

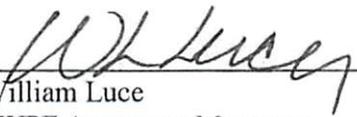
SALT WASTE PROCESSING FACILITY

**STANDARDS/REQUIREMENTS
IDENTIFICATION DOCUMENT**

Contract No. DE-AC09-02SR22210

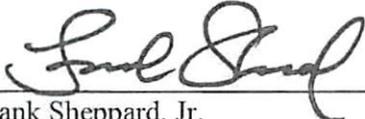
Function: ESH&Q
Doc. No.: S-RCP-J-00001
Revision: 4
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SIGNATURE PAGE



William Luce
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9/21/17
Date



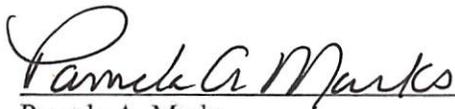
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SUMMARY OF CHANGES

Revision No.	Date	Description of Change
2	01/10/07	Issued for DOE Approval (Minor change. Document reissued to correct revision number per PP-DCR-07-136)
2A1	08/19/15	Revise per DMR 3174. This is a complete rewrite. No revision bars shown. Issued for Intradiscipline Check
2A2	08/19/15	Revise per DMR 3174. This is a complete rewrite. No revision bars shown. Issued for Interdiscipline Review
2B	09/16/15	Revise per DMR 3174. This is a complete rewrite. No revision bars shown. Issued for DOE Formal Review
3	08/15/16	Revise per DMR 3174. This is a complete rewrite. No revision bars shown. Issued for DOE Verification
3	10/04/16	Revise per DMR 3174. This is a complete rewrite. No revision bars shown. Issued for Approval
3A1	06/05/2017	Revise per DMR 3897. Issued for Intradiscipline Check.
3A2	06/06/2017	Revise per DMR 3897. Issued for Interdiscipline Review.
3B	08/10/2017	Revise per DMR 3897. Issued for DOE Formal Review.
4 Verification	09/12/2017	Revise per DMR 3897. Issued for DOE Verification.
4	09/22/2017	Revise per DMR 3897. Issued for DOE Approval.

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Appendix

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier

LIST OF ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CLIN	Contract Line Item Number
CRD	Contractor Requirements Document
Cs	Cesium
DEAR	U.S. Department of Energy Acquisition Regulation
DOE	U.S. Department of Energy
RMAIP	Risk Management Approach Implementation Plan
EM	Environmental Management
EPC	Engineering, Procurement, and Construction
ESH&Q	Environmental, Safety, Health, and Quality
FAR	Federal Acquisition Regulation
M&O	Management and Operating (Contractor)
S/RID	Standards/Requirements Identification Document
Sr	Strontium
SWPF	Salt Waste Processing Facility

1.0 INTRODUCTION

The mission of the Salt Waste Processing Facility (SWPF) is to process salt waste that will be removed from the liquid waste storage tanks in the F- and H-Area Tank Farms at the Savannah River Site. The SWPF will separate radioactive strontium (Sr), actinides, and cesium (Cs) from the salt solutions removed from the liquid waste tanks. The concentrated Sr, actinides, and Cs waste will be sent to the Defense Waste Processing Facility for final treatment (vitrification). The remaining bulk decontaminated salt solution will be sent to the Saltstone Facility for immobilization and disposal in the grout vaults.

The U.S. Department of Energy (DOE) has selected Parsons as the Engineering, Procurement, and Construction (EPC) Contractor to develop the design and construct, commission, and operate the SWPF for one year.

2.0 PURPOSE

The primary purpose of the SWPF Project Standards/Requirements Identification Document (S/RID) is to identify a compiled set of environmental, safety, health, and quality (ESH&Q) standards/requirements source documents that are necessary and sufficient to manage the SWPF Project in a manner that protects the public, workers, and the environment. Non-ESH&Q standards/requirements from DOE directive source documents are also specified through Section J, Attachment K of Contract DE-AC09-02SR22210, *Design, Construction, and Commissioning of a Salt Waste Processing Facility (SWPF)*¹ (List B) and are managed under the same processes used for ESH&Q standards/requirements source documents. Therefore, the S/RID includes specific non-ESH&Q standards/requirements DOE directive source documents for completeness.

3.0 SCOPE

The standards/requirements within the source documents identified in this document broadly apply to all Project phases including Design, Construction, Cold Commissioning, Hot Commissioning, and Operations, to the extent that each specific standard/requirement is applicable to one or more phases in accordance with the scope of the source document and/or the individual standard/requirement within the source document.

Methods and processes for management of Project compliance with S/RID standards/requirements source documents are described in S-RCP-J-00002, *SWPF Standards/Requirements Identification Document Compliance Plan*².

4.0 METHOD

In accordance with DOE Acquisition Regulation (DEAR) 970.5204-2, *Laws, regulations, and DOE directives*³ (incorporated by reference through Section I.121 of Contract [DE-AC09-02SR22210¹]), the EPC Contractor is required to (in part):

. . . *“Comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), unless relief has been granted in writing by the appropriate regulatory agency;. . .”* and

. . . *“Comply with the requirements of those DOE directives, or parts thereof, identified in the List of Applicable Directives (List B) appended to the contract. . . .”*

The List of Applicable Laws and Regulations is referred to as List A in DEAR 970.5204-2³ and this same naming convention is utilized in the compilation of the Project S/RID ESH&Q standards/requirements source documents. However, as also specified in DEAR 970.5204-2³, omission of any applicable law or regulation from List A does not affect the obligation of the contractor to comply with such law or regulation.

