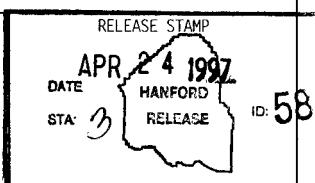


ENGINEERING CHANGE NOTICE

1. ECN 634578

Page 1 of 19
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4/24/97Proj.
ECN

<p>2. ECN Category (mark one)</p> <p>Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> [X] Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void <input type="checkbox"/></p>				<p>3. Originator's Name, Organization, MSIN, and Telephone No. G. L Bennett, FDH-QA, B1-14, 373-9667</p> <p>6. Project Title/No./Work Order No. Quality Assurance/S/RIDS Coordination</p> <p>9. Document Numbers Changed by this ECN (includes sheet no. and rev.) WHC-SD-MP-SRID-002, Rev. 0</p>	<p>4. USQ Required?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>7. Bldg./Sys./Fac. No. 840 Northgate</p> <p>10. Related ECN No(s). N/A</p>	<p>5. Date</p> <p>April 18, 1997</p> <p>8. Approval Designator ESQ/QA</p> <p>11. Related PO No. N/A</p>							
<p>12a. Modification Work</p> <p><input type="checkbox"/> Yes (fill out Blk. 12b) <input checked="" type="checkbox"/> No (NA Blks. 12b, 12c, 12d)</p>		<p>12b. Work Package No. N/A</p>	<p>12c. Modification Work Complete N/A</p>	<p>12d. Restored to Original Condition (Temp. or Standby ECN only) N/A</p>									
<p>13a. Description of Change</p> <p>13b. Design Baseline Document? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>This Direct Revision ECN constitutes an administrative change, and transmits HNF-SD-MP-SRID-002, Rev. 1 for release. Many of the requirement sources used in the S/RID have been revised since initial release of this document. This revision incorporates all these revisions to CFRs, WACs, etc. and also includes a name change from "Westinghouse Hanford Site" to "Fluor Daniel Hanford Contract" as a result of the transition to Fluor Daniel Hanford as the prime contractor.</p>													
<p>14a. Justification (mark one)</p> <table> <tr> <td>Criteria Change <input checked="" type="checkbox"/></td> <td>Design Improvement <input type="checkbox"/></td> <td>Environmental <input type="checkbox"/></td> <td>Facility Deactivation <input type="checkbox"/></td> </tr> <tr> <td>As-Found <input type="checkbox"/></td> <td>Facilitate Const <input type="checkbox"/></td> <td>Const. Error/Omission <input type="checkbox"/></td> <td>Design Error/Omission <input type="checkbox"/></td> </tr> </table>						Criteria Change <input checked="" type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>	As-Found <input type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>
Criteria Change <input checked="" type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>										
As-Found <input type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>										
<p>14b. Justification Details</p> <p>Incorporation of Source Requirement changes and new Contractor.</p>													
<p>15. Distribution (include name, MSIN, and no. of copies)</p> <p>P. J. Garcia Jr. A5-55 M. D. Jackson B1-14 J. W. Willis B1-14 G. L. Bennett B1-14</p>													

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ENGINEERING CHANGE NOTICE

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1. ECN (use no. from pg.
1)
634578

16. Design Verification Required [] Yes [X] No	17. Cost Impact ENGINEERING Additional 1 Savings N/A	CONSTRUCTION Additional 1 Savings N/A	18. Schedule Impact (days) Improvemen t Delay N/A
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19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1)

that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]	N/A	[X]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision

Document Number/Revision

Document Number Revision

21. Approvals

Signature	Date	Signature	Date
Design Authority N/A		Design Agent N/A	
Cog. Eng. G.L. Bennett <i>G.L. Bennett</i>	<u>4-21-97</u>	PE N/A	
Cog. Mgr. J.W. Willis <i>J.W. Willis</i>	<u>4-21-97</u>	QA S.A. Byers (see approvals)	
QA N/A		Safety J.R. Bell (see approvals)	
Safety J.R. Bell (see approvals)		Design J.L. Brennan (see approv)	
Environ. W.D. Adair (see approvals)		Environ. N/A	
Other E.J. Krejci (see approvals)		Other	

DEPARTMENT OF ENERGYSignature or a Control Number that
tracks the Approval SignatureADDITIONAL

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FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

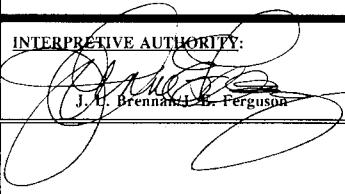
DOCUMENT

FUNCTIONAL AREA:

Management Systems

SIGNATURES

INTERPRETIVE AUTHORITY:

 J. L. Brennan	 J. L. Ferguson	1/22/97	Date
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FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

DOCUMENT

FUNCTIONAL AREA:

Management Systems

SIGNATURES

INTERPRETIVE AUTHORITY:

M D Jackson alt 11/13/46
G. W. Grier III Date

FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

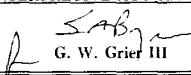
DOCUMENT

FUNCTIONAL AREA:

Quality Assurance

SIGNATURES

INTERPRETIVE AUTHORITY:


G. W. Grier III

11-26-96 Date

FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

DOCUMENT

FUNCTIONAL AREA:

Fire Protection

SIGNATURES

INTERPRETIVE AUTHORITY:

J. R. Bell / D. E. Good
J. R. Bell/D. E. Good

1/18/96
Date

FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

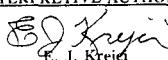
DOCUMENT

FUNCTIONAL AREA:

Nuclear Safety

SIGNATURES

INTERPRETIVE AUTHORITY:



E. J. Krejci

11/12/96

Date

FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

DOCUMENT

FUNCTIONAL AREA:

Occupational Safety and Health

SIGNATURES

INTERPRETIVE AUTHORITY:

J. R. Bell/D. S. Shoop

1/22/97

Date

FLUOR DANIEL HANFORD COMPANY

STANDARDS

REQUIREMENTS

IDENTIFICATION

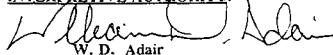
DOCUMENT

FUNCTIONAL AREA:

Environmental Protection

SIGNATURES

INTERPRETIVE AUTHORITY:

 W. D. Adair 1/8/47
Date

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Fluor Daniel Hanford Contract Standards/Requirements Identification Document

G. L. Bennett

Fluor Daniel Hanford-Quality Assurance, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 634578 UC: 630
Org Code: 02E00 Charge Code: MDM34
B&R Code: YN0100000 Total Pages: 306

Key Words: S/RID, Standards/Requirement Identification Document

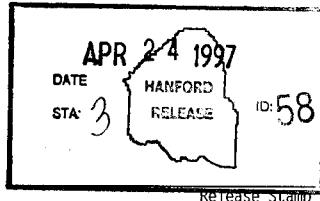
Abstract: This document, the Standards/Requirements Identification Document (S/RID) for the Fluor Daniel Hanford Contract, represents the necessary and sufficient requirements to provide an adequate level of protection of the worker, public health and safety, and the environment.

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Release Approval

Date



Approved for Public Release

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CONTENTS

The Fluor Daniel Hanford Contract Standards/Requirements Identification Document (S/RID) is comprised of twenty functional areas. Ten of the twenty functional areas were evaluated as having functional area nonapplicability. Each functional area follows as a separate chapter, either containing the S/RID or a justification for nonapplicability.

The twenty functional areas listed below follow as chapters.

<u>Chapter</u>	<u>Functional Area</u>
1.	Management Systems
2.	Quality Assurance
3.	Configuration Management
4.	Training and Qualification
5.	Emergency Management
6.	Safeguards & Security
7.	Engineering Program
8.	Construction
9.	Operations
10.	Maintenance
11.	Radiation Protection
12.	Fire Protection
13.	Packaging & Transportation
14.	Environmental Restoration
15.	Decontamination & Decommissioning
16.	Waste Management
17.	Research & Development & Experimental Activities
18.	Nuclear Safety
19.	Occupational Safety and Health
20.	Environmental Protection

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Fluor Daniel Hanford Contract

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MANAGEMENT SYSTEMS**

1.0 Management Systems

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract level requirements for the Management Systems (MS) program in place at Hanford. The MS Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the

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contract and facility level.

1.1 Management and Administration

1.1.1 Policies, Plans, and Procedures

See section 1.2 for requirements.

1.1.2 Organization

The requirements for this subelement are included in the Quality Assurance Functional Area, subelement 2.1.

1.1.3 Staffing

General and detailed requirements applicable to personnel selection and staffing are identified in the Training and Qualification (T&Q) Functional Area.

1.1.4 Training and Qualification

1.2 Policy and Procedures

Fluor Daniel Hanford Contract level organizations are responsible for maintaining and updating contract level manuals which are used as implementing documents by FDH facilities.

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(iv)

Documents and Records. Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design. Records shall be specified, prepared, reviewed, approved, and maintained.

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(2)(i)

Work Processes. Work shall be performed to established technical standards and administrative controls using approved instructions, procedures, or other appropriate means. Items shall be identified and controlled to ensure their proper use. Items shall be maintained to prevent their damage, loss, or deterioration. Equipment used for process monitoring or data collection shall be calibrated and maintained.

REQUIREMENT SOURCE: DOE ORDER 5480.28, Section 10.a.(1)

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General. Structures, systems, and components (SSCs) shall be designed and constructed to withstand the effects of natural phenomena hazards. An objective for all SSCs is to prevent loss of structural integrity endangering life safety. An additional objective for selected SSCs or site activities is to prevent loss of capability to perform functions consistent with: (1) importance to safety for workers and the public; (2) impact on the environment; (3) repair/replacement costs; or (4) programmatic mission. NPH design and evaluation criteria for SSCs for earthquake, wind, and flood shall be used for DOE laboratories, reservations, and production facilities. UCRL-15910 shall be used until a DOE standard is issued. It is the intent of this Order to conform to and/or use national consensus codes and standards wherever practicable. Thus, where appropriate DOE criteria and standards are not available (e.g., for electrical transmission and distribution systems or dams) or for other DOE facilities, applicable National, Federal, or industry consensus codes, standards, manuals of practice, or model building codes shall be deemed acceptable to meet the intent of this Order.

REQUIREMENT SOURCE: DOE ORDER 5480.28, Section 10.a.(4)(b)

The contractor/operator shall establish an implementation plan for evaluating and upgrading existing SSCs. The plan should identify current and future NPH mitigation actions for existing SSCs by facility. The plan should incorporate a prioritized schedule for evaluation of existing SSCs because it is recognized that there are time and funding constraints and programmatic mission considerations.

REQUIREMENT SOURCE: DOE-O-440.2, Attachment 1, Section 1.

DOE contractors shall conduct aviation operations in a safe and prudent manner.

REQUIREMENT SOURCE: DOE-O-440.2, Attachment 1, Section 2.

Contractors that lease, charter, or operate aircraft for DOE shall do the following.

- a. Ensure that aircraft in service to DOE are operated in accordance with the applicable parts of Title 14 Code of Federal Regulations and/or equivalent international or military standards appropriate to the operation and type of aircraft in service.
- b. Establish, in consultation with DOE, requirements for the following.
 - (1) Training programs for personnel involved with aviation operations.
 - (2) Flight and duty time limitations.
 - (3) Aviation personnel qualifications.
 - (4) Aircraft maintenance requirements.

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(5) Flight-following procedures.

- c. Ensure evaluation of charter and leased aircraft operations by the appropriate DOE organization or designee prior to the initiation of flight operations.
- d. Establish safe and effective policies and procedures for the conduct of aviation operations that have no directly applicable aviation standard (unmanned aircraft operations, research development operations, etc.).
- e. Ensure that aviation safety documentation is developed and approved for each mission that has risks not normally accepted by the public.

1.3 Issue Management

REQUIREMENT SOURCE: 10 CFR 708, Dated 03-03-92, Part 3

It is the policy of DOE that employees of contractors at DOE facilities should be able to provide information to DOE, to Congress, or to their contractors concerning violations of law, danger to health and safety, or matters involving mismanagement, gross waste of funds, or abuse of authority, to participate in proceedings conducted before Congress or pursuant to this part, and to refuse to engage in illegal or dangerous activities without fear of employer reprisal. Contractor employees who believe they have been subject to such reprisal may submit their complaints to DOE for review and appropriate administrative remedy as provided in §§708.6 through 708.11 of this part.

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(iii)

Quality Improvement. Processes to detect and prevent quality problems shall be established and implemented. Items, services, and processes that do not meet established requirements shall be identified, controlled, and corrected according to the importance of the problem and the work affected. Correction shall include identifying the causes of problems and working to prevent recurrence. Item characteristics, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items, services, and processes needing improvement.

REQUIREMENT SOURCE: DOE ORDER 5480.29, Preamble, Section 5.b

Employee concern reports shall be managed in a manner that assures prompt identification, prioritization, evaluation, corrective and protective response, and resolution of employee concerns raised by DOE, contractor, and subcontractor employees;

REQUIREMENT SOURCE: DOE ORDER 5480.29, Preamble, Section 9.f(1) and (2)

Employee concerns shall be processed within the following timeframes:

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(1) Acknowledgement regarding priority determination and the established resolution schedule will be available to the originator within 5 working days of receipt of the concern;

(2) All evaluations shall be completed within 30 working days of assignment;

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(1)

The RL Contractor ECM:

Submits program documentation (such as written procedures and forms), and any subsequent modifications of its ECP, to the RL ECM for review.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(2)

The RL Contractor ECM:

Assigns each new employee concern a unique number, enters the employee concern report in a formal tracking system, and generates an Employee Concerns Record.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(3)

The RL Contractor ECM:

Reviews and approves its subcontractor's ECP documentation (such as written procedures and forms) and any subsequent modifications.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(4)

The RL Contractor ECM:

Based upon review of the content of the employee concern, determines its significance and the need for an independent investigation. If such an investigation is needed:

(a) Assigns an organization, department, division, or special investigator the responsibility to investigate the employee concern.

(b) Assures that the organizational element named in the employee concern is not directly involved in the investigation.

(c) Reviews investigation findings and concurs with recommended corrective actions and resolution schedules.

Otherwise arranges for an appropriate response to the concern and approves the adequacy of the

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response.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(5)

The RL Contractor ECM:

Structures the resolution process according to the following criteria:

- (a) The resolution of each employee concern at the lowest level of management possible is encouraged.
- (b) Employees consider reporting employee concerns within their organization's ECP first.
- (c) When compelling reasons exist for going outside their organization's ECP (such as fear of reprisal), Hanford contractor employees may report employee concerns directly to the RL ECP.
- (d) If an employee feels that he/she has experienced a reprisal that is protected under 10 CFR 708, a complaint may be made directly to the RL ECP.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(6)

The RL Contractor ECM:

Obtains monthly status reports from subcontractor ECMs/Coordinators, which provide a status of employee concerns initiated, closed, or unresolved during the past month.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(7)

The RL Contractor ECM:

Issues by the 5th of each month, to the RL ECP Manager, a status report of all employee concerns initiated, closed, or remaining unresolved (including subcontractors) during the past month. The monthly status reports should include:

- (a) Employee Concern Report Number
- (b) Priority (based on the potential "significance" of the employee concern)
- (c) Title
- (d) An evaluation of the employee concern
- (e) Current resolution status (open or closed)
- (f) Name of the individual responsible for investigating the employee concern
- (g) Statistical summaries of the employee concerns (for trending)
- (h) Significant issues or improvements and/or enhancement.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(8)

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The RL Contractor ECM:

Process employee concerns within the time period indicated by the following criteria:

- (a) Acknowledgements regarding priority determinations and the established schedule for resolution of the employee concern are available within five working days.
- (b) A status report is provided to the Contractor ECM by the assigned investigator within 15 working days.
- (c) All investigations are normally completed within 30 working days from the receipt of the employee concern.
- (d) Exceptions to the 30-day investigation requirement are documented by a written action plan (sent to the Contractor ECM) that explains why the employee concern is unresolved and provides a list of actions required to resolve the employee concern satisfactorily.
- (e) "Significant" employee concerns that are not fully investigated within 30 days, or that are not documented by written action plans, are forwarded to the RL ECP Manager for follow-up.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(9)

The RL Contractor ECM:

Notifies the RL ECP Manager, within 24 hours of the determination, of all employee concerns that are not resolved within the specified time periods that meet one or more of the criteria, such as an employee concern involving an alleged reprisal, or that cannot be resolved to the Originator's satisfaction.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(10)

The RL Contractor ECM:

Documents the resolution of employee concerns in monthly status reports and initiate remedial and corrective actions (such as design changes, personnel training, material changes, maintenance, or procedure revisions). In addition, document actions already taken to preclude, prevent, or mitigate future recurrences.

REQUIREMENT SOURCE: RLID 5480.29, Attachment 1, Section 8.b(11)

The RL Contractor ECM:

Ensures that every departing employee (due to reassignment, termination, retirement) has an

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opportunity to complete an Exit Interview Form. All completed Exit Interview Forms are transmitted to the ECM for review.

1.4 Compliance Management

Author's Note: This S/RID is being developed as part of the implementation of the requirements management process. It provides a primary tool of the compliance management program.

1.5 Management Evaluations

REQUIREMENT SOURCE: DOE ORDER 5480.26, Section 7.a.(2)

Departmental elements not included in the formal DOE PI Program shall internally establish and track operations using PIs appropriate to their organizations but are excluded from formal reporting requirements defined in DOE-STD-1048-92.

1.6 Occurrence Reporting

Fluor Daniel Hanford Contract level organization provides information to the facilities for implementation of lessons learned requirements at the facility level.

Emergency classification requirements are found in the FDH Emergency Management Functional Area.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.

Author's Note: DOE Manual 232.1-1 provides detailed information for categorizing and reporting occurrences at DOE facilities. It complements DOE O 232.1 and its use is required by that Order.

REQUIREMENTS.

DOE M 232.1-1, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, is required to implement this Order.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.c. Introduction, and 4.c.(1)

Departmental Elements and contractors at facilities shall do the following:

(1) Develop or revise implementing procedures for the Occurrence Reporting Program at their facility to ensure appropriate categorization, notification, reporting, and investigating of events and/or conditions.

(a) On the effective date of this Order, all reporting requirements of this Order shall be

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implemented except for the submittal and approval of the site implementing procedures.

- (b) Implementation procedures shall be submitted for approval to the respective DOE Secretarial Office within 4 months after approval of this Order.
- (c) Implementation procedures submitted by the contractor or facility operator shall be considered automatically approved 2 months after submittal, if they are not deliberately approved or rejected by DOE prior to the automatic approval.
- (d) Pending approval of new or modified implementing procedures, the procedures approved and in effect as of the effective date of this Order may be used.

1.6.1 Identification and Categorization

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.a.

Author's Note: Only item (2) is applicable at the site level. Item (1) is the responsibility of the respective facility.

Immediately following an occurrence, DOE-owned or -operated facility staff and operators shall:

- (1) ensure that appropriate immediate response(s) are taken to stabilize or return the facility/operation to a safe condition; and
- (2) identify and promptly notify the Facility Manager of abnormal events and conditions and record and archive appropriate information pertaining to such occurrences.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b. Introduction, and 4.b.(1)

Author's Note: Only item (b) is applicable at the site level. All other items which involve event categorizations are the responsibility of the respective facility.

b. Departmental Elements and contractors responsible for DOE-owned or -operated facilities shall ensure a Facility Manager or Facility Manager Designee is available at all times to carry out the following requirements.

- (1) Perform categorization of the event.
 - (a) If the event is categorized as an Emergency in accordance with the DOE 5500 series Orders, then make the notification of the Emergency as required in the DOE 5500 series Orders and prepare the written Occurrence Reports in accordance with this Order.
 - (b) If the event is not categorized as an Emergency, then categorize the event as an Unusual or Off-Normal Occurrence as soon as practical but, in all cases, within 2 hours of identification.

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(c) If the category is not clear or the occurrence exceeds the threshold of more than one criteria, the occurrence shall be categorized at the higher level being considered. As an example, discovery of a defective item, material, or service, normally reportable as an Off Normal Occurrence, that caused the reduction of safety margin below that prescribed in the authorization basis, would be reported as an Unusual Occurrence.

(d) The occurrence category shall either be elevated, maintained, or lowered as information is made available.

1.6.2 Notification and Reporting

Author's Note: Occurrence reporting and submittal is the responsibility of the respective facility.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1301(e)

Occurrence reports to DOE regarding emergencies and/or accidents shall be prepared and submitted in accordance with Departmental requirements for occurrence reporting and processing.

REQUIREMENT SOURCE: 40 CFR 355, Dated 07-01-95, Part 40(b)(1)

Author's Note: Although a site level organization is responsible for making initial offsite notifications of releases, the facility has the responsibility for supplying this organization with the pertinent information.

The owner or operator of a facility subject to this section shall immediately notify the community emergency coordinator for the local emergency planning committee of any area likely to be affected by the release and the State emergency response commission of any State likely to be affected by the release. If there is no local emergency planning committee, notification shall be provided under this section to relevant local emergency response personnel.

REQUIREMENT SOURCE: 40 CFR 355, Dated 07-01-95, Part 40(b)(2)

The notice required under this section shall include the following to the extent known at the time of notice and so long as no delay in notice or emergency response results:

- (i) The chemical name or identity of any substance involved in the release.
- (ii) An indication of whether the substance is an extremely hazardous substance.
- (iii) An estimate of the quantity of any such substance that was released into the environment.

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- (iv) The time and duration of the release.
- (v) The medium or media into which the release occurred.
- (vi) Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.
- (vii) Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordination pursuant to the emergency plan).
- (viii) The names and telephone number of the person or persons to be contacted for further information.

REQUIREMENT SOURCE: 40 CFR 355, Dated 07-01-95, Part 40(b)(3)

As soon as practicable after a release which requires notice under (b)(1) of this section, such owner or operator shall provide a written follow-up emergency notice (or notices, as more information becomes available) setting forth and updating the information required under paragraph (b)(2) of this section, and including additional information with respect to:

- (i) Actions taken to respond to and contain the release,
- (ii) Any known or anticipated acute or chronic health risks associated with the release, and,
- (iii) Where appropriate, advice regarding medical attention necessary for exposed individuals.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(2) Introduction

Notify the DOE Facility Representative and the HQ Emergency Operations Center (HQ EOC) of an Unusual Occurrence as soon as practical but, in all cases, within 2 hours of categorization.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(3)

Prepare and submit a Notification Report as soon as practical but, in all cases, before the close of the next business day from the time of categorization (not to exceed 80 hours).

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(4)

Prepare and submit an Update Report when significant and new information is available or upon request of DOE.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(5)

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Document any changes in categorization in an Update Report and submit before the close of the next business day from the time of recategorization (not to exceed 80 hours).

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(6)

Prepare and submit a Final Report to the DOE Facility Representative when the root cause of the occurrence has been analyzed, corrective actions determined and scheduled, and lessons learned identified. Submit the Final Report as soon as possible, but no later than 45 calendar days after initial categorization.

1.6.3 Investigation

Investigation requirements are contained in the facility specific S/RIDs.

1.6.4 Tracking

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(7)

Author's Note: Submittal of an Update Report including a detailed explanation of the delay and estimated date for submittal of the Final Report is the responsibility of the respective facility.

If the required analysis cannot be completed within 45 calendar days, submit an Update Report within the 45 days and include a detailed explanation of the delay and an estimated date for submittal of the Final Report.

REQUIREMENT SOURCE: DOE-O-232.1, Part 4.b.(8)

If the Final Report was rejected by either the Facility Representative or Program Manager, prepare and resubmit the revised Final Report within 21 calendar days of disapproval.

1.7 Operational Readiness Reviews

REQUIREMENT SOURCE: RLID 5480.31, Section 6.0 e. and 6.0 e.(1)

RL contractors with responsibilities for performance of ORRs and RAs shall be required to:

(1) Prepare an implementing procedure for use in performing startup and restart activities in accordance with this Implementing Directive.

REQUIREMENT SOURCE: RLID 5480.31, Section 6.0 e.(4) through (9)

(4) Notify RL of planned start-ups or restarts and proposed AA in accordance with this Implementing Directive.

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- (5) Conduct ORRs and RAs in accordance with the provisions of this Implementing Directive.
- (6) Notify RL of readiness of the facility to startup or restart, after completion of the contractor ORR and RAs.
- (7) Designate the Contractor ORR Team Leader assuring the Team Leader's independence from the facility.
- (8) Designate the Contractor RA Team Leader assuring the team Leader's independence from the facility for new starts, or as specified in MOU for restarts.
- (9) Provide a MOU for review and approval to the Assistant Manager RL when restarts of a facility do not require either an ORR or RA.

1.8 Document and Database Control - Records Management

Author's Note: Additional records requirements are located in Section 1.2.

REQUIREMENT SOURCE: 36 CFR 1220, Dated 07-01-95, Part 30

Authority.

Section 3101 of title 44 U.S.C. requires the head of each Federal agency to make and preserve records containing adequate and proper documentation of the organization, functions, policies, decisions, procedures and essential transactions of the agency and designed to furnish the information necessary to protect the legal and financial rights of the Government and of persons directly affected by the agency's activities.

REQUIREMENT SOURCE: 36 CFR 1220, Dated 07-01-95, Part 32(a)

Cooperation with NARA in developing and applying standards, procedures, and techniques designed to improve the management of records, promote the maintenance and security of records deemed appropriate for permanent preservation, and facilitate the segregation and disposal of temporary records.

REQUIREMENT SOURCE: 36 CFR 1220, Dated 07-01-95, Part 42

Agency Internal evaluations. Each agency shall periodically evaluate its records management programs relating to records creation and recordkeeping requirements, maintenance and use of records, and records disposition. These evaluations shall include periodic monitoring of staff determinations of the record status of documentary materials, including electronic mail, and implementation of these decisions. These evaluations should determine compliance with NARA regulations in subchapter B of this chapter and assess the effectiveness of the agency's records

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management program.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 10

Authority.

(a) 44 U.S.C. 2904, vests in the Archivist of the United States responsibility for providing guidance and assistance to Federal agencies with respect to ensuring adequate and proper documentation of the policies and transactions of the Federal Government, including developing and issuing standards to improve the management of records.

(b) 44 U.S.C. 3101, requires that the head of each Federal agency shall make and preserve records containing adequate and proper documentation of the organization, functions, policies, decisions, procedures, and essential transactions of the agency and designed to furnish the information necessary to protect the legal and financial rights of the Government and of persons directly affected by the agency's activities.

(c) 44 U.S.C. 3102, requires that the head of each Federal agency shall establish and maintain an active, continuing program for the economical and efficient management of the records of the agency. The program, among other things, shall provide for-

(1) Effective controls over the creation, and over the maintenance and use of records in the conduct of current business;

(2) Cooperation with the Administrator of General Services and the Archivist in applying standards, procedures, and techniques designed to improve the management of records, promote the maintenance and security of records deemed appropriate for preservation, and facilitate the segregation and disposal of records of temporary value.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 40

Removal of records.

Agencies shall develop procedures to ensure that departing officials do not remove Federal records from agency custody.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 42

Removal of nonrecord materials.

(a) Nonrecord materials, including extra copies of agency records kept only for convenience of reference, may be removed from Government agencies only with the approval of the head of the agency or the individual authorized to act for the agency on matters pertaining to agency records.

(b) Agencies shall ensure that when nonrecord material containing classified information is removed from the executive branch, it is protected under conditions equivalent to those required of executive branch agencies. The originating agency or its successor in function retains control over

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access to such classified information, even after it is properly removed from the agency.

(c) Agencies shall ensure the appropriate protection of nonrecord material containing information which is restricted from release under the Privacy Act or other statutes, when such restricted nonrecord material is removed from Government agencies.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 46

Recordkeeping requirements of other agencies.

When statutes, regulations, directives or authoritative issuances of other agencies prescribe an agency's recordkeeping requirements, the agency so affected shall include these in appropriate directives or other authoritative issuances prescribing its organization, functions, or activities.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 48

(a) Contractors performing Congressionally-mandated program functions are likely to create or receive data necessary to provide adequate and proper documentation of these programs and to manage them effectively. Agencies shall specify the delivery of the Government of all data needed for the adequate and proper documentation of contractor-operated programs in accordance with requirements of the Federal Acquisition Regulation (FAR) and, where applicable, the Defense Federal Acquisition Regulation Supplement (DFARS).

(b) When contracts involve the creation of data for the Government's use, in addition to specifying a final product, agency officials may need to specify the delivery of background data that may have reuse value to the Government. Before specifying the background data that contractors must deliver to the agency, program and contracting officials shall consult with agency records and information managers and historians and, when appropriate, with other Government agencies to ensure that all agency and Government needs are met, especially when the data deliverables support a new agency mission or a new Government program.

(c) Deferred ordering and delivery-of-data clauses and rights-in-data clauses shall be included in contracts whenever necessary to ensure adequate and proper documentation or because the data have reuse value to the Government.

