

STANDARDS/REQUIREMENTS IDENTIFICATION DOCUMENT

FUNCTIONAL AREA 13.0

PACKAGING AND TRANSPORTATION (U)

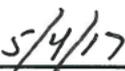
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Manager, Contractor Assurance



Date

Savannah River Remediation LLC
Savannah River Site
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13.00 PACKAGING AND TRANSPORTATION

Standards/Requirements Identification Document (S/RID) Functional Area 00, S/RID Purpose and Development, contains general information on the development (including the type of source documents considered), assessment, approval, and maintenance of the Savannah River Remediation LLC (SRR) S/RID which is pertinent to the understanding of this functional area S/RID. The reader should refer to S/RID Functional Area 00 for a complete understanding of this functional area S/RID.

This document addresses the Environmental, Safety, and Health (ES&H) requirements related to Packaging and Transportation activities undertaken by SRR on behalf of the United States Department of Energy (DOE) at the Savannah River Site (SRS). The sources for the requirements which govern Packaging and Transportation activities are primarily contained in Transportation Regulations (10 CFR 71, 49 CFR 40, 107, 171 - 174, 177, 178, 382, 383, 385 - 387, 389 - 393, 395 -397) and two DOE Orders (DOE O 460.1D, Packaging and Transportation Safety, and DOE O 460.2A, Departmental Material Transportation and Packaging Management).

The functional applicability of these requirements is shown in Table 1, and is applicable to all SRR organizations and facilities that may package and transport hazardous materials, including hazardous substances and hazardous wastes in commerce. SRR packages are turned over to the SRS Management and Operating (M&O) contractor Savannah River Nuclear Solutions, LLC (SRNS) and SRNS becomes the shipper of record. Each offsite shipment is reviewed by an SRNS organization to verify compliance to applicable DOE Order requirements and Department of Transportation (DOT) regulations. SRR facilities are required to adequately package the material for shipment and coordinate with SRNS to affect the shipment. As required by SRS procedures, facility level procedures are required for shipment of radioactive or fissile materials that exceed Type A quantities. Other types of hazardous shipments may require special procedures, as determined by facility management.

The latest definitions from the applicable regulations or DOE Orders (referenced) will be used in complying with the Table 1 requirements.

The Packaging and Transportation Functional Area S/RID is prepared in alignment with the Revision 0, July 30, 1993 version of the DOE-Headquarters (HQ) ES&H Configuration Guide.

13.01 MANAGEMENT AND ADMINISTRATION

This section contains requirements for coordination of the administrative aspects of Packaging and Transportation activities.

13.02 PACKAGING AND TRANSPORTATION OPERATIONS

This section contains general requirements for packaging standards, as well as requirements for operating procedures related to packaging and transportation operations. This section also contains requirements related to requesting exemptions from requirements.

13.02.01 Packaging

This section contains requirements for packaging of hazardous and radioactive materials and wastes.

13.02.02 Coordination and Planning of Base Technology

This section contains requirements for shipment procedures specific to Packaging and Transportation

activities. The section also contains a standard which applies to packaging and transportation of hazardous materials.

13.02.03 Vehicle and Equipment Control and Maintenance

This section contains requirements which apply to vehicle and traffic safety.

13.02.04 Onsite Material Tracking

No requirements are specified relating to onsite material tracking. Onsite material tracking is governed by SRS procedures.

13.02.05 Offsite Transportation Management

This section contains requirements which relate to compliance with laws and regulations for offsite shipments.

13.02.06 Marking, Labeling, and Placarding

This section contains requirements for the packaging, marking, labeling, and placarding of materials for transportation to comply with DOT hazardous materials regulations.

13.02.07 Shipping Papers, Bills of Lading, and Manifests

This section specifies the requirements for the preparation and maintenance of shipping records.

13.02.08 Shipment Plans

Requirements in this section establish the notifications of shipment required by DOE-Savannah River (SR).

13.02.09 Notification of State Authorities of Shipments of High-Hazard Materials

This section establishes the requirements for transportation of hazardous waste in commerce.

13.02.10 Emergency Response Information

This section contains requirements for emergency response pertaining to the shipment of hazardous materials.

13.02.11 Receipt Inspection

This section contains requirements for checking vehicles and packages for damage and leakage. It also includes requirements for prompt inspection of shipments of hazardous or radioactive materials including checks for external surface contamination if a package is suspected of being damaged.

13.03 OFFSITE SAFETY

Requirements are specified in this section for the safe packaging and transportation of hazardous materials to ensure that there is no undue risk to the health and safety of the public.

13.03.01 Package Standards and Certifications

This section contains requirements for certification by DOT, DOE, or Nuclear Regulatory Commission (NRC) dependent on the type of material, quantity, and form.

13.03.02 Safety Analysis

This section contains requirements for a Safety Assessment Report for Packaging (SARP) for any packagings for which Certificates of Compliance are required by DOE or NRC.

13.03.03 Design, Fabrication, Assembly, and Testing Quality Assurance (QA) for Offsite Shipping Containers

This section contains the requirements necessary to certify packages for offsite use.

13.03.04 Physical Protection for Security

This section contains the requirements necessary to ensure the physical security of the shipment.

13.03.05 Nuclear Components, Assemblies, and Materials of National Security Interest

This section contains the requirements necessary to ensure the safe transfer of nuclear components, special nuclear materials, assemblies, and other materials of national security interest.

13.04 ONSITE SAFETY

This section contains the requirements which apply to safety of onsite movements of hazardous materials.

13.04.01 Coordination of Material Transfers

There are no requirements included in this section. Onsite material transfers are governed by SRS procedures.

13.04.02 Safety Analysis

The requirements for performing safety analysis for offsite shipments are contained in section 13.03.02. Onsite shipments are subjected to an Onsite Safety Assessment in accordance with the Savannah River Site Transportation Safety Document. The procedures followed ensure the safety of the onsite movement.

13.04.03 Requirements for Potentially Explosive and Hazardous Materials

There are no requirements identified in this section.

13.04.04 Personnel Protection During Movement of Hazardous Materials

This section contains requirements for protecting workers during the transportation of hazardous materials. Radiation protection for workers during the movement of hazardous materials is provided by the procedures of the SRS Radiological Control Manual. Requirements for radiation protection are included in Radiation Protection Functional Area S/RID.

13.05 KEY INTERFACES

The key interfaces between the Packaging and Transportation Functional Area S/RID and other S/RID functional areas are identified and described in the following sections.

13.05.01 Training and Qualification

The interface with this functional area is to ensure personnel performing packaging and transportation activities are fully trained. Training requirements specific to packaging and transportation are included in this section. General Training requirements are contained in the Training and Qualification Functional Area S/RID. Refer to the Training and Qualification Functional Area S/RID for the specification of such requirements.

