manager of DOE-ID, on issues affecting the safety and surety of ISFSI operations. **(SAR Subsection 9.1.2.1 fourth subparagraph)**

QAS discussion:

The QAS reports directly to the DOE-ID QAM. **(SAR Figures 9.1-1)** The QAS function provides the infrastructure for implementing this QMP. Members of the QAS perform their respective tasks solely in support of the DOE-ID QAM. The QAS provides management and administrative support, as well as other qualified personnel to augment the DOE-ID QA staff for accomplishing ISFSI QA Program activities. The DOE-ID QAM reviews and approves the work of the QAS. The DOE-ID QAM reviews and concurs in the QAS budget to ensure continued independence of the QAS organization from cost and schedule considerations.

Assessment team leaders selected for DOE-ID QA audits and DOE-ID QA surveillances of the ISFSIs shall not be employees of the Idaho Contractor or parent organizations. **(NRC IFI-97-207-19 and OPE-SNF-98-423 dated 12/18/98 last paragraph)**

Detailed descriptions of roles and responsibilities of the DOE-ID personnel (supported by QAS personnel) and the Idaho Contractor personnel are provided in the ISFSI safety analysis reports. Organizational charts are provided in Section 9 in the ISFSI SARs.

### **2.1.2 Delegation of Work**

DOE-ID delegates certain day-to-day ISFSI QA program functions to the Idaho Contractor as indicated in the ISFSI SARs. **(SAR Subsections 9.1.3, 9.1.3.2, and throughout SAR Subsection 11)** Within the QA discipline areas, all quality engineering activities and quality inspection activities are delegated to the Idaho Contractor. The DOE-ID ISFSI QA organization and the Idaho Contractor QA organizations perform QA audits and QA surveillances independently. DOE-ID retains ultimate responsibility for compliance with the ISFSI QA programs as described in the ISFSI SARs.

### **2.1.3 Stop Work Authority**

When a condition adverse to quality within the ISFSI QA Program or other essential program is significant, a stop work shall be initiated as applicable.

The DOE-ID QAM has the responsibility to recommend stop work and the release of a DOE-ID initiated stop work order. The Manager of DOE-ID retains the ultimate authority and responsibility to stop work of ISFSI-related activities.

As described by PLN-466, stop work authority and processes also reside within the Idaho Contractor's organization. The Idaho Contractor has release authority on an internally issued stop work order, but cannot release a DOE-ID initiated stop work orders.

### **2.1.4 Resolution of Quality Disputes**

An ISFSI Quality Assurance Procedure has been developed to provide guidelines and assign responsibilities and actions that document, evaluate, and respond to differing staff opinions related to ISFSI QA Program issues raised by DOE-ID participants, QAS, or concerned employees. This procedure provides the process to elevate differences of opinion to successively higher levels of management for resolution. The employee concerns process is embedded in this procedure. The process includes references to NRC Form 3, "Notice to Employees." NRC posting requirements are addressed in the DOE-ID Licensing Procedures Manual. **(NRC Inspection Report No. 72-0009/97-207 inspector observation at report Page 19, Paragraph 12)**

As described by PLN-466, the Idaho Contractor has procedures in place to resolve disputes and employee concerns internally and escalate disputes or concerns externally to DOE-ID or the NRC. The Idaho Contractor processes include controls for NRC Form 3 postings.

Ultimately, the Manager of DOE-ID is responsible for providing solutions to quality problems within the ISFSI activities. **(SAR Subsection 11.1.4, Paragraph 3)**

## 2.2 Quality Assurance Program

### 2.2.1 General

SAR Section 11.2, "Quality Assurance Program," applies to program management activities of the DOE-ID ISFSI QA Program, the DOE-ID NRC Licensing Procedures Manual, and the Idaho Contractor for activities related to the ISFSIs.

This section addresses requirements related to planning, implementing, and maintaining the ISFSI QA Program. This QMP addresses QA program implementation for DOE-ID QA oversight and assessment functions for the Fort St Vrain, TMI-2, and the ISF Facility ISFSI activities and points to functions delegated to the Idaho Contractor.

### 2.2.2 Requirements

#### 2.2.2.1 QA Documents

1. The DOE-ID QA policy for the ISFSI QA Program is stated in a policy statement in the ISFSI DOE-ID QA Procedure Manual.
2. As described by PLN-466, the Idaho Contractor has established a QA Policy Statement (POL-110) that is responsive to the QARD.
3. The DOE-ID ISFSI Facility Director shall be responsible for oversight of the development of NRC-licensing documents for the ISFSIs. **(TMI-2 SAR Subsection 9.1.2.2.1, fourth subparagraph) (FSV SAR Subsection 9.1.2.2.1, sixth subparagraph) (ISF Facility SAR Subsection 9.1.2.2.1 fourth subparagraph)**
4. The DOE-ID QAM, supported by the QAS and with appropriate DOE-ID line organizations, shall develop and maintain QA program implementing documents such as *Quality Management Plans (NRC IFI-98-201-04)*, *Quality Assurance Program Matrices*, **(NRC Report 72-0009/207 inspector observation at report Page 18, Paragraph 11.1)** and ISFSI Quality Assurance Procedures. The DOE-ID QAM, supported by the QAS, shall coordinate document reviews with the affected organizations and submit the QA documents to the appropriate DOE-ID management for approval.
5. The QA program implementing documents shall comply with 10 CFR 72 Subpart G. **[SAR Subsection 11.0, second subparagraph and 10 CFR 72.40(a)(7)]**
6. The DOE-ID QAM supported by QAS shall coordinate development of the ISFSI DOE-ID Fort St Vrain/Three Mile Island-2/Independent Spent Fuel Facility QA Program Matrix (DOE/ISFSI/MTX-001). That coordination shall include obtaining reviews by the ISFSI Facility Director and the DOE-ID Licensing Manager. The Matrix shall list applicable ISFSI QA Procedures (IQPs), DOE-ID NRC Licensing Procedures Manual documents including Standard Project Procedures, and Idaho Contractor plans applicable to the ISFSI QA Program.
7. The DOE-ID QAM shall review and concur with plans and the Licensing Manual Procedures (LMPs).