(d) When data deliverables include electronic records, the agency shall require the contractor to deliver sufficient technical documentation to permit the agency or other Government agencies to use the data.

(e) All data created for Government use and delivered to, or falling under the legal control of, the Government are Federal records and shall be managed in accordance with records management legislation as codified at 44 U.S.C. chapters 21, 29, 31, and 33, the Freedom of Information Act (5 U.S.C. 552), and the Privacy Act (5 U.S.C. 552a), and shall be scheduled for disposition in accordance with 36 CFR part 1228.

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REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 50

Records Maintenance

(a) Agencies shall prescribe an appropriate records maintenance program so that complete records are filed or otherwise identified and preserved, records can be found when needed, the identification and retention of permanent records are facilitated, and permanent and temporary records are physically segregated or, for electronic records, segregable.

(b) Each Federal agency, in providing for effective controls over the maintenance of records, shall:

- (1) Establish and implement standards and procedures for classifying, indexing, and filing records as set forth in GSA and NARA handbooks;
- (2) Formally specify official file locations for records in all media and prohibit the maintenance of records at unauthorized locations;
- (3) Formally specify which officials are responsible for maintenance and disposition of electronic records and which computer systems are used for recordkeeping;
- (4) Standardize reference service procedures to facilitate the finding, charging out, and refiling of paper, audiovisual, and cartographic and architectural records, and to ensure that reference to electronic records minimizes the risk of unauthorized additions, deletions, or alterations;
- (5) Make available to all agency employees published standards, guides, and instructions designed for easy reference and revision;
- (6) Review its records maintenance program periodically to determine its adequacy; audit a representative sample of its paper, audiovisual, electronic, cartographic, and architectural files for duplication, misclassification, or misfiles;
- (7) Maintain microform, audiovisual, and electronic records in accordance with 36 CFR parts 1230, 1232, and 1234, respectively;
- (8) Establish and implement procedures for maintaining records all nonrecord materials separately; ensure that record materials generated electronically are clearly identified as records and protected from unauthorized change or deletion for the length of their scheduled retention period; and
- (9) Establish and implement procedures for the separate maintenance of any personal papers in accordance with § 1222.36.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 72

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Approval.

No permanent or unscheduled records shall be loaned to non-Federal recipients without prior written approval from NARA. This authorization is not required for temporary loan of permanent and unscheduled records between Federal agencies.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 104

Reporting.

(a) The head of a Federal agency shall report any unlawful or accidental destruction, defacing, alteration, or removal of records in the custody of that agency to NARA (NIR) Washington, DC 20408. The report shall include:

- (1) A complete description of the records with volume and dates if known;
- (2) The office of origin;
- (3) A statement of the exact circumstances surrounding the alienation, defacing, or destruction of the records;
- (4) A statement of the safeguards established to prevent further loss of documentation; and
- (5) When appropriate, details of the actions taken to salvage, retrieve, or reconstruct the records.

(b) This report has been cleared in accordance with 41 CFR part 201-45 and assigned Interagency Report Control Number 0285- NAR-AR.

(c) The Archivist of the United States will assist the head of the agency in contacting the Attorney General for the recovery of any unlawfully removed records.

REQUIREMENT SOURCE: 44 USC 3101, Dated 03-01-91, All

Author's Note: Related references

1. 36CFR1228 Part 20
2. 36CFR1222 Part 10

The head of each Federal agency shall make and preserve records containing adequate and proper documentation of the organization, functions, policies, decisions, procedures, and essential transactions of the agency and designed to furnish the information necessary to protect the legal and financial rights of the Government and of persons directly affected by the agency's activities.

REQUIREMENT SOURCE: 44 USC 3105, Dated 03-01-91, All

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The head of each Federal agency shall establish safeguards against the removal or loss of records he determines to be necessary and required by regulations of the Archivist. Safeguards shall include making it known to officials and employees of the agency -

- (1) that records in the custody of the agency are not to be alienated or destroyed except in accordance with sections 3301-3314 of this title, and
- (2) the penalties provided by law for the unlawful removal or destruction of records.

REQUIREMENT SOURCE: 44 USC 3312, Dated 03-01-91, All

Photographs or microphotographs of records made in compliance with regulations under section 3302 of this title shall have the same effect as the originals and shall be treated as originals for the purpose of their admissibility in evidence. Certified or authenticated reproductions of the photographs or microphotographs shall be admitted in evidence equally with the original photographs or microphotographs.

REQUIREMENT SOURCE: 44 USC 3506, Dated 03-01-95, All

(a) Each agency shall be responsible for carrying out its information management activities in an efficient, effective, and economical manner, and for complying with the information policies, principles, standards, and guidelines prescribed by the Director.

(b) The head of each agency shall designate, within three months after the effective date of this Act, a senior official or, in the case of military departments, and the Office of the Secretary of Defense, officials who report directly to such agency head to carry out the responsibilities of the agency under this chapter. If more than one official is appointed for the military departments the respective duties of the officials shall be clearly delineated.

(c) Each agency shall -

(1) systematically inventory its major information systems and periodically review its information resources management activities;

(2) ensure its information systems do not overlap each other or duplicate the systems of other agencies;

(3) develop procedures for assessing the paperwork and reporting burden of proposed legislation affecting such agency;

(4) assign to the official designated under subsection (b) the responsibility for the conduct of and accountability for any acquisitions made pursuant to a delegation of authority under section 111 of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 759);

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(5) ensure that information collection requests required by law or to obtain a benefit, and submitted to nine or fewer persons, contain a statement to inform the person receiving the request that the request is not subject to the requirements of section 3507 of this chapter; and (FOOTNOTE 1)

FOOTNOTE 1) So in original. The word "and" probably should not appear.

(6) implement applicable Government-wide and agency information policies, principles, standards, and guidelines with respect to information collection, paperwork reduction, statistical activities, records management activities, privacy and security of records, sharing and dissemination of information, acquisition and use of information technology, and other information resource management functions;

(7) periodically evaluate and, as needed, improve, the accuracy, completeness, and reliability of data and records contained within Federal information systems; and

(8) develop and annually revise a 5-year plan, in accordance with appropriate guidance provided by the Director, for meeting the agency's information technology needs.

(d) The head of each agency shall establish such procedures as necessary to ensure the compliance of the agency with the requirements of the Federal Information Locator System, including necessary screening and compliance activities.

REQUIREMENT SOURCE: DOE ORDER 1324.5B, Preamble, Section 8.c(1) and (2)

(1) Develop and implement a records management program consistent with the requirements of Federal law, Code of Federal Regulations, DOE directives, DOE guidelines, and Departmentally established or accepted referenced standards.

(2) Ensure that all records management program requirements are kept current and available for review.

1.8.1 Control

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 1(e)

The material was created or received on an electronic mail system and it meets the definition of record. For specific instructions on the disposition of records created or received on electronic mail systems, see 36 CFR 1234.32.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 184

Audiovisual records.

The following types of audiovisual records appraised as permanent shall be transferred to the National Archives as soon as they become inactive or whenever the agency cannot provide proper

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care and handling of the records, including adequate storage conditions, to facilitate their preservation by the National Archives (see part 1232 of this chapter). In general the physical types described below constitute the minimum record elements for archival purposes that are required to provide for future preservation, duplication, and reference needs.

(a) Motion pictures.

(1) Agency-sponsored or produced motion picture films (e.g., public information films) whether for public or internal use:

- (i) Original negative or color original plus separate optical sound track;
- (ii) Intermediate master positive or duplicate negative plus optical track sound track; and,
- (iii) Sound projection print and video recording, if both exist.

(2) Agency-acquired motion picture films: Two projection prints in good condition or one projection print and one videotape.

(3) Unedited footage, outtakes and trims (the discards of film productions) that are properly arranged, labeled, and described and show unstaged, unrehearsed events of historical interest or historically significant phenomena:

- (i) Original negative or color original; and
- (ii) Matching print or videotape.

(b) Still pictures.

(1) For black-and- white photographs, an original negative and a captioned print although the captioning information can be maintained in another file such as a data base if the file number correlation is clear. If the original negative is nitrate, unstable acetate, or glass based, a duplicate negative on a polyester base is also needed.

(2) For color photographs, the original color negative, color transparency, or color slide; a captioned print of the original color negative; and/or captioning information as described above if for an original color transparency or original color slide; and a duplicate negative, or slide, or transparency, if they exist.

(3) For slide sets, the original and a reference set, and the related audio recording and script.

(4) For other pictorial records such as posters, original art work, and filmstrips, the original and a reference copy.

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(c) Sound recordings.

(1) Disc recordings:

(i) For conventional disc recordings, the master tape and two disc pressings of each recording, typically a vinyl copy for playback at 33 1/3 revolutions per minute (rpm).

(ii) For compact discs, the origination recording regardless of form and two compact discs.

(2) For analog audio recordings on magnetic tape (open reel, cassette, or cartridge), the original tape, or the earliest available generation of the recording, and a subsequent generation copy for reference. Section 1232.30(d) of this subchapter requires the use of open-reel analog magnetic tape for original audio recordings.

(d) Video recordings.

(1) For videotape, the original or earliest generation videotape and a copy for reference. Section 1232.30(c) of this subchapter requires the use of industrial-quality or professional videotapes for use as originals, although VHS copies can be transferred as reference copies.

(2) For video discs, the premaster videotape used to manufacture the video disc and two copies of the disc. Video discs that depend on interactive software and nonstandard equipment may not be acceptable for transfer.

(e) Finding aids and production documentation. *The following records shall be transferred to the National Archives with the audiovisual records to which they pertain.*

(1) Existing finding aids such as data sheets, shot lists, continuities, review sheets, catalogs, indexes, list of captions, and other documentation that are helpful or necessary for the proper identification, or retrieval of audiovisual records. Agencies should contact the Nontextual Archives Division, or its appropriate audiovisual branch, to determine the type of hardware and software that is currently acceptable for transfer to the National Archives as an agency electronic finding aid that will accompany its audiovisual records. In general, however, agencies must transfer two copies of the electronic finding aid, one in its native format with its field structure documented, and a second copy in a contemporary format available at the time of transfer that NARA will be able to support and import to its database.

(2) Production case files or similar files that include copies of production contracts, scripts, transcripts, and appropriate documentation bearing on the origin, acquisition, release, and ownership of the production.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 186

Cartographic and architectural records.

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The following classes of cartographic and architectural records appraised as permanent should be transferred to the National Archives as soon as they become inactive or whenever the agency cannot provide the proper care and handling of the materials to guarantee their preservation.

(a) Maps and charts.

- (1) Manuscript maps; printed and processed maps on which manuscript changes, additions, or annotations have been made for record purposes or which bear manuscript signatures to indicate official approval; and single printed or processed maps that have been attached to or interfiled with other documents of a record character or in any way made an integral part of a record.
- (2) Master sets of printed or processed maps in the custody of the agency by which they were issued. Such master sets should be kept segregated from the stock of maps held for distribution and from maps received from other agencies. A master set should include one copy of each edition of a printed or processed map issued.
- (3) Computer-related and computer-plotted maps that cannot be reproduced by the National Archives because of destruction of the magnetic tapes or other stored data or because of the unavailability of ADP equipment.
- (4) Index maps, card indexes, lists, catalogs, or other finding aids that may be helpful in using the maps transferred.
- (5) Records related to preparing, compiling, editing, or printing maps, such as manuscript field notebooks of surveys, triangulation and other geodetic computations, and project folders containing specifications to be followed and appraisals of source materials to be used.

(b) Aerial photography and remote sensing imagery.

- (1) Vertical and oblique negative aerial film, conventional aircraft.
- (2) Annotated copy negatives, internegatives, rectified negatives, and glass plate negatives from vertical and oblique aerial film, conventional aircraft.
- (3) Annotated prints from aerial film, conventional aircraft.
- (4) Infrared, ultraviolet, multispectral (multiband), video, imagery radar, and related tapes, converted to a film base.
- (5) Indexes and other finding aids in the form of photo mosaics, flight line indexes, coded grids, and coordinate grids.

(c) Architectural and related engineering drawings.

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- (1) Design drawings, preliminary and presentation drawings, and models which document the evolution of the design of a building or structure.
- (2) Master sets of drawings which document the condition of a building or structure in terms of its initial construction and subsequent alterations. This category includes final working drawings, ``as-built'' drawings, shop drawings, and repair and alteration drawings.
- (3) Drawings of repetitive or standard details of one or more buildings or structures.
- (4) ``Measured'' drawings of existing buildings and original or photocopies of drawings reviewed for approval.
- (5) Related finding aids and specifications to be followed.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 188

Electronic records.

(a) Magnetic tape.

- (1) Computer magnetic tape is a fragile medium, highly susceptible to the generation of error by improper care and handling. To ensure that permanently valuable information stored on magnetic tape is preserved, Federal agencies should schedule files for disposition as soon as possible after the tapes are written. When NARA has determined that a file is worthy of preservation, the agency should transfer the file to the National Archives as soon as it becomes inactive or whenever the agency cannot provide proper care and handling of the tapes (see part 1234 of this chapter) to guarantee the preservation of the information they contain.
- (2) Agencies shall transfer electronic records to the National Archives either on open reel magnetic tape or on tape cartridges. Open reel magnetic tape shall be on one-half inch 7 or 9 track tape reels recorded at 800, 1600, or 6250 bpi. Tape cartridges shall be 18 track 3480-class cartridges recorded at 37,871 bpi. The data shall be written in ASCII or EBCDIC with all extraneous control characters removed from the data (except record length indicators for variable length records, or marks designating a datum, word, field, block or file), blocked at not higher than 32,760 bytes per block. The open reel magnetic tapes or the tape cartridges on which the data are recorded shall be new or recertified tapes (see part 1234 of this chapter) which have been passed over a tape cleaner before writing and shall be rewound under controlled tension.

(b) Other magnetic media. When an electronic file that has been designated for preservation by NARA is maintained on a direct access storage device, the file shall be written on an open reel magnetic tape or on a magnetic tape cartridge that meets the specifications in paragraph (a)(2) of this section. This tape copy shall be transferred to the National Archives.

(c) Documentation. Documentation adequate for servicing and interpreting electronic records that have been designated for preservation by NARA shall be transferred with them. This

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documentation shall include, but not necessarily be limited to completed NARA Form 14097, Technical Description for Transfer of Electronic Records, or its equivalent. Where it has been necessary to strip data of its extraneous control characters (see paragraph (a)(2) of this section), the codebook specifications defining the data elements and their values must match the new format of the data. Guidelines for determining adequate documentation may be obtained from the Office of Records Administration (NI), National Archives and Records Administration, Washington, DC 20408.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 7

Agency responsibilities. The head of each Federal agency must ensure that the management of microform records incorporates the following elements:

- (a) Assigning responsibility to develop and implement an agencywide program for managing all records on microform media and notifying the National Archives and Records Administration (NI), Washington, DC 20408 of the name and title of the person assigned the responsibility.
- (b) Integrating the management of microform records with other records and information resources management programs of the agency.
- (c) Incorporating microform records management objectives, responsibilities, and authorities in pertinent agency directives and disseminating them throughout the agency as appropriate.
- (d) Establishing procedures for addressing records management concerns, including recordkeeping and disposition requirements, before approving new microform records systems or enhancements to existing systems.
- (e) Ensuring that adequate training is provided for the managers and users of microform records.
- (f) Developing and securing NARA approval of records schedules covering microform records, and ensuring proper implementation of the schedule provisions.
- (g) Ensuring that computerized indexes associated with microform records, such as in a computer-assisted retrieval(CAR) system, are scheduled in accordance with part 1234 of this chapter.
- (h) Reviewing the agency's program periodically to ensure compliance with NARA standards in this part for the creation, storage, use, inspection, and disposition of microform records.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 10

Disposition authorization.

- (a) Permanent or unscheduled records. Agencies must schedule the disposition of both source

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documents (originals) and microforms by submitting Standard Form (SF) 115, Request for Records Disposition Authority, to NARA in accordance with part 1228 of this chapter. Source documents may not be disposed of before NARA authorization is received. The original records shall not be destroyed after microfilming when NARA determines that the original records have intrinsic value or when NARA concludes that the microforms present reference problems because of the access restrictions, including security classification, or other characteristics of the original records.

(1) Agencies using microfilming methods and procedures meeting the standards in § 1230.14 shall include on the SF 115 the following certification: "This certifies that the records described on this form were (or will be) microfilmed in accordance with the standards set forth in 36 CFR part 1230."

(2) Agencies using microfilming methods, materials and procedures that do not meet the standards in § 1230.14(a) shall include on the SF 115 a description of the system and standards used.

(3) Agencies proposing to retain and store the silver original microforms of permanent records after disposal of the original records shall include on the SF 115 a statement that the agency's storage conditions shall comply with the standards of § 1230.20 and that the inspections required by § 1230.22 will be performed.

(b) Temporary records. Agencies do not need to obtain further NARA approval before disposing of scheduled temporary records that have been microfilmed. The approved retention period for temporary records shall be applied to microform copies of such records; the original records shall be destroyed upon verification of the microfilm, unless legal requirements preclude early destruction of the originals.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 12

Preparatory steps prior to filming.

(a) The integrity of the original records authorized for disposal shall be maintained by ensuring that the microforms are adequate substitutes for the original records and serve the purpose for which such records were created or maintained. Copies shall be complete and contain all information shown on the originals.

(b) The records shall be arranged, identified, and indexed so that any particular document or component of the records can be located. Each microform roll or fiche shall include accurate titling information on a titling target or header. At a minimum, titling information shall include the name of the agency and organization; the title of the records; the number or identifier for each unit of film; the security classification, if any; and the inclusive dates, names, or other data identifying the records to be included on a unit of film. For fiche, complete titling information may be placed as a microimage in frame 1 if the information will not fit on the header.

(c) Each microform shall contain an identification target showing the date of filming. When

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necessary to give the film copy better legal standing, the target shall also identify the person authorizing the microfilming. See ANSI/AIIM MS19-1987 for standards for identification targets.

(d) The following formats are mandatory standards for microforms.

(1) Roll film -

(i) Source documents. The formats described in ANSI/AIIM MS14-1988 must be used for microfilming source documents on 16mm and 35mm roll film. A reduction ratio of no greater than 1:24 is recommended for typewritten or correspondence type of documents. See ANSI/AIIM MS23-1991 for determining the appropriate reduction ratio and format for meeting the image quality requirements. When microfilming on 35mm film for aperture card applications, the format dimensions in AIIM/MS32-1987, Table 1 are mandatory, the aperture card format "D Aperture" shown in ANSI/AIIM MS41-1988, Figure 1 must be used. The components of the aperture card, including the paper and adhesive, must conform to the requirements of ANSI IT9.2-1991. The 35mm film used in the aperture card application must conform to film designated as LE500 in ANSI/NAPM IT9.1-1992.

(ii) COM. Computer output microfilm (COM) generated images shall be the simplex mode described in ANSI/AIIM MS14-1988 at an effective ratio of 1:24 or 1:48 depending upon the application.

(2) Microfiche. For microfilming source documents or computer generated information (COM) on microfiche, the appropriate formats and reduction ratios prescribed in ANSI/AIIM MS5-1990 must be used as specified for the size and quality of the documents being filmed. See ANSI/AIIM MS23-1991 for determining the appropriate reduction ratio and format for meeting the image quality requirements.

(e) Index placement. -

(1) Source documents. When filming original (source) documents, all indexes, registers, or other finding aids, if microfilmed, shall be placed either in the first frames of the first roll of film or in the last frames of the last roll of film of a series or in the last frames of the last microfiche or microfilm jacket of a series.

(2) COM. Computer-generated microforms shall have the indexes following the data on a roll of film or in the last frames of a single microfiche, or the last frames of the last fiche in a series. Other index locations may be used only if dictated by special system constraints.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 14

Film and image requirements for permanent records or unscheduled records.

(a) Application. The following standards shall apply to the microfilming of permanent records

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where the original paper record will be destroyed or otherwise disposed of. Systems that produce original permanent records on microfilm with no paper originals, such as computer output microfilm (COM), must be designed so that they produce microfilm which meets the Standards of this section. Unscheduled records from systems such as COM must also meet the standards of this section. Prior NARA approval of a SF 115 is required before unscheduled paper records are disposed of after microfilming.

(b) Film stock standards. Only polyester-based silver gelatin type film that conforms to ANSI/NAPM IT9.1-1992 for LE 500 film must be used in all applications.

(c) Processing standards. Microforms shall be processed so that the residual thiosulfate ion concentration will not exceed 0.014 grams per square meter in accordance with ANSI/NAPM IT9.1-1992. Processing shall be in accordance with processing procedures in ANSI/AIIM MS1-1988 and MS23-1991.

(d) Quality standards -

(1) Resolution -

(i) Source documents. The method for determining minimum resolution on microforms of source documents shall conform to the Quality Index Method for determining resolution and anticipated losses when duplicating as described in ANSI/AIIM MS23-1991 and MS43-1988. Resolution tests shall be performed using a NIST-SRM 1010a, Microcopy Resolution Test Chart (a calibrated and certified photographic reproduction) as specified in ISO 3334-1991 (the standard practice for using the test chart), and the patterns will be read following the instructions of ISO 3334-1991. The character used to determine the height used in the Quality Index formula shall be the smallest character used to display information. A Quality Index of five is required at the third generation level.

(ii) COM. Computer output microforms (COM) shall meet the requirements of ANSI/AIIM MS1-1988.

(2) Background density of images. The background ISO standard visual diffuse transmission density on microforms shall be appropriate to the type of documents being filmed. The procedure for density measurement is described in ANSI/AIIM MS23-1991 and the densitometer shall be in accordance with ANSI/ISO 5/3-1984, for spectral conditions and ANSI IT2.19-1990, for geometric conditions for transmission density. Recommended visual diffuse transmission background densities for images of documents are as follows:

Classification	Description of document	Background density
Group 1	High-quality, high-	1.3-1.5

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	contrast printed books, periodicals, and black typing	
Group 2	Fine-line originals, black opaque pencil writing, and documents with small high-contrast printing	1.15-1.4
Group 3	Pencil and ink drawings, faded printing, and very small printing, such as footnotes at the bottom of a printed page	1.0-1.2
Group 4	Low-contrast manuscripts and drawings, graph paper with pale, fine-colored lines; letters typed with a worn ribbon; and poorly printed, faint documents	0.8-1.0
Group 5	Poor-contrast documents (special exception)	0.7-0.85

Recommended visual diffuse transmission densities for computer generated images are as follows:

Film type
Silver gelatin
Process: Conventional
Density measurement method: Printing or diffuse
Min. Dmax*: 0.75
Max. Dmin*: 0.15
Minimum density difference: 0.60

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Silver gelatin

Process: Full reversal

Density measurement method: Printing

Min. Dmax*: 1.50

Max. Dmin*: 0.20

Minimum density difference: 1.30

*Character or line density, measured with a microdensitometer or by comparing the film under a microscope with an image of a known density.

(3) Base plus fog density of films. The base plus fog density of unexposed, processed films should not exceed 0.10. When a tinted base film is used, the density will be increased. The difference must be added to the values given in the tables in paragraph (d)(2) of this section.

(4) Line or Stroke Width. Due to optical limitations in most photographic systems, film images of thin lines appearing in the original document will tend to fill in as a function of their width and density. Therefore, as the reduction ratio of a given system is increased, the background density shall be reduced as needed to ensure that the copies produced will contain legible characters.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 16

Film and image requirements for temporary records, duplicates, and user copies.

(a) Temporary records with a retention period over 99 years. Agencies must follow the film and image requirements in § 1230.14.

(b) Other temporary records. Agencies must select an appropriate film stock that meets agency needs for temporary microforms to be kept for less than 100 years and ensures the preservation of the microforms for their full retention period. NARA does not require use of particular standards for processing microfilm of such temporary records; agencies may consult appropriate ANSI standards or manufacturer's instructions.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 20

Storage.

(a) Permanent and unscheduled records. The extended term storage conditions specified in ANSI IT9.11-1991 and ANSI IT9.2-1991 are required for storing permanent and unscheduled microform records, except that the relative humidity of the storage area must be a constant 35% RH, plus or minus 5%. Non-silver copies of permanent or unscheduled microforms must not be stored in the same storage area as silver gelatin originals or duplicate copies.

(b) Temporary records. Temporary microform records must be stored under conditions that will ensure their preservation for their full retention period. Agencies may consult ANSI IT9.11-1991

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and ANSI IT9.2-1991 to determine appropriate storage conditions; however, NARA does not require adherence to this standard for temporary records.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 22(a)(1) thru (4)

Inspection.

(a) Permanent and unscheduled records.

(1) Master films of permanent records microfilmed in order to dispose of the original record, master films of permanent records originally created on microfilm, and other master films scheduled for transfer to the National Archives, must be inspected by the agency creating the film when the films are 2 years old and, until they are transferred to a Federal records center or to the National Archives, every 2 years thereafter. The inspection must be made in accordance with ANSI/AIIM MD45-1990.

(2) Microforms cannot be accepted for deposit with the National Archives of the United States until the first inspection (occurring after the microforms are 2 years old) has been performed. Permanent microforms may be transferred to a Federal records center only after the agency has performed the first inspection or has certified that the microforms will be inspected by the agency, an agency contractor, or the Federal records center (on a reimbursable basis) when they become 2 years old.

(3) To facilitate inspection, an inventory of microfilm must be maintained, listing each microform series/publication by production date, producer, processor, format, and results of previous inspections.

(4) The elements of the inspection shall consist of:

(i) An inspection for aging blemishes following the guidelines in the ANSI/AIIMMS4S-1990;

(ii) A rereading of resolution targets;

(iii) A remeasurement of density; and

(iv) A certification of the environmental conditions under which the microforms are stored, as specified in § 1230.20(a).

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 22(a)(5)

An inspection report must be prepared, and a copy must be furnished to NARA in accordance with § 1230.26(b). The inspection report must contain:

(i) A summary of the inspection findings, including:

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- (A) A list of batches by year that includes the identification numbers of microfilm rolls and microfiche in each batch;
- (B) The quantity of microforms inspected;
- (C) An assessment of the overall condition of the microforms;
- (D) A summary of any defects discovered, e.g., redox blemishes or base deformation; and
- (E) A summary of corrective action taken.

- (ii) A detailed inspection log created during the inspection that contains the following information:
 - (A) A complete description of all records inspected (title; roll or fiche number or other unique identifier for each unit of film inspected; security classification, if any; and inclusive dates, names, or other data identifying the records on the unit of film);
 - (B) The date of inspection;
 - (C) The elements of inspection (see subparagraph (a)(4) of this section);
 - (D) Any defects uncovered; and
 - (E) The corrective action taken.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 22(a)(6) and (7)

- (6) An agency having in its custody a master microform that is deteriorating, as shown by the inspection, shall prepare a silver duplicate in accordance with § 1230.14 to replace the deteriorating master. The duplicate film will be subject to the 2-year inspection requirement before transfer to a Federal Record Center or the National Archives.
- (7) Inspection must be performed in an environmentally controlled area in accordance with ANSI/AIIM MS45-1990.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 22(b)

Temporary records. Inspection by sampling procedures described in § 1230.22(a) is recommended but not required.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 24

Use of microform records.

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- (a) The silver gelatin original microform or duplicate silver gelatin microform created in accordance with § 1230.14 of this part (archival microform) must not be used for reference purposes. Duplicates must be used for reference and for further duplication on a recurring basis or for large-scale duplication, as well as for distribution of records on microform. Agency procedures must ensure that the archival microform remains clean and undamaged during the process of making a duplicating master.
- (b) Agencies retaining the original record in accordance with an approved records disposition schedule may apply agency standards for the use of microform records.

REQUIREMENT SOURCE: 36 CFR 1230, Dated 07-01-95, Part 26

Disposition of microform records. The disposition of microform records shall be carried out in the same manner prescribed for other types of records in part 1228 of this chapter with the following additional requirements:

- (a) The silver gelatin original (or a silver gelatin duplicate negative microform record created in accordance with § 1230.14) plus one microform copy of each permanent record microfilmed by an agency, must be transferred to an approved agency records center, the National Archives of the United States, or to a Federal records center, at the time that the records are to be transferred in accordance with the approved records disposition schedule, SF 258, or other authorization for transfer. Non-silver copies must be packaged separately from the silver gelatin original or silver duplicate microform copy and labeled clearly as non-silver copies.
- (b) The microforms shall be accompanied by:
 - (1) Information identifying the agency and organization; the title of the records; the number or identifier for each unit of film; the security classification, if any; the inclusive dates, names, or other data identifying the records to be included on a unit of film;
 - (2) Any finding aids relevant to the microform that are not contained in the microform; and
 - (3) The inspection log forms and inspection reports required by § 1230.22(a) (5) and (6).
- (c) The information required in this paragraph (b) shall be attached to the SF 135 when records are being transferred to a Federal records center and to the SF 258 when records are being transferred to the legal custody of the National Archives.

REQUIREMENT SOURCE: 36 CFR 1232, Dated 07-01-95, Part 20

Agency program responsibilities.