13.05.02 Safeguards and Security

This outline element is maintained for continuity with the DOE-HQ ES&H Configuration Guide, but there are no S/RID requirements in Safeguards and Security Functional Area S/RID. The requirements for the protection of classified materials, unclassified special nuclear materials, and spent nuclear fuel are addressed in Safeguards and Security related NonESH Compliance Assessment and Implementation Reports (CAIRs) available from the S/RID web page.

13.05.03 Nuclear and Process Safety

Nuclear and Process Safety is a primary consideration in the design of packages. The SARP demonstrates the safety of the package. Requirements for the SARP are contained in section 13.03.02. The use of an approved package for the transportation of fissile material can eliminate the need for a criticality alarm or detection system. Requirements for criticality alarm or detection systems are contained in the Nuclear and Process Safety Functional Area S/RID. Refer to the Nuclear and Process Safety Functional Area S/RID for the specification of such requirements.

13.05.04 Emergency Management

The interface between Packaging and Transportation and Emergency Management primarily involves the element of emergency response. Shipments of hazardous and/or nuclear materials include emergency response information and carrier instructions, including organizations and authorities to be notified in the event of release of materials. Section 13.02.10 contains specific emergency response requirements for Packaging and Transportation. General Requirements for the Emergency Management Program are contained in the Emergency Management Functional Area S/RID. Refer to the Emergency Management Functional Area S/RID for the specification of such requirements.

13.06 DOCUMENTS

13.06.01 Reference Documents

10 CFR 71	PACKAGING AND TRANSPORTATION OF RADIOACTIVE MATERIAL
49 CFR 107	HAZARDOUS MATERIALS PROGRAM PROCEDURES
49 CFR 171	GENERAL INFORMATION, REGULATIONS AND DEFINITIONS
49 CFR 172	HAZARDOUS MATERIALS TABLE, SPECIAL PROVISIONS, HAZARDOUS MATERIALS COMMUNICATIONS, EMERGENCY RESPONSE INFORMATION, TRAINING REQUIREMENTS, AND SECURITY PLANS

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49 CFR 173	SHIPPERS - GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS
49 CFR 174	CARRIAGE BY RAIL
49 CFR 177	CARRIAGE BY PUBLIC HIGHWAY
49 CFR 178	SPECIFICATIONS FOR PACKAGINGS
49 CFR 382	CONTROLLED SUBSTANCES AND ALCOHOL USE AND TESTING
49 CFR 383	COMMERCIAL DRIVER'S LICENSE STANDARDS; REQUIREMENTS AND PENALTIES
49 CFR 385	SAFETY FITNESS PROCEDURES
49 CFR 386	RULES OF PRACTICE FOR MOTOR CARRIER, INTERMODAL EQUIPMENT PROVIDER, BROKER, FREIGHT FORWARDER, AND HAZARDOUS MATERIALS PROCEEDINGS
49 CFR 387	MINIMUM LEVELS OF FINANCIAL RESPONSIBILITY FOR MOTOR CARRIERS
49 CFR 389	RULEMAKING PROCEDURES - FEDERAL MOTOR CARRIER SAFETY REGULATIONS
49 CFR 390	FEDERAL MOTOR CARRIER SAFETY REGULATIONS; GENERAL
49 CFR 391	QUALIFICATIONS OF DRIVERS -- TESTS
49 CFR 392	DRIVING OF COMMERCIAL MOTOR VEHICLES
49 CFR 393	PARTS AND ACCESSORIES NECESSARY FOR SAFE OPERATION
49 CFR 395	HOURS OF SERVICE OF DRIVERS
49 CFR 396	INSPECTION, REPAIR AND MAINTENANCE
49 CFR 397	TRANSPORTATION OF HAZARDOUS MATERIALS; DRIVING AND PARKING RULES
49 CFR 40	PROCEDURES FOR TRANSPORTATION WORKPLACE DRUG AND ALCOHOL TESTING PROGRAMS
Comm. Vehicle Safety Alliance	NORTH AMERICAN STANDARD VEHICLE OUT-OF-SERVICE CRITERIA, 4/1/2014
DOEM460.2-1A	RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL, 6/4/2008
DOEO460.1D	PACKAGING AND TRANSPORTATION SAFETY, 12/20/2016
DOEO460.2A	DEPARTMENTAL MATERIALS TRANSPORTATION AND PACKAGING MANAGEMENT, 12/22/2004

TABLE 1 FORMAT AND CONTENT

S/RID Requirement Number	Unique number for each requirement that links the statement to the ES&H Configuration Guide
Source Document	Number of the source document
Source Document Requirement Number	Unique reference from the source document.
Requirement Text	Requirement statement

Facility Categories *

Requirement applicability is shown in relation to the following facility categories:

Nuclear HC-1,2,3	Representing nuclear hazard category 1, 2 and 3 facilities (as defined by DOE Standard 1027-92) and includes any facility(s) required to support a nuclear facility(s).
Radiological	Representing facilities below Hazard Category 3 but still contain quantities of radioactive material at or above the Reportable Quantity value as specified in 40 CFR 302.4, Appendix B.
High Hazard Chemical	Representing facilities with radiological hazards below 40 CFR 302.4 thresholds for radiological materials, but with any chemical hazard at or above threshold quantities listed in 29 CFR 1910.119 or 40 CFR 68. These facilities may also contain nuclear materials exempt from the nuclear facility definition, e.g., check and calibration sources, radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and x-ray machines, as defined by 10 CFR 830.3.
Low Hazard Chemical	Representing facilities with radiological hazards below 40 CFR 302.4 thresholds, but with chemical hazards both below 29 CFR 1910.119 or 40 CFR 68 thresholds and at or above reportable quantities in 40 CFR 302.4. These facilities may also contain nuclear materials exempt from the nuclear facility definition, e.g., check and calibration sources, radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and x-ray machines, as defined by 10 CFR 830.3.
Other Industrial	Representing facilities with all radiological and chemical hazards below 40 CFR 302.4 thresholds. These facilities may also contain nuclear materials exempt from the nuclear facility definition, e.g., check and calibration sources, radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and x-ray machines, as defined by 10 CFR 830.3.
Facility Specific	These are requirements that are applicable to specific facilities. Facility identification is included in this column, when applicable.

Phase I Compliance Approach

Common	Implementation of these requirements is covered by common procedures and policies.
Facility Specific	Implementation of these requirements is covered by facility specific procedures.

* Refer to the "SRR Facilities List" contained in Functional Area 00 for the category for specific SRR facilities/ bldgs.