In relation to Section J, Attachment K of the Contract (DE-AC09-02SR22210¹), DOE directive source documents that contain contractor requirements are typically through DOE Orders, Notices, and selected Manuals. DOE Policies provide the Secretary's direction for Orders, Notices, Guides, and Technical Standards and, as such, do not include specific actionable requirements for contractors. DOE Guides and Technical Standards provide acceptable, but not mandatory means for complying with requirements of an Order or rule and DOE-approved possible methodologies and criteria for meeting requirements in an Order or rule, respectively. DOE Guides and Technical Standards can be made mandatory under DOE regulatory or contractual provisions and where this has occurred for the SWPF Project, the applicable versions of these documents are included in this document, either directly as a specific source document or indirectly through inclusion of the regulatory source document that invokes the Guide/Technical Standard. DOE Guides and Technical Standards that have not been made mandatory under DOE regulatory or contractual provisions are typically considered in the development of Project approaches, processes, and procedures that implement specific standards/requirements; however, such consideration does not extend to a contractual commitment or obligation to comply with such DOE Guides and Technical Standards.

A number of S/RID standards/requirements source documents include specific requirements directed at requiring compliance with other source documents. For example, paragraph 851.23 of 10 Code of Federal Regulations (CFR) 851, *Worker Safety and Health Program*⁴ requires (in part) contractor compliance with a specific set of Occupational Safety and Health standards as well as selected American National Standards Institute standards and National Fire Protection Association codes/standards. There is no need for the Project S/RID to specifically list these additional standards/requirements source documents, as listing the source documents that invoke compliance with the additional source documents implicitly provides S/RID coverage.

Section H.32 (*Project Integration and the Safety Management System*) of the Contract (DE-AC09-02SR22210¹) states (in part):

“The WSRC S/RID has been tested and approved by DOE for work at the site; however, the contractor is to review the S/RID to ensure all requirements applicable to the contemplated work are addressed, add new requirements as

necessary and delete, with DOE approval, those determined not to be applicable, if any.”

The Site Management and Operating (M&O) Contractor’s S/RID (WSRC-RP-94-1268, *Standards/Requirements Identification Document*⁵) was reviewed by EPC Contractor when establishing the initial SWPF S/RID (S-CRT-J-0048, *SWPF Standards/Requirements Identification Document Compliance Plans*⁶). The current version of the M&O’s S/RID (SRNS-RP-2008-00086, *Standards/Requirements Identification Document*⁷) was reviewed in conjunction with this revision. As expected, many standards/requirements source documents were found to be common to both S/RIDs. Differences between the S/RIDs are driven by the narrower scope for the EPC Contractor Contract (DE-AC-0-02SR22210¹) versus the Site M&O Contract, as well as apparent differences in the *List B* DOE Directives currently incorporated into the respective contracts.

5.0 S/RID

This section provides the S/RID identified for the SWPF Project. The S/RID is organized into List A and List B. The standards/requirements source documents in both tables are sorted by ESH&Q functional area for consistency with the Site M&O S/RID alignment. Standards/requirements source documents sorted by individual document type and alphanumeric identifiers are contained in Appendix A.

The requirements listed in Table 5-1 comprise ESH&Q laws and regulations identified as applicable to the SWPF Project. Omission of any applicable law or regulation from this table does not affect the obligation of the contractor to comply with such law or regulation.

Table 5-2 comprises the set of DOE Directives and consensus standards that are included in Section J, Attachment K of DE-AC09-02SR22210¹ and reflects the current set of such standards/requirements source documents through Contract Modification No. 0169, *Contract Number DE-AC09-02SR22210 Salt Waste Processing Facility (SWPF) Project*⁸. A few of the directives included in Section J, Attachment K of the Contract (DE-AC09-02SR22210¹) are not ESH&Q related, but are included in Table 5-2 for completeness and assigned to the “non-ESH&Q” functional area. In addition, to ensure a comprehensive compiled set of ESH&Q standards/requirements, selected Federal Acquisition Regulation (FAR) and DEAR contract clauses incorporated by reference in Section I of the Contract (DE-AC09-02SR22210¹) and related to ESH&Q functional areas have been included in Table 5-2.

Table 5-1. SWPF Project ESH&Q List A Standards/Requirements

Document No.	Title	Functional Area
10 CFR 436	Federal Energy Management and Planning Programs	Engineering Program
Public Law 104-113	National Technology Transfer and Advancement Act of 1995	Engineering Program
Public Law 109-58	Energy Act of 2005	Engineering Program

Table 5-1. SWPF Project ESH&Q List A Standards/Requirements (cont.)