Each Federal agency, in providing for effective controls over the creation of records, shall

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establish an appropriate program for the management of audiovisual records. This program shall be governed by the following requirements:

- (a) Prescribe the types of records to be created and maintained so that audiovisual activities and their products are properly documented. (Regulations on the appropriate types of permanent audiovisual records are located in § 1228.184 of this chapter.)
- (b) Ensure that adequate training is provided to:
 - (1) Agency personnel responsible for the disposition of audiovisual records;
 - (2) Contractor personnel who have temporary custody of audiovisual records; and,
 - (3) All users who create, handle, or maintain audiovisual records or operate equipment for their use.
- (c) Ensure that contract provisions protect the Government's legal title and control over audiovisual records and related documentation produced or maintained by contract. Ensure that contract provisions identify as deliverables any working papers/files that are needed for adequate and proper documentation. Include a provision that permits the Government to inspect contractor facilities used for the storage and handling of permanent or unscheduled audiovisual records. Agencies shall inspect such facilities at least once each year.
- (d) Keep inventories indicating the location of all generations of audiovisual records, whether in agency storage or in another facility such as a laboratory or library distribution center.
- (e) Schedule disposition of all audiovisual records as soon as practicable after creation. General Records Schedule 21 provides mandatory disposal authorization for temporary audiovisual records common to most Federal offices. Agencies must submit an SF 115, Request for Records Disposition Authority, to NARA to obtain authorization for the disposition of all other audiovisual records. The schedules covering permanent records must specify the different record elements identified in § 1228.184, and must always include related finding aids.
- (f) Periodically review agency audiovisual recordkeeping practices for conformance with requirements and take necessary corrective action.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 10

Author's Note: Related references

1. 36CFR1234 Part 30(a), (b), (c), (d), (e), (f), (g), (h)
2. 36CFR1234 Part 32

Agency responsibilities. The head of each Federal agency shall ensure that the management of

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electronic records incorporates the following elements:

- (a) Assigning responsibility to develop and implement an agency-wide program for the management of all records created, received, maintained, used, or stored on electronic media; and notifying the National Archives and Records Administration, Office of Records Administration (NRA), Washington, DC 20408 and the General Services Administration, Regulations Branch (KMPR), Washington, DC 20405, of the name and title of the person assigned the responsibility.
- (b) Integrating the management of electronic records with other records and information resources management programs of the agency.
- (c) Incorporating electronic records management objectives, responsibilities, and authorities in pertinent agency directives and disseminating them throughout the agency as appropriate.
- (d) Establishing procedures for addressing records management requirements, including recordkeeping requirements and disposition, before approving new electronic information system or enhancements to existing systems.
- (e) Ensuring that adequate training is provided for users of electronic mail systems on recordkeeping requirements, the distinction between Federal records and nonrecord materials, procedures for designating Federal records, and moving or copying records for inclusion in an agency recordkeeping system.
- (f) Ensuring that adequate training is provided for users of electronic information system in the operation, care, and handling of the equipment, software, and media used in the system.
- (g) Developing and maintaining up-to-date documentation about all electronic information system that is adequate to: Specify all technical characteristics necessary for reading or processing the records; identify all defined inputs and outputs of the system; define the contents of the files and records; determine restrictions on access and use; understand the purpose(s) and function(s) of the system; describe update cycles or conditions and rules for adding information to the system, changing information in it, or deleting information; and ensure the timely, authorized disposition of the records.
- (h) Specifying the location, manner, and media in which electronic records will be maintained to meet operational and archival requirements, and maintaining inventories of electronic information system to facilitate disposition.
- (i) Developing and securing NRA approval of records disposition schedules, and ensuring implementation of their provisions.
- (j) Specifying the methods of implementing controls over national security-classified, sensitive, proprietary, and Privacy Act records stored and used electronically.

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- (k) Establishing procedures to ensure that the requirements of this part are applied to those electronic records that are created or maintained by contractors.
- (l) Ensuring compliance with applicable Government-wide policies, procedures, and standards such as those issued by the Office of Management and Budget, the General Accounting Office, the General Services Administration, the National Archives and Records Administration, and the National Institute of Standards and Technology.
- (m) Reviewing electronic information system periodically for conformance to established agency procedures, standards, and policies as part of the periodic reviews required by 44 U.S.C. 3506. The review should determine if the records have been properly identified and described, and whether the schedule descriptions and retention periods reflect the current informational content and use. If not, or if substantive changes have been made in the structure, design, codes, purposes, or uses of the system, submit an SF 115, Request for Records Disposition Authority, to NARA.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 20

Creation and use of data files.

- (a) For electronic information system that produce, use, or store data files, disposition instructions for the data shall be incorporated into the system's design.
- (b) Agencies shall maintain adequate and up-to-date technical documentation for each electronic information system that produces, uses, or stores data files. Minimum documentation required is a narrative description of the system; physical and technical characteristics of the records, including a record layout that describes each field including its name, size, starting or relative position, and a description of the form of the data (such as alphabetic, zoned decimal, packed decimal, or numeric), or a data dictionary or the equivalent information associated with a data base management system including a description of the relationship between data elements in data bases; and any other technical information needed to read or process the records.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 22

Creation and use of text documents.

- (a) Electronic recordkeeping system that maintain the official file copy of text documents on electronic media shall meet the following minimum requirements:
 - (1) Provide a method for all authorized users of the system to retrieve desired documents, such as an indexing or text search system;
 - (2) Provide an appropriate level of security to ensure integrity of the documents;

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- (3) Provide a standard interchange format when necessary to permit the exchange of documents on electronic media between agency computers using different software/operating systems and the conversion or migration of documents on electronic media from one system to another; and
- (4) Provide for the disposition of the documents including, when necessary, the requirements for transferring permanent records to NARA (see § 1228.188 of this chapter).

(b) Before a document is created electronically on electronic recordkeeping system that will maintain the official file copy on electronic media, each document shall be identified sufficiently to enable authorized personnel to retrieve, protect, and carry out the disposition of documents in the system. Appropriate identifying information for each document maintained on the electronic media may include: office of origin, file code, key words for retrieval, addressee (if any), signator, author, date, authorized disposition (coded or otherwise), and security classification (if applicable). Agencies shall ensure that records maintained in such systems can be correlated with related records on paper, microform, or other media.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 24 Introduction

Agencies shall manage records created or received on electronic mail systems in accordance with the provisions of this chapter pertaining to adequacy of documentation, recordkeeping requirements, agency records management responsibilities, and records disposition (36 CFR parts 1120, 1222, and 1228).

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 24(a)

Agency instructions on identifying and preserving electronic mail messages will address the following unique aspects of electronic mail:

- (1) Some transmission data (names of sender and addressee(s) and date the message was sent) must be preserved for each electronic mail record in order for the context of the message to be understood. Agencies shall determine if any other transmission data is needed for purposes of context.
- (2) Agencies that use an electronic mail system that identifies users by codes or nicknames or identifies addressees only by the name of a distribution list shall instruct staff on how to retain names on directories or distributions lists to ensure identification of the sender and addressee(s) of messages that are records.
- (3) Agencies that use an electronic mail system that allows users to request acknowledgments or receipts showing that a message reached the mailbox or inbox of each addressee, or that an addressee opened the message, shall issue instructions to e-mail users specifying when to request such receipts or acknowledgments for recordkeeping purposes and how to preserve them.
- (4) Agencies with access to external electronic mail systems shall ensure that Federal records sent

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or received on these systems are preserved in the appropriate recordkeeping system and that reasonable steps are taken to capture available transmission and receipt data as needed by the agency for recordkeeping purposes.

(5) Some e-mail systems provide calendars and task lists for users. These may meet the definition of Federal record. Calendars that meet the definition of Federal records are to be managed in accordance with the provisions of General Records Schedule 23, Item 5.

(6) Draft documents that are circulated on electronic mail systems may be records if they meet the criteria specified in 36 CFR 1222.34.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 24(b)

Agencies shall consider the following criteria when developing procedures for the maintenance of electronic mail records in appropriate recordkeeping systems, regardless of format.

(1) Recordkeeping systems that include electronic mail message must:

(i) Provide for the grouping of related records into classifications according to the nature of the business purposes the records serve;

(ii) Permit easy and timely retrieval of both individual records and files or other groupings of related records;

(iii) Retain the records in a usable format for their required retention period as specified by a NARA-approved records schedule;

(iv) Be accessible by individuals who have a business need for information if the system;

(v) Preserve the transmission and receipt data specified in agency instructions; and

(vi) Permit transfer of permanent records to the National Archives and Records Administration (see 36 CFR 1228.198 and 36 CFR 1234.32(a)).

(2) Agencies shall not store the recordkeeping copy of electronic mail messages that are Federal records only on the electronic mail system, unless the system has all of the features specified in paragraph (b)(1) of this section. If the electronic mail system is not designed to be a recordkeeping system, agencies shall instruct staff on how to copy Federal records from the electronic mail system to a recordkeeping system.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 24(c)

Agencies that maintain their electronic mail records electronically shall move or copy them to a separate electronic recordkeeping system unless their system has the features specified in paragraph

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(b)(1) of this section. Because they do not have the features specified in paragraph (b)(1) of the section, backup tapes should not be used for recordkeeping purposes. Agencies may retain records from electronic mail systems in an off-line electronic storage format (such as optical disk or magnetic tape) that meets the requirements described at 36 CFR 1234.30(a). Agencies that retain permanent electronic mail records scheduled for transfer to the National Archives shall either store them in a format and on a medium that conforms to the requirements concerning transfer at 36 CFR 1228.188 or shall maintain the ability to convert the records to the required format and medium at the time transfer is scheduled.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 24(d)

Agencies that maintain paper files as their record keeping systems shall print the electronic mail records and the related transmission and receipt data specified by the agency.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 26

Judicial use of electronic records. Electronic records may be admitted in evidence to Federal courts for use in court proceedings (Federal Rules of Evidence 803(8)) if trustworthiness is established by thoroughly documenting the recordkeeping system's operation and the controls imposed upon it. Agencies should implement the following procedures to enhance the legal admissibility of electronic records.

(a) Document that similar kinds of records generated and stored electronically are created by the same processes each time and have a standardized retrieval approach.

(b) Substantiate that security procedures prevent unauthorized addition, modification or deletion of a record and ensure system protection against such problems as power interruptions.

(c) Identify the electronic media on which records are stored throughout their life cycle, the maximum time span that records remain on each storage medium, and the NARA-approved disposition of all records.

(d) Coordinate all of the above with legal counsel and senior IRM and records management staff.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 28

Security of electronic records. Agencies shall implement and maintain an effective records security program that incorporates the following:

(a) Ensures that only authorized personnel have access to electronic records.

(b) Provides for backup and recovery of records to protect against information loss.

(c) Ensures that appropriate agency personnel are trained to safeguard sensitive or classified

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electronic records.

- (d) Minimizes the risk of unauthorized alteration or erasure of electronic records.
- (e) Ensures that electronic records security is included in computer systems security plans prepared pursuant to the Computer Security Act of 1987 (40 USC 759 note).

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 32

Retention of electronic records. Agencies shall establish policies and procedures to ensure that electronic records and their documentation are retained as long as needed by the Government. These retention procedures shall include provisions for:

- (a) Scheduling the disposition of all electronic records, as well as related documentation and indexes, by applying General Records Schedules (particularly GRS 20 or GRS 23) as appropriate or submitting an SF 115, Request for Records Disposition Authority, to NARA (see part 1228 of this chapter). The information in electronic information system, including those operated for the Government by a contractor, shall be scheduled as soon as possible but no later than one year after implementation of the system.
- (b) Transferring a copy of the electronic records and any related documentation and indexes to the National Archives at the time specified in the records disposition schedule in accordance with instructions found in § 1228.188 of this chapter. Transfer may take place at an earlier date if convenient for both the agency and the National Archives and Records Administration.
- (c) Establishing procedures for regular recopying, reformatting, and other necessary maintenance to ensure the retention and usability of electronic records throughout their authorized life cycle (see § 1234.28).
- (d) Electronic mail records may not be deleted or otherwise disposed of without prior disposition authority from NARA (44 USC 3303a). This applies to the original version of the record that is sent or received on the electronic mail system and any copies that have been transferred to a recordkeeping system. See 36 CFR 1228 for records disposition requirements.
 - (1) Disposition of records on the electronic mail system. When an agency has taken the necessary steps to retain the record in a recordkeeping system, the identical version that remains on the user's screen or in the user's mailbox has no continuing value. Therefore, NARA has authorized deletion of the version of the record on the electronic mail system under General Records Schedule 20, Item 14, after the record has been preserved in a recordkeeping system along with all appropriate transmission data.
 - (2) Records in recordkeeping systems. The disposition of electronic mail records that have been transferred to an appropriate recordkeeping system is governed by the records schedule or schedules that control the records in that system. If the records in the system are not scheduled,

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the agency shall follow the procedure at 36 CFR part 1228.

REQUIREMENT SOURCE: 36 CFR 1234, Dated 07-01-95, Part 34

Destruction of electronic records. Electronic records may be destroyed only in accordance with a records disposition schedule approved by the Archivist of the United States, including General Records Schedules. At a minimum each agency shall ensure that:

- (a) Electronic records scheduled for destruction are disposed of in a manner that ensures protection of any sensitive, proprietary, or national security information.
- (b) Magnetic recording media previously used for electronic records containing sensitive, proprietary, or national security information are not reused if the previously recorded information can be compromised by reuse in any way.
- (c) Agencies shall establish and implement procedures that specifically address the destruction of electronic records generated by individuals employing electronic mail.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 10, Sentences 2 and 3

The records may be maintained on a variety of media including paper, magnetic tape or disk, photographic film, and microfilm. The management of vital records is part of an agency's continuity of operations plan designed to meet emergency management responsibilities.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 12

Heads of agencies are responsible for the vital records program under the following authorities:

- (a) To make and preserve records containing adequate and proper documentation of the agency's organization, functions, policies, procedures, decisions, and essential transactions, and to furnish information to protect the legal and financial rights of the Government and of persons directly affected by the agency's activities (44 U.S.C. 3101).
- (b) To perform national security emergency preparedness functions and activities (Executive Order 12656).

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 20, Sentence 3

In carrying out the vital records program agencies shall:

- (a) Specify agency staff responsibilities;
- (b) Ensure that all concerned staff are appropriately informed about vital records;

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- (c) Ensure that the designation of vital records is current and complete; and
- (d) Ensure that vital records and copies of vital records are adequately protected, accessible, and immediately usable.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 22, Sentence 1 and 3

Vital records include emergency plans and related records that specify how an agency is to respond to an emergency as well as those records that would be needed to continue operations and protect legal and financial rights. Only the most recent and complete source of the vital information needs to be treated as vital records.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 24

Agencies shall ensure that retrieval procedures for vital records require only routine effort to locate needed information, especially since individuals unfamiliar with the records may need to use them during an emergency or disaster. Agencies also shall ensure that all equipment needed to read vital records or copies of vital records will be available in case of emergency or disaster. For electronic records systems, agencies also shall ensure that system documentation adequate to operate the system and access the records will be available in case of emergency or disaster.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26 Introduction

Agencies shall take appropriate measures to ensure the survival of the vital records or copies of vital records in case of emergency or disaster. In the case of electronic records, this requirement is met if the information needed in the event of emergency or disaster is available in a copy made for general security purposes, even when the copy contains other information.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(a) Sentences 1 thru 3

Duplication. Computer backup tapes created in the normal course of system maintenance or other electronic copies that may be routinely created in the normal course of business may be used as the vital record copy. For hard copy records, agencies may choose to make microform copies. Standards for the creation, preservation and use of microforms are found in 36 CFR part 1230, Micrographic Records Management.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(b)

Storage. When agencies choose duplication as a protection method, the copy of the vital record stored off-site is normally a duplicate of the original record.... original vital records must be retained for the period specified in the agency records disposition schedule. The agency may store the original records off-site if protection of original signatures is necessary, or if it does not need to keep the original record at its normal place of business.

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REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(c) Sentences 2 and 4

Copies of emergency operating vital records need to be accessible in a very short period of time for use in the event of an emergency or a disaster. In deciding where to store vital records copies, agencies shall treat records that have the properties of both categories, that is, emergency operating and legal and financial rights records, as emergency operating records.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(c)(1) Sentences 1 and 3

Under certain circumstances, Federal records centers (FRC's) may store copies of emergency operating vital records. Prior to preparing the records for shipment, the agency must contact the FRC to determine if the center can accommodate the storage requirements and return copies in an acceptable period of time.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(c)(2)

The off-site copy of legal and financial rights vital records may be stored at an off-site agency location or, in accordance with § 1228.156 of this chapter, at an FRC.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 26(c)(3)

... the agency must specify on the SF 135, Records Transmittal and Receipt, that they are vital records (duplicate copies) and the medium on which they are maintained. The agency shall also periodically cycle (update) them by removing obsolete items and replacing them with the most recent version, when necessary.

REQUIREMENT SOURCE: 36 CFR 1236, Dated 07-01-95, Part 28

The disposition of original vital records is governed by records schedules approved by NARA (see part 1228, Disposition of Federal Records). Original records that are not scheduled may not be destroyed or deleted.

REQUIREMENT SOURCE: 5 USC 552, Dated 03-28-96, Section (a)(2)

Each agency, in accordance with published rules, shall make available for public inspection and copying -

(A) final opinions, including concurring and dissenting opinions, as well as orders, made in the adjudication of cases;

(B) those statements of policy and interpretations which have been adopted by the agency and are not published in the Federal Register; and

(C) administrative staff manuals and instructions to staff that affect a member of the public;

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unless the materials are promptly published and copies offered for sale. To the extent required to prevent a clearly unwarranted invasion of personal privacy, an agency may delete identifying details when it makes available or publishes an opinion, statement of policy, interpretation, or staff manual or instruction. However, in each case the justification for the deletion shall be explained fully in writing. Each agency shall also maintain and make available for public inspection and copying current indexes providing identifying information for the public as to any matter issued, adopted, or promulgated after July 4, 1967, and required by this paragraph to be made available or published. Each agency shall promptly publish, quarterly or more frequently, and distribute (by sale or otherwise) copies of each index or supplements thereto unless it determines by order published in the Federal Register that the publication would be unnecessary and impracticable, in which case the agency shall nonetheless provide copies of such index on request at a cost not to exceed the direct cost of duplication. A final order, opinion, statement of policy, interpretation, or staff manual or instruction that affects a member of the public may be relied on, used, or cited as precedent by an agency against a party other than an agency only if -

- (i) it has been indexed and either made available or published as provided by this paragraph; or
- (ii) the party has actual and timely notice of the terms thereof.

REQUIREMENT SOURCE: 5 USC 552, Dated 03-28-96, Section (a)(3)

Except with respect to the records made available under paragraphs (1) and (2) of this subsection, each agency, upon any request for records which (A) reasonably describes such records and (B) is made in accordance with published rules stating the time, place, fees (if any), and procedures to be followed, shall make the records promptly available to any person.

REQUIREMENT SOURCE: 5 USC 552, Dated 03-28-96, Section (a)(4)(A)(i) thru (v)

(i) In order to carry out the provisions of this section, each agency shall promulgate regulations, pursuant to notice and receipt of public comment, specifying the schedule of fees applicable to the processing of requests under this section and establishing procedures and guidelines for determining when such fees should be waived or reduced. Such schedule shall conform to the guidelines which shall be promulgated, pursuant to notice and receipt of public comment, by the Director of the Office of Management and Budget and which shall provide for a uniform schedule of fees for all agencies.

(ii) Such agency regulations shall provide that -

(I) fees shall be limited to reasonable standard charges for document search, duplication, and review, when records are requested for commercial use;

(II) fees shall be limited to reasonable standard charges for document duplication when records are not sought for commercial use and the request is made by an educational or noncommercial

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scientific institution, whose purpose is scholarly or scientific research; or a representative of the news media; and

(III) for any request not described in (I) or (II), fees shall be limited to reasonable standard charges for document search and duplication.

(iii) Documents shall be furnished without any charge or at a charge reduced below the fees established under clause (ii) if disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester.

(iv) Fee schedules shall provide for the recovery of only the direct costs of search, duplication, or review. Review costs shall include only the direct costs incurred during the initial examination of a document for the purposes of determining whether the documents must be disclosed under this section and for the purposes of withholding any portions exempt from disclosure under this section. Review costs may not include any costs incurred in resolving issues of law or policy that may be raised in the course of processing a request under this section. No fee may be charged by any agency under this section -

(I) if the costs of routine collection and processing of the fee are likely to equal or exceed the amount of the fee; or

(II) for any request described in clause (ii) (II) or (III) of this subparagraph for the first two hours of search time or for the first one hundred pages of duplication.

(v) No agency may require advance payment of any fee unless the requester has previously failed to pay fees in a timely fashion, or the agency has determined that the fee will exceed \$250.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (b)

Conditions of Disclosure. - No agency shall disclose any record which is contained in a system of records by any means of communication to any person, or to another agency, except pursuant to a written request by, or with the prior written consent of, the individual to whom the record pertains, unless disclosure of the record would be -

(1) to those officers and employees of the agency which maintains the record who have a need for the record in the performance of their duties;

(2) required under section 552 of this title;

(3) for a routine use as defined in subsection (a)(7) of this section and described under subsection (e)(4)(D) of this section;

(4) to the Bureau of the Census for purposes of planning or carrying out a census or survey or

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related activity pursuant to the provisions of title 13;

- (5) to a recipient who has provided the agency with advance adequate written assurance that the record will be used solely as a statistical research or reporting record, and the record is to be transferred in a form that is not individually identifiable;
- (6) to the National Archives and Records Administration as a record which has sufficient historical or other value to warrant its continued preservation by the United States Government, or for evaluation by the Archivist of the United States or the designee of the Archivist to determine whether the record has such value;
- (7) to another agency or to an instrumentality of any governmental jurisdiction within or under the control of the United States for a civil or criminal law enforcement activity if the activity is authorized by law, and if the head of the agency or instrumentality has made a written request to the agency which maintains the record specifying the particular portion desired and the law enforcement activity for which the record is sought;
- (8) to a person pursuant to a showing of compelling circumstances affecting the health or safety of an individual if upon such disclosure notification is transmitted to the last known address of such individual;
- (9) to either House of Congress, or, to the extent of matter within its jurisdiction, any committee or subcommittee thereof, any joint committee of Congress or subcommittee of any such joint committee;
- (10) to the Comptroller General, or any of his authorized representatives, in the course of the performance of the duties of the General Accounting Office;
- (11) pursuant to the order of a court of competent jurisdiction; or
- (12) to a consumer reporting agency in accordance with section 3711(f) of title 31.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (c)

Accounting of Certain Disclosures. - Each agency, with respect to each system of records under its control, shall -

- (1) except for disclosures made under subsections (b)(1) or (b)(2) of this section, keep an accurate accounting of -
 - (A) the date, nature, and purpose of each disclosure of a record to any person or to another agency made under subsection (b) of this section; and
 - (B) the name and address of the person or agency to whom the disclosure is made;

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- (2) retain the accounting made under paragraph (1) of this subsection for at least five years or the life of the record, whichever is longer, after the disclosure for which the accounting is made;
- (3) except for disclosures made under subsection (b)(7) of this section, make the accounting made under paragraph (1) of this subsection available to the individual named in the record at his request; and
- (4) inform any person or other agency about any correction or notation of dispute made by the agency in accordance with subsection (d) of this section of any record that has been disclosed to the person or agency if an accounting of the disclosure was made.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (d)

Access to Records. - Each agency that maintains a system of records shall -

(1) upon request by any individual to gain access to his record or to any information pertaining to him which is contained in the system, permit him and upon his request, a person of his own choosing to accompany him, to review the record and have a copy made of all or any portion thereof in a form comprehensible to him, except that the agency may require the individual to furnish a written statement authorizing discussion of that individual's record in the accompanying person's presence;

(2) permit the individual to request amendment of a record pertaining to him and -

(A) not later than 10 days (excluding Saturdays, Sundays, and legal public holidays) after the date of receipt of such request, acknowledge in writing such receipt; and

(B) promptly, either -

(i) make any correction of any portion thereof which the individual believes is not accurate, relevant, timely, or complete; or

(ii) inform the individual of its refusal to amend the record in accordance with his request, the reason for the refusal, the procedures established by the agency for the individual to request a review of that refusal by the head of the agency or an officer designated by the head of the agency, and the name and business address of that official;

(3) permit the individual who disagrees with the refusal of the agency to amend his record to request a review of such refusal, and not later than 30 days (excluding Saturdays, Sundays, and legal public holidays) from the date on which the individual requests such review, complete such review and make a final determination unless, for good cause shown, the head of the agency extends such 30-day period; and if, after his review, the reviewing official also refuses to amend the record in accordance with the request, permit the individual to file with the agency a concise

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statement setting forth the reasons for his disagreement with the refusal of the agency, and notify the individual of the provisions for judicial review of the reviewing official's determination under subsection (g)(1)(A) of this section;

(4) in any disclosure, containing information about which the individual has filed a statement of disagreement, occurring after the filing of the statement under paragraph (3) of this subsection, clearly note any portion of the record which is disputed and provide copies of the statement and, if the agency deems it appropriate, copies of a concise statement of the reasons of the agency for not making the amendments requested, to persons or other agencies to whom the disputed record has been disclosed; and

(5) nothing in this section shall allow an individual access to any information compiled in reasonable anticipation of a civil action or proceeding.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (e)

Agency Requirements. - Each agency that maintains a system of records shall -

(1) maintain in its records only such information about an individual as is relevant and necessary to accomplish a purpose of the agency required to be accomplished by statute or by executive order of the President;

(2) collect information to the greatest extent practicable directly from the subject individual when the information may result in adverse determinations about an individual's rights, benefits, and privileges under Federal programs;

(3) inform each individual whom it asks to supply information, on the form which it uses to collect the information or on a separate form that can be retained by the individual -

(A) the authority (whether granted by statute, or by executive order of the President) which authorizes the solicitation of the information and whether disclosure of such information is mandatory or voluntary;

(B) the principal purpose or purposes for which the information is intended to be used;

(C) the routine uses which may be made of the information, as published pursuant to paragraph (4)(D) of this subsection; and

(D) the effects on him, if any, of not providing all or any part of the requested information;

(4) subject to the provisions of paragraph (11) of this subsection, publish in the Federal Register upon establishment or revision a notice of the existence and character of the system of records, which notice shall include -

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- (A) the name and location of the system;
- (B) the categories of individuals on whom records are maintained in the system;
- (C) the categories of records maintained in the system;
- (D) each routine use of the records contained in the system, including the categories of users and the purpose of such use;
- (E) the policies and practices of the agency regarding storage, retrievability, access controls, retention, and disposal of the records;
- (F) the title and business address of the agency official who is responsible for the system of records;
- (G) the agency procedures whereby an individual can be notified at his request if the system of records contains a record pertaining to him;
- (H) the agency procedures whereby an individual can be notified at his request how he can gain access to any record pertaining to him contained in the system of records, and how he can contest its content; and
- (I) the categories of sources of records in the system;

(5) maintain all records which are used by the agency in making any determination about any individual with such accuracy, relevance, timeliness, and completeness as is reasonably necessary to assure fairness to the individual in the determination;

(6) prior to disseminating any record about an individual to any person other than an agency, unless the dissemination is made pursuant to subsection (b)(2) of this section, make reasonable efforts to assure that such records are accurate, complete, timely, and relevant for agency purposes;

(7) maintain no record describing how any individual exercises rights guaranteed by the First Amendment unless expressly authorized by statute or by the individual about whom the record is maintained or unless pertinent to and within the scope of an authorized law enforcement activity;

(8) make reasonable efforts to serve notice on an individual when any record on such individual is made available to any person under compulsory legal process when such process becomes a matter of public record;

(9) establish rules of conduct for persons involved in the design, development, operation, or maintenance of any system of records, or in maintaining any record, and instruct each such person with respect to such rules and the requirements of this section, including any other rules and

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procedures adopted pursuant to this section and the penalties for noncompliance;

- (10) establish appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records and to protect against any anticipated threats or hazards to their security or integrity which could result in substantial harm, embarrassment, inconvenience, or unfairness to any individual on whom information is maintained;
- (11) at least 30 days prior to publication of information under paragraph (4)(D) of this subsection, publish in the Federal Register notice of any new use or intended use of the information in the system, and provide an opportunity for interested persons to submit written data, views, or arguments to the agency; and
- (12) if such agency is a recipient agency or a source agency in a matching program with a non-Federal agency, with respect to any establishment or revision of a matching program, at least 30 days prior to conducting such program, publish in the Federal Register notice of such establishment or revision.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (f)

Agency Rules. - In order to carry out the provisions of this section, each agency that maintains a system of records shall promulgate rules, in accordance with the requirements (including general notice) of section 553 of this title, which shall -

- (1) establish procedures whereby an individual can be notified in response to his request if any system of records named by the individual contains a record pertaining to him;
- (2) define reasonable times, places, and requirements for identifying an individual who requests his record or information pertaining to him before the agency shall make the record or information available to the individual;
- (3) establish procedures for the disclosure to an individual upon his request of his record or information pertaining to him, including special procedure, if deemed necessary, for the disclosure to an individual of medical records, including psychological records, pertaining to him;
- (4) establish procedures for reviewing a request from an individual concerning the amendment of any record or information pertaining to the individual, for making a determination on the request, for an appeal within the agency of an initial adverse agency determination, and for whatever additional means may be necessary for each individual to be able to exercise fully his rights under this section; and
- (5) establish fees to be charged, if any, to any individual for making copies of his record, excluding the cost of any search for and review of the record. The Office of the Federal Register shall biennially compile and publish the rules promulgated under this subsection and agency notices published under subsection (e)(4) of this section in a form available to the public at low cost.