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Req Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.01.021	49 CFR 107	Subpart C	Comply with the requirements of 49 CFR 107,Subpart C	X	X	X	X	X		X	
13.01.023	49 CFR 173	Subpart A	Comply with the requirements of 49 CFR 173,Subpart A	X	X	X	X	X		X	
13.01.024	49 CFR 382	Subpart A	Comply with the requirements of 49 CFR 382,Subpart A	X	X	X	X	X		X	
13.01.025	49 CFR 382	Subpart B	Comply with the requirements of 49 CFR 382,Subpart B	X	X	X	X	X		X	
13.01.026	49 CFR 382	Subpart C	Comply with the requirements of 49 CFR 382,Subpart C	X	X	X	X	X		X	
13.01.027	49 CFR 382	Subpart D	Comply with the requirements of 49 CFR 382,Subpart D	X	X	X	X	X		X	
13.01.028	49 CFR 382	Subpart E	Comply with the requirements of 49 CFR 382,Subpart E	X	X	X	X	X		X	
13.01.029	49 CFR 382	Subpart F	Comply with the requirements of 49 CFR 382,Subpart F	X	X	X	X	X		X	
13.01.030	49 CFR 383	Subpart A	Comply with the requirements of 49 CFR 383,Subpart A	X	X	X	X	X		X	
13.01.031	49 CFR 383	Subpart B	Comply with the requirements of 49 CFR 383,Subpart B	X	X	X	X	X		X	
13.01.032	49 CFR 383	Subpart C	Comply with the requirements of 49 CFR 383,Subpart C	X	X	X	X	X		X	
13.01.033	49 CFR 383	Subpart D	Comply with the requirements of 49 CFR 383,Subpart D	X	X	X	X	X		X	
13.01.034	49 CFR 383	Subpart E	Comply with the requirements of 49 CFR 383,Subpart E	X	X	X	X	X		X	
13.01.035	49 CFR 383	Subpart F	Comply with the requirements of 49 CFR 383,Subpart F	X	X	X	X	X		X	
13.01.036	49 CFR 383	Subpart G	Comply with the requirements of 49 CFR 383,Subpart G	X	X	X	X	X		X	
13.01.037	49 CFR 383	Subpart H	Comply with the requirements of 49 CFR 383,Subpart H	X	X	X	X	X		X	
13.01.038	49 CFR 386	Subpart A	Comply with the requirements of 49 CFR 386,Subpart A	X	X	X	X	X		X	
13.01.039	49 CFR 386	Subpart B	Comply with the requirements of 49 CFR 386,Subpart B	X	X	X	X	X		X	
13.01.040	49 CFR 386	Subpart C	Comply with the requirements of 49 CFR 386,Subpart C	X	X	X	X	X		X	
13.01.041	49 CFR 386	Subpart D	Comply with the requirements of 49 CFR 386,Subpart D	X	X	X	X	X		X	
13.01.042	49 CFR 386	Subpart E	Comply with the requirements of 49 CFR 386,Subpart E	X	X	X	X	X		X	
13.01.043	49 CFR 386	Subpart F	Comply with the requirements of 49 CFR 386,Subpart F	X	X	X	X	X		X	
13.01.044	49 CFR 386	Subpart G	Comply with the requirements of 49 CFR 386,Subpart G	X	X	X	X	X		X	
13.01.045	49 CFR 387	Subpart A	Comply with the requirements of 49 CFR 387,Subpart A	X	X	X	X	X		X	
13.01.046	49 CFR 387	Subpart B	Comply with the requirements of 49 CFR 387,Subpart B	X	X	X	X	X		X	
13.01.047	49 CFR 389	Subpart A	Comply with the requirements of 49 CFR 389,Subpart A	X	X	X	X	X		X	
13.01.048	49 CFR 389	Subpart B	Comply with the requirements of 49 CFR 389,Subpart B	X	X	X	X	X		X	
13.01.049	49 CFR 390	Subpart A	Comply with the requirements of 49 CFR 390,Subpart A	X	X	X	X	X		X	
13.01.050	49 CFR 390	Subpart B	Comply with the requirements of 49 CFR 390,Subpart B	X	X	X	X	X		X	
13.01.052	49 CFR 391	Subpart A	Comply with the requirements of 49 CFR 391,Subpart A	X	X	X	X	X		X	
13.01.053	49 CFR 391	Subpart B	Comply with the requirements of 49 CFR 391,Subpart B	X	X	X	X	X		X	
13.01.054	49 CFR 391	Subpart C	Comply with the requirements of 49 CFR 391,Subpart C	X	X	X	X	X		X	
13.01.055	49 CFR 391	Subpart D	Comply with the requirements of 49 CFR 391,Subpart D	X	X	X	X	X		X	
13.01.056	49 CFR 391	Subpart E	Comply with the requirements of 49 CFR 391,Subpart E	X	X	X	X	X		X	
13.01.057	49 CFR 391	Subpart F	Comply with the requirements of 49 CFR 391,Subpart F	X	X	X	X	X		X	
13.01.058	49 CFR 391	Subpart G	Comply with the requirements of 49 CFR 391,Subpart G	X	X	X	X	X		X	
13.01.059	49 CFR 392	Subpart A	Comply with the requirements of 49 CFR 392,Subpart A	X	X	X	X	X		X	
13.01.060	49 CFR 392	Subpart B	Comply with the requirements of 49 CFR 392,Subpart B	X	X	X	X	X		X	
13.01.061	49 CFR 392	Subpart C	Comply with the requirements of 49 CFR 392,Subpart C	X	X	X	X	X		X	
13.01.062	49 CFR 392	Subpart D	Comply with the requirements of 49 CFR 392,Subpart D	X	X	X	X	X		X	