8. DOE-ID QAM is responsible for interpreting and approving QA Program Requirements as they apply to the Idaho Contractor's scope of work. **(SAR Subsection 11.1.3, seventh subparagraph, Item 13)**. This is accomplished by reviews of the Idaho Contractor ISFSI QA Program plans and follow-up assessments for verification of QA program implementation for ISFSI-specific activities. The DOE-ID QAM shall coordinate DOE-ID reviews of the Idaho Contractors Quality Program Plans and requirements matrices.
9. Review criteria embedded in the ISFSI IQPs assures that proposed changes to the ISFSI IQPs are reviewed against the ISFSI SARs.
10. The ISFSI QA Program (see definition) is an essential program subject to the Essential Program Control as stipulated by the ISFSI Technical Specifications at 5.5.2. The DOE-ID ISFSI QAM shall implement the essential program controls contained in the DOE-ID *Licensing Procedures Manual* (LMP-203) for DOE-ID initiated changes to the ISFSI QA Program prior to adopting the changes.
11. For ISFSI QA Program changes initiated by the Idaho Contractor, Essential Program Control is provided through the Idaho Contractor's procedures and in coordination with DOE-ID.
12. Proposed changes to the ISFSI QA programs are compared to pre-established criteria. **(Federal Register: February 23, 1999. Volume 64, Number 35 pages 9029-9034)**. Changes that decrease the effectiveness of the ISFSI QA Program are subject to NRC review and approval prior to implementation. **(SAR Subsection 11.0, fourth subparagraph)**
13. Subsequent to performing the qualification audit of the Idaho Contractor's QA program and implementing procedures, the DOE-ID QAM performs periodic reviews (QA audits, and QA surveillances) of the Idaho Contractor, as indicated at each subsection of SAR Section 11.

### 2.2.2.2 Classifying Items

All structures, systems, and components (SSCs) are analyzed to determine whether their functions or physical characteristics are essential to the safety functions. Those items determined to be important to safety are subject to the applicable requirements of the ISFSI QA Program including the QARD. Items important to safety are identified in Chapter 3 of the Three Mile Island Unit-2 (TMI-2) SAR and in Chapter 4 of the Fort St. Vrain (FSV) SAR. SSCs that are not important to safety have the QA program applied in a graded approach. **(SAR Subsection 11.0, seventh subparagraph)**

As described by PLN-466, the Idaho Contractor has processes in place to classify items. The Idaho Contractor develops Q-Lists, which communicates the QA program requirements for items important to safety, and graded requirements for other SSCs. The Q-Lists are based on the items important to safety described by the ISFSI SARs. The classification processes and the resultant Q-Lists have been reviewed by the QAS and reviewed and accepted by the DOE-ID ISFSI QAM. This review and acceptance took place when the Contractor's QA program implementing documents represented in PLN-466, "Quality Assurance Program for ISFSI Management" was reviewed and accepted prior to NRC Licensing. The Idaho Contractor's Q-Lists will only be reviewed if the applicable sections of the ISFSI SARs are revised.

The DOE-ID Quality Assurance Program is not responsible for developing a Q-List for any SSCs that have safety significance.

### **2.2.2.3 Controlling Activities**

The ISFSI QA Program applies to activities related to the items on a Q-List (such as design, procurement, construction, fabrication, production, handling, packaging, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, modification, and decontamination. **(QARD at Subsection 2.2.3 B)**)

Nuclear safety related activities are accomplished under controlled conditions. **(SAR Subsection 11.2, ninth subparagraph)**

The ISFSI QA Program applies to the managerial and administrative controls used to ensure safe operation of the ISFSIs. **(10 CFR 72.24(n) and 10 CFR 72.140)** The managerial and administrative controls are established by the ISFSI technical specifications at 5.0.

### **2.2.2.4 Applying QA Controls**

The application of QA Program controls (grading) must be commensurate with the importance of an item or activity. The oversight functions performed by the DOE-ID QAM and supported by the QAS are not subject to a graded approach.

The ISFSI QA audit and QA surveillance processes are also applied to the DOE-ID QAM assessments of the managerial and administrative controls used to ensure safe operation of the ISFSIs. **[10 CFR 72.24(n)]**

The graded approach shall not be applied to the qualification and certification of inspectors, NDE personnel, and auditors. **(SAR Subsection 11.2, eighth subparagraph)**

As described by PLN-466, the Idaho Contractor work control process includes provisions for selecting and applying QA controls.