Document No.	Title	Functional Area
SC Code, Title 40, Chapter 22	Professions and Occupations, Engineers and Surveyors	Engineering Program
40 CFR 112	Oil Pollution Prevention	Environmental Protection
40 CFR 116	Designation of Hazardous Substances	Environmental Protection
40 CFR 117	Determination of Reportable Quantities for Hazardous Substances	Environmental Protection
40 CFR 122	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System	Environmental Protection
40 CFR 136	Guidelines Establishing Test Procedures for the Analysis of Pollutants	Environmental Protection
40 CFR 302	Designation, Reportable Quantities, and Notification	Environmental Protection
40 CFR 355	Emergency Planning and Notification	Environmental Protection
40 CFR 370	Hazardous Chemical Reporting: Community Right-To-Know	Environmental Protection
40 CFR 372	Toxic Chemical Release Reporting: Community Right-To-Know	Environmental Protection
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards	Environmental Protection
40 CFR 60	Standards of Performance for New Stationary Sources	Environmental Protection
40 CFR 61	National Emission Standards for Hazardous Air Pollutants	Environmental Protection
40 CFR 82	Protection of Stratospheric Ozone	Environmental Protection
SC R.61-62	Air Pollution Control Regulations and Standards	Environmental Protection
SC R.61-67	Standards for Wastewater Facility Construction	Environmental Protection
SC R.61-68	Water Classifications and Standards	Environmental Protection
SC R.72-300	Standards for Stormwater Management and Sediment Reduction	Environmental Protection
10 CFR 708	DOE Contractor Employee Protection Program	Management Systems
10 CFR 820	Procedural Rules for DOE Nuclear Activities	Management Systems
10 CFR 830, Subpart B	Safety Basis Requirements	Nuclear and Process Safety
10 CFR 707	Workplace Substance Abuse Programs at DOE Sites	Occupational Safety and Health
10 CFR 851	Worker Safety and Health Program	Occupational Safety and Health
10 CFR 71	Packaging and Transportation of Radioactive Material	Packaging and Transportation

Table 5-1. SWPF Project ESH&Q List A Standards/Requirements (cont.)

Document No.	Title	Functional Area
49 CFR 171	General Information, Regulations, and Definitions	Packaging and Transportation
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans	Packaging and Transportation
49 CFR 173	Shippers-General Requirements for Shipments and Packagings	Packaging and Transportation
49 CFR 177	Carriage by Public Highway	Packaging and Transportation
49 CFR 178	Specifications for Packagings – Subpart K: Specifications for Packagings for Class 7 (Radioactive) Materials	Packaging and Transportation
10 CFR 830, Subpart A	Quality Assurance Requirements	Quality Assurance
10 CFR 835	Occupational Radiation Protection	Radiation Protection
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste	Waste Management
40 CFR 246	Source Separation for Materials Recovery Guidelines	Waste Management
40 CFR 260	Hazardous Waste Management System: General	Waste Management
40 CFR 261	Identification and Listing of Hazardous Waste	Waste Management
40 CFR 262	Standards Applicable to Generators of Hazardous Waste	Waste Management
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste	Waste Management
40 CFR 268	Land Disposal Restrictions	Waste Management
40 CFR 273	Standards for Universal Waste Management	Waste Management
40 CFR 279	Standards for the Management of Used Oil	Waste Management
SC R 61-107	Solid Waste Management	Waste Management
SC R.61-79	Hazardous Waste Management Regulations	Waste Management

Table 5-2. SWPF Project List B Standards/Requirements

Document No.	Title	Functional Area
DOE-STD-1073-2003	Configuration Management (October 2003)	Configuration Management
DOE O 151.1C	Comprehensive Emergency Management System (11/02/2005)	Emergency Management
IBC-2003	International Building Code	Engineering Program
FAR 52.236-25	Requirements for Registration of Designers (APR 1984)	Engineering Program
DOE O 450.1, Chg 2	Environmental Protection Program (12/07/2005)	Environmental Protection
DOE O 458.1, Admin Chg 3	Radiation Protection of the Public and the Environment (01/15/2013)	Environmental Protection
FAR 52.223-14	Toxic Chemical Release Reporting (OCT 2000)	Environmental Protection
FAR 52.223-5	Pollution Prevention and Right-to-Know Information (APR 1998)	Environmental Protection
DOE-STD-1088-95	Fire Protection for Relocatable Structures (June 1995)	Fire Protection
DOE O 433.1B, Admin Chg 1	Maintenance Management Program for DOE Nuclear Facilities (03/12/2013)	Maintenance
DEAR 952.203-70	Whistleblower Protection for Contractor Employees (DEC 2000)	Management Systems
DEAR 952.250-70	Nuclear Hazards Indemnity Agreement (JUN 1996)	Management Systems
DEAR 970.5204-2	Laws, Regulations, and DOE Directives (DEC 2000)	Management Systems
DEAR 970.5223-1	Integration of Environment, Safety, and Health into Work Planning and Execution (DEC 2000)	Management Systems
DOE M 450.4-1	Integrated Safety Management System Manual (11/01/2006)	Management Systems
DOE O 210.2A	DOE Corporate Operating Experience Program (04/08/2011)	Management Systems
DOE O 225.1B	Accident Investigations (03/04/2011)	Management Systems
DOE O 226.1B	Implementation of Department of Energy Oversight Policy (04/25/2011)	Management System
DOE O 232.2A	Occurrence Reporting and Processing of Operations Information (1/17/2017) including <i>Environmental Management (EM) Contractor Requirements Document (CRD) (Supplemented DOE O 232.2A)</i> . U.S. Department of Energy, Washington, D.C. Memorandum for Distribution (07/14/2017)	Management System
DOE O 413.3B ^A	Program and Project Management for the Acquisition of Capital Assets (11/29/2010)	Management Systems

^A Per Contract Modification 90, DOE O 413.3B requirements involving compliance with ANSI/EIA-748B, ASEM NQA-1-2008 and NQA-1a-2009, and EO 13423 are not invoked. In addition, SWPF will not be affected by

Table 5-2. SWPF Project List B Standards/Requirements (cont.)