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S/RID Requirement Number	Source Document	Source Document Req# Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.01.063	49 CFR 392	Subpart E	Comply with the requirements of 49 CFR 392,Subpart E	X	X	X	X	X		X	
13.01.064	49 CFR 392	Subpart F	Comply with the requirements of 49 CFR 392,Subpart F	X	X	X	X	X		X	
13.01.065	49 CFR 392	Subpart G	Comply with the requirements of 49 CFR 392,Subpart G	X	X	X	X	X		X	
13.01.066	49 CFR 393	Subpart A	Comply with the requirements of 49 CFR 393,Subpart A	X	X	X	X	X		X	
13.01.067	49 CFR 393	Subpart B	Comply with the requirements of 49 CFR 393,Subpart B	X	X	X	X	X		X	
13.01.068	49 CFR 393	Subpart C	Comply with the requirements of 49 CFR 393,Subpart C	X	X	X	X	X		X	
13.01.069	49 CFR 393	Subpart D	Comply with the requirements of 49 CFR 393,Subpart D	X	X	X	X	X		X	
13.01.070	49 CFR 393	Subpart E	Comply with the requirements of 49 CFR 393,Subpart E	X	X	X	X	X		X	
13.01.071	49 CFR 393	Subpart F	Comply with the requirements of 49 CFR 393,Subpart F	X	X	X	X	X		X	
13.01.072	49 CFR 393	Subpart G	Comply with the requirements of 49 CFR 393,Subpart G	X	X	X	X	X		X	
13.01.073	49 CFR 393	Subpart H	Comply with the requirements of 49 CFR 393,Subpart H	X	X	X	X	X		X	
13.01.074	49 CFR 393	Subpart I	Comply with the requirements of 49 CFR 393,Subpart I	X	X	X	X	X		X	
13.01.075	49 CFR 393	Subpart J	Comply with the requirements of 49 CFR 393,Subpart J	X	X	X	X	X		X	
13.01.076	49 CFR 395	All	Comply with the requirements of 49 CFR 395	X	X	X	X	X		X	
13.01.077	49 CFR 397	Subpart E	Comply with the requirements of 49 CFR 397,Subpart E	X	X	X	X	X		X	
13.01.078	49 CFR 40	Subpart A	Comply with the requirements of 49 CFR 40,Subpart A	X	X	X	X	X		X	
13.01.079	49 CFR 40	Subpart B	Comply with the requirements of 49 CFR 40,Subpart B	X	X	X	X	X		X	
13.01.080	49 CFR 40	Subpart C	Comply with the requirements of 49 CFR 40,Subpart C	X	X	X	X	X		X	
13.01.081	49 CFR 40	Subpart D	Comply with the requirements of 49 CFR 40,Subpart D	X	X	X	X	X		X	
13.01.095	DOEO460.2A	Att. 2(1)	Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this Contractor Requirements Document (CRD). An affected site/facility management contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to ensure the contractor's compliance with the requirements. In doing so, the contractor must not flow down requirements to subcontractors unnecessarily or imprudently. That is, the contractor will ensure that it and its subcontractors comply with the requirements of this CRD; and only incur costs that would be incurred by a prudent person in the conduct of competitive business.	X	X	X	X	X		X	
13.01.096	DOEO460.2A	Att. 2.8	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: COMPLIANCE EVALUATIONS. The contractor must perform a self-assessment of transportation and packaging operations at least every 3 years to ensure compliance with applicable regulations, Orders, etc.	X	X	X	X	X		X	

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13.01.097	DOEM460.2-1A	Att. 1.1	<p>The contractor must follow these additional requirements for radioactive material and radioactive waste:</p> <p>General. Notwithstanding the exemption available through the National Security Provision [Title 49, Code of Federal Regulations (CFR), part 173.7(b)], all shipments will be undertaken in accordance with the requirements of 49 CFR 100–185, except those that infringe upon maintenance of classified information.</p>	X	X	X	X	X		X	
13.01.098	DOEM460.2-1A	Att. 1.2.a	<p>Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include:</p> <p>Transportation Planning. The contractor must prepare a transportation plan with information on shipments of spent nuclear fuel (SNF), high-level waste (HLW), tritium-bearing reactor components, and transuranic (TRU) waste shipments and submit it to the appropriate field element. (TRU waste shipments shall follow the WIPP Transportation Plan (DOE/CBFO 98-3103)). Transportation plans describe operational strategy and delineate steps that will be taken to meet applicable regulatory and DOE requirements. Specific contents of transportation plans are determined by the program office and/or operations office, but should include organizational roles and responsibilities, material to be shipped, projected shipping dates, estimated number of shipments, mode of transport and carriers to be used, packages to be used, preferred and/or alternative routes, shipment pre-notifications required, safe parking arrangements, tracking systems that will be used, emergency preparedness and response plans, recovery and cleanup strategy, security and escort arrangements, and a public information plan.</p> <p>At the direction of the responsible program office or field element, the contractor must prepare a transportation plan for low-level and mixed low-level, or other radioactive shipments. The contractor must also assist in preparing public information materials such as fact sheets, briefing packages, press releases, etc.</p> <p>Note: Certain planning, routing, and other activities mentioned in DOE M 460.2-1A are retained by DOE-SR.</p>	X	X	X	X	X		X	