### **2.2.2.5 Planning Work**

The QAS develops and maintains a comprehensive **(10 CFR 72.176)** assessment schedule for DOE-ID QAM approval. Development of the assessment schedule is coordinated with the DOE-ID line organization. The assessment schedule includes internal audits of DOE-ID and audits of the Idaho Contractor. **(NRC IFI 07-207-18)**

As described by PLN-466, the Idaho Contractor maintains processes that control work.

### **2.2.2.6 Surveillances**

In addition to the audit process described in Section 2.18 of this QMP, the DOE-ID QAM ensures that program and implementation surveillances are planned, scheduled, and performed to provide management with timely information on the acceptability of current program activities affecting quality.

As described by PLN-466, the Idaho Contractor schedules and performs QA surveillances.

### **2.2.2.7 Management Assessments**

The DOE-ID QAM shall ensure that management assessments of the ISFSI QA Program are planned and documented and performed annually. **(NRC IFI 97-207-16)** The annual management assessment shall include the DOE-ID and support activities.

#### **2.2.2.8 Readiness Reviews**

Readiness reviews, as defined in the QARD, will be performed, as appropriate, by or for the ISFSI line management organizations and will not be conducted by the DOE-ID QAM or QAS.

As described by PLN-466, the Idaho Contractor performs readiness reviews of major scheduled or planned work.

#### **2.2.2.9 Peer Reviews**

Peer reviews, as defined in the QARD, will be performed, as appropriate, by or for the ISFSI line management organizations and will not be conducted by the DOE-ID QAM or QAS. Peer reviews, as defined in the QARD for SNF data, are not anticipated during the operational phase of the ISFSIs.

#### **2.2.2.10 Document Reviews**

A document review process for the IQPs and LMPs has been established to ensure that the appropriate reviewers review documents per applicable requirements.

As described by PLN-466, the Idaho Contractor performs document reviews per established procedures.

#### **2.2.2.11 QA Program Information Management**

A QA information system shall be established to facilitate effective communication of the status of the ISFSI QA Program, status of resolution of issues, significant conditions adverse to quality, and summary of QA overview results. The DOE-ID ISFSI Facility Director provides results of line management self-assessments and performance monitoring activities to the DOE-ID QAM for evaluation and detection of ISFSI-related trends. The Idaho Contractor shall provide QA program status information to the DOE-ID QAM for evaluation and detection of ISFSI-related trends.

The DOE-ID QAM conducts documented QA information meetings with the DOE-ID ISFSI line management and the Idaho Contractor to assure that adequate and effective QA coverage related to the day-to-day ISFSI activities is maintained. (NRC IFI 72-020/9901-03)

The goal of the QA Program information management process is to assure that the DOE-ID QAM oversight is based on direct knowledge of specific implementation of the ISFSI QA Program; to enhance the independent evaluation of program findings; and to enhance the trending of defects and problems. (NRC Information Notice 2000-11, August 7, 2000)

As described by PLN-466, the Idaho Contractor provides QA information to the DOE-ID ISFSI QAM.

#### **2.2.2.12 Personnel Selection, Indoctrination, Training, and Qualification**

A program shall be established for the evaluation, selection, indoctrination, training, and qualification of QAS personnel. Personnel will be assigned appropriate responsibilities and authorities. Personnel assigned responsibility for performing ISFSI QA Program activities shall be indoctrinated in the purpose, scope, and implementation of the QA program, the licensing basis documents, and essential program controls.

The training source and topics are described below. See Note 1.

- Applicable QA program elements as described in this QMP; Training source: DOE-ID QAM/QAS
- Applicable ISFSI Quality Assurance Procedures; Training source: DOE-ID QAM/QAS
- Applicable License Management Procedures (LMPs) see Note 3; Training source: DOE-ID NRC Licensing Manager
- ISFSI License Basis Documents see Note 2; Training Source: DOE-ID Licensing Manager/ Idaho Contractor
- Essential Program Control see Note 1; Training Source: DOE-ID Licensing Manager/ Idaho Contractor
- Audit Team Leader/Auditor/Technical Specialist see Note 3; Training Source: DOE-ID QAM/QAS

**Note 1:** Implementation of the FSV, TMI-2, and the ISFF training programs described by the ISFSI SARs in Subsection 9.3 has been delegated to the Idaho Contractor.

**Note 2:** QAS personnel receive the one time training and qualifications prescribed by IQP-2.04 and LMP-055 for the DOE ISFSI QA Manager (DOE-ID QAM). (**FSV/TMI-2 SAR Subsection 9.1.4.1, second subparagraph and ISF SAR Subsection 9.1.3.1**) ID training matrixes are provided as attachments to IQP-2.04 and LMP-055. The ID training matrices identify training needs in selected programs. When significant revisions are made to program documents, as determined by the DOE-ID QAM, QAS personnel receive the updated training.

**Note 3:** Audit Team Leader/Auditor/Technical Specialist training and qualifications for DOE-ID and QAS personnel is performed by QAS as prescribed by quality assurance implementing documents.