Document No.	Title	Functional Area
DOE O 425.1D, Admin Chg 1	Verification of Readiness to Startup or Restart Nuclear Facilities (04/02/2013)	Management Systems
DOE O 442.1A	Department of Energy Employee Concerns Program (06/06/2001)	Management Systems
DOE P 450.4	Safety Management System Policy (10/15/1996)	Management Systems
DOE P 450.7	Department of Energy Environment, Safety and Health (ES&H) Goals (08/02/2004)	Management Systems
FAR 52.203-17	Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights (APR 2014)	Management Systems
FAR 52.223-6	Drug-Free Workplace (MAY 2001)	Management Systems
FAR 52.236-7	Permits and Responsibilities (NOV 1991)	Management Systems
ANSI/ANS-8.1-1998	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	Nuclear and Process Safety
ANSI/ANS-8.19-2005	Administrative Practices for Nuclear Criticality Safety	Nuclear and Process Safety
ANSI/ANS-8.3-1997	Criticality Accident Alarm System	Nuclear and Process Safety
DOE-STD-1027-92, Chg Notice 1	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE O 5480.23, Nuclear Safety Analysis Reports (September 1997)	Nuclear and Process Safety
DOE-STD-1186-2004	Specific Administrative Controls (August 2004)	Nuclear and Process Safety
DOE-STD-3009-94, Chg Notice 3	Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facilities Documented Safety Analyses (March 2006)	Nuclear and Process Safety
DOE O 420.1B	Facility Safety (12/22/2005) (Only for Contract Line Item Number [CLIN] 5)	Nuclear and Process Safety, Fire Protection, Configuration Management, and Engineering
DOE O 420.1C, Chg 1 ^B	Facility Safety (12/27/2015) (Only for CLIN 6 & 7)	Nuclear and Process Safety, Fire Protection, Configuration Management, and Engineering
ANSI Z358.1-1998	American National Standard for Emergency Eyewash and Shower Equipment	Occupational Safety and Health

DOE-STD-1189 unless a major modification is implemented to the facility. Also refer to Contact Modification 150 in relation to applicability of NQA-1-2008 and NQA-1a-2009.

^B DOE O 420.1C, Chg 1 is incorporated for all CLIN 0006 and CLIN 0007 activities per Contract Modification 0139. All assumptions documented in Attachment A of Modification 0135 with the implementation of 420.1C Facility Safety will remain intact. For SWPF design requirements, Parsons will continue to use the Code of Record which is DOE O 420.1B through the completion of the contract. SWPF has reached a “high level of design maturity” and consequently “the design requirements” in DOE O 420.1C “do not apply” as well as all other assumptions referenced in Parsons’ Attachment A, Reference No. 00-700-23378 to their proposal dated 1/6/2015.

Table 5-2. SWPF Project List B Standards/Requirements (cont.)

Document No.	Title	Functional Area
DEAR 970.5223-4	Workplace Substance Abuse Programs at DOE Sites (DEC 2000)	Occupational Safety and Health
DOE O 231.1B, Admin Chg 1	Environment, Safety and Health Reporting (11/28/2012)	Occupational Safety and Health
DOE Memorandum, SPD-06-075	Safety Alert (02/14/2006)	Occupational Safety and Health
DOE O 440.1A (Attachment 2, Paragraph 15.c)	Worker Protection Management for DOE Federal and Contractor Employees (03/27/1998)	Occupational Safety and Health
FAR 52.223-3	Hazardous Material Identification and Material Safety Data (JAN 1997); Alternate I (JUL 1995)	Occupational Safety and Health
WSRC-TM-90-7, Rev 6 (Section 11.5.1.5)	Savannah River Site Hoisting and Rigging Manual, Mobile Cranes (02/03/2005)	Occupational Safety and Health
ANSI/ANS-3.2-1994 (Section 5.2.1.5)	Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	Conduct of Operations
DOE O 422.1, Admin Chg 2	Conduct of Operations (12/03/2014)	Conduct of Operations
DOE O 460.1C	Packaging and Transportation Safety (05/14/2010)	Packaging and Transportation
DOE O 460.2A	Departmental Materials Transportation and Packaging Management (12/22/2004)	Packaging and Transportation
ANSI/ISO/ASQ Q9001-2000	Quality Management Systems – Requirements	Quality Assurance
ASME NQA-1-2004 (Part I and Part II, Subpart 2.7)	Quality Assurance Requirements for Nuclear Facility Applications (Only for CLIN 5)	Quality Assurance
ASME NQA-1-2008/2009a (Part I and Part II) ^C	Quality Assurance Requirements for Nuclear Facility Applications (Only for CLIN 6, 7 & 8)	Quality Assurance
DEAR 970.5204-3	Access to and Ownership of Records (DEC 2000)	Quality Assurance
DOE O 414.1C	Quality Assurance (06/17/2005) (Only for CLIN 5)	Quality Assurance
DOE O 414.1D, Admin Chg 1 ^D	Quality Assurance (05/08/2013) (Only for CLIN 6, 7 & 8)	Quality Assurance
IEEE Std 730-2002	IEEE Standard for Software Quality Assurance Plans	Quality Assurance
ANSI N323A-1997	Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments	Radiation Protection