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S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.01.099	DOEM460.2-1A	Att. 1.2.b	<p>Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include:</p> <p>Routing. For nonclassified shipments (by highway and rail) of spent nuclear fuel, high-level waste, and tritium-bearing reactor components, the contractor must perform an analysis of proposed routes using transportation models such as Transportation Routing Analysis Geographic Information System.</p> <p>Note: Certain planning, routing, and other activities mentioned in DOE M 460.2-1A are retained by DOE-SR.</p>	X	X	X	X	X		X	
13.01.100	DOEM460.2-1A	Att. 1.2.c	<p>Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include:</p> <p>Security. The contractor must ensure that a security plan is developed and includes an assessment of possible transportation security risks for radioactive shipments. The plan must contain sufficient background to understand the nature of threats against the radioactive shipment, the means to identify the vulnerabilities to those threats; and an approach to address the vulnerabilities.</p> <p>(1) For shipments of SNF and HLW, security will be provided in accordance with the requirements set forth in 10 CFR 73. The contractor must ensure that in-transit requirements are addressed, including developing security plans, implementing physical security access controls, training, escorts, inspections, tracking, communications, and employee background checks. Transport security must be coordinated with State and Tribal law enforcement officials and the involved railroad and motor carriers.</p> <p>(2) For shipments of low-level waste, mixed low-level waste, and other radioactive shipments, the contractor will develop a security plan when required by 49 CFR 172.800.</p> <p>Note: Certain planning, routing, and other activities mentioned in DOE M 460.2-1A are retained by DOE-SR.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.01.101	DOEM460.2-1A	Att. 1.2.d	<p>Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include:</p> <p>Carrier/Driver Requirements. Upon request from the field element or DOE, the contractor must evaluate carriers. For carriers that transport highway route controlled quantities of radioactive material in less-than-truckload or truckload (TL) quantities, any TL quantities of radioactive material will be evaluated by the contractor. A copy of the evaluation document must be provided by the contractor to the field element within 30 days after completion of the carrier evaluation.</p>	X	X	X	X	X		X	
13.01.105	DOEO460.ID	Att.1. 6.	<p>6. The contractor must submit a renewal request to the responsible Head of Operations Office or Field Office/Site Office Manager for processing through the appropriate CO for an expiring QA program that was approved by the DOE CO or NNSA CO at least 30 days prior to the expiration date, if still needed. QA programs for which renewal requests have been submitted within the timeframe specified above will not expire until a final decision is made by the appropriate CO. Any revision, except spelling corrections and non-substantive changes to punctuation or editorial items, to a QA program approved by the DOE CO or NNSA CO must be submitted for approval.</p>	X	X	X	X	X		X	
13.01.106	DOEO460.ID	Att.1. 7.	<p>7. For use of the International Civil Aviation Organization's (ICAO) Technical Instructions, the International Maritime Organization's (IMO) International Maritime Dangerous Goods (IMDG) Code, Transport Canada's Transportation of Dangerous Goods Regulations, and/or the IAEA's Regulations for the Safe Transport of Radioactive Material (SSR-6) for domestic segments of international transportation, the contractor must also meet the requirements of 49 CFR 171.22 to 171.26.</p>	X	X	X	X	X		X	
13.01.107	DOEO460.ID	Att.1.10.	<p>10. The contractor must share significant packaging and transportation safety successes, problems, causal analysis and corrective actions with other Departmental elements through the use of the Department's lessons learned program under the Operating Experience Program.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.046	DOEO460.2A	Att. 2.4.a	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>TRANSPORTATION SERVICES AND RATES. Upon request from the field organization or other DOE organization, the contractor must evaluate carriers that transport highway route controlled quantities of radioactive material in less-than-truckload or truckload (TL) quantities, any TL quantities of radioactive material, and hazardous waste in any quantity. A copy of the evaluation document must be provided by the contractor to the field organization within 30 days after completion of the carrier evaluation.</p> <p>Note: SRS uses the DOE Motor Carrier Evaluation Program (MCEP) database of the DOE Albuquerque Operations Office to select carriers and will continue to utilize MCEP criteria, as appropriate, to evaluate carriers not included in the MCEP when requested by the field organization or other DOE organizations.</p>	X	X	X	X	X		X	
13.02.047	DOEO460.2A	Att. 2.4.b	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>TRANSPORTATION SERVICES AND RATES. The contractor must ensure that rail tenders and tariffs reflect the lowest available commercial rates for the commodity. Accessorial costs, including demurrage or other late charges, must be clearly detailed in any tender or tariff.</p>	X	X	X	X	X		X	
13.02.048	DOEO460.2A	Att. 2.4.c	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>TRANSPORTATION SERVICES AND RATES. Only carrier rates on file with field organizations, other Federal agencies, or a State commission will be used for shipments by common carrier on behalf of DOE or NNSA.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.049	DOEO460.2A	Att. 2.4.d	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: TRANSPORTATION SERVICES AND RATES. When the contractor uses other than a low-cost carrier or mode of transportation, for any shipment other than overnight express, a written justification or management approval statement must be retained.	X	X	X	X	X		X	
13.02.052	DOEO460.ID	Att.1. [1]	Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this Contractor Requirements Document (CRD). The contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the requirements. This CRD establishes requirements for Department of Energy (DOE), including National Nuclear Security Administration (NNSA), contractors whose contracts implicitly or explicitly involve packaging or transportation of offsite shipments and onsite transfers of hazardous materials, including radioactive materials. In addition to the requirements set forth in this CRD, contractors are responsible for complying with Attachments 2 and 3 to DOE Order 460.ID referenced in and made a part of this CRD and which provide program requirements and/or information applicable to contracts in which this CRD is inserted. To the extent the contractor is regulated by the Nuclear Regulatory Commission (NRC), a state under an agreement with the NRC (Agreement State), or Department of Transportation (DOT), nothing in this CRD relieves the contractor of having to comply with any applicable regulatory requirements.	X	X	X	X	X		X	
13.02.01.023	49 CFR 107	Subpart B	Comply with the requirements of 49 CFR 107,Subpart B	X	X	X	X	X		X	
13.02.01.024	49 CFR 173	Subpart C	Comply with the requirements of 49 CFR 173,Subpart C	X	X	X	X	X		X	
13.02.01.037	DOEO460.ID	Att.1. 2.	2. The contractor must perform offsite packaging and transportation activities in accordance with the requirements of 49 CFR Part 40, 49 CFR Parts 171-180 for transportation of hazardous materials generally, 49 CFR Parts 350-399 for transporting hazardous materials by motor vehicle, 49 CFR Parts 200-268 for rail operations, and 49 CFR Parts 190-193, 195, and 199 for transportation of hazardous materials by pipeline.	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.01.038	DOEO460.ID	Att.1. 3.a.	<p>3. For specific radioactive material packagings for offsite shipments, the following apply:</p> <p>a. Each contractor, when using a Type B or fissile material packaging with contents authorized by the Certificate of Compliance (CoC), as certified by the DOE Certifying Official (DOE CO), NNSA Certifying Official (NNSA CO) or the U.S. Nuclear Regulatory Commission (NRC), must meet the conditions specified in the CoC for the packaging issued by the DOE CO, NNSA CO, or NRC. DOE contractors must register in writing with the DOE CO and NNSA contractors must register in writing with the NNSA CO prior to first use. For packagings certified by the NRC and for which neither DOE nor NNSA is the certificate holder, DOE contractors must register with the DOE CO, and NNSA contractors must register with the NNSA CO.</p>	X	X	X	X	X		X	
13.02.01.039	DOEO460.ID	Att.1. 3.b.	<p>3. For specific radioactive material packagings for offsite shipments, the following apply:</p> <p>b. For an import or an export shipment pursuant to 49 CFR 173.471, 173.472 or 173.473, each contractor must use a radioactive material packaging certified by the U.S. Competent Authority (DOT) where the DOE or NNSA has been registered with the DOT as a user, and the contractor has the required documentation for the use and maintenance of the packaging and makes the shipments in accordance with the terms of the certificate issued by the DOT. DOE contractors must register in writing with the DOE CO and NNSA contractors must register in writing with NNSA CO prior to the first use.</p>	X	X	X	X	X		X	
13.02.01.040	DOEO460.ID	Att.1. 3.c.	<p>3. For specific radioactive material packagings for offsite shipments, the following apply:</p> <p>c. For an application to NRC for a new Type B or fissile material packaging certificate; revision, renewal, or amendment to an existing NRC certificate where DOE or NNSA is the certificate holder; application to NRC for Special Package Authorization in accordance with 10 CFR 71.41(d); application for a DOT-International Atomic Energy Agency (IAEA) certificate of competent authority (CoCA); or application to DOT for a new Special Form or renewal of or an amendment to existing Special Form certificate, the contractor must submit a request with the responsible Head of the Operations Office or the Field Office/Site Office Manager for processing through the DOE CO or NNSA CO, as appropriate. Requests for renewal must be submitted at least 120 days prior to the certificate expiration date for processing through the DOE CO or NNSA CO, as appropriate.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.01.041	DOEO460.ID	Att.1. 3.d.	<p>3. For specific radioactive material packagings for offsite shipments, the following apply:</p> <p>d. For a new Type B or fissile material packaging certificate from the DOE CO or NNSA CO, or a revision, renewal, or amendment to an existing certificate, each contractor must submit an application to the responsible Head of the Operations Office or the Field Office/Site Office Manager for processing through the DOE CO or NNSA CO, as appropriate to meet mission needs. The application must include a Safety Analysis Report for Packaging (SARP) which must adequately describe the proposed package in sufficient detail to identify the package accurately in accordance with 10 CFR 71.33 and provide a sufficient basis for evaluation of the package in accordance with 10 CFR 71.35. The application must also be supported by any other documentation needed to demonstrate that the packaging meets the requirements of 10 CFR Part 71, Subparts E, F, G, and H, and any other applicable standards for certification prior to use. Requests for renewal must be submitted at least 90 days prior to the certificate expiration date for processing through the DOE CO or NNSA CO, as appropriate to meet mission needs.</p>	X	X	X	X	X		X	
13.02.01.042	DOEO460.ID	Att.1. 3.e.	<p>3. For specific radioactive material packagings for offsite shipments, the following apply:</p> <p>e. Contractors must use Type B or fissile material packagings certified by the DOE CO or NNSA CO whenever possible, except as otherwise required by applicable law or regulations. In situations where an existing packaging is certified by the NRC and the contractor seeks to transport in that packaging Departmental contents other than those for which the NRC has certified the packaging, DOE contractors must submit an application for a new certificate to the responsible Head of the Operations Office or the Field Office/Site Office Manager for processing through the DOE CO or NNSA CO, as appropriate to meet mission needs.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.01.043	DOEO460.1D	Att.1. 4.	4. The contractor must report to the responsible Head of the Operations Office or the Field Office/Site Office Manager within 30 days of any instance of significant reduction in the effectiveness of any approved Type B or fissile material packaging during use; any discovery of any defects with safety significance in Type B or fissile material packaging after first use, with details of the means employed to mitigate the effects of the defects; or any instances where the conditions of approval in the CoC were not met in making a shipment. The contractor must receive prior written approval from the DOE CO or NNSA CO, as appropriate, for any corrective actions planned for any instance of a significant reduction in the effectiveness of the packaging during use or the discovery of any defects with safety significance in the packaging after first use, including the means to be employed to repair any defects and actions to be taken to reduce the probability of similar events occurring in the future. Contractors must report to the NRC in accordance with 10 CFR 71.95 if using an NRC approved packaging and provide a copy of that notification to the responsible Head of the Operations Office or the Field Office/Site Office Manager. The contractor must prepare the report in accordance with the CRD to DOE Order 232.2, Admin Chg. 1, Occurrence Reporting and Processing of Operations Information, or the successor Orders, as established in its contract.	X	X	X	X	X		X	
13.02.02.015	49 CFR 171	All	Comply with the requirements of 49 CFR 171	X	X	X	X	X		X	
13.02.02.016	DOEO460.2A	Att. 2.2.a	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: SHIPMENT PROCEDURES. The contractor must use an automated transportation management system to perform transportation tasks and will ensure that shipment data is reported through that system. Note: SRS uses the DOE Automated Transportation Management System (ATMS) database of the DOE Albuquerque Operations Office and will continue to use the same system.	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.02.017	DOEO460.2A	Att. 2.2.b	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>SHIPMENT PROCEDURES. Consistent with the Government’s self-insurance policy, the contractor must not expend Government funds to insure property against loss, damage, or destruction while in transit, unless the shipment qualifies as a special circumstance as defined in 48 CFR 47.102.</p>	X	X	X	X	X		X	
13.02.02.018	DOEO460.2A	Att. 2.2.c	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>SHIPMENT PROCEDURES. All commercial bills of lading, air bills, and other commercial documents covering shipments made by or to DOE/NNSA contractors on DOE’s/NNSA’s behalf must provide for consignment of the shipments as follows. TO: U.S. Department of Energy in care of (name of DOE contractor) OR TO: U.S. National Nuclear Security Administration in care of (name of NNSA contractor) AND FROM: (name of DOE contractor) on behalf of the U.S. Department of Energy OR FROM: (name of NNSA contractor) on behalf of the U.S. National Nuclear Security Administration.</p>	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.02.019	DOEO460.2A	Att. 2.2.d	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: SHIPMENT PROCEDURES. When military air transportation is required, the contractor must send requests to the Air Force [Department of Defense regulation 4500.9-R, Defense Transportation Regulation] and provide copies of the request to the head of the DOE field organization and to appropriate program Secretarial Office. Requests must include a DOE field organization certification that such transportation is in the national interest and that commercial air transportation is not readily obtainable or capable of meeting program requirements. Note: SRR does not have a defined work scope that includes air transportation using military aircraft. If a need would arise, SRR will turn packages over to SRNS and SRNS will be the shipper of record.	X	X	X	X	X		X	
13.02.02.020	DOEO460.2A	Att. 2.2.e	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: SHIPMENT PROCEDURES. Special train services must be approved by the DOE field office or program traffic manager.	X	X	X	X	X		X	
13.02.03.018	Comm. Vehicle Safety Alliance	Vehicle Insp. Std.	The "North American Uniform Vehicle Out-of-Service Criteria " shall be used to perform vehicle inspections.	X	X	X	X	X		X	
13.02.03.020	49 CFR 107	Subpart G	Comply with the requirements of 49 CFR 107,Subpart G	X	X	X	X	X		X	
13.02.03.021	49 CFR 107	Subpart H	Comply with the requirements of 49 CFR 107,Subpart H	X	X	X	X	X		X	
13.02.03.022	49 CFR 177	Subpart D	Comply with the requirements of 49 CFR 177,Subpart D	X	X	X	X	X		X	
13.02.03.024	49 CFR 385	All	Comply with the requirements of 49 CFR 385	X	X	X	X	X		X	
13.02.03.025	49 CFR 396	All	Comply with the requirements of 49 CFR 396	X	X	X	X	X		X	
13.02.03.026	49 CFR 397	Subpart A	Comply with the requirements of 49 CFR 397,Subpart A	X	X	X	X	X		X	
13.02.05.007	49 CFR 177	Subpart A	Comply with the requirements of 49 CFR 177,Subpart A	X	X	X	X	X		X	