**Note 4:** DOE-ID ISFSI Program staff maintains skills commensurate with position by performing document change reviews and during surveillances and audits document reviews of the Contractors ISFSI Program. Refresher indoctrination training will be given to all DOE-ID ISFSI Program Staff biennially to ensure appropriate skills and knowledge. If any changes in technology methods or job responsibilities occur they will be evaluated on a case-by-case base and the training needs determined at that time.

As described by PLN-466, the Idaho Contractor performs QA Program training and qualifications. The Idaho Contractor performs other training as required by the ISFSI SARs.

### **2.2.2.13 Qualification of Personnel Performing QA Functions**

The DOE-ID QAM shall establish appropriate processes for qualifying personnel performing special QA functions (such as auditing) to ensure qualification per the specific sections of the QARD.

As described by PLN-466, the Idaho Contractor establish appropriate processes for qualifying personnel performing special QA functions (such as auditing) to ensure qualification per the specific sections of the QARD.

## 2.3 Design Control

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.3, as applicable.

As described by PLN-466, the Idaho Contractor implements the requirements of 10 CFR 72.48. **(ISFSI SARs at Subsection 11.3 third subparagraph)**

The DOE-ID ISFSI Facility Director reviews and concurs with 10 CFR 72.48 evaluations prepared by the Idaho Contractor. **(Technical Specification 5.6)**

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of design control activities for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.4 Procurement Document Control

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.4, "Procurement Document Control," as applicable.

As described by PLN-466, the Idaho Contractor complies with and implements the reporting requirements of 10 CFR Part 21. **(NRC IFI 72-20/9901-11)**

The DOE-ID ISFSI Facility Director receives and reviews the necessary 10 CFR Part 21 reports provided by the Idaho Contractor and provides the reports to the NRC.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of procurement document control for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.5 Implementing Documents

SAR Section 11.5, "Implementing Documents," applies to program management activities of the DOE-ID ISFSI QA Program, the DOE-ID NRC Licensing Procedures Manual, and the Idaho Contractor for activities related to the ISFSIs. The DOE-ID QAM shall develop quality assurance implementing procedures that ensure quality-affecting documents, including changes thereto, are reviewed for adequacy, approved for release, and distributed to and used at the location where the work is being performed. The quality assurance implementing procedures shall standardize methods for identifying, formatting, and distributing controlled documents. Appropriate management, including the DOE-ID ISFSI QAM, shall concur with or approve these documents.

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.5, "Implementing Documents," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of implementing documents for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.6 Document Control

SAR Section 11.6, "Document Control," applies to program management activities of the DOE-ID ISFSI QA Program, the DOE-ID NRC Licensing Procedures Manual, and the Idaho Contractor for activities related to the ISFSIs. –

The DOE-ID QAM shall develop implementing procedures (IQPs) or LMPs that ensure quality-affecting documents, including changes thereto, are reviewed for adequacy, approved for release, and distributed to and used at the location where the work is being performed. The IQPs and LMPs shall standardize methods for identifying, formatting, and distributing controlled documents. Appropriate management, including the DOE-ID ISFSI QAM, shall concur with or approve the IQP and LMP documents.

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.6, "Document Control," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Document Control for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.7 Control of Purchased Items and Services

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.7, "Control of Purchased Items and Services," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Control of Purchased Items and Services for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.8 Identification and Control of Items

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.8, "Identification and Control of Items," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Identification and Control of Items for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.9 Control Of Special Processes

As described by PLN-466, the Idaho Contractor complies with and implements SAR Section 11.9, "Control of Special Processes as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Control of Special Processes for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.10 Inspection

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.10, "Inspection," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Inspection for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.11 Test Control**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.11, "Test Control," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Test Control for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.12 Control of Measuring and Test Equipment**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.12, "Control of Measuring and Test Equipment," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Control of Measuring and Test Equipment for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.13 Handling, Storage, and Shipping**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Section 11.13, "Handling, Storage, and Shipping," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Handling, Storage, and Shipping for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.14 Inspection, Test, and Operating Status**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.14, "Inspection, Test, and Operating Status" as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Inspection, Test, and Operating Status for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.15 Nonconformances**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.15, "Nonconformances," as applicable.

The DOE-ID ISFSI QA Program receives nonconformance reports provided by the Idaho Contractor and, on a periodic basis, reviews nonconformance report trends during ISFSI QA Information Meetings. (NRC IFI 72-20/9901-03)

As described by PLN-466, the Idaho Contractor complies with and implements the reporting requirements of 10 CFR Part 21. (NRC IFI 72-20/9901-11)

The DOE-ID ISFSI Facility Director receives and reviews the necessary 10 CFR Part 21 reports provided by the Idaho Contractor and provides the reports to the NRC.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Nonconformances for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.16 Corrective Action

SAR Subsection 11.16, "Corrective Action," applies to program management activities of the DOE-ID ISFSI QA Program and the Idaho Contractor for the activities related to the ISFSIs.

The DOE-ID QAM performs QA oversight, such as reviews, audits, surveillances, and assessments at the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented and to identify conditions adverse to quality within the ISFSI QA Program.

Conditions adverse to quality shall be promptly reported to the cognizant DOE-ID and contractor management and corrective action initiated. Cognizant managers shall evaluate conditions adverse to quality to determine the impact of the deviation on completed work, the root cause, and the corrective action(s) required.