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REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (n)

Mailing Lists. - An individual's name and address may not be sold or rented by an agency unless such action is specifically authorized by law. This provision shall not be construed to require the withholding of names and addresses otherwise permitted to be made public.

REQUIREMENT SOURCE: 5 USC 552A, Dated 03-28-96, Section (q)

Sanctions. -

(1) Notwithstanding any other provision of law, no source agency may disclose any record which is contained in a system of records to a recipient agency or non-Federal agency for a matching program if such source agency has reason to believe that the requirements of subsection (p), or any matching agreement entered into pursuant to subsection (o), or both, are not being met by such recipient agency.

(2) No source agency may renew a matching agreement unless -

(A) the recipient agency or non-Federal agency has certified that it has complied with the provisions of that agreement; and

(B) the source agency has no reason to believe that the certification is inaccurate.

**REQUIREMENT SOURCE: EXECUTIVE ORDER 12516, Revision 1, Section I.A,
Paragraph 7**

The following principles should be applied in establishing administrative records:

The record should be compiled as documents relating to the selection of the response action are generated or received by the lead agency;

The record should include documents that form the basis for the decision, whether or not they support the response selection; and

The record should be a contemporaneous explanation of the basis for the selection of a response action.

**REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section
9.4, Paragraph 15**

The DOE will maintain an index of all documents entered into the administrative record. A current copy of the index will be distributed at least quarterly to each administrative record file and each public information repository, and will be available for inspection by any of the parties.

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REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraphs 3 and 4

An administrative record will be established for each operable unit and TSD group and will contain all of the documents containing information considered in arriving at a record of decision or permit. When the investigation process begins at each operable unit or when a permit action for a TSD unit (or group of units) is initiated, the administrative record file will be available to the public for review during normal business hours at the following location:

- Westinghouse Hanford Company
Environmental Data Management Center
2440 Stevens Center
Room 1101
Mail Stop: H6-08
Richland, Washington 99352

Two additional copies of the file will also be available to the public, during normal business hours, located as follows:

- EPA Region 10
Superfund Administrative Record Center
1200 Sixth Avenue
Park Place Building
Mail Stop: HW-113
Seattle, Washington 98101

- Washington State Department of Ecology
300 Desmond Drive
P.O. Box 47600
Lacey, Washington 98503

1.8.2 Storage

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 183(a)

Permanent records shall be transferred to the National Archives of the United States when the records have been in existence for more than 30 years unless the head of the agency which has custody of the records certifies in writing to the Archivist that the records must be retained in agency custody for use in the conduct of the regular current business of the agency. Records that are scheduled in a NARA-approved records schedule to be transferred to the National Archives of the United States after a specified period of time are subject to the certification requirement only if the records are not transferred as scheduled.

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REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 194

Records subject to the Privacy Act of 1974.

For records constituting systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), the agency shall attach to the SF 258 the most recent agency Privacy Act system notice covering the records.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 220

Authority.

Federal agencies are authorized to maintain and operate records centers for the storage, servicing, and disposal of their own noncurrent records when these centers are approved by the Archivist (44 U.S.C. 3103). Centers operated by Federal agencies are referred to in this subchapter B as "agency records centers."

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 222

Facility standards for agency records centers.

Inspection of agency records centers by NARA shall include an evaluation of the agency's compliance with the facility standards for records centers specified below:

(a) General.

(1) The facility should be a single-story building, at or above grade level, constructed with noncombustible materials.

(2) A floor load limit shall be established for the records storage area by a structural engineer. The allowable load limit shall be posted in a conspicuous place and shall not be exceeded.

(3) Steel shelving or other open-shelf records storage equipment shall be braced to prevent collapse under full load in accordance with Federal Specifications AS-S-271 or AA-S-1047. The records storage height shall not exceed 15 feet. Agencies operating records centers which have storage heights in excess of 15 feet may apply in writing to the National Archives (NC), Washington, DC 20408, for an exemption to this requirement. If a request for exemption is denied, agencies will be required to remodel existing centers to meet the 15-foot requirement.

(4) The area occupied by the center shall be equipped with an anti-intrusion alarm system, or equivalent, to protect against unlawful entry after hours.

(b) Fire safety.

(1) All walls separating records areas from each other and from other storage areas in the building shall be 4-hour fire resistant. The records areas shall not exceed 40,000 square feet each. Two-hour-rated firewalls shall be provided between the records storage areas and other auxiliary

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spaces. Penetrations in the walls shall not reduce the specified fire resistance ratings.

(2) Openings in firewalls separating records storage areas shall be avoided as far as possible but if openings are necessary they shall be protected by self-closing or automatic Class A firedoors, or equivalent, on each side of the wall openings.

(3) Roof support structures that cross or penetrate firewalls shall be cut and supported independently on each side of the firewall.

(4) If firewalls are erected with expansion joints, the joints shall be protected to their full height with No. 10 iron astragals lapping the opening on each side of the firewall.

(5) Building columns in the records storage areas shall be 2-hour fire resistant from the floor to the point where they meet the ceiling or roof framing system.

(6) Automatic roof vents shall not be designed into new or existing buildings.

(7) Where lightweight steel roof or floor supporting members (e.g., bar joists having top chords with angles 2 by 1 1/2 inches or smaller, 1/4-inch thick or smaller, and 13/16-inch or smaller web diameters) are present, they shall be protected either by applying a 10 minute fire resistive coating to the top chords of the joists, or by retrofitting the sprinkler system with large drop sprinkler heads. Retrofitting may require modifications to the piping system to ensure that adequate water capacity and pressure are provided in the areas to be protected with these large drop sprinkler heads.

(8) Furnace or boiler rooms shall be separated from records storage areas by 4-hour-rated firewalls, with no openings directly from these rooms to the records storage areas. No open flame (oil or gas) equipment or unit heaters shall be installed or used in any records storage area.

(9) The arrangement of the records storage equipment shall be such that there shall be no dead-end aisles. Equipment rows running perpendicular to the wall shall terminate at least 18 inches from the wall.

(10) No oil-type electrical transformers, regardless of size, except thermally protected devices included in fluorescent light ballasts, shall be installed in the records storage areas. All electrical wiring shall be in metal conduit, except that armored cable may be used where flexible connections to light fixtures are required.

(11) All records storage and adjoining areas shall be protected by automatic wetpipe sprinklers. Automatic sprinklers are specified herein because they provide the most effective fire protection for high-piled storage of paper records on open-type shelving.

Note: Other automatic extinguishing systems or protective measures may provide an acceptable level of fire-loss risk depending upon specific conditions, such as type or importance of the

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records, the type and stacking height of the storage equipment used; or how the space is designed, controlled, and operated (as well as its value). Agencies may elect to use alternate standards, as appropriate to their needs, such as those issued by the National Fire Protection Association (see NFPA 13, NFPA 231, NFPA 231C, NFPA 232, and NFPA 232AM). Also, agencies may consult the Chief of the Accident and Fire Prevention Branch in the GSA regional office about these or other systems and protective measures.

(12) The sprinkler system shall be rated at 286 degrees Fahrenheit and designed to provide 0.30 gpm per square foot for the most remote 1,500 square feet of floor area with a minimum flowing pressure of 7.0 psi at the most remote sprinkler head. Installation shall be in accordance with Standard Number 13 of the National Fire Protection Association.

(13) Maximum spacing of the sprinkler heads shall be on a 10-foot grid and the positioning of the heads shall provide complete, unobstructed coverage, with a clearance of not less than 18 inches from the top of the highest stored materials.

(14) The sprinkler system shall be equipped with a water-flow alarm connected to a continuously staffed fire department or central station, with responsibility for immediate response.

(15) A manual fire alarm system shall be provided with central station service or other automatic means of notifying the municipal fire department. A manual alarm pull station shall be located adjacent to each exit. Supplemental manual alarm stations are permitted within the records storage areas.

(16) All water cutoff valves in the sprinkler system shall be equipped with automatic closure alarm connected to a continuously staffed station, with responsibility for immediate response.

(17) A dependable water supply free of interruption shall be provided. This normally requires a backup supply system having sufficient pressure and capacity to meet both firehose and sprinkler requirements for 2 hours.

(18) Interior firehose stations equipped with a 1 1/2-inch diameter hose shall be provided in the records storage areas, enabling any point in the records storage area to be reached by a 50-foot hose stream from a 100-foot hose lay. The fire hoses shall not be provided, however, unless training in the handling and use of small hoses, protective gear, and breathing equipment has been given, and these protective items are available for brigade members.

(19) In addition to the designed sprinkler flow demand, 500 gpm shall be provided for hose stream demand. The hose stream demand shall be calculated into the system at the base of the main sprinkler riser.

(20) Fire hydrants should be located within 250 feet of each exterior entrance or other access to the records center that could be used by firefighters. All hydrants should be at least 50 feet away from the building walls and adjacent to a roadway usable by fire apparatus.

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(21) Portable water-type fire extinguishers (2 1/2-gallon stored pressure-type) shall be provided at each fire alarm striking station.

(22) Catwalks may be provided in the aisles between the metal stacks in high-activity records storage areas without provision of sprinklers under the walkway. Where provided, the walking surface of the catwalks shall be of expanded metal at least 0.09-inch thickness with a 2-inch mesh length. The surface opening ratio shall be equal to or greater than that outlined in Military Specification (MIL-M-17194C) of March 8, 1955. The sprinkler water demand for protection over bays with catwalks where records are not oriented perpendicular to the aisles shall be calculated hydraulically to give 0.3 gpm per square foot for the most remote 2,000 square feet.

(23) Storage of hazardous cellulose nitrate film requires special facilities not covered by the above standards. (See NFPA 40 and NFPA 232.)

(c) Archives.

(1) Archival materials, whether on paper, plastic, or other media, generally require a much higher level of protection than temporary records, such as environmentally controlled and filtered storage space, and other safety measures not included in this section on agency records centers.

(2) Firesafety criteria for archives shall be the same as that for records centers, except that fire detection shall be incorporated into the archival storage areas in accordance with NFPA Standard 72E, and fire divisions in the archival storage areas may be reduced in size to reflect a management decision on the maximum amount of archives subject to damage or loss from fire.

REQUIREMENT SOURCE: 44 USC 3103, Revision 03-1-91, All

When the head of a Federal agency determines that such action may affect substantial economies or increased operating efficiency, he shall provide for the transfer of records to a records center maintained and operated by the Archivist, or, when approved by the Archivist, to a center maintained and operated by the head of the Federal agency.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 6.5, Paragraph 6

For analytical chemistry and radiological laboratories, the QA/QC plans must include the elements listed in "Guidance on Preparation of Laboratory Quality Assurance Plans" (as listed in Appendix F). DOE shall submit laboratory QA/QC plans to the lead regulatory agency for review as secondary documents prior to use of that laboratory. In the event that DOE fails to demonstrate to the lead regulatory agency that data generated pursuant to this Agreement was obtained in accordance with the QA/QC requirements of this section, including laboratory QA/QC plans, DOE shall repeat sampling or analysis as required by the lead regulatory agency. Such action by the lead regulatory agency shall not preclude any other action which may be taken pursuant to this

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Agreement. For other data, the lead regulatory agency may request DOE to provide QA/QC documentation. Any such data that does not meet the QA/QC standard required by this section shall be clearly flagged and noted to indicate this fact.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 14

Any documents that the regulatory agency has determined to be subject to an applicable privilege, and that are part of the administrative record, shall be maintained exclusively in confidential administrative record files of the appropriate parties until such time as enforcement action has been taken or the privilege has been waived.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 5

The DOE will compile and maintain the administrative record file at Richland, Washington, and provide copies to the EPA and Ecology for their respective files. At the time when the decisional document is signed, all documents forming the basis for selection of the final action(s) must have been placed in the administrative record file. Microfilm copies will be regularly provided to the EPA and Ecology for use in their files. This will include microfilm for all documents included since the last set of microfilm was provided. Microfilm readers will be made available for use at these locations.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 6

A microfilm copy and one hard copy of the administrative records will be maintained in the Richland administrative record file. After one year following the CERCLA record of decision or RCRA permit determination, the hard copies of administrative record documents issued up to those decision points may be removed from the administrative record file. The microfilm copies will be kept on file for a minimum of 10 years. The final decision documentation (i.e., CERCLA proposed plan and record of decision, and RCRA permit) will be maintained in hard copy through completion of all remedial actions or the term of the permit. Current versions of all general documents (e.g., guidance and applicable procedures) will be maintained in hard copy throughout the RI/FS process or through the term of the permit.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 8

For those which are designated as primary documents (see Table 9-1) the administrative record will include:

- All drafts submitted to the regulatory agencies for review and/or approval

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- Any documents submitted by the non lead regulatory agency to the lead regulatory agency for inclusion in the Administrative Record
- Written comments from the lead regulatory agency to DOE (to include Notice of Deficiency on a Permit Application)
- DOE written responses to comments received from the lead regulatory agency
- Final document and any subsequent revisions
- Drafts which are submitted for public comment.
- For public comment documents, the public comments and lead regulatory agency responses (if no comments are received, a letter from the lead regulatory agency shall be included documenting that fact).

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 9

For those which are designated as secondary documents (see Table 9-2), the administrative record will include:

- Final document and any subsequent revisions
- Any documents submitted by the non lead regulatory agency to the lead regulatory agency for inclusion in the Administrative Record
- Written comments from the lead regulatory agency to DOE, if provided
- DOE written responses to comments received from the lead regulatory agency.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 10.2, Paragraphs 1 and 2

Information will be readily available to the public to ensure meaningful participation. One mechanism for accomplishing this goal is the establishment of public information repositories at major population centers. The locations of the repositories are as follows:

- University of Washington - Suzzalo Library
Mailstop FM-25 - Government Publications
Seattle, Washington 98915
(206) 543-4664
- DOE-RL Public Reading Room

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Washington State University/Tri-Cities
100 Sprout Road
Room 130
Richland, Washington 99352
(509) 376-8583

- Portland State University
Branford Price and Millar Library
934 SW Harrison
P.O. Box 1151
Portland, Oregon 97207
(503) 725-3690
- Gonzaga University
Foley Center
E. 502 Boone
Spokane, Washington 99258
(509) 328-4220, extension 3844

All documents (with exception of drafts) listed on Table 1 of the CRP will be sent to the repositories. In addition, copies of drafts when submitted for public comment will be placed in the repositories. Any additional information or documents will be placed in the repositories as deemed necessary by the assigned executive managers. In addition to review of documents at the repositories, the public may also review the administrative record files during normal working hours (see Section 9.4 for discussion and location of administrative records).

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 10.5.2, Paragraph 2, Sentence 4

All public comments received on these documents, along with the lead regulatory agency's response to comments, will be placed in the administrative record and will be sent to the public information repositories.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 10.6, Paragraph 2, Sentence 1

Copies of all public comments received and the agencies' responses to comments will become part of the administrative record and will be sent to the public information repositories.

1.8.3 Retention and Disposal

REQUIREMENT SOURCE: 36 CFR 1220, Dated 07-01-95, Part 38

Disposition of records.

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Provision shall be made to ensure that permanent records are preserved but that records no longer of current use to an agency are promptly disposed of or retired. Effective techniques for the accomplishment of these ends are the development of records disposition schedules; the transfer of records to records centers and the National Archives of the United States; the conversion of the information to other media; and the disposal of valueless records. Disposition of any records requires the approval of the Archivist of the United States (see part 1228 of this chapter).

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 20(b)(6)

Develop and implement records schedules for all records created and received by the agency and obtain NARA approval of the schedules in accordance with 36 CFR part 1228;

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 34(a)(b)(c)

(a) General. To ensure that complete and accurate records are made and retained in the Federal Government, it is essential that agencies distinguish between records and nonrecord materials by the appropriate application of the definition of records (see 44 U.S.C. 3301 and 36 CFR 1220.14) to agency documentary materials. Applying the definition of records to most documentary materials created or received by agencies presents few problems when agencies have established and periodically updated recordkeeping requirements covering all media and all agency activities at all levels and locations.

(b) Record status. Documentary materials are records when they meet both of the following conditions:

(1) They are made or received by an agency of the United States Government under Federal law or in connection with the transaction of agency business; and

(2) They are preserved or are appropriate for preservation as evidence of agency organization and activities or because of the value of the information they contain.

(c) Working files and similar materials. Working files, such as preliminary drafts and rough notes, and other similar materials shall be maintained for purposes of adequate and proper documentation if:

(1) They were circulated or made available to employees, other than the creator, for official purposes such as approval, comment, action, recommendation, follow-up, or to communicate with agency staff about agency business; and

(2) They contain unique information, such as substantive annotations or comments included therein, that adds to a proper understanding of the agency's formulation and execution of basic policies, decisions, actions, or responsibilities.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 34(d)

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Record status of copies. The determination as to whether a particular document is a record does not depend upon whether it contains unique information. Multiple copies of the same document and documents containing duplicative information, including messages created or received on electronic mail systems, may each have record status depending on how they are used to transact agency business. See paragraph (f)(2) of this section concerning the nonrecord status of extra copies.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 34(f)

Nonrecord materials. Nonrecord materials are Government-owned documentary materials that do not meet the conditions of record status (see § 1222.34(b)) or that are specifically excluded from status as records by statute (see 44 U.S.C. 3301):

- (1) Library and museum material (but only if such material is made or acquired and preserved solely for reference or exhibition purposes);
- (2) Extra copies of documents (but only if the sole reason such copies are preserved is for convenience of reference); and
- (3) Stocks of publications and of processed documents. (Each agency shall create and maintain serial or record sets of its publications and processed documents, as evidence of agency activities and for the information they contain, including annual reports, brochures, pamphlets, books, handbooks, posters and maps.)

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 36

Identifying personal papers.

(a) Personal papers are documentary materials, or any reasonably segregable portion thereof, of a private or nonpublic character that do not relate to, or have an effect upon, the conduct of agency business. Personal papers are excluded from the definition of Federal records and are not owned by the Government. Examples of personal papers include:

- (1) Materials accumulated by an official before joining Government service that are not used subsequently in the transaction of Government business;
- (2) Materials relating solely to an individual's private affairs, such as outside business pursuits, professional affiliations, or private political associations that do not relate to agency business; and
- (3) Diaries, journals, personal correspondence, or other personal notes that are not prepared or used for, or circulated or communicated in the course of, transacting Government business.

(b) Personal papers shall be clearly designated as such and shall at all times be maintained separately from the office's records.

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- (c) If information about private matters and agency business appears in the same document, the document shall be copied at the time of receipt, with the personal information deleted, and treated as a Federal record.
- (d) Materials labeled "personal," "confidential," or "private," or similarly designated, and used in the transaction of public business, are Federal records subject to the provisions of pertinent laws and regulations. The use of a label such as ``personal'' is not sufficient to determine the status of documentary materials in a Federal office.

REQUIREMENT SOURCE: 36 CFR 1222, Dated 07-01-95, Part 38

Categories of documentary materials to be covered by recordkeeping requirements.

Agency recordkeeping requirements shall prescribe the creation and maintenance of records of the transaction of agency business that are sufficient to:

- (a) Document the persons, places, things, or matters dealt with by the agency.
- (b) Facilitate action by agency officials and their successors in office.
- (c) Make possible a proper scrutiny by the Congress or other duly authorized agencies of the Government.
- (d) Protect the financial, legal, and other rights of the Government and of persons directly affected by the Government's actions.
- (e) Document the formulation and execution of basic policies and decisions and the taking of necessary actions, including all significant decisions and commitments reached orally (person to person, by telecommunications, or in conference).
- (f) Document important board, committee, or staff meetings.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 22

Developing records schedules.

The primary steps in developing agency records schedules are given below. Details in each step are contained in the NARA records management handbook, Disposition of Federal Records (NSN 7610-01-055-8704). Ultimately, all records of an agency must be scheduled, but they need not all be scheduled at the same time. An agency may schedule the records of one function, program or organizational element at a time.

- (a) Determine the functions and activities documented by the records to be scheduled.

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- (b) Prepare an inventory of the records including a description of their medium, location, volume, inclusive dates, informational content and use.
- (c) Evaluate the period of time the agency needs each records series or system by reference to its uses and value to agency operations or legal obligations.
- (d) Based on agency need, formulate specific recommended disposition instructions for each records series or each part of an automated information system, including file breaks, retention periods for temporary records, transfer periods for permanent records, and instructions for the retirement of records to Federal records centers, when appropriate. Recommended retention periods take into account the rights of the Government and the rights of those directly affected by agency actions.
- (e) Assemble into a draft schedule the descriptions and recommended disposition instructions for logical blocks of records, i.e., entire agency, organizational component, or functional area.
- (f) Obtain approval of the records schedules from NARA (and from the General Accounting Office, when so required under title 8 of the GAO "Policy and Procedures Manual for the Guidance of Federal Agencies").

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 24

(a) General. Agency records schedules approved by the Archivist of the United States specify the disposition for agency records. Records of continuing (permanent) value will be scheduled for retention and immediate or eventual transfer to the legal custody of NARA. All other records will be scheduled for destruction or donation after a specific period of time based on administrative, fiscal, and legal values.

(b) Characteristics of schedules. Though records disposition authority may be requested from NARA on a program-by-program, function-by-function, or office-by-office basis, all agency records must be scheduled. Schedules must follow the guidelines provided below:

(1) Schedules shall identify and describe clearly each series or system and shall contain disposition instruction that can be readily applied. (Additional information is required for permanent records as specified in § 1228.28(b).) Schedules must be prepared so that each office will have standing instructions detailing the disposal, transfer, or retention of records.

(2) SF 115s shall include only new records not covered by the General Records Schedules (GRS) (see subpart C), deviations from the GRS (see § 1228.42), or previously scheduled records requiring changes in retention periods or substantive changes in description.

(3) All schedules shall take into account the physical organization of records or the filing system so that disposal or transfer can be handled in blocks.

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(4) The disposition of nonrecord materials is controlled by instructions in the agency's printed or published records disposition manual. These instructions do not require NARA approval. Such items shall not be included on SF 115s. Non-record materials, such as extra copies of documents preserved solely for reference, and stocks of processed documents, and personal materials shall be maintained separately from official agency files to aid in records disposition.

(c) Provisions of schedules. Records schedules shall provide for:

(1) The destruction of records that have served their statutory, fiscal, or administrative uses and no longer have sufficient value to justify further retention. Procedures for obtaining disposal authorizations are prescribed in § 1228.30;

(2) The removal to a Federal records center (or to an agency records center approved under subpart K) of records not eligible for immediate destruction or other disposition but which are no longer needed in office space. These records are maintained by the records center until they are eligible for further disposition action;

(3) The retention of the *minimum volume* of current records in office space consistent with effective and efficient operations; and

(4) The identification of records of permanent value in accordance with § 1228.28, and the establishment of cutoff periods and dates when such records will be transferred to the legal custody of NARA.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 26

Request for records disposition authority.

(a) Submission. Requests for records disposition authority shall be initiated by Federal agencies by submitting Standard Form 115, Request for Records Disposition Authority, to NARA (NIR). An SF 115 is used for requesting authority to schedule (or establish the disposition for) permanent and temporary records, either on a recurring or one-time basis.

(1) New Federal agencies shall apply General Records Schedules to eligible records and shall submit to NARA SF 115s covering all remaining records within 2 years of their establishment.

(2) Agencies shall submit to NARA schedules for the records of new programs and of programs that are reorganized or otherwise changed in a way that results in the creation of new or different records within 1 year of the implementation of the change.

(b) Certification. The signature of the authorized agency representative on the SF 115 shall constitute certification that the records recommended for disposal do not or will not have sufficient administrative, legal, or fiscal value to the agency to warrant retention beyond the expiration of the specified period and that records described as having permanent value will be transferred to the

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National Archives upon expiration of the stated period.

(c) Disapproval of requests for disposition authority. Requests for records disposition authority may be returned to the agency if the SF 115 is improperly prepared. The agency shall make the necessary corrections and resubmit the form to NARA (NIR). NARA may disapprove the disposition request for an item if, after appraisal of the records, NARA determines that the proposed disposition is not consistent with the value of the records. In such cases, NARA will notify the agency in writing.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 28

Scheduling permanent records.

(a) Initiation. Federal agencies propose permanent retention of records in accordance with guidelines contained in the NARA records management handbook, Disposition of Federal Records (NSN 7610-01-055-8704).

(b) Requirements. Each item proposed for permanent retention on an SF 115 shall include the following:

(1) Records series title used by agency personnel to identify the records;

(2) Complete description of the records including physical type and information contents;

(3) Inclusive dates;

(4) An arrangement statement;

(5) Statement of restrictions on access which NARA should impose in conformity with the Freedom of Information Act if the records are proposed for immediate transfer;

(6) An estimate of the volume of records accumulated annually if the records are current and continuing;

(7) The total volume to date; and

(8) Disposition instructions, developed using the following guidelines:

(i) If the records series or system is current and continuing, the SF 115 will include a disposition instruction specifying the period of time after which the records will be transferred to the National Archives, normally within 30 years for paper records, 5-10 years for audiovisual or microform records, and as soon as the records become inactive or the agency cannot meet the maintenance requirements found in §1228.188 of this part for electronic records.

(ii) If the records series or system is nonrecurring, i.e., no additional records will be created or

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acquired, the agency may propose either immediate or future transfer to the National Archives.

(c) Determination. NARA will determine whether or not records are of permanent value and when the transfer of the permanent records will take place.

(1) If NARA determines that records are not permanent, it will notify the agency and negotiate an appropriate disposition. The disposition instruction on the SF 115 will be modified prior to NARA approval.

(2) If NARA determines that records are permanent, but that the transfer instructions are not appropriate, it will negotiate appropriate transfer terms with the agency. The disposition instruction on the SF 115 will be modified prior to NARA approval.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 30

Scheduling temporary records.

(a) Initiation. Federal agencies request authority to dispose of records, either immediately or on a recurring basis. Requests for immediate disposal are limited to records already in existence which no longer accumulate. For recurring records, approved schedules provide continuing authority to destroy the records. The retention periods approved by NARA are mandatory, and the agency shall dispose of the records after expiration of the retention period, except as provided in §1228.54.

(b) Requirements. Each item on an SF 115 proposed for eventual destruction shall include the following:

(1) Records series title used by agency personnel to identify the records;

(2) Description of the records including physical type and informational content;

(3) If the records are contained in a Privacy Act system of records, a citation to the agency's alpha-numeric or numeric code designation for the system of records. If the system of records was added or deleted since the publication of the current Office of the Federal Register compilation of Privacy Act Issuances, the agency shall also cite the date and page of the Federal Register on which the new system notice appears or the deleted system is announced.

(4) Disposition instructions, developed using the following guidelines:

(i) If the records series or system is current and continuing, the SF 115 will include a disposition instruction specifying the period of time after which the records will be destroyed.

(ii) If the records series or system is nonrecurring, i.e., no additional records will be created or acquired, the agency may propose either immediate destruction or destruction on a future date.

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(c) Determination. NARA may determine that records proposed as temporary merit permanent retention and transfer to the National Archives. In such cases, NARA arranges with the agency to change the disposition instruction prior to approval of the SF 115.

(d) General Accounting Office concurrence. Each Federal agency shall obtain the approval of the Comptroller General for the disposal of program records less than 3 years old and for certain classes of records relating to claims and demands by or against the Government, and to accounts in which the Government is concerned in accordance with the GAO "Policy and Procedures Manual for Guidance of Federal Agencies," title 8-Records Management (44 U.S.C. 3309). This approval must be obtained before the approval of the disposal request by NARA, but the request may be submitted concurrently to GAO and NARA.

(e) Withdrawn items. Agencies may request that items listed on the SF 115 be withdrawn in order to aid in NARA's processing (appraisal) of the remaining items on the schedule.

(1) If, during the course of the appraisal process, NARA determines that records described by an item(s) on the proposed schedule do not exist or are not arranged as stated on the SF 115, NARA may request the agency to withdraw the item(s) from consideration, if the agency is unable to offer sufficient clarification.