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S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.05.010	DOEO460.2A	Att. 2.1	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: GENERAL. The contractor/subcontractor must conduct operations in compliance with all applicable international, Federal, State, local, and Tribal requirements governing materials transportation, unless exemptions or alternatives are approved. Notwithstanding the exemption available through the National Security Provision [Title 49, Code of Federal Regulations (CFR), section 173.7(b)], all shipments will comply with the requirements of 49 CFR 100–185, except for requirements that infringe upon maintenance of classified information.	X	X	X	X	X		X	
13.02.05.013	DOEO460.ID	Att.1. 8.	8. If the contractor is subject to the Hazardous Materials Regulations (HMR) and wishes to prepare and/or conduct an offsite shipment that is not in accordance with the HMR, then the contractor must apply for a DOT Special Permit. New applications for a Special Permit or renewal of or an amendment to an existing Special Permit must be submitted to the responsible Head of Operations Office or the Field Office/Site Office Manager for processing through the DOE CO or NNSA CO, as appropriate, to DOT. Applications must be prepared in accordance with 49 CFR 107.105, 107.107 and 107.109, as appropriate. Applications for Party Status to an existing Special Permit may be submitted directly to DOT. The contractor must provide a copy of the application to the responsible Head of Operations Office or Field Office/Site Office Manager and the DOE CO or NNSA CO, as appropriate.	X	X	X	X	X		X	
13.02.05.014	DOEO460.ID	Att.1. 9.	9. If the contractor is not otherwise subject to the HMR and wishes to conduct activities that are not in accordance with the requirements of this CRD, then the contractor must apply for a DOE or NNSA exemption to the responsible Head of Operations Office or the Field Office/Site Office Manager for processing through the DOE CO or NNSA CO for final approval or disapproval. Applications for DOE or NNSA exemptions must contain information in accordance with 49 CFR 107.105(c) and (d).	X	X	X	X	X		X	
13.02.06.006	49 CFR 172	Subpart D	Comply with the requirements of 49 CFR 172,Subpart D	X	X	X	X	X		X	
13.02.06.007	49 CFR 172	Subpart E	Comply with the requirements of 49 CFR 172,Subpart E	X	X	X	X	X		X	
13.02.06.008	49 CFR 172	Subpart F	Comply with the requirements of 49 CFR 172,Subpart F	X	X	X	X	X		X	
13.02.06.009	49 CFR 174	Subpart C	Comply with the requirements of 49 CFR 174,Subpart C	X	X	X	X	X		X	
13.02.06.010	49 CFR 174	Subpart D	Comply with the requirements of 49 CFR 174,Subpart D	X	X	X	X	X		X	
13.02.06.011	49 CFR 174	Subpart K	Comply with the requirements of 49 CFR 174, Subpart K	X	X	X	X	X		X	
13.02.06.012	49 CFR 177	Subpart C	Comply with the requirements of 49 CFR 177,Subpart C	X	X	X	X	X		X	