Procedural instructions and policy guidance provide criteria for determining the existence of significant conditions adverse to quality. **(SAR Subsection 11.16, second subparagraph)**

Significant conditions adverse to quality will be evaluated for stop work applicability. The DOE-ID QAM shall ensure the adequacy of corrective actions and ensure committed corrective actions are completed in a timely manner.

When significant conditions adverse to quality are identified through DOE-ID overview or assessments, the proposed corrective action plans are approved prior to implementation. **(SAR Subsection 11.16, third subparagraph)**

Conditions adverse to quality shall be tracked until closure.

Conditions adverse to quality are trended.

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.16, "Corrective Action" as applicable.

As described by PLN-466, the Idaho Contractor complies with and implements the reporting requirements of 10 CFR Part 21. **(NRC IFI 72-20/9901-11)**

The DOE-ID ISFSI Facility Director receives and reviews the necessary 10 CFR Part 21 reports provided by the Idaho Contractor and provides the reports to the NRC.

The DOE-ID ISFSI Facility Director and the DOE-ID ISFSI QAM to determine the organization responsible for correcting the cited problem or deficiency review problems or deficiencies cited by external entities. The ISFSI QA Program corrective action process is used to document and track the externally identified problems or deficiencies when the responsible organization is DOE-ID. The Idaho Contractor's corrective action process is used to document and track the externally identified problems or deficiencies when the responsible organization is the Idaho Contractor.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of corrective action for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.17 QA Records

SAR Section, 17, "Quality Assurance Records," applies to program management activities of the DOE-ID ISFSI QA Program, the DOE-ID NRC Licensing Procedures Manual, and the Contractor for activities related to the ISFSIs.

Records pertaining to the design, fabrication, erection, testing, maintenance, and use of structures, systems, and components important to safety are maintained by or under the control of the licensee until the Commission terminates the license. **(10 CFR 72.174)** Records of information important to the safe and effective decommissioning of the facility are kept until the Commission terminates the license. **[10 CFR 72.30 (d)]**

QA records generated as a result of executing implementing procedures of the DOE-ID ISFSI QA Program will be identified, classified, collected, stored, and maintained. The DOE-ID ISFSI QA Program processes QA records and forwards designated ISFSI lifetime and ISFSI nonpermanent QA records to the DOE-ID records Center.

The DOE-ID records Center is located in Idaho Falls, Idaho at the Willow Creek Building first floor room 98. ISFSI lifetime and nonpermanent records will be electronically scanned into the Contractor's Electronic Document Management System (EDMS) for dual storage. An information hard copy of the ISFSI records will be maintained at the Willow Creek Building first floor room 98 for approximately three years.

QA records generated by procedures contained in the DOE-ID NRC Licensing Procedures Manual and the ISFSI QA Procedure Manual are sent directly by the originator to the DOE-ID QAM for review prior to processing by the DOE-ID records center.

As described by PLN-466, the Idaho Contractor complies with and implements SAR Section 11.17, "Quality Assurance Records," as applicable. QA records generated by the Idaho Contractor are identified, classified, collected, stored, and maintained by the Idaho Contractor for DOE-ID using dual storage locations maintained by the Idaho Contractor.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of QA Records for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## 2.18 Audits

SAR Section 18, "Audits," applies to program management activities of the DOE-ID QA Program and the Idaho Contractor for activities related to the ISFSIs.

The DOE-ID QAM shall establish and implement a comprehensive audit and surveillance program to ensure compliance with the ISFSI SARs and QARD requirements and to determine the effectiveness of the ISFSI QA Programs. Internal audits of work to verify QA program compliance shall be performed annually.

The DOE-ID QAM shall ensure that audits and surveillances are planned and performed by qualified and certified personnel. For audits of the ISFSIs, audit team leaders shall not be employees of the Idaho Contractor or parent organizations. **(NRC IFI 97-207-17)** Audits and surveillances shall be

scheduled and coordinated with the organization being audited. The DOE-ID QAM shall coordinate NRC participation in ISFSI QA Program assessments. (SAR Subsection 11.1.3, seventh subparagraph, bullet 5 & 12)

The DOE-ID QAM performs QA audits and surveillances of ISFSI programs and processes, including:

- The Idaho Contractor QA Program
- Implementation of the DOE-ID ISFSI QA Program
- Personnel training programs as described in SAR Subsection 9.3 (SAR Subsection 11.18)
- Essential Program Control Program 10 CFR 72.48 evaluation processes (SAR Subsection 11.3)
- 10 CFR 21 reporting processes. (SAR Subsection 11.18)
- Decommissioning plans as appropriate
- Other managerial and administrative controls used to ensure safe operation of the ISFSIs selected from ISFSI Technical Specifications at 5.0. Example: ISFSI Maintenance programs (SAR in Subsection 11.18, second subparagraph, fourth bullet) [10 CFR 72.24(n)]

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.18, "Audits," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of audits for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

## **2.19 Supplements and Appendices**

### **2.19.1 Supplement I, Software**

As described by PLN-466, the Idaho Contractor complies with and implements SAR Subsection 11.19.1 Supplement I, "Software," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Supplement I, "Software," for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

### **2.19.2 Supplement II, Sample Control**

As indicated in SAR Subsection 11.19.1, Supplement II, "Sample Control," does not apply to the ISFSIs.