^C Per Contract Modification 150, implementation is in accordance with the *SWPF Implementation Plan for NQA-1-2008 (with the NQA-1a-2009 Addenda)* (Letter 00-700-23883, August 18, 2015).

^D Per Contract Modification 128, DOE O 414.1D is only applicable to CLIN 0006, 0007, and 0008; and the NQA-2008/2009a will not be applied at this time. DOE O 414.1C remains in effect for CLIN 0005.

Table 5-2. SWPF Project List B Standards/Requirements (cont.)

Document No.	Title	Functional Area
ANSI N42.18-1980	Specification and Performance of On-Site Instrumentation for Continuously Monitoring Radioactivity in Effluents	Radiation Protection
ANSI N43.3-1993	American National Standard for General Radiation Safety - Installations Using Non-Medical X-Ray and Sealed Gamma-Ray Sources, Energies up to 10 MeV	Radiation Protection
DEAR 952.223-75	Preservation of Individual Occupational Radiation Exposure Records (APR 1984)	Radiation Protection
DOE-STD-1098-99, Chg Notice 1 (Chapter III, Part 8, Section 113)	Radiological Control (June 2004)	Radiation Protection
DOE O 426.2, Admin Chg 1	Personnel Selection, Training, Qualification and Certification Requirements for DOE Nuclear Facilities (07/29/2013)	Training and Qualifications
DOE M 435.1-1, Chg 1	Radioactive Waste Management Manual (06/19/2001)	Waste Management
DOE O 435.1, Chg 1	Radioactive Waste Management (08/28/2001)	Waste Management
FAR 52.223-10	Waste Reduction Program (AUG 2000)	Waste Management
DOE O 142.3, Chg 1	Unclassified Foreign Visits and Assignments Program (02/28/2008)	Non-ESH&Q
DOE O 205.1B, Chg 2 ^E	Department of Energy Cyber Security Program (3/11/2013)	Non-ESH&Q
DOE O 206.2	Identity, Credential, and Access Management (ICAM) (02/19/2013)	Non-ESH&Q
DOE O 221.1A	Reporting Fraud, Waste and Abuse to the Office of Inspector General (04/19/2008)	Non-ESH&Q
DOE O 221.2A	Cooperation with the Office of Inspector General (02/25/2008)	Non-ESH&Q
DOE O 470.4B, Admin Chg 1	Safeguards and Security Program (02/15/2013)	Non-ESH&Q
DOE O 470.5	Insider Threat Program (06/02/2014)	Non-ESH&Q
DOE O 471.1B	Identification and Protection of Unclassified Controlled Nuclear Information (03/01/2010)	Non-ESH&Q
DOE O 471.3, Admin Chg 1	Identifying and Protecting Official Use Only Information (01/13/2011)	Non-ESH&Q
DOE EM RMAIP ^E	Office of Environmental Management (EM) Cyber Security Policy and Risk Management Approach Implementation Plan (February 2014)	Non-ESH&Q

^E Per Contract Modification 159, DOE O 205.1B, Chg 2 Department of Energy Cyber Security Program replaced DOE O 205.1A requiring implementation of DOE EM RMAIP *Office of Environmental Management (EM) Cyber Security Policy and Risk Management Approach Implementation Plan* (February 2014) and thereby canceling PCSP V 1.2.

6.0 STANDARDS/REQUIREMENTS FLOW DOWN

In accordance with DEAR 970.5204-2³, standards/requirements source documents in the SWPF S/RID will be included in subcontracts, as applicable to the procured items/services.

7.0 MAINTENANCE

Revisions to the SWPF S/RID are driven by issuance of new laws and regulations applicable to the Project and through specific Contract Modifications that invoke compliance with new or revised DOE Directives after any appropriate processing via PP-CO-9002, *Contract Modifications and Contract Changes*⁹. Such revisions are managed in real time as laws/regulations and Contract Modifications are issued and, therefore, it is not necessary to update this document for each change. Rather, this document will undergo a full revision on a periodic basis to reflect a compilation of changes since the prior revision.