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				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.07.005	49 CFR 172	Subpart C	Comply with the requirements of 49 CFR 172,Subpart C	X	X	X	X	X		X	
13.02.07.006	49 CFR 174	Subpart B	Comply with the requirements of 49 CFR 174,Subpart B	X	X	X	X	X		X	
13.02.08.014	49 CFR 177	Subpart B	Comply with the requirements of 49 CFR 177,Subpart B	X	X	X	X	X		X	
13.02.08.016	DOEO460.2A	Att. 2.3.a	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>CONSIGNEE SHIPMENT NOTIFICATIONS. For each shipment of fissile material or more than a Type A quantity of radioactive material, the contractor must:</p> <p>Notify the consignee of the date of shipment, expected date of arrival, and special loading or unloading instructions.</p>	X	X	X	X	X		X	
13.02.08.017	DOEO460.2A	Att. 2.3.b	<p>The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements:</p> <p>CONSIGNEE SHIPMENT NOTIFICATIONS. For each shipment of fissile material or more than a Type A quantity of radioactive material, the contractor must:</p> <p>Require the consignee to notify the shipper by the end of the first working day after the estimated arrival date if the shipments have not been received.</p>	X	X	X	X	X		X	
13.02.08.018	DOEM460.2-1A	Att. 1.2.e	<p>Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include:</p> <p>Shipment Prenotification. Before shipping SNF or HLW within or through a State or tribal jurisdiction, the contractor must prepare a letter, to be sent by registered mail with return receipt, to the State Governor (or the Governor's designee) and tribal President or Governor (or tribal designee) postmarked at least 7 days before the shipment. Alternatively, a notification may be delivered by messenger to these same representatives at least 4 days before a shipment is transported within or through the State or tribal jurisdiction. A record must be retained in the shipping records file that includes the names of the persons contacted and the dates and times of the contacts. For low-level or mixed-low level waste, or other radioactive shipments, the contractor must provide notifications to affected States based on negotiated agreements.</p> <p>Note: Certain planning, routing, and other activities mentioned in DOE M 460.2-1A are retained by DOE-SR.</p>	X	X	X	X	X		X	