### **2.19.3 Supplement III, Scientific Investigation**

As indicated in SAR Subsection 11.19.3, Supplement III, "Scientific Investigation," does not apply to the ISFSIs.

#### **2.19.4 Supplement IV, Field Surveying**

As indicated at SAR section 11.19.4, Supplement IV, "Field Surveying," does not apply to the ISFSIs.

#### **2.19.5 Supplement V, Control of Electronic Management of Data**

As described by PLN-466, the Idaho Contractor complies with and implements Supplement V, "Control of Electronic Management of Data," as applicable.

The DOE-ID QAM performs periodic reviews (QA audits and surveillances) of Supplement V, "Control of Electronic Management of Data," for the ISFSIs to ensure ISFSI Safety Analysis Report and QARD requirements are implemented.

#### **2.19.6 Appendix A, High-Level Waste Form Production**

As indicated in SAR Subsection 11.19.6, Appendix A, "High-Level Waste Form Production," does not apply to the ISFSIs.

#### **2.19.7 Appendix B, Storage and Transportation**

As indicated at SAR Section 11.19.7, Appendix B, "Storage and Transportation," does not apply to the Fort St Vrain and the TMI-2 ISFSIs.

As indicated by Idaho Spent Fuel Facility SAR Section 11.9.7, Appendix B, "Storage and Transportation," does apply to the Idaho Spent Fuel Facility ISFSI when the order is given to construct and operate the facility.

The DOE-ID QAM will then perform periodic reviews (QA audits and surveillances) of Appendix B, "Storage and Transportation," for the ISFF ISFSI to ensure ISFSI Safety Analysis Report and 10-CFR-72 Subpart G requirements are implemented when the facility is constructed.

#### **2.19.8 Appendix C, Monitored Geologic Repository**

As indicated at SAR Section 11.19.8, Appendix C, "Monitored Geologic Repository," does not apply to the ISFSIs.

### **SECTION 3 REFERENCES AND INL SOURCES**

The following documents are the controlling, guidance, and source documents used for developing the technical and regulatory requirements of this QMP:

Office of Civilian Radioactive Waste Management (OCRWM) DOE/RW-0333P, *Quality Assurance Requirements and Description* (QARD), Revision 10.

Source: DOE-ID QAM/QAS

U.S. Department of Energy Idaho Operations Office, *Fort St. Vrain Independent Spent Fuel Storage Installation Safety Analysis Report*, Docket No. 72-09, Current Revision.

Source: DOE-ID NRC Licensing Manager/Idaho Contractor

U.S. Department of Energy Idaho Operations Office, *The Safety Analysis Report for the INEEL TMI-2 Independent Spent Fuel Storage Installation*, Docket No. 72-20, Current Revision.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

U.S. Department of Energy Idaho Operations Office, *The Safety Analysis Report for the Idaho Spent Fuel Facility (ISFF) Independent Spent Fuel Storage Installation*, Docket No. 72-25, Current Revision.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

10 CFR Part 71, "Packaging and Transportation of Radioactive Material," *Code of Federal Regulations*.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste," *Code of Federal Regulations*.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

10 CFR Part 73, "Physical Protection of Plants and Materials," *Code of Federal Regulations*.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

10 CFR Part 21, NRC Reporting Requirements.

Source: DOE-ID NRC Licensing Manager/Idaho contractor

*PLN-466, Quality Assurance Program Plan for ISFSI Management*, Current Revision.

Source: DOE-ID QAM /Idaho contractor

*PLN-120, Hazardous Material Packaging and Transportation Quality Implementation Plan*, Current Revision.

Source: DOE-ID QAM /Idaho Contractor

U. S. Department of Energy Idaho Operations Office, NRC Project, DOE-ID NRC Licensing Procedure Manual, Current Revisions.

Source: DOE-ID NRC Licensing Manager

U. S. Department of Energy Idaho Operations Office, NRC Project, ISFSI Quality Assurance Procedure Manual, Current Revisions.

Source: DOE-ID QAM

U. S. Department of Energy Idaho Operations Office, NRC Project, ISFSI Quality Assurance Program Matrix (DOE/ISFSI/MTX-001), Current Revision.

Source: DOE-ID QAM

## SECTION 4 REVISION HISTORY

<b>Revision</b>	<b>Description and Reason</b>	<b>Effective Date</b>
0	New document to describe the quality assurance program.	03/05/2002
1	Corrects miss numbering of QMP and correct editorial errors.	06/12/2003
2	Corrects name and title changes plus removes inconsistencies.	11/15/2004
3	Revision to document the incorporation of Yucca Mountain Project (YMP) QA comments.	12/14/2004
4	To correct deficiencies 05-ISFSI-AU-001-DR-001 and 05-ISFSI-AU-001-DR-002. The changes clarify QAM responsibilities and Q-List periodic review.	04/29/2005
5	Corrects site name change and changes in contractor's QPP.	01/02/2005
6	Corrections for findings identified in 07-ISFSI-AU-001.	01/15/2007
7	Corrections for findings identified in 07-ISFSI-AU-001.	04/30/2007
8	Addresses concerns in finding 09-ISFSI-AU-01-DR-001.	03/31/2009
9	Up-date to reflect new Idaho Spent Fuel Facility (ISFF) ISFSI license.	08/31/2009
10	Revised to resolve issues identified in the 2012 ISFSI annual audit and to clarify the ISFF applicability in the current phase.	11/30/2013
11	To correct deficiency in 2014 annual ISFSI audit. Adds revision history table.	04/30/2014

## **Appendix A**

### **Acronyms and Definitions**

## Acronyms and Definitions

*Assessment.* As used in this QMP, the term assessment refers to an independent function performed by the responsible QA organizations. The general term assessment, as applied herein, refers solely to QA audits, QA surveillances, and Management Assessments of the QA Program (also see *oversight* and *self-assessment*).