8.0 REFERENCES

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- ¹ DE-AC09-02SR22210, *Design, Construction, and Commissioning of a Salt Waste Processing Facility (SWPF)*. U. S. Department of Energy. 2002.
 - ² S-RCP-J-00002, *SWPF Standards/Requirements Identification Document Compliance Plan*, Revision 1. Parsons, Aiken, South Carolina.
 - ³ DEAR 970.5204-2, *Laws, Regulations, and DOE Directives (DEC 2000)*. U.S. Department of Energy Acquisition Regulation, Washington, D.C.
 - ⁴ 10 CFR 851, *Worker Safety and Health Program*
 - ⁵ WSRC-RP-94-1268, *Standards/Requirements Identification Document*, Revision 05-16. Westinghouse Savannah River Company, Aiken, South Carolina. 2002.
 - ⁶ S-CRT-J-0048, *SWPF Standards/Requirements Identification Document Compliance Plans*, Revision 0. Parsons, Aiken, South Carolina.
 - ⁷ SRNS-RP-2008-00086, *Standards/Requirements Identification Document*, Savannah River Nuclear Solutions, Aiken, South Carolina, July 2015.
 - ⁸ Contract Modification No. 0169, *Contract Number DE-AC09-02SR22210 Salt Waste Processing Facility (SWPF) Project*. June 20, 2017.
 - ⁹ *Salt Waste Processing Facility Project Procedures Manual*. Parsons, Aiken, South Carolina.
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Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier

Document No.	Title	Functional Area
Federal Laws/Regulations		
10 CFR 436	Federal Energy Management and Planning Programs	Engineering Program
10 CFR 707	Workplace Substance Abuse Programs at DOE Sites	Occupational Safety and Health
10 CFR 708	DOE Contractor Employee Protection Program	Management Systems
10 CFR 71	Packaging and Transportation of Radioactive Material	Packaging and Transportation
10 CFR 820	Procedural Rules for DOE Nuclear Activities	Management Systems
10 CFR 830, Subpart A	Quality Assurance Requirements	Quality Assurance
10 CFR 830, Subpart B	Safety Basis Requirements	Nuclear and Process Safety
10 CFR 835	Occupational Radiation Protection	Radiation Protection
10 CFR 851	Worker Safety and Health Program	Occupational Safety and Health
40 CFR 112	Oil Pollution Prevention	Environmental Protection
40 CFR 116	Designation of Hazardous Substances	Environmental Protection
40 CFR 117	Determination of Reportable Quantities for Hazardous Substances	Environmental Protection
40 CFR 122	EPS Administered Permit Programs: The National Pollutant Discharge Elimination System	Environmental Protection
40 CFR 136	Guidelines Establishing Test Procedures for the Analysis of Pollutants	Environmental Protection
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste	Waste Management
40 CFR 246	Source Separation for Materials Recovery Guidelines	Waste Management
40 CFR 260	Hazardous Waste Management System: General	Waste Management
40 CFR 261	Identification and Listing of Hazardous Waste	Waste Management
40 CFR 262	Standards Applicable to Generators of Hazardous Waste	Waste Management
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste	Waste Management
40 CFR 268	Land Disposal Restrictions	Waste Management
40 CFR 273	Standards for Universal Waste Management	Waste Management
40 CFR 279	Standards for the Management of Used Oil	Waste Management
40 CFR 302	Designation, Reportable Quantities, and Notification	Environmental Protection
40 CFR 355	Emergency Planning and Notification	Environmental Protection
40 CFR 370	Hazardous Chemical Reporting: Community Right-To-Know	Environmental Protection

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
40 CFR 372	Toxic Chemical Release Reporting: Community Right-To-Know	Environmental Protection
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards	Environmental Protection
40 CFR 60	Standards of Performance for New Stationary Sources	Environmental Protection
40 CFR 61	National Emission Standards for Hazardous Air Pollutants	Environmental Protection
40 CFR 82	Protection of Stratospheric Ozone	Environmental Protection
49 CFR 171	General Information, Regulations, and Definitions	Packaging and Transportation
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans	Packaging and Transportation
49 CFR 173	Shippers-General Requirements for Shipments and Packagings	Packaging and Transportation
49 CFR 177	Carriage by Public Highway	Packaging and Transportation
49 CFR 178	Specifications for Packagings – Subpart K: Specifications for Packagings for Class 7 (Radioactive) Materials	Packaging and Transportation
Public Law 104-113	National Technology Transfer and Advancement Act of 1995	Engineering Program
Public Law 109-58	Energy Act of 2005	Engineering Program
State Laws/Regulations		
SC Code, Title 40, Chapter 22	Professions and Occupations, Engineers and Surveyors	Engineering Program
SC R 61-107	Solid Waste Management	Waste Management
SC R.61-62	Air Pollution Control Regulations and Standards	Environmental Protection
SC R.61-67	Standards for Wastewater Facility Construction	Environmental Protection
SC R.61-68	Water Classifications and Standards	Environmental Protection
SC R.61-79	Hazardous Waste Management Regulations	Waste Management
SC R.72-300	Standards for Stormwater Management and Sediment Reduction	Environmental Protection
DOE Directives		
DOE M 435.1-1, Chg.1	Radioactive Waste Management Manual (06/19/2001)	Waste Management
DOE M 450.4-1	Integrated Safety Management System Manual (11/01/2006)	Management Systems
DOE O 142.3, Chg 1	Unclassified Foreign Visits and Assignments Program (02/28/2008)	Non-ESH&Q