(2) If NARA and the agency cannot agree on the retention period for an item(s), the items(s) may be withdrawn. In these cases, the agency will submit an SF 115 with a revised proposal for disposition within 6 months of the date of the approval of the original SF 115.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 32

Request to change disposition authority.

(a) Agencies desiring to change the approved retention period of a series or system of records shall submit an SF 115. Disposition authorities contained in an approved SF 115 are automatically superseded by approval of a later SF 115 applicable to the same records unless the later SF 115 specified an effective date. Agencies submitting revised schedules shall indicate on the SF 115 the relevant schedule and item numbers to be superseded, the citation to the current printed records disposition schedule, if any, and/or the General Records Schedules and item numbers that cover the records.

(b) Agencies proposing to change the retention period of a series or system of records shall submit with the SF 115 an explanation and justification for the change. The need to retain records longer than the retention period specified in the disposition instructions on an approved SF 115 for purposes of audit, court order, investigation, litigation, study, or any other administrative purpose that justifies the temporary extension of the retention period shall be governed by the procedures set forth in §1228.54. Agencies shall not submit an SF 115 to change the retention period in such cases.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 42

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Applicability.

(a) New items or changes in the disposition of GRS records supersede approved agency schedules for the same series or system of records, unless the agency schedule provides for a shorter retention period, or unless NARA indicates that the GRS standard must be applied without exception. Agencies shall not request authority to apply GRS authorizations (see §1228.24(b)(2)).

(b) Agencies may request exceptions to disposition instructions in the GRS by submitting an SF 115 in accordance with §1228.30 accompanied by a written justification explaining why the agency needs the records for a different period of time from other agencies.

(c) Provisions of the General Records Schedules may be applied to records in the custody of the National Archives at NARA's discretion subject to the provisions of §1228.200.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 50

Application of schedules.

The application of approved schedules is mandatory (44 U.S.C. 3303a). The Archivist of the United States will determine whether or not records may be destroyed or transferred to the National Archives. If the Archivist approves the request for disposition authority, NARA will notify the agency by returning one copy of the completed SF 115. This shall constitute mandatory authority for the final disposition of the records (for withdrawal of disposal authority or the extension of retention periods, see §1228.52 and 1228.54). The authorized destruction shall be accomplished as prescribed in §1228.58. The head of each Federal agency shall direct the application of records schedules to ensure the agency maintains recorded information necessary to conduct Government business, avoid waste, and preserve permanent records for transfer to the National Archives. The agency head shall take the following steps to ensure proper dissemination and application of approved schedules:

(a) Issue an agency directive incorporating the disposition authorities approved by NARA, i.e., SF 115s (except for one-time authorities covering nonrecurring records) and the General Records Schedules. Also include nonrecord materials with disposition instructions developed by the agency. Once all records and nonrecord materials are included, this document is the agency's comprehensive schedule. Agencies may also issue other directives containing instructions relating to agency records disposition procedures.

(1) Published schedules do not include nonrecurring records for which NARA has granted authority for immediate disposal or transfer to the National Archives. They do include general instructions for retirement of records to the Federal records centers, transfer of records to the National Archives, and other records disposition procedures.

(2) Comprehensive schedules are formally published manuals or directives that provide for the disposition of all recurring records and nonrecord materials created by an agency. These schedules must cite the GRS or SF 115 and item numbers that provide the legal disposition authority for items

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covering record material.

- (3) Prior to issuance, agencies may consult with NARA concerning directives or other issuances containing approved schedules, instructions for use of the Federal records centers, transfer of records to the National Archives, or other matters covered by NARA procedures or regulations.
- (4) Agencies shall forward to the National Archives and Records Administration (NIR) three copies of each final directive or other issuance relating to records disposition and 20 copies of all published records schedules (printed agency manuals) and changes.

(b) Establish internal training programs to acquaint appropriate personnel with the requirements and procedures of the records disposition program.

(c) Apply the approved records disposition schedules to the agency's records.

- (1) Records described by items marked "disposition not approved" or "withdrawn" may not be destroyed until a specific disposition has been approved by NARA.
- (2) Disposition authorities for items on approved SF 115s that specify an organizational component of the department or independent agency as the creator or custodian of the records may be applied to the same records after internal reorganization, but only if the nature, content, and functional importance of the records remain the same. Authority approved for items described in a functional format may be applied to any organizational component within the department or independent agency that is responsible for the relevant function.
- (3) Disposition authorities approved for one department or independent agency may not be applied by another. Departments or agencies that acquire records from another department or agency, and/or continue creating the same series of records previously created by another department or agency through interagency reorganization must submit an SF 115 to NARA for disposition authorization for the records within one year of the reorganization.
- (4) Unless otherwise specified, disposition authorities apply retroactively to all existing records as described in the schedule, including records acquired by transfer of function within or between agencies, as long as the nature, content, and functional importance of the records series is unchanged.

(d) Review approved schedules, and, if necessary, update them annually. Additions and changes to the GRS shall be incorporated or otherwise disseminated within 6 months of issuance from NARA.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 54

Temporary extension of retention periods.

- (a) Approved agency records schedules and the General Records Schedules are mandatory (44

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U.S.C. 3303a). Except as specified in §1228.32(b), records series or systems approved for destruction shall not be maintained longer without the prior written approval of the National Archives and Records Administration (NIR). However, extended retention of an individual shipment of records to a Federal Records Center for a period up to 6 months is governed by procedures in §1228.164(c).

- (b) Upon submission of adequate justification, NARA may authorize a Federal agency to extend the retention period of a series or system of records (44 U.S.C. 2909). These extensions of retention periods will be granted for records which are required to conduct Government operations because of special circumstances which alter the normal administrative, legal, or fiscal value of the records.
- (c) The head of a Federal agency may request approval of a temporary extension of a retention period by sending a letter to NARA (NIR), Washington DC 20408. The request shall include:
 - (1) A concise description of the records series for which the extension is requested.
 - (2) A complete citation of the specific provisions of the agency records schedule or the General Records Schedule currently governing disposition of the records;
 - (3) A statement of the estimated period of time that the records will be required; and
 - (4) A statement of the current and proposed physical location of the records including information on whether the records have been or will be transferred to one or more Federal records centers.
- (d) Approval of a request for extension of retention periods may apply to records in the custody of one Federal agency or records common to several or all Federal agencies. If approval of a request is applicable to records in the custody of one agency, that agency will be notified by letter. If approval is applicable to records common to several agencies, notification may be made by NARA bulletin.
- (e) Upon approval of a request for a change in retention periods applicable to records that have been or will be transferred to one or more Federal records centers, centers will be notified of the change and agencies will be furnished a copy of the notification. Agencies shall forward to the National Archives and Records Administration (NIR) 20 copies of all formally issued instructions which extend retention periods.
- (f) Upon expiration of an approved extension of retention period, NARA will notify all affected agencies to apply normal retention requirements.
- (g) Except when NARA agrees to continue to store and service records on a reimbursable basis or waives the requirements of this paragraph under a condition specified in paragraph (h) of this section, agencies shall remove from Federal records centers at the agency's expense records that, because of audit, court order, investigation, litigation, study, or any other administrative reason,

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the agency wishes to retain longer than the scheduled retention period for the records. The removal of records must be accomplished within 90 days of the date of the notification from the Federal records center that the retention period has expired. Agencies that wish to establish an agreement or inquire about their records should write to NARA, Office of Federal Records Centers (NC), 8601 Adelphi Road, College Park, MD 20740-6001.

(h) NARA will waive the requirements specified in paragraph (g) of this section when:

- (1) The temporary extension of retention period has been imposed by NARA, for instance when NARA plans to reappraise the archival value of records or when NARA is working on a new or revised General Records Schedule item;
- (2) The agency has submitted an SF 115, Request for Disposition Authority, to NARA to request a change in the scheduled disposition of a series of records;
- (3) NARA and the agency mutually agree that a temporary extension is required to meet exceptional records management situations such as a NARA-agency screening project to separate permanent from disposable records or application of a new records disposition schedule to previously unscheduled records; or
- (4) The administrative cost to NARA to implement a reimbursable agreement would exceed the reimbursement received.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 56

Transfer of permanent records.

All records scheduled as permanent shall be transferred to the National Archives after the period specified on the SF 115 in accordance with procedures specified under subpart J.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 58

Destruction of temporary records.

(a) Authority. Federal agencies are required to follow regulations issued by the Archivist of the United States governing the methods of destroying records (44 U.S.C. 3302). Only the methods described in this section shall be used.

(b) Sale or salvage. Paper records to be disposed of normally must be sold as wastepaper. If the records are restricted because they are national security classified or exempted from disclosure by statute, including the Privacy Act, or regulation, the wastepaper contractor must be required to pulp, macerate, shred, or otherwise definitively destroy the information contained in the records, and their destruction must be witnessed either by a Federal employee or, if authorized by the agency that created the records, by a contractor employee. The contract for sale must prohibit the resale of all other paper records for use as records or documents. Records other than paper records (audio, visual, and data tapes, disks, and diskettes) may be salvaged and sold in the same

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manner and under the same conditions as paper records. All sales must be in accordance with the established procedures for the sale of surplus personal property. (See 41 CFR part 101-45, Sale, Abandonment, or Destruction of Personal Property.)

(c) Destruction. If the records cannot be sold advantageously or otherwise salvaged, the records may be destroyed by burning, pulping, shredding, macerating, or other suitable means.

REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 92

Menaces to human life or health or to property.

(a) Agencies may destroy records that constitute a continuing menace to human health or life or to property (44 U.S.C. 3310). When such records are identified, the agency head shall notify NARA (NIR), specifying the nature of the records, their location and quantity, and the nature of the menace. If NARA concurs in the determination, the Archivist will direct the immediate destruction of the records or other appropriate means of destroying the recorded information. However, if the records are still or motion picture film on nitrocellulose base that has deteriorated to the extent described in paragraph (b) of this section, the head of the agency may follow the procedure therein provided.

(b) Whenever any radarscope, aerial, or other still or motion picture film on nitrocellulose base has deteriorated to the extent that it is soft and sticky, is emitting a noxious order, contains gas bubbles, or has retrograded into acrid powder, and the head of the agency having custody of it shall determine that it constitutes a menace to human health or life or to property, then the agency shall without prior authorization of the Archivist:

(1) Arrange for its destruction in a manner that will salvage its silver content if the silver content is of sufficient quantity and market value per troy ounce to warrant such salvage;

(2) Authorize burial in approved landfills, in the event the quantity is not sufficiently large to justify the salvaging of its silver content; or

(3) Effect other appropriate methods in the event that the methods provided in paragraph (b)(1) or (2) of this section are not feasible.

(c) These films should be removed from inhabited buildings as soon as possible.

(d) Within 30 days after the destruction of the film as provided in this section, the head of the agency who directed its destruction shall submit a written statement to NARA (NIR), Washington, DC 20408, describing the film and showing when, where, and how the destruction was accomplished.

(e) This report has been cleared in accordance with 41 CFR part 201-45 and assigned Interagency Report Control Number 1095-NAR-AR.

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REQUIREMENT SOURCE: 36 CFR 1228, Dated 07-01-95, Part 100

Responsibilities.

(a) The Archivist of the United States and the heads of Federal agencies are responsible for preventing the alienation or unauthorized destruction of records, including all forms of mutilation. Records may not be removed from Federal custody or destroyed without regard to the provisions of agency records schedules (SF 115) approved by NARA or the General Records Schedules issued by NARA (44 U.S.C. 2905, 3106, and 3303a).

(b) The heads of Federal agencies are responsible for ensuring that all employees are aware of the provisions of the law relating to unauthorized destruction, alienation, or mutilation of records, and should direct that any such action be reported to them.

REQUIREMENT SOURCE: 44 USC 3309, Dated 03-01-91, All

Records pertaining to claims and demands by or against the Government of the United States or to accounts in which the Government of the United States is concerned, either as debtor or creditor, may not be disposed of by the head of an agency under authorization granted under this chapter, until the claims, demands, and accounts have been settled and adjusted in the General Accounting Office, except upon the written approval of the Comptroller General of the United States.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 9.4, Paragraph 12

The project managers will meet at least monthly, as described in Section 4.1. During these meetings, the project managers will decide which documents are appropriate for inclusion in the record. The DOE project manager will then notify the administrative record staff of these documents to be added to the record.

1.9

Key Interfaces

The Management Systems Functional Area is a collection of systems and processes which service all other functional areas. Interfaces with the various Management Systems elements are identified by the other functional areas.

All the other functional areas interface with Management Systems for requirements/standards related to:

- Policy and procedure preparation, review, approval, control, and maintenance
- Issue management systems for the identification, evaluation, and prioritization of issues, determination of root causes, and the development, tracking, and completion of

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appropriate corrective action;

- Notification, reporting, investigation, and tracking of occurrences;
- Operational readiness reviews and readiness assessments;
- Records storage provisions to ensure records generated are available for future reference;
- Records disposition measures to ensure records generated are retained only until their specified retention period has expired.

1.10 References

The following documents were used as requirement sources in the development of this S/RID:

5 U.S.C. 552, Public Information; Agency Rules; Opinions, Orders, Records, and Proceedings, 03/28/96.

5 U.S.C. 552a, Records Maintained on Individuals, 03/28/96.

10 CFR 830, Nuclear Safety Management, Part 120, Quality Assurance Requirements, 5/5/94.

10 CFR 835, Occupational Radiation Protection, 12/14/93.

10 CFR 708, DOE Contractor Employee Protection Program, 03/01/92.

36CFR, Federal Records Management, 07/01/95.

40 CFR 355, Emergency Planning and Notification; EPA/Superfund, Emergency Planning, and Community Right-to-Know Programs, 07/01/95 Edition.

41 CFR 201, Rules of Practice and Procedure, 07/01/95.

44 U.S.C., Public Printing and Documents, 03/01/91.

DOE O 232.1, Occurrence Reporting and Processing of Operations Information, 9/25/95.

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DOE O 440.2, Aviation Safety, 09/20/95.

DOE 1324.5B, Records Management Program, 01/12/95.

DOE 5480.26, Trending and Analysis of Operations Information Using Performance Indicators, 1/15/93.

DOE 5480.28, Natural Phenomena Hazards Mitigation Program, 01/15/93.

DOE 5480.29, Employee Concerns Management System, 1/15/93.

Executive Order 12516, Final Guidance on Administrative Records for Selecting CERCLA Response Actions, 12/03/90.

RLID 5480.28, RL Employee Concerns Program, 12/12/94.

RLID 5480.31, Startup and Restart of Facilities Operational Readiness Review and Readiness Assessments, 09/26/94.

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev. 6, 2/96

RIDs by Document X-Reference Listing
Based on FDHC-MS-SD RID and including all documents.

10 CFR 708, DOE Contractor Employee Protection Program, Dated 03-03-92

10 CFR 830, Nuclear Safety Management, Dated 04-05-94

10 CFR 835, Occupational Radiation Protection, Dated 12-14-93

36 CFR 1220, Federal Records - General, Dated 07-01-95

36 CFR 1222, Creation and Maintenance of Records; Adequate and Proper Documentation, Dated 07-01-95

36 CFR 1228, Disposition of Federal Records, Dated 07-01-95

36 CFR 1230, Micrographic Records Management, Dated 07-01-95

36 CFR 1232, Audiovisual Records Management, Dated 07-01-95

36 CFR 1234, Electronic Records Management, Dated 07-01-95

36 CFR 1236, Management of Vital Records, Dated 07-01-95

40 CFR 355, Emergency Planning and Notification, Dated 07-01-95

44 USC 3101, Records Management by Agency Heads; General Duties, Dated 03-01-91

44 USC 3103, Transfer of Records to Records Center, Revision 03-1-91

44 USC 3105, Safeguards, Dated 03-01-91

44 USC 3309, Preservations of Claims of Government Until Settled in General Accounting Office; Disposal Authorized Upon Written Approval of Comptroller General, Dated 03-01-91

44 USC 3312, Photographs or Microphotographs of Records Considered as Originals; Certified Reproductions Admissible in Evidence, Dated 03-01-91

44 USC 3506, Federal Agency Responsibilities, Dated 03-01-95

5 USC 552, Public Information; Agency Rules, Opinions, Orders, Records, and Proceedings, Dated 03-28-96

5 USC 552A, Records Maintained on Individuals, Dated 03-28-96

DOE ORDER 1324.5B, Records Management Program

DOE ORDER 5480.26, Trending and Analysis of Operations Information Using Performance Indicators

DOE ORDER 5480.28, Natural Phenomena Hazards Mitigation

DOE ORDER 5480.29, Employee Concerns Management System

DOE-O-232.1, Occurrence Reporting and Processing of Operations Information

DOE-O-440.2, Aviation Safety

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RIDs by Document X-Reference Listing
Based on FDHC-MS-SD RID and including all documents.

EXECUTIVE ORDER 12516, Final Guidance on Administrative Records for Selecting CERCLA Response Actions, Revision 1

RLID 5480.29, RL Employee Concerns Program

RLID 5480.31, Startup and Restart of Facilities Operational Readiness Review and Readiness Assessments

TRIPARTY AGREEMENT, Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Revision 6

*** End of RIDs by Document X-Reference Listing ***

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QUALITY ASSURANCE**

2.0 Quality Assurance

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH Contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Quality Assurance (QA) program established for the PHMC. The QA Functional Area defined in this document is described in general accordance with the Environment, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the FDH and facility level.

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NOTE: QA/QC programs/requirements specific to environmental sampling, analysis, and monitoring activities are contained in applicable facility-specific documents whose applicable regulations mandate those programs/requirements.

2.1 Management

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(a)

General Rule

- (1) A contractor responsible for a DOE nuclear facility shall:
 - (i) Conduct its work in accordance with the criteria of paragraph (c) of this section;
 - (ii) Develop and submit for approval by DOE a Quality Assurance Program (QAP) for the work; and
 - (iii) Implement the QAP, as approved and modified by DOE.

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(b)

Author's Note: Item No. 2 no longer applies.

Quality Assurance Program.

- (1) A contractor shall develop a QAP by applying the quality assurance criteria specified in paragraph (c) of this section. A QAP shall include a discussion of how the criteria of paragraph (c) of this section will be satisfied. The criteria of paragraph (c) of this section shall be applied using a graded approach. The contractor shall use appropriate standards, wherever applicable, to develop and implement its QAP.
- (2) Within 180 days after May 5, 1994, a contractor shall submit to DOE for approval a current QAP and an implementation plan.
- (3) A contractor may, at any time, make changes to an approved QAP. Changes made over the previous year shall be submitted annually to DOE for review. A submittal shall identify the changes, the pages affected, the reason for the changes, and the basis for concluding that the revised QAP continues to satisfy the requirements of this section. Changes made to correct spelling, punctuation, or other editorial items do not require explanation.
- (4) Implementation plans and QAPs shall be regarded as approved by DOE 90 days after submittal, unless approved or rejected by DOE at an earlier date, and shall include any

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modification made or directed by DOE.

2.2 Quality Assurance Program

Author's Note: There is one contract-wide QA Program established for the PHMC. FDH subcontractors are responsible for developing Quality Assurance Program Plans that integrate these QA requirements with any facility, program or project specific requirements.

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(i)

Program. A written QAP shall be developed, implemented, and maintained. The QAP shall describe the organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work. The QAP shall describe management processes, including planning, scheduling, and resource considerations.

2.3 Training and Qualification of Personnel

For requirements, refer to the FDH Training and Qualification Functional Area and facility-specific S/RIDs.

2.4 Quality Improvement

Author's Note: This element refers to the contract level corrective action management system [Hanford Action Tracking System (HATS)].

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(iii)

Quality Improvement. Processes to detect and prevent quality problems shall be established and implemented. Items, services, and processes that do not meet established requirements shall be identified, controlled, and corrected according to the importance of the problem and the work affected. Correction shall include identifying the causes of problems and working to prevent recurrence. Item characteristics, process implementation, and other quality-related information shall be reviewed and the data analyzed to identify items, services, and processes needing improvement.

2.5 Documents and Records

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(iv)

Documents and Records. Documents shall be prepared, reviewed, approved, issued, used, and revised to prescribe processes, specify requirements, or establish design. Records shall be specified, prepared, reviewed, approved, and maintained.

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2.6 Work Processes

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(2)(i)

Work Processes. Work shall be performed to established technical standards and administrative controls using approved instructions, procedures, or other appropriate means. Items shall be identified and controlled to ensure their proper use. Items shall be maintained to prevent their damage, loss, or deterioration. Equipment used for process monitoring or data collection shall be calibrated and maintained.

2.7 Design

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(2)(ii)

Design. Items and processes shall be designed using sound engineering/scientific principles and appropriate standards. Design work, including changes, shall incorporate applicable requirements and design bases. Design interfaces shall be identified and controlled. The adequacy of design products shall be verified or validated by individuals or groups other than those who performed the work. Verification and validation work shall be completed before approval and implementation of the design.

2.8 Procurement

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(2)(iii)

Procurement. Procured items and services shall meet established requirements and perform as specified. Prospective suppliers shall be evaluated and selected on the basis of specified criteria. Processes to ensure that approved suppliers continue to provide acceptable items and services shall be established and implemented.

2.9 Inspection and Acceptance Testing

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(2)(iv)

Inspection and Acceptance Testing. Inspection and testing of specified items, services, and processes shall be conducted using established acceptance and performance criteria. Equipment used for inspections and tests shall be calibrated and maintained.

2.9.1 Calibration Standards Lab

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.1, Sentence 1 thru 4

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Each piece of M&TE should be assigned a unique identification number that is permanently marked on or attached to the M&TE (the identification number may consist of the manufacturer's serial number). These numbers assist in identifying, tracing, and positively controlling M&TE. A master list of all controlled M&TE should be maintained. If separate organizations control their own M&TE, each organization should maintain or have access to a list of its own equipment.

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.2.a, Sentence 1 and 2

Only calibration standards that are traceable to the National Institute of Standards and Technology or other nationally recognized standards should be used for calibration of M&TE. If repair or calibration of a standard is necessary, the recalibration must be traceable to the National Institute of Standards and Technology or to the standard of record for the M&TE.

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.2.b, Sentence 1 and 2

Calibration of equipment should be performed by qualified technicians using approved procedures. (NOTE: The "ratio of accuracy" of the standard to the M&TE being calibrated should be as high as reasonably achievable and consistent with national standards.)

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.2.c, Sentence 1

Calibration frequency should be determined based on the manufacturer's recommendations, M&TE usage, and M&TE historical reliability.

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.3.a, Sentence 1 thru 4

As discussed in Paragraph 4, proper facilities are needed to help ensure that equipment is protected from damage in storage, is properly maintained, and is readily retrievable. M&TE devices that are relatively easy to damage when transporting and handling should be provided more protection by boxing or special mounting rigs (e.g., test gauges mounted in portable frames). M&TE in the issue area should be segregated from defective, out-of-calibration, or other M&TE requiring investigation so that only calibrated M&TE is available for issue. This should be a physically and distinctively marked separation.

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.3.c, Sentence 1

M&TE devices that have special uses, limitations, or restrictions should be clearly labeled to describe their applications or limitations.

REQUIREMENT SOURCE: DOE ORDER 4330.4B, Chapter II, Section 12.3.3.d, Paragraph 1, Sentence 2

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Traceability of M&TE should be provided to support a timely evaluation of instruments, systems, and other equipment associated with M&TE found to be deficient.

2.10 Management Assessment

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(3)(i)

Management Assessment. Managers shall assess their management processes. Problems that hinder the organization from achieving its objectives shall be identified and corrected.

2.11 Independent Assessment

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(3)(ii)

Independent Assessment. Independent assessment shall be planned and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. The group performing independent assessments shall have sufficient authority and freedom from the line to carry out its responsibilities. Persons conducting independent assessments shall be technically qualified and knowledgeable in the areas assessed.

2.12 Key Interfaces

2.12.1 Training and Qualification

Implementation of training requirements, as identified in 10 CFR 830.120, are located in the FDH Training and Qualification chapter.

2.12.2 Maintenance

Requirements for M&TE calibration labs are addressed in the FDH QA Functional Area chapter.

2.12.3 Packaging and Transportation

The QA/QC department interfaces with Packaging and Transportation personnel regarding the shipment of radioactive materials, specifically the manufacture and use of packagings.

2.12.4 Environmental Protection

The QA Functional Area addresses control of work processes which would include requirements pertaining to monitoring, surveillance, and testing activities. Per the ES & H

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Configuration Guide, the Contract Level Functional Area Document discusses these activities and has included QA requirements that provide programmatic controls and describe methods of implementation.

2.12.5 Management Systems

Requirements for Tracking and Trending Analysis of identified QA issues are addressed in the FDH Contract Level Management Systems functional Area document. Document Control and records management processes established in the FDH Site Management Systems Functional Area apply to QA records.

2.13 References

For references, see attachment titled "RIDs by Document X-Reference Listing".

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RIDs by Document X-Reference Listing
Based on FDHC-QA-SD RID and including all documents.

10 CFR 830, Nuclear Safety Management, Dated 04-05-94

DOE ORDER 4330.4B, Maintenance Management Program

*** End of RIDs by Document X-Reference Listing ***

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CONFIGURATION MANAGEMENT**

3.0 Configuration Management

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH Contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract Level S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Configuration Management Functional Area has been determined to be nonapplicable, for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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4.0 Training and Qualification

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract level requirements for the Training and Qualification (TN) program in place at Hanford. The TN Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the

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contract and facility level.

It is intended that this document be used as a baseline from which to compare the existing Training and Qualification Program at FDH for determination of the level of program definition and maturity including the existence of an overall site infrastructure and clearly defined interfaces with other relevant functional areas. Additionally, this S/RID may be used as the basis against which future program definition and improvement efforts, including procedures development and/or revisions, can be compared to ensure consistency, completeness and proper integration with other functional programs. As described in the Key Interface section of this document, Training and Qualification interacts with multiple organizations within FDH.

This S/RID applies to the programmatic controls, activities, personnel, and programs involved in executing the mission of the FDH Contract. Each of the functional areas provides interpretive authority to the FDH Training Organization concerning the adequate set of requirements for Training and Qualification in that area. Requirements for training which are implemented by a Fluor Daniel Hanford Contract level organization are included in this document. Facility specific training will be included in each facility's Training and Qualification Functional Area.

4.1 Management and Administration

REQUIREMENT SOURCE: 10 CFR 830, Dated 04-05-94, Part 120(c)(1)(ii)

Personnel Training and Qualification. Personnel shall be trained and qualified to ensure they are capable of performing their assigned work. Personnel shall be provided continuing training to ensure that job proficiency is maintained.

4.2 Administration of Training

4.2.1 Selection and Qualification

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 120(e)(5)

(5) Qualifications for trainers. Trainers shall be qualified to instruct employees about the subject matter that is being presented in training. Such trainers shall have satisfactorily completed a training program for teaching the subjects they are expected to teach, or they shall have the academic credentials and instructional experience necessary for teaching the subjects. Instructors shall demonstrate competent instructional skills and knowledge of the applicable subject matter.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 120(p)(7)(iii)

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(iii) Trainers. Trainers who teach initial training shall have satisfactorily completed a training course for teaching the subjects they are expected to teach or they shall have the academic credentials and instruction experience necessary to demonstrate a good command of the subject matter of the courses and competent instructional skills.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 120(q)(7)

(7) Trainers. Trainers who teach any of the above training subjects shall have satisfactorily completed a training course for teaching the subjects they are expected to teach, such as the courses offered by the U.S. National Fire Academy, or they shall have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach.

4.2.2 Training Needs Assessment

REQUIREMENT SOURCE: DOE ORDER 5480.20A, Chapter I, Section 7.b Introduction, Sentences 1 and 2

Training Process. Initial and continuing training programs shall be established to ensure that operating organization personnel are qualified to perform job requirements. This shall be achieved by using a systematic approach to training.

4.2.3 Design and Development

Requirements relative to design and development are addressed in subelement 4.2.2.

4.2.4 Implementation

Requirements relative to a training implementation matrix may be found in the facility Training and Qualification functional area.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(11)(a)

Training must be provided annually to workers who may have to take protective actions (e.g., assembly, evacuation) in the event of an emergency.

4.2.5 Evaluation

Evaluation requirements are addressed in subelement 4.2.2.

4.2.6 Facilities and Equipment

Requirements for this subelement are implemented at the facility level.

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4.2.7 Training Schedules

Requirements for this subelement are implemented at the facility level.

4.2.8 Testing, Qualification, Certification

REQUIREMENT SOURCE: DOE ORDER 5480.20A, Chapter I, Section 7 Introduction, Sentence 1 and 2

TRAINING REQUIREMENTS. Training to support qualification and certification programs shall be based on a systematic approach to training. A graded approach shall be used to establish the systematic approach to training for operations personnel, maintenance personnel, technicians, and the technical staff.

4.2.9 Revision and Update of Training

Element 4.1 addresses requirements associated with the revision and update of training.