*CFR.* Code of Federal Regulations

*Condition Adverse To Quality.* A state of noncompliance with quality assurance requirements or implementing document; a failure, nonconformance, malfunction, deficiency, deviation, or defect in material, components, or systems important to safety.

*DOE.* U.S. Department of Energy

*DOE-ID.* DOE Idaho Operations Office (Licensee)

*DOE-Owned Spent Nuclear Fuel (SNF).* Nuclear fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated.

*DOE-HQ.* Department of Energy Headquarters

*DOE-ID ISFSI QA Manager (DOE-ID QAM)* - The Department of Energy –Idaho field office (DOE-ID) individual assigned as the Quality Assurance Manager for the NRC Licensed Independent Spent Fuel Storage Facilities (ISFSIs) as described in the ISFSI Safety Analysis Reports (SAR).

*EDMS.* Electronic Document Management System (The electronic system utilized at the INL to manage electronic procedures and QA and Non-QA records.)

*FSV.* Fort St. Vrain (ISFSI located in Colorado.)

*IFI.* Inspection Follow-up Item; a term used by the NRC for problems or deficiencies noted by the NRC.

*Idaho Contractor.* (DOE prime contractor) (an agent of the license)

*INL.* Idaho National Laboratory

*INTEC.* Idaho Nuclear Technology and Engineering Center (An INL facility)

*IRC.* INL Research Complex.

*ISFF.* Idaho Spent Fuel Facility (ISFSI not constructed)

*ISFSI.* Independent Spent Fuel Storage Installation

*ISFSI QA Program.* The QA program described by the ISFSI Safety Analysis Report(s). The ISFSI QA Program requirements are further amplified by the QARD by reference.

*ISFSI QA Procedures (IQP).* An implementing document within the ISFSI program that prescribes methods for performing quality-related activities. Also assigns specific responsibilities for performing these activities. IQPs that apply to the ISFSI QA Program are listed in a QA Program Matrix designated as DOE/ISFSI/MTX-001.

*Licensing Procedures Manual (LPM).* A controlled set of DOE-ID Licensing Management Procedures (LMPs) and plans established and maintained by DOE-ID line management responsible for ISFSI activities within the DOE-ID operations office.

*Licensing Management Procedures (LMPs).* Licensing Management Procedures provide administrative controls for activities performed by DOE-ID ISFSI licensing personnel, DOE-ID ISFSI Facility Directors, and for the direction, control and handling of ISFSI records.

*Laboratory Wide Procedures (LWPs).* A controlled set of Idaho Contractor (Battelle Energy Alliance, LLC (BEA)) implementing documents.

*Management Control Procedures (MCPs).* A controlled set of Idaho Contractor (CH2M-WG Idaho, LLC (CWI)) implementing documents.

*Monitor.* A term used in the ISFSI SARs in Sections 11 that includes documented reviews (QA surveillances and audits); viewed separately or in combination. (Also see *oversight*)

*NEPA/EIS.* National Environmental Policy Act/Environmental Impact Statement (Title of the Records storage area located in Willow Creek Building.)

*Nuclear Regulatory Commission (NRC).* Agency that licenses and regulates an ISFSI.

*Office of Civilian Radioactive Waste Management (OCRWM; RW).* A DOE organization responsible for establishing and implementing a QA program for site selection, construction, and operation of a geologic repository for spent nuclear fuel. The ISFSI decommissioning plans currently include ultimate disposal of the stored spent nuclear fuel at a repository.

*Oversight.* As used in this QMP, the term oversight includes assessments (see definition) or other means of verification such as, documented reviews, documented meetings, documented on-site visits, and documented evaluations as performed by the DOE-ID ISFSI Quality Assurance Manager.

*QA.* Quality Assurance

*QAS.* Quality Assurance Staff are qualified in accordance with the qualification program defined by the ISFSI Quality Assurance Procedures (IQP)s, and Licensing Management Procedures (LMPs). Provides QA support to the DOE-ID ISFSI Quality Assurance Manager).

*Quality Assurance Requirements and Description (QARD, DOE/RW-0333P).* A quality assurance program document prepared by OCRWM. Identified as QARD throughout this document. The ISFSI QA Program described by Sections 11.0 of the ISFSI Safety Analysis Reports includes the QARD by reference.

*Quality Management Plan (QMP).* A controlled document prepared by the QAS that identifies specific authority for the DOE-ID ISFSI Quality Assurance Program. Describes internal and external organizational requirements and responsibilities. Describes the QARD-based QA Program elements applicable to the ISFSI QA Program. Describes the QARD requirements implemented by DOE-ID for QA oversight functions and QARD requirements implemented by the Idaho management and operating (M&O) contractor.