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
DOE O 151.1C	Comprehensive Emergency Management System (11/02/2005)	Emergency Management
DOE O 205.1B, Chg 2 ^F	Department of Energy Cyber Security Program (3/11/2013)	Non-ESH&Q
DOE O 206.2	Identity, Credential, and Access Management (ICAM) (02/19/2013)	Non-ESH&Q
DOE O 210.2A	DOE Corporate Operating Experience Program (04/08/2011)	Management Systems
DOE O 221.1A	Reporting Fraud, Waste and Abuse to the Office of Inspector General (04/19/2008)	Non-ESH&Q
DOE O 221.2A	Cooperation with the Office of Inspector General (02/25/2008)	Non-ESH&Q
DOE O 225.1B	Accident Investigations (03/04/2011)	Management Systems
DOE O 226.1B	Implementation of Department of Energy Oversight Policy (04/25/2011)	Management System
DOE O 231.1B, Admin Chg 1	Environment, Safety and Health Reporting (11/28/2012)	Occupational Safety and Health
DOE O 232.2A	Occurrence Reporting and Processing of Operations Information (1/17/2017) including <i>Environmental Management (EM) Contractor Requirements Document (CRD) (Supplemented DOE O 232.2A)</i> . U.S. Department of Energy, Washington, D.C. Memorandum for Distribution (07/14/2017)	Management System
DOE O 413.3B ^G	Program and Project Management for the Acquisition of Capital Assets (11/29/2010)	Management Systems
DOE O 414.1C	Quality Assurance (06/17/2005) (Only for CLIN 5)	Quality Assurance
DOE O 414.1D, Admin Chg 1 ^H	Quality Assurance (05/08/2013) (Only for CLIN 6, 7 & 8)	Quality Assurance
DOE O 420.1B	Facility Safety (12/22/2005) (Only for CLIN 5)	Nuclear Safety, Fire Protection, Configuration Management, and Engineering

^F Per Contract Modification 159, DOE O 205.1B, Chg 2 Department of Energy Cyber Security Program replaced DOE O 205.1A .

^G Per Contract Modification 90, DOE O 413.3B requirements involving compliance with ANSI/EIA-748B, ASME NQA-1-2008 and NQA-1a-2009, and EO 13423 are not invoked. In addition, SWPF will not be affected by DOE-STD-1189 unless a major modification is implemented to the facility. Also refer to Contact Modification 150 in relation to applicability of NQA-1-2008 and NQA-1a-2009.

^H Per Contract Modification 128, DOE O 414.1D is only applicable to CLIN 0006, 0007, and 0008; and the NQA-2008/2009a will not be applied at this time. DOE O 414.1C remains in effect for CLIN 0005.

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
DOE O 420.1C, Chg 1 ¹	Facility Safety (12/27/2015) (Only for CLIN 6 & 7)	Nuclear and Process Safety, Fire Protection, Configuration Management, and Engineering
DOE O 422.1, Admin Chg 2	Conduct of Operations (12/03/2014)	Conduct of Operations
DOE O 425.1D, Admin Chg 1	Verification of Readiness to Startup or Restart Nuclear Facilities (04/02/2013)	Management Systems
DOE O 426.2, Admin Chg 1	Personnel Selection, Training, Qualification and Certification Requirements for DOE Nuclear Facilities (07/29/2013)	Training and Qualifications
DOE O 433.1B, Admin Chg 1	Maintenance Management Program for DOE Nuclear Facilities (03/12/2013)	Maintenance
DOE O 435.1, Chg 1	Radioactive Waste Management (08/28/2001)	Waste Management
DOE O 440.1A (Attachment 2, Paragraph 15.c)	Worker Protection Management for DOE Federal and Contractor Employees (03/27/1998)	Occupational Safety and Health
DOE O 442.1A	Department of Energy Employee Concerns Program (06/06/2001)	Management Systems
DOE O 450.1, Chg 2	Environmental Protection Program (12/07/2005)	Environmental Protection
DOE 458.1, Admin Chg 3	Radiation Protection of the Public and the Environment (01/15/2013)	Environmental Protection
DOE O 460.1C	Packaging and Transportation Safety (05/14/2010)	Packaging and Transportation
DOE O 460.2A	Departmental Materials Transportation and Packaging Management (12/22/2004)	Packaging and Transportation
DOE O 470.4B, Admin Chg 1	Safeguards and Security Program (02/15/2013)	Non-ESH&Q
DOE O 470.5	Insider Threat Program (06/02/2014)	Non-ESH&Q
DOE O 471.1B	Identification and Protection of Unclassified Controlled Nuclear Information (03/01/2010)	Non-ESH&Q
DOE O 471.3, Admin Chg 1	Identifying and Protecting Official Use Only Information (01/13/2011)	Non-ESH&Q
DOE P 450.4	Safety Management System Policy (10/15/1996)	Management Systems

¹ DOE O 420.1C, Chg 1 is incorporated for all CLIN 0006 and CLIN 0007 activities per Contract Modification 0139. All assumptions documented in Attachment A of Modification 0135 with the implementation of 420.1C Facility Safety will remain intact. For SWPF design requirements, Parsons will continue to use the Code of Record which is DOE O 420.1B through the completion of the contract. SWPF has reached a “high level of design maturity” and consequently “the design requirements” in DOE O 420.1C “do not apply” as well as all other assumptions referenced in Parsons’ Attachment A, Reference No. 00-700-23378 to their proposal dated 1/6/2015.