4.3 Training Categories and Subjects

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 901(a)

All general employees shall be trained in radiation safety prior to receiving occupational exposure during access to controlled areas at a DOE site or facility. Allowance may be made for previous DOE training on generic radiation safety topics (i.e., those not specific to a site or facility), provided the training was received at another DOE site or facility within the past 2 years. Documentation of the previous training shall clearly identify the individual's name, date of training, topics covered, and name of the certifying individual. The knowledge of radiation safety possessed by general employees shall be verified by examination.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 901(b)

Retraining shall be provided when there is a significant change to radiation protection policies and procedures that affect general employees and shall be conducted at intervals not to exceed 2 years.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 902

Radiological worker training programs and retraining shall be established and conducted at intervals not to exceed 2 years to familiarize the worker with the fundamentals of radiation protection and the ALARA process. Training shall include both classroom and applied training. Training shall either precede assignment as a radiological worker or be concurrent with assignment as a radiological worker if the worker is accompanied by and under the direct supervision of a

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trained radiological worker. Radiological worker training not specific to a given site or facility may be waived provided that: this training has been received at another DOE site or facility within the past 2 years; there is provision of proof-of-training in the form of a certification document containing the individual's name, date of training, and specific topics covered; and an appropriate official has certified the training of the individual. The knowledge of radiation safety possessed by radiological workers shall be verified by examination prior to an unsupervised assignment. The training shall include procedures specific to an individual's job assignment. The level of training is to be commensurate with each worker's assignment.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 903

Training and retraining programs for radiological control technicians shall be established and conducted at intervals not to exceed 2 years to familiarize technicians with the fundamentals of radiation protection and the proper procedures for maintaining exposures ALARA. This program shall include both classroom and applied training. The training shall either precede performance of tasks assigned to radiological control technicians or be concurrent with such task assignments if the individual is accompanied by and under the direct supervision of a trained individual. The required level of knowledge of radiation safety possessed by radiological control technicians shall be verified by examination to include demonstration prior to any unsupervised work assignment. The training program shall include procedures specific to the site or facility where the technician is assigned. The level of training shall be commensurate with the technician's assignment. Allowance may be made for previous DOE training on generic radiation safety topics (i.e., those not specific to a site or facility), provided the training was received within the past 2 years. Documentation of the previous training shall clearly identify the individual's name, date of training, topics covered, and name of the certifying individual.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1302(e)

Author's Note: "Individuals" refers to personnel involved in rescue and recovery operations.

Each individual selected shall be trained in accordance with §835.902 and briefed beforehand of the known or anticipated hazards to which the individual will be subjected.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 120(e)(6)

(6) Training certification. Employees and supervisors that have received and successfully completed the training and field experience specified in paragraphs (e)(1) through (e)(4) of this section shall be certified by their instructor or the head instructor and trained supervisor as having successfully completed the necessary training. A written certificate shall be given to each person so certified. Any person who has not been so certified or who does not meet the requirements of paragraph (e)(9) of this section shall be prohibited from engaging in hazardous waste operations.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 120(q)(6) Introduction

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Training. Training shall be based on the duties and function to be performed by each responder of an emergency response organization. The skill and knowledge levels required for all new responders, those hired after the effective date of this standard, shall be conveyed to them through training before they are permitted to take part in actual emergency operations on an incident. Employees who participate, or are expected to participate, in emergency response, shall be given training in accordance with the following paragraphs:

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 147(c)(7)(i) Sentence 1.

(7) Training and communication. (i) The employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees.

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 704

Training requirements.

(a) Hazmat employee training shall include the following:

(1) General awareness/familiarization training. Each hazmat employee shall be provided general awareness/familiarization training designed to provide familiarity with the requirements of this subchapter, and to enable the employee to recognize and identify hazardous materials consistent with the hazard communication standards of this subchapter.

(2) Function-specific training. (i) Each hazmat employee shall be provided function-specific training concerning requirements of this subchapter, or exemptions issued under subchapter A of this chapter, which are specifically applicable to the functions the employee performs.

(ii) As an alternative to function-specific training on the requirements of this subchapter, training relating to the requirements of the ICAO Technical Instructions and the IMDG Code may be provided to the extent such training addresses functions authorized by §§171.11 and 171.12 of this subchapter.

(3) Safety training. Each hazmat employee shall receive safety training concerning-

(i) *Emergency response information required by subpart G of part 172;*

(ii) *Measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place, including specific measures the hazmat employer has implemented to protect employees from exposure; and*

(iii) *Methods and procedures for avoiding accidents, such as the proper procedures for handling packages containing hazardous materials.*

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(b) OSHA or EPA Training. Training conducted by employers to comply with the hazard communication programs required by the Occupational Safety and Health Administration (OSHA) of the Department of Labor (29 CFR 1910.120) or the Environmental Protection Agency (EPA) (40 CFR 311.1), to the extent that training addresses the training specified in paragraph (a) of this section, may be used to satisfy the training requirements in paragraph (a) of this section, in order to avoid unnecessary duplication of training.

(c) Initial and recurrent training.-(1) Initial training. Each hazmat employer shall train each hazmat employee as follows:

- (i) Training for a hazmat employee employed on or before July 2, 1993, shall be completed prior to October 1, 1993.
- (ii) Training for a hazmat employee employed after July 2, 1993, shall be complete within 90 days after employment.
- (iii) A hazmat employee who changes hazardous materials job functions shall complete training in the new job function(s) within 90 days after the change.
- (iv) A hazmat employee described in paragraph (c)(1) (ii) or (iii) of this section, may perform new hazardous materials job functions *prior to the completion of training* provided the employee performs those functions under the supervision of a properly trained and knowledgeable hazmat employee.

(2) Recurrent Training. A hazmat employee shall receive the training required by this subpart at least once every two years.

(3) Relevant Training. Relevant training received from a previous employer or other source may be used to satisfy the requirements of this subpart provided a current record of training is obtained from hazmat employees' previous employer.

(4) Compliance. Each hazmat employer is responsible for compliance with the requirements of this subchapter regardless of whether the training required by this subpart has been completed.

(d) Recordkeeping. A record of current training, inclusive of the preceding two years, in accordance with this subpart shall be created and retained by each hazmat employer for each hazmat employee for as long as that employee is employed by that employer as a hazmat employee and for 90 days thereafter. The record shall include:

- (1) The hazmat employee's name;
- (2) The most recent training completion date of the hazmat employee's training;

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(3) A description, copy, or the location of the training materials used to meet the requirements in paragraph (a) of this section;

(4) The name and address of the person providing the training; and

(5) Certification that the hazmat employee has been trained and tested, as required by this subpart.

(e) Limitation. A hazmat employee who repairs, modifies, reconditions, or tests packagings as qualified for use in the transportation of hazardous materials, and who does not perform any other function subject to the requirements of this subchapter, is not subject to the safety training requirement of paragraph (a)(3) of this section.

REQUIREMENT SOURCE: 49 CFR 174, Dated 10-01-95, Part 7

Compliance and training.

(a) Unless this subchapter specifically provides that another person is to perform a particular duty, each carrier, including a connecting carrier, shall perform the duties specified and comply with all applicable requirements of this part and shall thoroughly instruct hazmat employees in relation thereto.

(b) A carrier may not transport a hazardous material by rail unless each of its hazmat employees involved in that transportation is trained as required by subpart H of part 172 of this chapter.

REQUIREMENT SOURCE: 49 CFR 177, Dated 10-01-95, Part 800

Purpose and scope of this part and responsibility for compliance and training.

(a) Purpose and scope. This part prescribes requirements, in addition to those contained in parts 171, 172, 173, 178 and 180 of this subchapter, that are applicable to the acceptance and transportation of hazardous materials by private, common, or contract carriers by motor vehicle.

(b) Responsibility for compliance. Unless this subchapter specifically provides that another person shall perform a particular duty, each carrier, including a connecting carrier, shall perform the duties specified and comply with all applicable requirements in this part and shall ensure its hazmat employees receive training in relation thereto.

(c) Responsibility for training. A carrier may not transport a hazardous material by motor vehicle unless each of its hazmat employees involved in that transportation is trained as required by this part and subpart H of part 172 of this subchapter.

REQUIREMENT SOURCE: DOE ORDER 5480.20A, Chapter I, Section 7.e Introduction

General Employee Training (GET) Requirements. All persons employed either full- or part-time in

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DOE nuclear facilities shall be trained commensurate with their job duties

4.4 Training Records and Documentation

REQUIREMENT SOURCE: DOE ORDER 5480.20A, Chapter I, Section 15.a

Qualification and certification of personnel shall be documented in an easily auditable format. Individual record documentation shall include the following at a minimum:

- (1) Education, experience, and employment history and most recent health evaluation summary (e.g., similar to NRC Form 396);
- (2) Training programs completed and qualification/certification achieved;
- (3) Latest completed checklists, graded written examinations (with answers corrected as necessary or examination keys), simulator examinations (where applicable), and operational evaluations used for certification (this requires controlling access to training records to maintain examination security). The record should include an evaluation of knowledge and performance during operational evaluations;
- (4) Lists of questions asked and the examiner's overall evaluation of the responses on oral examinations;
- (5) Correspondence relating to exceptions to training requirements and extensions of qualification/certification;
- (6) Records of qualification for one-time-only special tests or operations; and
- (7) Attendance records for required training courses or sessions.

REQUIREMENT SOURCE: DOE ORDER 5480.20A, Chapter I, Section 15.b

Author's Note: DOE 1324.2A references the General Record Schedules (GRS) published by the National Archives and Records Administration (NARA). These have been implemented by FDH.

A historical record that documents initial qualification or certification, and applicable information from the above list that verifies the most recent qualification or certification shall be retained in individual records. Superseded information should be handled in accordance with DOE 1324.2A, RECORDS DISPOSITION.

REQUIREMENT SOURCE: DOE/EH-0256T, Revision 1, Chapter 7, Part 2, Article 725.3

Personnel training records shall be controlled and retained. At a minimum, these records shall include the following:

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- a. Course title;
- b. Attendance sheets with instructor's name;
- c. Employee's name, identification number and signature;
- d. Date of training;
- e. Identification of the examination or evaluation form, including sufficient data to identify which test each person completed;
- f. Verification document or record confirming satisfaction of the training requirement;
- g. Documentation related to exceptions for training requirements and extensions of qualification;
- h. Quizzes, tests, responses and acknowledgements of training, with the date and signature of the person trained;
- i. Special instructions to females, their supervisors and coworkers concerning prenatal radiation dose, acknowledged by the worker's signature.

4.5 Accreditation

Development and submission of documentation to support successful accreditation of training programs, where required, is a facility specific responsibility therefore, accreditation requirements are not detailed in this S/RID.

4.6 KEY INTERFACES

4.6.1 Quality Assurance

Training needs and requirements should be identified by the management of the Quality Assurance functional area at the contract level and at each facility.

4.6.2 Emergency Management

Formal training for Emergency Management should be established as defined by the management of the Emergency Management functional area to support general employee training and the Hanford Emergency Response Organization (ERO).

4.6.3 Safeguards and Security

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Formal training for Safeguards and Security (SAS) is established as defined by management of the Safeguards and Security functional area. To support the general FDH Contract population, input is provided for use in Hanford General Employee Training (HGET). Training topics include: Personnel Security, Information Security, Computer Security, access control, visitor control, escort requirements and protection of classified and non-classified assets.

Additionally, SAS provides initial new hire briefings, comprehensive briefings (for personnel with an access authorization), and vendor/visitor briefings to provide an overview of general security requirements. SAS also supports the employee population with special security education briefings focusing on current contract level and facility specific issues as requested.

In addition to meeting facility specific training requirements (radiation protection, etc.), general and specialized protective force training is provided by the Department of Energy Central Training Academy and the Hanford Patrol Training Academy. Such training includes all elements and sub-elements identified in DOE 5632.7A, "Protective Force Program," and DOE M 5632.1C-1, "manual for Protection and Control of Security Interests."

4.6.4 Construction Program

Training requirements for construction personnel are identified by the project management and are covered in the facility specific S/RIDs.

4.6.5 Operations

Formal training for the Operations functional area is covered in the facility specific S/RIDs.

4.6.6 Maintenance

Formal training of Maintenance personnel is determined by the facilities Maintenance Managers and is included in the facility specific S/RIDs.

4.6.7 Radiation Protection

Formal training provides both general and specific training curricula in the area of radiation protection. Core training requirements are identified in previous sections of this document. Additionally facility specific rad protection training requirements are addressed

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in the facility specific S/RIDs.

4.6.8 Fire Protection

Formal training in Fire Protection and Emergency Services is performed by the Hanford Fire Department. All training requirements will be found in the Contract Fire Protection Functional Area Document.

4.6.9 Packaging and Transportation

Formal training for the Packaging and Transportation functional area provides appropriate personnel with a detailed understanding of applicable Federal, State and local regulations as well as pertinent DOE Orders. Training syllabi is developed in accordance with the needs and requirements identified by the management of the Packaging and Transportation functional area.

4.6.10 Waste Management

Formal training for the Waste Management functional area is addressed in the facility specific S/RIDs.

4.6.11 Occupational Safety and Health

Formal training in Occupational Safety and Health, as defined by functional area management, ensures consistent and thorough understanding of fundamentals for general employees, managers/supervisors, and ensures visitors and contractors are adequately trained prior to performing work.

4.6.12 Environmental Protection

Formal training in the area of Environmental Protection should be defined by the management of the functional area.

4.7 References

The following documents were used as requirement sources in the development of this Standards/Requirements Identification Document:

10CFR830 Code of Federal Regulations, Nuclear Safety Management, 4/5/94

10CFR835 Code of Federal Regulations, Occupational Radiation Protection, 12/14/93

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29CFR1910 Code of Federal Regulations, Occupational Safety and Health, 7/1/95

49CFR172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications Requirements and Emergency Response Information Requirements, 10/01/95

49CFR174 Carriage by Rail, 10/01/95

49CFR177 Carriage by Public Highway, 10/01/95

DOE-5480.20A Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities, 11/15/94

DOE-5500.3A Planning and Preparedness For Operational Emergencies, Change 1, 2/27/92

DOE/EH0256T(940431) U.S. Department of Energy Radiological Control Manual, revision 1, 4/94

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RIDs by Document X-Reference Listing
Based on FDHC-TN-SD RID and including all documents.

10 CFR 830, Nuclear Safety Management, Dated 04-05-94

10 CFR 835, Occupational Radiation Protection, Dated 12-14-93

29 CFR 1910, Occupational Safety and Health Standards, Dated 07-01-95

49 CFR 172, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information and Training Requirements, Dated 10-01-95

49 CFR 174, Carriage by Rail., Dated 10-01-95

49 CFR 177, Carriage by Public Highway., Dated 10-01-95

DOE ORDER 5480.20A, Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities

DOE ORDER 5500. 3A, Planning and Preparedness For Operational Emergencies, Revision C01

DOE/EH-0256T, U.S. Department of Energy Radiological Control Manual, Revision 1

*** End of RIDs by Document X-Reference Listing ***

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5.0 Emergency Management

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the site's or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract level requirements for the Emergency Management (EM) program in place at Hanford. The EM Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the

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contract and facility level.

The Emergency Management program exists at Hanford to ensure the safety and health of workers and the public and to protect property and the environment in the event of an emergency. The technical basis for emergency planning is provided by a hazards identification and assessment process, which is used to determine the extent and scope of emergency management activities.

The Emergency Management program complies with state and Federal environmental and occupational health laws and regulations. Washington State is a RCRA Authorized state and therefore WAC-173-303 is used in lieu of 40CFR264 and 40CFR265 with the exception of the Hazardous Solid Waste Amendments for which the state has not yet been authorized. This S/RID also cites the extensive series of DOE Orders which address emergency management. It should be noted that regulatory citations may span functional areas in which case responsibility for compliance may be shared. This is discussed in the Interfaces Section.

This document in conjunction with the DOE-RL and facility S/RIDs, define the Emergency Management controls, activities, personnel, and programs implemented by the FDH contract.

5.1 Management and Administration

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.a

Author's Note: Offsite Response Interfaces and Public Information elements are the responsibility of DOE-RL; Medical Support elements are either the responsibility of the Hanford Environmental Health Foundation, Hanford Fire Department and/or RL; and drills are the responsibility of the facility.

As part of the EMS, DOE elements and DOE contractors shall establish and maintain emergency management programs consisting of plans and procedures for response to Operational Emergencies involving or affecting DOE facilities, including DOE transportation activities. These emergency management programs must be commensurate with the assessment of potential hazards and targets and must include the following elements:Emergency Response Organization, Offsite Response Interfaces, Operational Emergency Event Classes, Notification, Consequence Assessment, Protective Actions, Medical Support, Recovery and Reentry, Public Information, Emergency Facilities and Equipment, Training, Drills and Exercises, and Program Administration.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(1)

Author's Note: Section (d) is not applicable to FDH.

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Emergency Response Organization. An element with clearly specified authorities and responsibilities for emergency response and mitigation have overall responsibility for the initial and ongoing response to, and mitigation of, an emergency, and must:

- (a) Perform, but not be limited to, the following functions: event categorization, determination of the emergency class, notification, provision of protective action recommendations, management and decision making, control of onsite emergency activities, consequence assessment, protective actions, medical support, public information, activation and coordination of onsite response resources, security, communications, administrative support, and coordination and liaison with offsite support and response organizations;
- (b) Consist of an adequate number of experienced and trained personnel, including designated alternates, for timely performance of the functions identified above;
- (c) Assign emergency response responsibilities and tasks to specific individuals identified by name, title, or position; and
- (d) Integrate local agencies and organizations which would be relied upon to provide onsite response services and include those contractor and private organizations that may be relied upon to provide specialized expertise and assistance to all emergency planning, preparedness, and readiness assurance activities.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 360(1)

Author's Note: Within the context of this requirement, "facility" applies to the Hanford site.

Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 810(2)

Author's Note: This requirement is cited in the EM functional area due to site-wide contingency plan management responsibility.

Duty to comply. The permittee must comply with all conditions of his permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee need not comply with the conditions of his permit to the extent and for

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the duration such noncompliance is authorized in an emergency permit.

5.2 Emergency Response Training

Author's Note: The FDH Emergency Management organization provides the training to fulfill this requirement. Other training requirements, for emergency management, are addressed in the functional area(s) that provide the training.

**REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(11)(b)
Introduction**

Author's Note: Within the context of this requirement, "facility" applies to the Hanford site.

A formal training program must be in place for the instruction and qualification of all personnel (i.e., primary and alternate) comprising the facility emergency response organization to include initial training and annual retraining for both onsite and offsite incidents, including transportation incidents.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(11)(b)(1)

All training must be systematic and performance based, i.e., based on an analysis of tasks to be performed during an emergency, and developed with performance objectives, emphasis on team training, and facility-specific emergency response scenarios.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(11)(b)(2)

Annual retraining shall include training on weaknesses detected during drills and exercises, changes to plans, procedures, and lessons learned from emergencies at DOE and other industrial facilities.

5.3 Hazards Assessment

Author's Note: FDH Emergency Management is the lead for Hazard Assessment.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.b.(1)

Hazards Assessment. A hazards assessment shall be prepared and maintained for each facility and shall be used for emergency planning purposes. This hazards assessment provides the technical basis for the emergency management program and shall include information sufficient to determine the scope and extent of the program elements comprising the emergency management program for the respective facility. This hazards assessment shall be derived from information provided by the assessment of the potential DOE requirements. The use of vulnerability and target analyses may include sensitive or classified information which will need special handling.

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REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.b.(2)

The hazards assessment shall consider the broad range of emergency events that could affect the facility. These emergency events may result from operation of the facility; accidents; hostile attack, terrorism, sabotage, or malevolent acts; or earthquakes or other natural phenomena. The hazards assessment shall include descriptions of those hazards relevant to potential Operational Emergencies and characterizations of the potential consequences on workers, the public, and the environment. For each potential Operational Emergency considered, the assessment must address the determination of initiating events, accident mechanisms, equipment or system failures, event indications, contributing events, source terms, material release characteristics, topography, environmental transport and diffusion, and exposure considerations.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.b.(3)

Assumptions, methodology, models, and evaluation techniques used in the hazards assessment shall be fully documented. Also, the hazards assessment shall include a determination of the size of the EPZ, i.e., the area surrounding the facility for which special planning and preparedness efforts are required to ensure that prompt and effective protective actions can be taken to minimize the risk to workers, the general public, and the environment.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(13)(b)

Author's Note: The Hanford Site Emergency Plan (DOE/RL-94-02) is the responsibility of DOE-RL.

The emergency plan and implementing procedures shall be controlled distribution documents and shall be annually reviewed and updated.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.d.(2)(a)

Procedures must consist of special emergency plan implementing procedures (e.g., EALs, event categorization, notification, EOC operation) as well as other procedures currently in use (e.g., equipment operation, chemistry controls, radiological monitoring, and maintenance) which would be utilized in, or associated with, emergency response activities.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.d.(2)(b)

Procedures which describe how the emergency plan shall be implemented. Procedures must be consistent and compatible with the emergency plan. Emergency procedures must contain the detailed information and the specific instructions needed to carry out the emergency plan during a drill, exercise, or actual emergency. Procedures must clearly and concisely identify the individual(s) responsible for performance of response activities and delineate the specific actions/steps to be performed. Procedures must identify the relevant prerequisites (i.e., conditions which must exist prior to specific actions being performed) and precautions (regarding personnel

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safety and equipment operation) associated with the response actions.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(1)

Purpose. The purpose of this section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment in the event of an emergency circumstance, including a fire, explosion, or unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or ground water by a facility. A contingency plan must be developed to lessen the potential impacts of such emergency circumstances, and the plan must be implemented immediately in such emergency circumstances.

5.4 Facilities, Equipment and Resources

5.4.1 Emergency Response Facilities

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(10)(a)

Author's Note: Sentence one is not applicable to FDH.

An EOC must be established from which the emergency response organization assesses, evaluates, coordinates, and directs emergency response activities and communicates within DOE and with other Federal, state, tribal, and local response organizations. Additional emergency facilities must be designated commensurate with the scope and characteristics of response activities (e.g., technical support, security, personnel assembly, decontamination, medical services, process control, and chemical/radiological analyses).

5.4.2 Emergency Equipment and Supplies

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(10)(d)

Adequate equipment and supplies must be available and operable for emergency response personnel to carry out their respective duties and responsibilities.

5.4.3 Communications Equipment

Author's Note: Within context of this subelement, 29CFR1910 applies to FDH contract level sirens and alarms.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 38(a)(3)

Alarm system.

(i) The employer shall establish an employee alarm system which complies with § 1910.165.

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(ii) If the employee alarm system is used for alerting fire brigade members, or for other purposes, a distinctive signal for each purpose shall be used.

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 165(b)

Author's Note: Paragraph (4) of this requirement is performed at the facility level.

General requirements.

(1) The employee alarm system shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate work area, or both.

(2) The employee alarm shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm.

(3) The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the emergency action plan.

(4) The employer shall explain to each employee the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones. The employer shall post emergency telephone numbers near telephones, or employee notice boards, and other conspicuous locations when telephones serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over all non-emergency messages.

(5) The employer shall establish procedures for sounding emergency alarms in the workplace. For those employers with 10 or fewer employees in a particular workplace, direct voice communication is an acceptable procedure for sounding the alarm provided all employees can hear the alarm. Such workplaces need not have a back-up system.

5.5 Classification, Notification and Reporting

Author's Note: Within the context of this element, "Notification" applies to emergencies rather than occurrence reporting.

REQUIREMENT SOURCE: DOE ORDER 5500. 1B, Revision C01, Section 10.w(26)(a)1

Ensure the proper identification, categorization, and notification of emergencies or other reportable occurrences to line management and the HQ EOC, in accordance with applicable DOE policies and requirements;

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REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 11.a.2(a)4e

Transportation. An Alert shall be declared when events are in progress or have occurred which involve an actual or potential substantial degradation of the safety of the shipment. Any release of hazardous materials (radiological or non-radiological) is expected to be limited to small fractions of the appropriate PAG or ERPG exposure levels.

REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 11.a.2(b)7.e

Transportation. A Site Area Emergency shall be declared when events are in progress or have occurred which involve an actual or potential major reduction in the safety of the shipment. Any release of hazardous materials (radiological or non-radiological) is expected to exceed appropriate PAG or ERPG exposure levels in the immediate vicinity of the accident or incident but is not expected to exceed the appropriate PAGs or ERPGs in a general public area.

REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 11.a.2(c)7.e

Transportation. A General Emergency shall be declared when events have occurred which involve an actual or imminent catastrophic reduction in the safety of the shipment. Any release of hazardous materials (radiological or non-radiological) is expected to exceed appropriate PAG or ERPG exposure levels in a general public area. If the event has occurred on a DOE site, the release is expected to exceed appropriate PAG or ERPG exposure levels offsite.

REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 12.b(2)(a)

The Manager/Administrator of each DOE- or contractor-operated facility shall:

Concurrently notify the HQ EOC and the Field Element of the emergency as soon as crucial information is available but no later than 15 minutes after categorization of the event as an Emergency;

REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 12.b(2)(b)

Concurrently notify the HQ EOC and the Field Element of all changes in the emergency class within 15 minutes of the redesignation;

REQUIREMENT SOURCE: DOE ORDER 5500. 2B, Revision C01, Section 12.b(2)(e)

Notify appropriate regional Federal, state, tribal, and local agencies in accordance with the approved emergency plans and procedures and appropriate memoranda of understanding or other written agreements. Verbal notifications shall be made within 15 minutes of the categorization of the event as an emergency.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(3)

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Author's Note: The last sentence is not applicable as offsite interface elements are a responsibility of DOE-RL.

Operational Emergency Event Classes. Operational Emergencies involving or affecting DOE facilities must be characterized as one of the Operational Emergency classes (e.g., Alert, Site Area Emergency, or General Emergency) in accordance with DOE 5500.2B. EALs, the specific criteria used to recognize and categorize events, must be developed for the spectrum of potential Operational Emergencies identified by the hazards assessment. EALs form the basis for notification and participation of offsite organizations and for determining what and when protective measures will be implemented. EAL initiating conditions (i.e., individual instrument readings, equipment status, valve positions, parameter values, onsite and/or offsite monitor readings, etc.) must be specifically identified in procedures and must be observable and recognizable in a timely manner by responsible personnel. The EALs and related information must be consistent and integrated with the emergency plans and procedures of offsite Federal, state, tribal, and local organizations, and should be reviewed annually, as appropriate, by all parties involved in response activities.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(4)

Notification. Notification and communication of emergency information must be consistent with the requirements of DOE 5000.3A and 5500.2B. Provisions must be in place for prompt initial notification of appropriate DOE elements and other Federal, state, tribal, and local organizations, and for continuing effective communication among the response organizations throughout an emergency. The content and format of the initial notification and follow-up messages must be prearranged and standardized in the emergency plan. The handling of classified and/or controlled information during an emergency must be in accordance with established procedures and DOE requirements.

5.6 Personnel Protection

5.6.1 Consequence Assessment

Author's Note: FDH Emergency Management is the lead for consequence assessment for the FDH Contract even though facilities perform this task for their individual structures.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(5)

Consequence Assessment. Provisions must be in place to adequately assess the actual or potential onsite and offsite consequences of an emergency and must include:

- (a) Timely initial assessment of the actual or potential consequences of an emergency and continuous, in-depth assessment of events throughout an emergency;

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- (b) Integration of the consequence assessment process with the process for categorization of an event as an emergency, determination of the appropriate emergency class, and protective action decision making, including projections of onsite and offsite consequences;
- (c) Monitoring and evaluation of the specific indicators necessary to continually assess the consequences of emergency events and to monitor safety, health, environmental, and security conditions which may affect or exacerbate the emergency; and
- (d) Coordinate with Federal, state, tribal, and local organizations to locate and track hazardous materials released to the environment; estimate the integrated impact of such release on the public and the environment; and locate and recover materials, especially those with national security implications.

5.6.2 Protective Actions

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(6)(a)

Author's Note: Within the context of this requirement, (PAGs) and (ERPGs) are defined as the levels at which protective actions are required.

Protection Action Guides (PAGs) and Emergency Response Planning Guidelines (ERPGs), prepared in conformance with DOE approved guidance applicable to the actual or potential release of hazardous materials to the environment for use in protective action decision making;

5.6.3 Personnel Accountability and Evacuation

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(6) Introduction

Author's Note: In this instance this requirement pertains to declared emergency events at the Hanford site.

Provisions must be in place for specific, predetermined actions to be taken in response to emergency conditions to protect onsite personnel and the public....

5.6.4 Medical Response

Author's Note: Requirement DOE5500.3A Section 11.c.(7) was deleted from this subelement and applicable portions addressed in the FDH and facility Fire Protection S/RIDs.

5.7 Recovery and Reentry

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REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(8)

Author's Note: This requirement is cited in this document, though implementation occurs at the facility level, to address site Emergency coordinator authorization required to approve reentry.