*Quality Assurance Program Plan (QAPP).* A controlled document prepared by the Idaho Contractor and reviewed by the DOE-ID QAM that documents the Idaho Contractors QA program for operating an ISFSI. A QAPP includes a Quality Program Matrix.

*Quality Program Matrix.* A document that provides a crosswalk from ISFSI QA Program requirements and/or QARD requirements to implementing documents and procedures. Sometimes referred to as an implementation matrix. The ISFSI Quality Program Matrix for the ISFSI QA Program is designated as DOE/ISFSI/MTX-001. The Idaho Contractor's Quality Program Matrix is contained in the Idaho Contractors QA Program Plan designated as PLN-466.

*SAR.* Safety Analysis Report

*Self-Assessment.* As used in this QMP, an administrative process performed by DOE-ID line organizations in accordance with the *DOE-ID Licensing Procedures Manual*.

*Significant condition adverse to quality.* A condition adverse to quality or non-compliance items that meets one or more of the following criteria.

A condition adverse to quality or non-compliance item that, if uncorrected, could have a serious effect on safety.

The following criteria are recommended to be used to determine if a condition is considered significant:

- A condition that, were it to remain uncorrected, could have an adverse impact on the ability to meet Technical Specifications acceptance criteria.
- A condition that could result in invalid or indeterminate qualification of data.
- A condition that could result in invalid or indeterminate records.

A material or programmatic condition adverse to quality or non-compliance item that:

- Has impaired or has a high potential to impair a safety function required to assure personnel or public health and safety
- That causes or has a high potential to cause a deviation or violation of the license or other regulatory requirement
- A condition indicating a QA or other Program breakdown, e.g., Training, Maintenance, Operations, Emergency Preparedness, etc.
- Is repetitive in nature such that the effectiveness of prior corrective actions is questionable

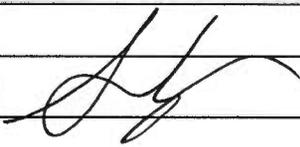
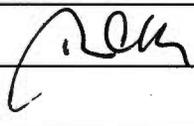
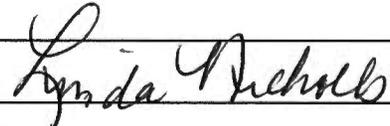
Is a willful violation of QA or other Program requirements, e.g., Training, Emergency Preparedness, etc. or site work rules.

*SNF.* Spent Nuclear Fuel (see DOE-owned SNF).

*TMI-2.* Three Mile Island Unit 2 (ISFSI located at the INL at the INTEC facility.)

## NRC LICENSING DCS FORM

**Instructions:** Fill in **bolded** fields as appropriate. Do not fill in shaded blocks.  
See back of form for notes.

<b>DCSN:</b>	
<b>Document ID:</b> <sup>(1)</sup>	<b>QMP-001</b>
<b>Revision Number:</b> <sup>(1a)</sup>	<b>11</b>
<b>Document Title (or description):</b> <sup>(2)</sup>	<b>Quality Management Plan for the Department of Energy Idaho Operations Office Independent Spent Fuel Storage Installations Operations Phase.</b>
<b>Document Date:</b>	<b>6-18-14</b>
<b>Author:</b>	<b>Shawn Murphy</b>
<b>Addressee:</b> <sup>(3)</sup>	<b>NA</b>
<b>Signature Name:</b> <sup>(4)</sup>	<b>Randolph Kay</b>
<b>Key Words:</b> <sup>(5)</sup>	
<b>File location within EDMS</b> <sup>(6)</sup> <b>File Hierarchy is</b> <b>BEA or ICP, DOE-ID, NRC, ISFSI</b>	<input type="checkbox"/> Correspondence <input type="checkbox"/> Assessments <input checked="" type="checkbox"/> Procedures <input type="checkbox"/> Training
<b>Page Count (include only page 1 of this form)</b>	<b>28 pgs.</b>
<b>Type of Record</b>	<input checked="" type="checkbox"/> QA <input type="checkbox"/> Project Record (Non-QA)
<b>QA Record Retention Period:</b> <sup>(7)</sup>	<input checked="" type="checkbox"/> Non Permanent <input type="checkbox"/> Lifetime
<b>Records Disposition Authority:</b> <sup>(8)</sup>	<input checked="" type="checkbox"/> ID QAM <input type="checkbox"/> Facility Director <input type="checkbox"/> Licensing Mgr
<b>Uniform Filing Code &amp; Disposition:</b> <sup>(9)</sup>	<b>7652 - N1-434-01-3-2</b>
<b>Individual Submitting Record</b>	<hr/> Shawn Murphy/  <span style="float: right;">6-18-14</span> Print/Signature <span style="float: right;">Date</span>
<b>QA Record Authentication:</b> <sup>(10)</sup>	<hr/> Randolph Kay/  <span style="float: right;">6/18/2014</span> Print/Signature <span style="float: right;">Date</span>
<b>ERA Record Verification</b> <sup>(11)</sup>	<hr/> Linda Nicholls  <span style="float: right;">6/19/14</span> Print/Signature <span style="float: right;">Date</span>