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S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.08.019	DOEM460.2-1A	Att. 1.2.f	Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include: Transportation Operational Contingencies. For SNF, HLW, tritium-bearing reactor components, and transuranic waste shipments, the contractor must concur with the carrier that travel conditions are considered acceptable before dispatch and consider information provided by States or Tribes regarding weather or road conditions. In the event of any substantial unanticipated delay in transit (greater than 2 hours), the contractor must notify the affected States and Tribes of the event through the DOE Transportation Tracking and Communications System (TRANSCOM).	X	X	X	X	X		X	
13.02.08.020	DOEM460.2-1A	Att. 1.2.g	Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include: Tracking. The contractor must use TRANSCOM for tracking and monitoring the following categories of shipments: (1) spent nuclear fuel (see DOE M 5632.1C-1, Manual for Protection and Control of Safeguards and Security Interests, Chapter IV); (2) tritium-bearing reactor components; (3) high-level waste; and (4) transuranic waste (unless other arrangements have been made). Note: DOE M 5632.1C-1 has been replaced by DOE M 470.4-1 (Safeguards and Security Program Planning and Management, dated 3/7/06.) A Compliance Assessment for DOE M 470.4-1 is available from the list of Non-ESH Directives available from the S/RID web page.	X	X	X	X	X		X	
13.02.08.021	DOEM460.2-1A	Att. 1.2.h	Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include: Inspections. The contractor must ensure preshipment inspections are done by the shipper and/or carrier to ensure that shipments meet the regulatory standards. For highway shipments of spent nuclear fuel, high-level waste, tritium-bearing reactor components, and transuranic waste, the contractor must ensure shipments are made available, before departure, for inspection by certified State inspectors (Commercial Vehicle Safety Alliance Enhanced North American Standard Inspection Procedures (Level VI)) unless other arrangements have been made with the State.	X	X	X	X	X		X	
13.02.09.002	49 CFR 172	Subpart B	Comply with the requirements of 49 CFR 172,Subpart B	X	X	X	X	X		X	
13.02.09.003	49 CFR 397	Subpart C	Comply with the requirements of 49 CFR 397,Subpart C	X	X	X	X	X		X	
13.02.10.006	49 CFR 172	Subpart A	Comply with the requirements of 49 CFR 172,Subpart A	X	X	X	X	X		X	
13.02.10.007	49 CFR 173	Subpart B	Comply with the requirements of 49 CFR 173,Subpart B	X	X	X	X	X		X	
13.02.10.008	49 CFR 172	Subpart G	Comply with the requirements of 49 CFR 172,Subpart G	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.10.009	DOEO460.2A	Att. 2.5.a	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: EMERGENCY NOTIFICATION/RESPONSE. The contractor must include in shipping papers a 24-hour emergency response phone number as required by 49 CFR 172.604. The contractor must perform periodic tests/drills to ensure that the 24-hour emergency response system is operable.	X	X	X	X	X		X	
13.02.10.010	DOEO460.2A	Att. 2.5.b	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: EMERGENCY NOTIFICATION/RESPONSE. If a contractor uses a third-party provider for its 24-hour emergency number, the contractor must perform periodic tests/drills to ensure that agency's/organization's system is operable. The contractor must ensure that the agency/organization can provide comprehensive information about specific shipments or ensure access to personnel that can provide the information.	X	X	X	X	X		X	
13.02.10.011	DOEM460.2-1A	Att. 1.2.i	Transportation of Radioactive Material and Radioactive Waste. Specific requirements that must be followed include: Recovery and Cleanup. The contractor must review truckload carriers' plans for recovery and cleanup or verify they have a contract with a remediation company. For shipments of SNF, HLW, tritium-bearing reactor components, and transuranic waste, the contractor must ensure carriers have specific written plans and procedures for providing recovery and cleanup in the event of an accident or incident.	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.02.11.004	DOEO460.2A	Att. 2.6.a	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: RECEIPT OF MATERIALS. The contractor must ensure that shipments are inspected upon receipt for damage or loss and evidence of leakage: (1) Radioactive material shipments must be inspected for external contamination and radiation levels [10 CFR 835.405, Occupational Radiation Protection]. (2) Claims will be filed according to the provisions of the DOE Accounting Handbook and facility procedures. The handbook is available online at www.cfo.doe.gov/policy/actindex/index.html-ssi .	X	X	X	X	X		X	
13.02.11.005	DOEO460.2A	Att. 2.6.b	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: RECEIPT OF MATERIALS. If a delivery conveyance is contaminated by the radioactive cargo or when surveys indicate potential exposure above acceptable limits, the transport vehicle must be detained and the carrier notified immediately to ensure that other potentially contaminated vehicles can be surveyed. [Release limits are specified in 49 CFR 177.843, Contamination of Vehicles.] Specific response will follow facility procedures.	X	X	X	X	X		X	
13.02.11.006	DOEO460.2A	Att. 2.6.c	The contractors/ subcontractors performing transportation and packaging work for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), must comply with the following requirements: RECEIPT OF MATERIALS. Perform additional transfer checks and receipt measurements for nuclear materials (which have not been discarded as waste).	X	X	X	X	X		X	
13.03.01.017	49 CFR 173	Subpart D	Comply with the requirements of 49 CFR 173,Subpart D	X	X	X	X	X		X	
13.03.01.019	49 CFR 173	Subpart F	Comply with the requirements of 49 CFR 173,Subpart F	X	X	X	X	X		X	
13.03.01.020	49 CFR 173	Subpart G	Comply with the requirements of 49 CFR 173,Subpart G	X	X	X	X	X		X	
13.03.02.009	49 CFR 173	Subpart I	Comply with the requirements of 49 CFR 173,Subpart I	X	X	X	X	X		X	
13.03.03.027	49 CFR 173	Subpart E	Comply with the requirements of 49 CFR 173,Subpart E	X	X	X	X	X		X	
13.03.03.028	49 CFR 178	Subpart K	Comply with the requirements of 49 CFR 178,Subpart K	X	X	X	X	X		X	
13.03.03.029	10 CFR 71	All	Comply with the requirements of 10 CFR 71	X	X	X	X	X		X	

TABLE 1 - S/RID FUNCTIONAL AREA 13 (PACKAGING AND TRANSPORTATION) REQUIREMENTS

S/RID Requirement Number	Source Document	Source Document Reqt Number	Requirement Text	SRR Applicability						Phase I Compliance	
				Nuclear HC-1,2,3	Radi-ological	High Hazard Chemical	Low Hazard Chemical	Other Industrial	Facility Specific	Common	Facility Specific
13.03.03.033	DOEO460.ID	Att.1. 5.a.	5. The contractor, when participating in the design, testing, fabrication, procurement, inspection, use, operations or maintenance of hazardous materials packaging, must have and maintain a QA program approved by: a. The NRC or the DOE CO for DOE contractors or the NNSA CO for NNSA contractors, for certified Type B or fissile materials packagings satisfying the requirements of 10 CFR Part 71, Subpart H, Quality Assurance, or	X	X	X	X	X		X	
13.03.03.034	DOEO460.ID	Att.1. 5.b.	5. The contractor, when participating in the design, testing, fabrication, procurement, inspection, use, operations or maintenance of hazardous materials packaging, must have and maintain a QA program approved by: b. The responsible Head of Operations Office or Field Office/Site Office Manager, as appropriate, for all other radioactive and hazardous materials packagings satisfying the requirements of the CRD to DOE Order 414.ID, or its successor, as found in its contract.	X	X	X	X	X		X	
13.03.04.004	49 CFR 397	Subpart D	Comply with the requirements of 49 CFR 397,Subpart D	X	X	X	X	X		X	
13.04.02.004	DOEO460.ID	Att.1. 1.	1. The contractor must perform onsite hazardous materials transfers in accordance with 49 CFR Parts 171-180 and the relevant federal regulations governing each mode of transportation, or the site-or facility-specific Operations or Field Office/Site Office approved Transportation Safety Document (TSD) that describes the methodology and compliance process to meet equivalent safety for any deviation from the requirements of 49 CFR Parts 171-180 and 49 CFR Parts 350-399. For onsite transfers involving nuclear facility Hazard Category 2 or 3 quantities, the TSD must comply with the Safety Basis Requirements of 10 CFR Part 830, Subpart B.	X	X	X	X	X		X	
13.04.04.004	49 CFR 172	Subpart I	Comply with the requirements of 49 CFR 172,Subpart I	X	X	X	X	X		X	
13.05.01.011	49 CFR 172	Subpart H	Comply with the requirements of 49 CFR 172,Subpart H	X	X	X	X	X		X	
13.05.01.012	49 CFR 174	Subpart A	Comply with the requirements of 49 CFR 174,Subpart A	X	X	X	X	X		X	
13.05.01.015	DOEO460.ID	Att.1.11.	11. The contractor, when preparing for and transporting, or transferring hazardous materials, including radioactive materials, must ensure that all personnel who support and/or perform packaging, transfer and transportation operations are appropriately trained and qualified; and maintain auditable training records in accordance with approved DOE or NNSA or site-specific record retention requirements.	X	X	X	X	X		X	