Recovery and Reentry. Provisions must be made for recovery from an Operational Emergency and reentry into the affected facility.

- (a) The approach and general procedures for recovery include: decision making and communications associated with termination of an emergency; dissemination of information to Federal, state, tribal, and local organizations regarding the emergency and relaxation of public protective actions; establishment of a recovery organization; and establishment of general criteria for resumption of normal operations.
- (b) The means must exist for estimating dosage and for protecting workers and the general public from hazardous exposure during recovery and reentry activities.

5.8 Public Information

This function is the responsibility of DOE-RL.

5.9 Coordination with Offsite Agencies

This function is the responsibility of DOE-RL.

5.10 Demonstrating, Monitoring and Improving Performance

5.10.1 Drill and Exercise Program

Author's Note: Requirements relative to "Drills" are appropriately addressed in facility S/RIDs. Requirements relative to "exercises" are appropriately addressed in the contract level document.

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(12)(b)(1)

A full participation exercise shall be conducted annually for at least one facility on each DOE site to test and demonstrate an integrated emergency response capability. For multiple-facility sites, the basis of the exercise scenario shall be rotated among those facilities with EPZs extending offsite;

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(12)(b)(3)

Full participation exercises shall require the full participation of HQ and Field Elements. Federal, state, tribal, and local regulatory and/ or emergency response organization participation shall be

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requested. When these groups respond affirmatively, they shall be accommodated;

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(12)(b)(4)

A control group shall be established for each exercise to ensure that events occur which address the objectives for the exercise;

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(12)(b)(5)

An evaluation group shall be established for each exercise to assess the performance of the exercise participants against the objectives; and

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(12)(b)(6)

A critique process shall be conducted for each exercise to provide initial impressions of accomplishments and shortcomings discovered during the exercise;

5.10.2 Reviews, Audits and Evaluations

REQUIREMENT SOURCE: DOE ORDER 5500.10, Revision C01, Section 10.a

DOE- or contractor-operated facilities shall conduct annual internal readiness assurance assessments of their emergency management programs. These assessments shall be conducted by contractor personnel not directly responsible during an emergency for performing the functions being assessed. The assessment process will include implementation of management controls for evaluation and correction of assessment results. Assessment results shall be documented and reported to the Head of Field Element.

5.10.3 Emergency Readiness Assurance Program

REQUIREMENT SOURCE: DOE ORDER 5500.10, Revision C01, Section 8.d(7)

Author's Note: Within the context of this requirement, "facility" applies to the Hanford site.

Ensure that the Manager/Administrator of each DOE- or contractor-operated facility, as the first or operating level of the line management structure:

- (a) Performs internal EMS readiness assurance assessments of the facility, in coordination with the Head of Field Element; and
- (b) Prepares the ERAPs and annual updates required by this Order.

REQUIREMENT SOURCE: DOE ORDER 5500.10, Revision C01, Section 9 General

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Emergency Readiness Assurance Plans (ERAPs)

a. ERAPs addressing planning and preparedness for emergency response shall be developed for each facility. The initial ERAP and all annual updates shall cover a planning cycle of 5 fiscal years from the date of initial or updated ERAP. Each ERAP section should be organized so as to separate the following information:

- (1) Background material and procedures not subject to change from year-to-year, unless the facility, operation or activity changes; and
- (2) Annually updated information containing reports on the activities and accomplishments of the past year and plans, schedules, and budgets for the next 5 fiscal years.

5.10.4 Deficiency Identification and Correction

FDH Emergency Management is responsible for identification and correction of deficiencies in their respective functional area. Requirements relative to this subelement are addressed in the Quality Assurance functional area.

5.11 Key Interfaces

5.11.1 Safeguards and Security

Key interfaces with the FDH Safeguards and Security organization are necessary for the completion of various EM tasks. Although the FDH EM organization takes the lead on these tasks, they require input from the SAS organization in the following areas: development of scenarios for emergency exercises; development of hazards assessments, and radiological and toxicological sabotage assessments; and coordination of access control provisions during emergencies.

5.11.2 Operations

EM interfaces with various Facility Operations personnel to develop credible operational scenarios for emergency exercises; to ensure coordination between emergency operating procedures and emergency plan implementing procedures; and to coordinate plans for on-scene incident command during emergencies. EM has one area of overlapping responsibility with Operations, that being WAC-173-303-360 which addresses operational procedures used in emergency mitigation.

5.11.3 Training and Qualification

Key interfaces with FDH Training Services are necessary for successful implementation of EM responsibilities, such as: ensuring inclusion of appropriate emergency plan/response

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information in HGET programs; tracking of training completion documentation; and coordination of onsite and imported training conducted relative to Occurrence Reporting.

5.11.4 Radiation Protection

Key interfaces with Radiation Protection are necessary for technical support of EM activities, and they include: Identification of dose limits, coordination to support onsite and offsite environmental radiological monitoring and sampling; assistance in scenario development; and support for the development of hazards assessments.

5.11.5 Waste Management

Key interfaces with Waste Management are not required to support the EM operations. Waste Management related interfaces necessary to support EM activities are addressed in the Operations interface subelement (5.11.2) above.

5.11.6 Occupational Safety and Health

Key interfaces with OS&H are necessary for development of hazards assessments and exercise scenarios development.

5.11.7 Fire Protection

Key interfaces with the Hanford Fire Department are necessary for successful operations during emergency activities related to HAZMAT, medical, fire suppression, rescue, and support for exercise scenario development and exercise participation.

5.11.8 Medical

Refer to 5.11.7, Fire Protection.

5.11.9 Packaging and Transportation

EM interfaces with Packaging and Transportation to provide appropriate emergency response information and carrier instructions, including organizations and authorities to be notified in the event of release of materials. Coordination between the Transportation Program and EM ensures that commonly handled hazardous materials are known and included in emergency plans for the facility, and that special equipment or vehicles for transportation are known and available for emergency situations.

5.11.10 Quality Assurance

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EM interfaces with Quality Assurance (QA) to ensure that independent assessments, audits, and corrective action programs meet contract level QA standards. QA may perform independent assessments of the EM program.

5.11.11 Environmental Protection

EM interfaces with Environmental Protection in coauthorship of the Hanford Facility Contingency Plan which addresses RCRA permit requirements. EM has several areas of overlapping responsibility with Environmental Protection, including the RCRA permit, 40 CFR 302, 40 CFR 355, and WAC-173-303.

5.12 References

The following documents were used as requirement source in the development of this EM Functional Area Document.

29 CFR 1910, Hazardous Waste Operations and Emergency response; OSHA, effective 07/01/95.

WAC-173-303, Dangerous Waste Regulations; WA Department of Ecology, 01/01/95.

DOE 5500.1B, Emergency Management System, change 01, 4/30/91.

DOE 5500.2B, Emergency Categories, Classes, and Notification and Reporting Requirements, change 01, 04/30/91.

DOE 5500.3A, Planning and Preparedness for Operational Emergencies, change 01, 04/30/91.

DOE 5500.10, Emergency Readiness Assurance Program, change 01, 04/30/91.

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RIDs by Document X-Reference Listing
Based on FDHC-EM-SD RID and including all documents.

29 CFR 1910, Occupational Safety and Health Standards, Dated 07-01-95

DOE ORDER 5500. 1B, Emergency Management System, Revision C01

DOE ORDER 5500. 2B, Emergency Categories, Classes, and Notification and Reporting, Revision C01

DOE ORDER 5500. 3A, Planning and Preparedness For Operational Emergencies, Revision C01

DOE ORDER 5500.10, Emergency Readiness Assurance Program, Revision C01

WAC 173-303, Dangerous Waste Regulations, Dated 11-01-95

***** End of RIDs by Document X-Reference Listing *****

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6.0 Safeguards and Security

A Standards/Requirements Identification Document (S/RID) is the total list of the Environmental, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements.

The Fluor Daniel Hanford (FDH) Contract level S/RID contains standards/requirements applicable contract-wide that are necessary for safe operation of the site and its associated facilities, and that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

For application in this S/RID, the words "shall" and "should" in requirement statements both indicate mandatory compliance. The key interface information is provided for general recognition and understanding and is not considered to contain prescriptive requirements.

SCOPE

It is intended that this document be used as a baseline from which safety-related Safeguards and Security requirements can be identified. All Safeguards and Security orders and directives are identified in the PHMC contract and compliance is mandatory in accordance with that contract.

For purposes of this document and as it pertains to Safeguards and Security, the term "facility" is defined as the Hanford site.

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6.1 Management and Administration

FDH will comply with all contractually imposed Safeguards and Security (SAS) requirements identified in orders and directives unless specifically exempted by DOE. The FDH SAS Functional Area identifies only the Environmental, Safety, and Health related SAS requirements.

6.2 Personnel Security

REQUIREMENT SOURCE: 10 CFR 707, Dated 07-22-92, Part 7(a) & (b)

Random drug testing requirements and identification of testing designated positions.

(a)(1) Each workplace substance abuse program will provide for random testing for evidence of the use of illegal drugs of [sic] employees in testing designated positions identified in this section.

(2) Programs developed under this part for positions identified in paragraph (b)(3) of this section shall provide for random tests at a rate equal to 50 percent of the total number of employees in testing designated positions for each 12 month period. Employees in the positions identified in paragraphs (b)(1), (b)(2), and (c) of this section will be subject to random testing at a rate equal to 100 percent of the total number of employees identified, and those identified in paragraphs (b)(1) and (b)(2) of this section may be subject to additional drug tests.

(b) The testing designated positions subject to random drug testing are:

(1) Positions determined to be covered by the Personnel Security Assurance Program (PSAP), codified at 10 CFR Part 710. PSAP employees will be subject to the drug testing standards of this part and any additional requirements of the PSAP rule.

(2) Positions which entail critical duties that require an employee to perform work which affords both technical knowledge of and access to nuclear explosives sufficient to enable the individual to cause a detonation (high explosive or nuclear), in what is commonly known as the Personnel Assurance Program (PAP). PAP employees will be subject to the drug testing standards of this part and any additional requirements of the PAP program.

(3) Positions identified by the contractor which entail duties where failure of an employee adequately to discharge his or her position could significantly harm the environment, public health or safety, or national security, such as:

(i) Pilots;

(ii) Firefighters;

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- (iii) Protective force personnel, exclusive of those covered in paragraphs (b)(1) or (b)(2) of this section, in positions involving use of firearms where the duties also require potential contact with, or proximity to, the public at large;
- (iv) Personnel directly engaged in construction, maintenance, or operation of nuclear reactors; or
- (v) Personnel directly engaged in production, use, storage, transportation, or disposal of hazardous materials sufficient to cause significant harm to the environment or public health and safety.

(4) Other positions determined by the DOE, after consultation with the contractor, to have the potential to significantly affect the environment, public health and safety, or national security.

REQUIREMENT SOURCE: 10 CFR 710, Dated 05-25-95, Part 55

Designation of PSAP positions. PSAP positions shall be designated by the cognizant Operations Office Manager in accordance with the following criteria:

- (a) Positions that afford direct access to Category I quantities of SNM or have direct responsibility for transportation or protection of Category I quantities of SNM.
- (b) Positions that afford direct access to the control areas of a nuclear material production reactor.
- (c) Positions with the potential for causing unacceptable damage to national security which are not included in paragraph (a) or (b) of this section, and are designated by the Director, Office of Safeguards and Security, DOE.

6.3 Protection Program Operations

REQUIREMENT SOURCE: DOE M 5632.1C-1, Chapter I, Section 1

SITE-SPECIFIC CHARACTERISTICS. Protection programs shall be tailored to address specific site characteristics and requirements, current technology, ongoing programs, operational needs, and to achieve acceptable protection levels that reduce inherent risks on a cost-effective basis.

REQUIREMENT SOURCE: DOE ORDER 5632. 1C, Preamble, Section 7.d.(1), Sentences 1 and 2

Protection Strategy. A protection strategy shall be developed and delineated by each DOE site and approved by the Head of the Field Element for all safeguards and security interests. The strategy used will be determined by the impact that a malevolent act would have on the national security, program continuity, the health and safety of DOE and contractor employees, the public, and/or the environment.

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REQUIREMENT SOURCE: DOE ORDER 5632. 1C, Preamble, Section 7.d.(2)

Contingency/Emergency Planning. Plans that address protection measures shall be developed and in place for events such as a threat guidance event, natural disasters, civil emergencies, personnel shortfalls (e.g., work force shortfalls, work force disruptions, walkouts, disputes), call-out of off-duty employees, and other credible situations.

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Chapter I, Section 3.b.

Threat. The "Design Basis Threat Policy for the Department of Energy (DOE) Programs and Facilities (U)" shall be used with local threat guidance and vulnerability assessments for protection and control program planning.

**REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Preamble 4.c.
Paragraph 1**

Graded Protection. By graded approach, DOE intends that the highest level of protection be given to security interests whose loss, theft, compromise, and/or unauthorized use will seriously affect the national security, and/or the health and safety of DOE and contractor employees, the public, the environment, or DOE programs. Protection of other interests shall be graded accordingly. Asset valuation, threat analysis, and vulnerability assessments shall be considered, along with the acceptable level of risk and any uncertainties, to decide how great is the risk and what protection measures are to be applied.

6.3.1 Physical Security

**REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Attachment 1,
Preamble 5.a.**

Standardization. Safeguards and security equipment and systems shall be selected on the basis of cost savings or other benefit to DOE such as worker safety, compliance with life safety codes, enhancing mission capability, and facilitating contingency efforts.

6.3.2 Security Systems

REQUIREMENT SOURCE: DOE M 5632.1C-1, Chapter I, Section 3.e

Safeguards and security systems and critical systems elements shall be performance tested to ascertain their effectiveness in providing countermeasures to address design basis threats.

REQUIREMENT SOURCE: DOE M 5632.1C-1, Chapter X, Section 2

DURESS SYSTEMS. Facilities with Protected Areas, Material Access Areas, and Vital Areas shall

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have duress capabilities between mobile and fixed posts and shall meet the following requirements:

- a. Activation of the duress alarm shall be accomplished in as unobtrusive a manner as practicable.
- b. Duress alarms shall not annunciate at the post initiating the duress alarm.
- c. The duress alarm for a Central Alarm Station shall annunciate at the Secondary Alarm Station or another fixed protective force post.
- d. The duress alarm for the Secondary Alarm Station shall annunciate at the Central Alarm Station or another fixed post.
- e. Mobile duress alarms shall annunciate at the Central Alarm Station, Secondary Alarm Station, or another fixed post.

6.3.3 Protective Forces

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter I, Section 1.b.,c.,d., & e.

- b. During firearms training, all personnel shall have access to an instruction manual for each type of firearm with which they may be armed while on duty and shall demonstrate both technical and practical knowledge of the contents of the manual governing the safe use of that firearm.
- c. Training records for personnel authorized to carry firearms shall be available for review by appropriate safety and security personnel.
- d. All firearms training, qualification, requalification, practice and test firing shall be conducted by personnel who are certified by the Central Training Academy (CTA). This certification is specific and personnel shall not conduct activities for which they have not been certified.
- e. Lesson plans for all firearms training shall be available for review by appropriate safety and security personnel. Such lesson plans shall incorporate safety in addition to other training objectives and task performance standards. The Central Training Academy shall provide training on how to develop the categorical information to be contained in typical lesson plans.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter I, Section 1.f.(1) & (2)

Standard Operating Procedures.

- (1) All firearms training shall be conducted in accordance with the Office of Safeguards and Security guidance and local standard operating procedures developed in response to specific site needs and tactics as designated by the cognizant local DOE authority for safeguards and security.

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Standard operating procedures shall include detailed procedures emphasizing the safety of participants, observers, and bystanders and the use of personal protective equipment.

(2) All standard operating procedures should be reviewed and approved by appropriate contractor safety and protective force personnel at least annually or more frequently if significant revisions are made in the training program. Field Element safety and protective force personnel review and approve standard operating procedures initially and whenever significant changes are made.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter II, Section 1.

BASIC CONSIDERATIONS.

a. The Department is required to develop and implement its responsibilities by the following:

(1) The Atomic Energy Act of 1954, as amended;

(2) Federal statutes;

(3) Executive orders; and

(4) Other orders, such as DOE Orders.

b. These responsibilities include the protection of:

(1) Restricted Data and other classified information or matter;

(2) Nuclear weapons and nuclear weapon components; and

(3) Departmental and contractor facilities, property, and equipment.

c. In order to provide the required level of protection, some Departmental and contractor employees are armed. These employees include protective force personnel, Transportation Safeguards Division (AL) couriers, and Departmental safeguards and security staff personnel.

d. Employees shall not be authorized to carry a firearm until they have:

(1) Received appropriate safety training in its use; and

(2) Demonstrated their technical and practical knowledge governing the safe use of those firearms.

e. Authorization to remain in armed status shall continue only if the employee demonstrates his or her technical and practical knowledge of firearms safety semiannually.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter II, Section 2.

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REQUIREMENTS.

- a. Semiautomatic and automatic firearms shall be carried in the manner specified below except when responding to an incident where there is reasonable cause to believe that deadly force is authorized.
 - (1) Semiautomatic handguns shall not be carried with a live round in the firing chamber unless the following conditions are met:
 - (a) The site has, in place, a documented training program for such handguns, which has been approved by the Operations Office Manager,
 - (b) The training program in use is approved by the CTA, and
 - (c) After receiving CTA approval, and after all involved protective force personnel have successfully completed the training program, the Operations Office Manager shall formally notify the Office of Occupational Safety and Office of Safeguards and Security as to when they intend to allow the carrying of a round in the chamber at the site.
 - (2) Semiautomatic long guns, e.g., rifles, shotguns, submachine guns, shall not be carried during normal operations or placed in post or vehicle racks or carriers with a round in the firing chamber.
- b. All duty firearms shall be carried in the manner approved by the cognizant local DOE authority for Safeguards and Security. Unless otherwise stated, from check-in to check-out a handgun shall always be in a holster; and a rifle, shotgun, or submachine gun shall always be carried on an appropriate sling with the muzzle pointed up or down, except where the firearm is designed to be carried in a different manner or operational conditions dictate otherwise. At no time shall a firearm be carried with fingers on the trigger or inside the trigger guard.
- c. When firearms are carried in vehicles, watercraft, or aircraft, they shall be mounted in an appropriate rack or container when not held by an individual.
- d. All personnel covered by this Order shall be required to comply with the personal protective and safety rules in effect at each workplace.
- e. The loading or clearing of firearms shall take place only in an approved area or when the barrel of the firearm is in or pointing toward a bullet containment device. Each site shall have an approved procedure for loading and clearing firearms under field conditions when no bullet containment device is available.
- f. The routine loading and clearing of all firearms shall be witnessed by a supervisor.
- g. If the presence of alcohol or drugs is detected on a person, it shall be grounds for denial of the

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issuance of a firearm or removal from a duty station.

- h. Departmental elements and contractors performing security operations shall develop specific site policies and procedures covering the safe transportation, handling, use and storage of live ammunition, blank ammunition, chemical munitions and pyrotechnic devices used in firearms operations.
- i. Each Operations Office shall require that analyses be performed to determine what ammunition and firearms can be used safely in each site for which it has responsibility.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter II, Section 3.

FIREARMS MAINTENANCE.

- a. All sites, including the Central Training Academy, shall have (onsite, under contract offsite, or in association with another DOE site) an armorer with the knowledge, capability, and responsibility for inspecting, maintaining, and repairing all firearms available for use. The armorer and all other personnel shall be prohibited from modifying the basic design of a firearm or any of the firearm's operating or safety components without written approval from the Operations Office Manager or, as applicable, Office of Safeguards and Security.
- b. Armorers shall successfully complete a factory authorized or U.S. military approved training course for each firearm available for on duty use at a site. In addition, armorers shall demonstrate proficiency in the following:
 - (1) Conducting firearms safety inspections;
 - (2) Performing minor repair of basic firearms;
 - (3) Assembling/disassembling the firearms used at the various sites;
 - (4) Rendering firearms safe, including confiscated firearms;
 - (5) Knowing the minimum and maximum tolerances associated with safe operation of all firearms in inventory and available for use at each site; and
 - (6) Identifying unapproved modifications to firearms.
- c. Certification procedures for armorers shall be established by the Central Training Academy, which shall certify all DOE armorers. Recertification shall be required at least every 2 years or whenever there is a major change in firearms policy.
- d. The armorer shall inspect and certify for use all firearms available for duty issue. This inspection shall be in accordance with the recommendations of the manufacturer or the Central

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Training Academy, but not less often than semiannually.

- e. The armorer shall maintain accurate individual records on all firearms, including the name of manufacturer, model, serial number of firearm, inspection dates, and nature and date of any repair, in accordance with prescribed authorized schedules.
- f. The armorer shall inspect and conduct test firings of a firearm following any unusual operation of, occurrence with, or functional repairs made to that firearm. Functional repairs are those that may have an effect on the safe operation or reliability of the firearm. Any firearm that has experienced an unusual operation shall be tagged "out-of-service" and segregated from operational firearms until certified by the armorers as safe to operate. Records of any unusual occurrence and subsequent inspection/test firing shall be maintained in accordance with prescribed authorized schedules.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter III, Section 1.

APPRAISALS/SELF ASSESSMENTS.

- a. Formal appraisals or self assessments of the safety and health aspects of the safeguards and security program following the procedures detailed in DOE 3790.1B and DOE 5482.1B shall include firearms safety and shall be performed by line management at least annually.
- b. Contractors shall conduct formal appraisals, and self assessments (i.e., annual program reviews and worksite appraisals and periodic surveillances).
- c. Cognizant DOE field and line management shall conduct formal self assessments to include annual program reviews (assessments) of each contractor and appraisals of selected worksites.
- d. All shall maintain audits of their internal operations.
- e. Such evaluations and audits should be conducted by safety personnel or by a joint safety and protective force evaluation team.
- f. Such evaluations and audits shall cover procedures, responsibilities, and duty assignments within the firearms safety program to ensure that overall objectives and performance are being met.
- g. Such evaluations or audits shall include reviews of the following:
 - (1) Records of unauthorized firearms discharges, investigations of such discharges, and the application of lessons learned;
 - (2) Armorer's records of firearms inspections, malfunctions, and repairs;

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- (3) Firearms documentation maintained by DOE or contractor Environmental, Safety and Health manager to ensure that management decisions and actions to correct deficiencies have been completed and documented on time;
- (4) Protective force safety performance data, as compared with similar operations and programs, to determine whether there are lessons to be learned or deficiencies that require corrective action;
- (5) Hazardous incidents involving firearms and associated equipment;
- (6) Safety tagout program for defective firearms;
- (7) Disciplinary actions for violation of firearms safety procedures or regulations;
- (8) Results of the airborne lead monitoring programs at firing ranges and of the testing programs for blood lead level changes and hearing loss;
- (9) Storage and handling of firearms, ammunition, and cleaning materials in armories;
- (10) High risk activities, such as loading, unloading, and exchanging firearms, to ensure the existence of proper accident prevention controls; and
- (11) Firearms training programs.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter III, Section 2.

FIREARMS SAFETY COMMITTEE.

- a. Composition. The DOE Firearms Safety Committee shall be comprised of one permanent DOE safety representative voting member or alternate from each of the following:
 - (1) Office of Occupational Safety;
 - (2) Office of Safeguards and Security;
 - (3) Central Training Academy;
 - (4) Transportation Safeguards Division (AL);
 - (5) Each of the DOE Operations Offices; and
- (6) A representative from the Office of Human Resources and Administration shall serve as an ex-officio member of the committee.

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b. Responsibilities.

(1) Assistant Secretary for Environment, Safety and Health, through the Director of Occupational Safety, shall administer and manage the Firearms Safety Committee.

(2) The Committee shall review, evaluate, and make recommendations for action on proposed changes to this Order, the DOE Firearms Safety Manual, and the DOE Range Design Criteria Manual. The Committee shall meet annually or more often to review and evaluate the Order.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter III, Section 3.

MANAGERS OF OPERATIONS OFFICES AND CONTRACTORS. Those providing protective force functions on, at, or for a DOE site shall have a firearms safety committee formally organized and chartered to assist management in providing safe firearm activities.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter III, Section 4.

EMPLOYEE REVIEW. All DOE, contractor, and subcontractor employees have the right and responsibility to lodge a formal complaint about deficient safety practices or procedures. DOE employees are to be guided by DOE 3790.1A, contractor employees by DOE 5483.1B.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter III, Section 6.

EMERGENCY/EVENT PLANNING. Emergency plans and procedures required by DOE 5500.1B shall specifically address, as applicable, incidents involving firearms.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter IV, Section 1.

APPROVED AMMUNITION.

a. Office of Safeguards and Security shall be responsible for developing, updating, and maintaining a list of approved ammunition for the daily use of Departmental personnel. This list shall specify the caliber, bullet type and weight, and manufacturer of the ammunition.

b. Ammunition used for live fire training and qualification, ESS training, and other nonlethal training shall be of the highest quality. Reloaded, reprocessed, or military surplus ammunition should not be used for training purposes. Ammunition shall not be unboxed and placed in bulk containers.

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REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter IV, Section 2.

TRANSPORTATION OF MUNITIONS.

- a. Transportation of munitions on public highways shall be governed by Department of Transportation (DOT) regulations (49 CFR part 173). For transportation purposes only, munitions shall be given DOT class designations.
- b. Transportation of munitions onsite shall comply with requirements contained in Chapter I, Section 16, of the "Department of Energy Explosives Safety Manual" (DOE/EV/06194). Munitions not in original DOT containers shall be transported in containers specified in paragraph 17.5, Chapter II of the Manual.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter IV, Section 3.

HANDLING OF MUNITIONS.

- a. Munitions shall be protected from abnormal stimuli or environments such as impact, shock, high temperatures, and open flames.
- b. Smoking shall be prohibited when handling, transporting, or storing munitions. No matches, lighters, other fire-, flame-, or spark-producing devices shall be taken into a munitions storage area; appropriate signs or marking shall be posted at such areas.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter IV, Section 4.

STORAGE OF MUNITIONS. (This is a summary of applicable requirements for the munitions listed in this Order. Additional criteria can be found in DOE/EV06194, and in "DOD Ammunition and Explosives Safety Standards" (DOD 6055.9-STD).)

- a. Storage Structures. Refer to the DOE/EV/06194 for guidance on design of structures for storing munitions.

b. Hazard Class and Hazard Division.

- (1) For the purpose of placarding, the United Nations Organization (UNO) or the National Fire Protection Association (NFPA) hazard classification systems may be used. To ease identification of hazard characteristics and thus promote safe storage of munitions, the hazard classification system recommended by the UNO is used for DOE explosives classification. The system consists of nine classes for dangerous goods, with munitions included in Class 1. Class 1 is further subdivided into divisions that are based on the character and predominance of the associated hazards and on the

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potential for causing personnel casualties or property damage. The four divisions of Class 1 are as follows:

- (a) Hazard Class/Division 1.1. Mass detonating with possible fragments.
- (b) Hazard Class/Division 1.2. Non-mass-detonating, fragment producing (fragments falling within indicated minimum distances).
- (c) Hazard Class/Division 1.3. Mass fire (fragments and firebrands could fall within indicated minimum distances).
- (d) Hazard Class/Division 1.4. Moderate fire, no blast.

(2) When required to properly describe the hazard, a numerical figure in parenthesis shall be placed to the left of the hazard class/division 1.1 through 1.3 (e.g., (18) 1.1, (08) 1.2, and (06) 1.3); this number in parenthesis is used to indicate the minimum separation distance (in hundreds of feet) for specified levels of protection from munitions for inhabited buildings, public traffic routes, and personnel in the open.

(3) The hazard class/division designation for the munitions presently in use by DOE security forces is contained in Attachments IV-1 and IV-2. Attachment IV-1 lists the military-type ammunition and explosives; Attachment IV-2 contains commercial items.

c. **Quantity Distance Requirements.**

(1) Hazard Class/Division 1.1 Munitions. Inhabited building and public traffic route separation distances shall be in accordance with those specified in Table 9-1, DOD 6055.9-STD. If the storage structure is an above-ground magazine (not earth-covered), Column 5 for inhabited buildings and Column 9 for public traffic routes shall be used. The minimum fragment distance has been incorporated into the table except when the minimum fragment distance is indicated by a numerical figure in parenthesis. For example, "Hazard/Class/Division (04) 1.1" means that for 100 pounds or less of net explosives weight, the minimum fragment distance will be 400 feet.

(2) Hazard Class/Division 1.2 Munitions.

(a) (04) 1.2 Munitions. Inhabited building and public traffic route separation distances shall be as specified in Table 9-6, DOD 6055.9-STD. If the minimum distances specified are available, there is no limit as to the quantity of the material which can be stored in an approved structure. If the minimum distances are not available, (04) 1.2 material shall not be stored in the structure. Limited quantities of (04) 1.2 items, for reasons of operational necessity, may be stored in security facilities; however, fragmentation shielding is required.