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
DOE P 450.7	Department of Energy Environment, Safety and Health (ES&H) Goals (08/02/2004)	Management Systems
DOE Technical Standards		
DOE-STD-1027-92, Chg Notice 1	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE O 5480.23, Nuclear Safety Analysis Reports (September 1997)	Nuclear and Process Safety
DOE-STD-1073-2003	Configuration Management (October 2003)	Configuration Management
DOE-STD-1088-95	Fire Protection for Relocatable Structures (June 1995)	Fire Protection
DOE-STD-1098-99, Chg Notice 1 (Chapter III, Part 8, Section 113)	Radiological Control (June 2004)	Radiation Protection
DOE-STD-1186-2004	Specific Administrative Controls (August 2004)	Nuclear and Process Safety
DOE-STD-3009-94, Chg Notice 3	Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facilities Documented Safety Analyses (March 2006)	Nuclear and Process Safety
Other Codes/Standards		
ANSI/ANS-3.2-1994 (Section 5.2.1.5)	Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	Conduct of Operations
ANSI/ANS-8.1-1998	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	Nuclear and Process Safety
ANSI/ANS-8.19-2005	Administrative Practices for Nuclear Criticality Safety	Nuclear and Process Safety
ANSI/ANS-8.3-1997	Criticality Accident Alarm System	Nuclear and Process Safety
ANSI/ISO/ASQ Q9001-2000	Quality Management Systems – Requirements	Quality Assurance
ANSI N323A-1997	Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments	Radiation Protection
ANSI N42.18-1980	Specification and Performance of On-Site Instrumentation for Continuously Monitoring Radioactivity in Effluents	Radiation Protection
ANSI N43.3-1993	American National Standard for General Radiation Safety - Installations Using Non-Medical X-Ray and Sealed Gamma-Ray Sources, Energies up to 10 MeV	Radiation Protection
ANSI Z358.1-1998	American National Standard for Emergency Eyewash and Shower Equipment	Occupational Safety and Health
ASME NQA-1-2004 (Part I and Part II, Subpart 2.7)	Quality Assurance Requirements for Nuclear Facility Applications (Only for CLIN 5)	Quality Assurance

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
ASME NQA-1-2008/2009a ^J (Part I and Part II)	Quality Assurance Requirements for Nuclear Facility Applications (Only for CLIN 6, 7 & 8)	Quality Assurance
IBC-2003	International Building Code	Engineering Program
IEEE Std 730-2002	IEEE Standard for Software Quality Assurance Plans	Quality Assurance
Other Source Documents		
DEAR 952.203-70	Whistleblower Protection for Contractor Employees (DEC 2000)	Management Systems
DEAR 952.223-75	Preservation of Individual Occupational Radiation Exposure Records (APR 1984)	Radiation Protection
DEAR 952.250-70	Nuclear Hazards Indemnity Agreement (JUN 1996)	Management Systems
DEAR 970.5204-2	Laws, Regulations, and DOE Directives (DEC 2000)	Management Systems
DEAR 970.5204-3	Access to and Ownership of Records (DEC 2000)	Quality Assurance
DEAR 970.5223-1	Integration of Environment, Safety, and Health into Work Planning and Execution (DEC 2000)	Management Systems
DEAR 970.5223-4	Workplace Substance Abuse Programs at DOE Sites (DEC 2000)	Occupational Safety and Health
DOE Memorandum, SPD-06-075	Safety Alert (02/14/2006)	Occupational Safety and Health
FAR 52.203-17	Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights (APR 2014)	Management Systems
FAR 52.223-10	Waste Reduction Program (AUG 2000)	Waste Management
FAR 52.223-14	Toxic Chemical Release Reporting (OCT 2000)	Environmental Protection
FAR 52.223-3	Hazardous Material Identification and Material Safety Data (JAN 1997); Alternate I (JUL 1995)	Occupational Safety and Health
FAR 52.223-5	Pollution Prevention and Right-to-Know Information (APR 1998)	Environmental Protection
FAR 52.223-6	Drug-Free Workplace (MAY 2001)	Management Systems
FAR 52.236-25	Requirements for Registration of Designers (APR 1984)	Engineering Program
FAR 52.236-7	Permits and Responsibilities (NOV 1991)	Management Systems
DOE EM RMAIP ^K	Office of Environmental Management (EM) Cyber Security Policy and Risk Management Approach Implementation Plan (February 2014)	Non-ESH&Q

^J Per Contract Modification 150, implementation is in accordance with the *SWPF Implementation Plan for NQA-1-2008 (with the NQA-1a-2009 Addenda)* (Letter 00-700-23883, August 18, 2015).

^K Per Contract Modification 159, DOE O 205.1B, Chg 2 requires implementation of DOE EM RMAIP thereby canceling PCSP V 1.2.

Appendix A. Standards/Requirements Sorted by Document Type and Alpha-Numeric Identifier (cont.)

Document No.	Title	Functional Area
WSRC-TM-90-7, Rev 6 (Section 11.5.1.5)	Savannah River Site Hoisting and Rigging Manual, Mobile Cranes (02/03/2005)	Occupational Safety and Health