(b) (08) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-7, DOD 6055.9-STD. If the minimum distance specified is available, there is

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no limit as to the quantity of material that may be stored in an approved structure. If the minimum distance is not available, the structure shall not be used for this material.

(c) (12) 1.2 Munitions. Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-8, DOD 6055.9-STD. If the minimum distance is not available, the structure shall not be used for this material.

(3) Hazard Class/Division 1.3 Munitions.

(a) Inhabited buildings and public traffic route separation distances shall be as specified in Table 9-10, DOE 6055.9-STD, for Hazard Class/Division 1.3 munitions.

(b) If the Hazard Class/Division 1.3 material is further described by a numerical figure in parenthesis, that number in hundreds of feet shall be minimum separation distance required, regardless of the distances given in Table 9-10 for the specific quantity.

(4) Hazard Class/Division 1.4 Munitions.

(a) Limited quantities of Hazard Class/Division 1.4 material for operational use may be stored in security facilities such as guard headquarters, security operations buildings, and guard stations without regard to quantity distance separation requirements.

(b) Storage of larger quantities, such as training stocks, shall be in accordance with Table 9-11, DOD 6055.9-STD. Additionally, this material in its original DOT Class C packaging may be stored in warehouses if the material is placed in segregated and specifically designed areas.

(5) Combined Storage of Hazard Class/Division.

(a) If Hazard Class/Division 1.1, 1.2, and 1.3 materials are stored together, the largest separation distance for each individual Hazard Class/Division shall be required for protection of inhabited buildings and public traffic routes (See Chapter 9, Paragraph B.1 c through g, DOE 6055.9-STD).

(b) Combining Hazard Class/Division 1.4 with any other Hazard Class/Division shall not affect the required separation distances.

(6) Intraline and Intermagazine Distances. If munitions for a protective force are stored near or within an explosives storage area or near explosives operation buildings, the required intraline and intermagazine separation distances shall be specified by the cognizant safety office using DOD 6055.9-STD.

d. Storage Compatibility Requirements.

(1) Compatibility groupings define which munitions may be safely stored together without increasing the risk of initiation. Attachments IV-1 and IV-2 list the storage compatibility group for

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munitions presently in use by Department protective forces.

(2) Storage compatibility mixing.

(a) The permitted mixing of storage compatibility groups shall be as specified in "Department of Energy Explosives Safety Manual," Chapter II, Table II-5. Additionally, items from storage compatibility groups C, D, E, F, G, and S may be combined in storage if the net explosives weight in the items (or in bulk) does not exceed 1,000 pounds and if the items are in their original or approved packages.

(b) Electric blasting caps (storage compatibility group B) shall not be stored in a magazine with other munitions unless the blasting caps are separated from the other items by an enclosure built of sandbags.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter IV, Section 5.

PROTECTIVE FORCE MUNITIONS.

a. Storage of Small Arms Ammunition. Articles in Hazard Class/Division 1.4 and Storage Compatibility Group S are considered as inert for storage purposes and only require appropriate fire-protection distance separation requirements as long as they are stored only with inert items or other 1.4 S items. This applies only if the Hazard Class/Division 1.4 and Storage Compatibility Group S articles remain in their original packaging containers. When stored with items in a Storage Compatibility Group other than S, normal quantity-distance requirements must be observed (see Chapter 9, Paragraph C.4.b. [page 9-19] of DOD 6055.9-STD).

b. Transportation of Munitions in Protective Force Vehicles.

(1) Protective force patrol and response vehicles are authorized to transport the minimum quantity of munitions needed to support approved contingency plans and to execute protective force duties.

(2) Whenever possible, support munitions required for defense against hostile forces should be pre-positioned in readily accessible magazines.

(3) Protective force vehicles loaded with a combination of up to 25 pounds net explosive weight of Hazard Class/Division 1.1 and 1.2 munitions shall be exempt from explosives quantity-distance requirements when executing approved contingency plans or protective force duties.

(a) Vehicles so loaded shall not be used for administrative purposes.

(b) Vehicles so loaded shall be separated from inhabited facilities and property lines by a minimum of 125 feet when temporarily out of protective force service.

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- (c) Vehicles so loaded shall be downloaded into properly sited magazines or approved facilities when parked for periods in excess of 4 hours.
- (4) Operation of explosives-loaded vehicles will be restricted to onsite locations.
- (5) The explosives must be secured within the vehicle.
- (6) Smoking in explosives loaded vehicles is prohibited.
- (7) These vehicles shall be downloaded into properly sited magazines or approved facilities prior to repair or maintenance, except under emergency response conditions (see Chapter II, Paragraph 16.1.2.e (1) of DOE/EV/06194).
- (8) Munition shall not be exposed to temperature conditions within the vehicle that exceed the criteria stated on the MSDS or manufacturer's recommendation. Appropriate safety precautions will be taken to ensure munitions are not exposed to extreme temperatures.
- c. Munitions Carried by Protective Force Personnel. Protective Force Personnel shall be allowed to carry on their person Hazard Class/Division 1.1 and 1.2 munitions issued to them for use in the execution of approved contingency plans without regard to explosives quantity-distance requirements. Appropriate safety precautions for the handling of munitions shall be observed and the munitions shall be placed in an approved location if temporarily removed from the uniform/load bearing equipment used to carry such items.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Chapter V, Section 3.

FIREARMS RELATED ACTIVITIES NOT OTHERWISE SPECIFIED. Specific written procedures shall be developed and approved for any activity not addressed elsewhere in the Order that involves DOE or DOE contractor personnel in the planned discharge of firearms, e.g., competitive shooting matches or pest control.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Preamble 8.,a, & .b.

Variances. A variance does not exempt contractors from a DOE-prescribed firearms safety requirement. However, a contractor may request a variance from a specific DOE-prescribed firearms safety requirement when they are unable to comply, due to their mission, to meet the required firearms safety specifications and the contractor provides equivalent protection of employees for the duration of the variance (if approved). Heads of Departmental Elements may deny variances; however, only the Assistant Secretary for Environment, Safety, and Health can approve variances. There are two types of variances:

- a. **Temporary.** A temporary variance may be requested when DOE or contractors are unable to meet this Order's standards, for a short period of time, but anticipate subsequent full conformance with requirements. While a temporary variance is in effect, the contractor shall provide equivalent

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or acceptable firearms safety protection to employees. Requests for a temporary variance shall be submitted to Heads of Departmental Elements for action.

b. Permanent. If any firearms activity, operation, or process is determined not to comply with this Order's requirements, yet the manager of the facility, or Operations Office Safeguards and Security manager, or the protective force contractor determines that the activity, operation, or process is providing equivalent or acceptable protection to employees, he or she may submit a request for a permanent variance to the appropriate DOE official.

REQUIREMENT SOURCE: DOE ORDER 5480.16A, Dated 03-04-94, Preamble 8.d.

Content of Variance. Any variance request shall include the following elements:

- (1) Description of condition;
- (2) Safety standard requiring deviation;
- (3) Reason why a variance is requested;
- (4) Steps taken to provide equivalent or greater protection;
- (5) Statement of whether equivalent safety is provided, description of safety enhancements, and an analysis of corresponding risk reduction;
- (6) Any proposed corrective action and schedule; and
- (7) Duration of requested variance (if temporary).

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Attachment II-1, Section 5.b.

Safety Considerations.

- (1) Safety is a primary consideration when engaged in fresh pursuit of a suspected criminal. In determining whether to pursue, as well as the method and means of pursuit, a protective force officer will weigh the seriousness of the alleged offense and the necessity for immediate apprehension against the risk of injury to himself/herself, other protective force officers, and the public. If at any time during the pursuit the risk of injury to pursuing protective force officers or the public surpasses the necessity for immediate apprehension, the pursuit shall be terminated.
- (2) Protective force officers will use the minimum force necessary under the circumstances to apprehend a suspected criminal.
- (3) The use of physical and/or deadly force in a fresh pursuit situation, regardless of whether

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jurisdictional lines have been crossed, shall be in strict conformance with 10 CFR 1047.6 and 1047.7, and other Departmental guidelines applicable to the use of force on Department of Energy facilities.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Attachment II-1, Section 5.c.

Vehicular Pursuit.

- (1) Vehicles utilized in fresh pursuit shall be operated in as safe a manner as is practicable.
- (2) To the extent practicable, vehicles utilized should be "marked" and should be equipped with visual and audible emergency equipment.
- (3) Vehicles occupied by nonprotective force personnel shall not be used in fresh pursuit situations unless the situation mandates an immediate pursuit, and the extreme circumstances prohibit the occupant's disembarkation.
- (4) The number of pursuing vehicles that cross a jurisdictional line should be limited to that necessary to provide sufficient personnel to deal with the situation. Under no circumstance should the number of pursuing protective force officers be such that the facility is left without sufficient security protection.
- (5) There is an inherent danger associated with the use of roadblocks. Thus, unless exigent circumstances mandate the immediate apprehension of the suspected criminal, roadblocks generally should not be attempted without the authorization of the appropriate law enforcement officials of the jurisdiction entered, and should not be utilized to apprehend suspected misdemeanants. Under no circumstances will a roadblock be used without the concurrence of the supervisor of the pursuing protective force officers.

**REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.
Introduction**

EQUIPMENT. Protective forces shall be equipped to effectively, efficiently, and safely perform routine and emergency duties. Equipment shall be tailored to counter adversaries identified in the "Design Basis Threat Policy for Department of Energy (DOE) Programs and Facilities (U)" and site-specific threat guidance or as specified in the Site Safeguards and Security Plan. The equipment shall provide the protective force the ability to: move in a tactically sound, safe, and timely manner and in sufficient number under all expected environmental conditions; transfer information between protective personnel; and detect the presence of adversary forces under all environmental conditions.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(c)

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Alternative to Deadly Force. Armed protective force personnel are to be assigned equipment that provides an alternative, in the appropriate circumstances, to the use of deadly force.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(d)

Nonlethal Area Weapons. Nonlethal area weapons such as chemical agents, if available for protective force use, shall be of the type commensurate with the intended use and shall not pose danger to personnel or facilities beyond that required for the success of the protective force mission. Chemical agents shall not be kept in active inventory past their expiration date.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(e)

Personal Protective Armor. Personal protective armor shall be readily available for site-identified, protective force personnel performing crucial, high-risk functions. This includes, minimally, SPO-II and SPO-III personnel. Protective armor must offer a level of protection commensurate with the expected level of threat for the particular functions, but in no case less than Type III-A protection (National Institute of Justice Standard 0101.03).

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(g)

Protective Masks. Masks shall be available for all crucial on-duty protective personnel. This includes, minimally, all SPO-II and SPO-III personnel. They are to be of a type that does not unduly hinder performance of emergency duties, including accurate firing of all firearms. They shall be individually fit-tested.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(h)1

Optical Devices.

1. Corrective Lenses. As specified in 10 CFR 1046, Security Police Officers whose uncorrected distant vision in the better eye is not at least 20/40 shall be required to carry an extra pair of corrective lenses.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.a.(2)(h)3

Protective Masks. Protective force personnel whose uncorrected distant vision in the better eye is not at least 20/40 shall be provided with corrective lenses that can be accommodated by the mask.

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**REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.b.
Introduction Sentences 1 through 4**

Firearms, Pyrotechnics, and Explosives. Firearms, pyrotechnics, and explosives must be available in sufficient numbers to permit protective forces to act according to response plans. Firearms and explosives shall be of a type suitable for the intended use, deployed in a manner commensurate with that use, and shall be controlled in a manner consistent with "Department of Energy Explosives Safety Manual" (DOE EV 06194). The firearms and explosives used shall pose the minimum danger to personnel, noncombatants, and facilities commensurate with success of the protective force mission. Firearms and explosives are to be carried safely and securely.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.b.(2)(c)

Firearms Storage.

- (1) Whenever practical, firearms are to be stored separately from explosives and 1,000 rounds or more of ammunition.
- (2) Firearms not identified for duty or contingency use and having a valid justification for retention shall be stored in a manner that will prevent deterioration due to environmental conditions.
- (3) Off-site storage of firearms shall be specified and authorized by the Head of the Field Element.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.b.(2)(d)

On-Post Firearms. Auxiliary firearms and ammunition that are maintained on posts for use during emergencies shall be under the direct control of the on-duty protective force personnel. Firearms shall be readily accessible to the protective force personnel and inaccessible to persons passing through or by the post.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.b.(3)

Firearms and Ammunition Maintenance/Inspection. Firearms available for duty or contingency operations shall be inspected by a qualified armorer prior to initial use, and at least twice a year thereafter to determine serviceability.

- (a) The minimum trigger pull for firearms shall be at least that specified by the manufacturer as the minimum for safe operation.
- (b) Firearms maintenance checks shall be documented.

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- (c) Stored firearms shall be inspected prior to return to active inventory.
- (d) Duty ammunition shall be exchanged for fresh ammunition, at a minimum, annually.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VI, Section 1.c.(1)

Protective Force Vehicles.

(1) Vehicle Type. Protective force vehicles shall exhibit a degree of reliability commensurate with their intended function. Vehicles shall enhance the efficiency, speed, and safety of routine and emergency duties under all expected weather conditions. Vehicles shall be of a type and size suitable for the intended use and, in the case of armored vehicles, offer assurance of continued operation and a safe level of protection to occupants under small arms fire, up to and including North Atlantic Treaty Organization (NATO) 7.62 millimeter full metal jacket. Vehicles should be distinctly marked and be equipped with necessary emergency response equipment, e.g., external warning lights, sirens, radios, and spotlights.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VII, Section 1.b.

Alarm Response and Assessment Performance Test. An Alarm Response and Assessment Performance Test is a no prior notice test to evaluate on-duty protective force response to a specific location under safeguards and security alarm protection. Test scenarios shall be based on simulated adversary actions consistent with the Design Basis Threat Policy and vulnerability analyses. The purpose of these tests is to evaluate protective force readiness and response to an alarm condition. These tests shall take into consideration all aspects of the response, including communications, personal protective measures, equipment availability and serviceability, and any protective force and facility coordination activities that may be necessary for effective mitigation of an event. The tests shall be pre-coordinated with facility representatives and trusted agents to ensure that safety requirements are fulfilled, security is not compromised, and operational disruption is minimized. Upon commencement of a test, responding protective force personnel shall be advised of the test. Handguns shall not be unholstered and auxiliary weapons shall not have a round chambered.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VII, Section 1.c.

Force-on-Force Exercise. A force-on-force exercise is a major test of the overall effectiveness of all elements involved in response to a Design Basis Threat and site-specific threats. These tests shall be held at all facilities meeting the requirements listed in paragraph 8a, page 4. Exercises shall be pre-planned, announced in advance to all participating parties, and conducted during specified time periods (exercise windows). Personnel shall be designated and briefed in advance to act as adversaries. All weapons shall be unloaded, and simulated weapons systems shall be used.

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For this reason, when an exercise involves an operating facility as opposed to a test area, a "shadow force" of protective force personnel shall be deployed for protection of the security interest. Interface procedures to include rules of conduct for all participants, controller actions, exercise boundaries, and off-limit areas shall be developed. In addition, communication procedures shall be developed between the simulated and shadow forces to ensure no compromise of safeguards and security during the exercise.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VII, Section 2.

TEST PLAN. A written test plan shall be prepared for protective force performance testing activities. The plan shall consider and include, as appropriate:

- a. The specific element of the protective force being tested;
- b. The objective of the test;
- c. Applicable pass/fail criteria;
- d. Specific safety considerations;
- e. Specific safeguards and security considerations;
- f. Test results documentation and after action reviews; and
- g. Classification of the proposed test and anticipated results, as appropriate.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VII, Section 3.

SAFETY. Protective force performance tests shall be conducted with the highest regard for the safety and health of personnel, protection of the environment, and protection of Government property. Specific safety considerations and requirements for conducting protective force performance tests are found in DOE 5480.16, FIREARMS SAFETY.

REQUIREMENT SOURCE: DOE ORDER 5632. 7A, Revision C01, Chapter VII, Section 4.

COORDINATION. When the protective force command post exercise and command field exercise performance tests involve demonstrations of site-level emergency response capabilities, the development and conduct of the exercise should be coordinated with the appropriate site-level emergency management organizations.

6.3.4 Security Identification Badges and Passes

Requirements applicable to this section are not safety-related and will not be incorporated

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into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.3.5 Incident Response and Management

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.3.6 Transportation Security

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.4 Material Control and Accountability for Special Nuclear Material

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.5 Facility Approvals, Security and Nuclear Material Surveys

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Chapter IX, Section 1. and 2.

1. **POLICY/OBJECTIVES.** To ensure proper levels of protection consistent with Departmental standards to prevent unacceptable, adverse impact on national security or on the health and safety of DOE and contract employees, the public, or the environment are afforded safeguards and security activities. The adequacy of safeguards and security measures shall be validated through various means, such as:

- a. surveys conducted by the DOE Surveying Office prior to initiation of safeguards and security activities and periodically thereafter;
- b. periodic facility self-assessments;
- c. program reviews by Facility Survey Operations Managers and other appropriate Departmental Elements; and
- d. inspections and assessments by the Deputy Assistant Secretary for Independent Oversight and Appraisals.

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2. **APPLICABILITY.** The Survey Program applies to all facilities that are eligible to have access to, use, store, or transmit nuclear and other hazardous material presenting a potential radiological or toxicological sabotage threat and/or classified information, that require access authorizations, or that possess over \$5,000,000 of DOE property, exclusive of facilities and land values.

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Chapter V, Section 3.a. & b.

a. Nuclear and other hazardous materials presenting a potential radiological or toxicological sabotage threat, classified matter, and property protection interests shall not be permitted on premises occupied by the Department or its contractors until facility clearance is granted.

b. Safeguards and security activities involving access authorizations shall be registered to assist in ensuring proper levels of protection consistent with Departmental standards to prevent unacceptable, adverse impact on national security or on the health and safety of DOE and contractor employees, the public, or the environment.

6.6 Information Security Program

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.7 Operations Security (OPSEC)

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is expected.

6.8 Foreign Ownership, Control or Influence (FOCI)

Requirements applicable to this section are not safety-related and will not be incorporated into this document. All Safeguards and Security requirements that are not safety-related are identified in the PHMC contract and compliance is mandatory.

6.9 Evaluation of Radiological and Toxicological Sabotage Consequences

REQUIREMENT SOURCE: DOE ORDER 5632. 1C, Preamble, Section 7.b

Threat. The "Design Basis Threat Policy for the Department of Energy Programs and Facilities (U)" shall be used to identify and characterize the range of potential adversary threats to

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Departmental programs and facilities. Field Elements should review and develop, as appropriate, supplementary local threat policy to take into account site-specific and regional-specific threat considerations.

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Attachment 1, Chapter I, Section 2.c.(4)

Programs shall be designed to mitigate the consequences of radiological/toxicological sabotage that would cause unacceptable impact to national security or pose significant dangers to the health and safety of employees, the public, or the environment.

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Attachment 1, Chapter I, Section 2.c.(7)

Security countermeasures to address bombings shall consider a range of activities from hand-carried, or mailed, to vehicle-transported devices.

REQUIREMENT SOURCE: DOE-O-470.1, Revision Chg. 1, 06-21-96, Chapter I, Section 3.c.(1)(g)

Programs must be designed to prevent acts of radiological/toxicological sabotage that would cause unacceptable impact to national security or pose significant dangers to the health and safety of employees, the public, or the environment, and/or mitigate the consequences of acts of radiological/toxicological sabotage that would cause unacceptable impact to national security or pose significant dangers to the health and safety of employees, the public, or the environment.

REQUIREMENT SOURCE: RLID 473.1, Section 6.0 e.

RL, RL Contractors and Subcontractors shall:

- (1) Develop, as part of the Hanford Site Safeguards and Security Plan (SSSP), or as part of their contractor/organizational security directive, as applicable, procedures for implementing an asset protection program and access control measures, in accordance with the contents of this directive and the references contained in DOE M 5632.1C-1, as amended. These procedures shall be submitted to SAS for approval prior to implementation.
- (2) Implement and ensure compliance with the contents of this directive, and ensure that the required documentation is maintained.
- (3) To maintain consistency in the hazards and vulnerability assessments, the management and operating contractor will lead the team effort with the involvement of the contractor responsible for the target location.

REQUIREMENT SOURCE: RLID 473.1, Section 7.0 a., Paragraph 3.d:

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- (1) All RL contractors possessing hazardous materials in use or storage, including those contained in waste, shall perform graded assessments of the risk due to radiological/toxicological sabotage, consistent with the levels of hazards present within each facility.
- (2) Threshold amounts are defined for radioactive materials in 10 CFR 30.72, Schedule C. Threshold quantities for non-radioactive materials are defined in 40 CFR Part 355, Appendix A. If threshold amounts are exceeded, as defined in these references, vulnerability assessments shall be performed. The result of these analyses shall be incorporated into the Hanford SSSP.

6.10 KEY INTERFACES

6.10.1 Emergency Management

Author's Note: This applies to both the facility level and the FDH Contract level.

"Facility emergency plans shall address conditions that indicate possible loss of control of special nuclear material. The emergency plan shall be consistent with safeguards and security directives, and shall specify materials control and accountability measures to be taken prior to resumption of operations following emergency operations."

6.10.2 Packaging and Transportation

The Safeguards and Security organization establishes security requirements for onsite and offsite shipments of radioactive material, including special nuclear material shipments.

6.11 References

For List of Source Documents for this Functional Area see attachment "RIDS by Document X-Reference Listing."

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RIDs by Document X-Reference Listing
Based on FDHC-SS-SD RID and including all documents.

10 CFR 707, Workplace Substance Abuse Programs at DOE Sites, Dated 07-22-92

10 CFR 710, Criteria and Procedures for Determining Eligibility for Access to Classified Matter or Special Nuclear Material, Dated 05-25-95

DOE M 5632.1C-1, Manual for Protection and Control of Safeguards and Security Interests

DOE ORDER 5480.16A, Firearms Safety, Dated 03-04-94

DOE ORDER 5632. 1C, Protection and Control of Safeguards and Security Interests

DOE ORDER 5632. 7A, Protective Force Program, Revision C01

DOE-O-470.1, Safeguards and Security Program, Revision Chg. 1, 06-21-96

RLID 473.1, Protection of Safeguards and Security Interests

*** End of RIDs by Document X-Reference Listing ***

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ENGINEERING PROGRAM**

7.0 Engineering Program

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Engineering Program Functional Area has been determined to be nonapplicable, for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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CONSTRUCTION PROGRAM**

8.0 Construction

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Construction Program Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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OPERATIONS**

9.0 Operations

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements applicable company-wide that are necessary for safe operation of the site and its associated facilities, and that are not the direct responsibility of the facility manager (e.g., a company-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Operations Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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MAINTENANCE**

10.0 Maintenance

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Maintenance Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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RADIATION PROTECTION**

11.0 Radiation Protection

A Standards/Requirements Identification Document (S/RID) is the total list of the Environmental, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract requirements for the Radiation Protection (RP) program in place at Hanford. The RP Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the

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contract and facility level.

The Radiological Protection (RP) functional area includes the management related controls, activities, programs, and personnel necessary to ensure adequate protection of the health and safety of workers.

The Fluor Daniel Hanford Contract level organization will conduct the radiation protection program in accordance with the requirements of 10 CFR 835 and the Hanford Site Radiological Control Manual by implementation of the DOE approved FDHC 10 CFR 835 Radiation Protection Program and FDH Radiological Control Manual Implementation Plan.

11.1 Management

NOTE: The FDH Contract level organization will conduct Radiation Protection Program in accordance with the requirements of 10 CFR 835 and the Hanford Site Radiological Control Manual by implementation of the DOE-approved FDHC 10 CFR 835 Radiation Protection Program and FDHC Radiological Control Manual Implementation Plan.

This element defines management requirements and commitments related specifically to Fluor Daniel Contract Radiation Protection programs and the policy for response to abnormal radiological situations.

The Management and Organization element for Radiation Protection includes requirements which are specific to Radiation Protection and likely do not apply to other functional areas at the Fluor Daniel Hanford Contract Facilities. Because of the nature of these requirements, they are not included in the Management Systems functional area.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 101

Radiation protection programs.

- (a) A DOE activity shall be conducted in compliance with a documented radiation protection program (RPP) as approved by the DOE.
- (b) The DOE may direct or make modifications to a RPP.
- (c) The content of each RPP shall be commensurate with the nature of the activities performed and shall include formal plans and measures for applying the as low as reasonably achievable (ALARA) process to occupational exposure.
- (d) The RPP shall specify the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP. Except as provided in §835.101(i), any task outside the scope of a

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RPP shall not be initiated until an update of the RPP is approved by DOE.

- (e) The content of the RPP shall address, but shall not necessarily be limited to each requirement in this part.
- (f) The RPP shall include plans, schedules, and other measures for achieving compliance with regulations of this part. Compliance with this part shall be achieved no later than January 1, 1996.
- (g) The RPP for an existing activity shall be submitted to DOE no later than January 1, 1995.
- (h) An update of the RPP shall be submitted to DOE:
 - (1) Whenever a change or an addition to the RPP is made;
 - (2) Prior to the initiation of a task not within the scope of the RPP; or
 - (3) Within 180 days of the effective date of any modifications to this part.
- (i) Changes additions, or updates to the RPP may become effective without prior Department approval only if the changes do not decrease the effectiveness of the RPP, and the RPP as changed, continues to meet the requirements of this part. Proposed changes that decrease the effectiveness of the RPP shall not be implemented without submittal to and approval by the Department.
- (j) An initial RPP or an update shall be considered approved 180 days after its submission unless rejected by DOE at an earlier date.

11.1.1 Exposure Reduction and ALARA

Author's Note: Requirements for this subelement are located in element 11.1 Management

11.1.2 Radiation Protection Training

See Training and Qualification S/RID for requirements.

11.1.3 RP Selection and Qualification

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.1.4 Radiological Program Performance Goals

Author's Note: Contract level goals are captured in 11.1 Management.

11.1.5 Program Policy and Procedures

Author's Note: Contract level Policy and Procedures are captured in 11.1 Management.

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11.1.6 Policy for Response to Abnormal Situations

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1301(a)

Author's Note: This requirement is implemented at both the site and facility level.

A general employee whose occupational exposure has exceeded any of the limits specified in §§835.202 or 835.205 may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met:

- (1) Approval is first obtained from the contractor management and the Head of the responsible DOE field organization;
- (2) The individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year; and
- (3) The affected employee agrees to return to radiological work.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1301(b)

Author's Note: This requirement is implemented at both the site and facility level.

All exposures exceeding the limits specified in §§835.202 or 835.205 shall be recorded in the affected individual's occupational exposure file and reported to the DOE in accordance with Departmental requirements for occurrence reporting and processing.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1302(d)

Author's Note: This requirement is implemented at both the site and facility level.

The dose limits for individuals performing these operations are as follows:

{REFER TO 10CFR835.1302(d) for Table}

11.1.7 Rad Protection Program Assessments/Internal Audits

See Quality Assurance Functional Area for requirements.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 102

Internal audits. Internal audits of all functional elements of the radiation protection program shall be conducted no less frequently than every 3 years and shall include program content and

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RADIATION PROTECTION**

implementation.

11.1.8 Recordkeeping and Reporting

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 204(e)

Records of the conduct of a planned special exposure shall be maintained and a written report submitted within 30 days after the planned special exposure to the approving organizations identified in §835.204(a)(3).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 701(a)

Author's Note: This requirement is implemented at both the site and facility level.

Records shall be maintained to document compliance with this part and with radiation protection programs required by §835.101.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 701(b)

Author's Note: This requirement is implemented at both the site and facility level.

Unless otherwise specified in this subpart, records shall be retained until final disposition is authorized by DOE.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(a)

Records shall be maintained to document doses received by all individuals for whom monitoring was required pursuant to §835.402 and doses received during planned special exposures, accidents, and emergency conditions.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(b)

The results of individual external and internal dose measurements that are performed, but are not required by §835.402, shall be recorded. Recording of the non-uniform shallow dose equivalent to the skin caused by contamination on the skin (see §835.205) is not required if the dose is less than 2 percent of the limit specified for the skin in §835.202(a)(4).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c) Intro & (c)(1)

The records required by this section shall:

(1) Be sufficient to evaluate compliance with §835.202;

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c)(2)

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Be sufficient to provide dose information necessary to complete reports required by subpart I of this part and by Departmental requirements for occurrence reporting and processing;

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c)(3)

Include the following quantities for external dose received during the year:

- (i) The effective dose equivalent from external sources of radiation (deep dose equivalent may be used as effective dose equivalent for external exposure);
- (ii) The lens of the eye dose equivalent;
- (iii) The shallow dose equivalent to the skin; and
- (iv) The shallow dose equivalent to the extremities.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c)(4)

Include the following quantities for internal dose resulting from intakes received during the year:

- (i) Committed effective dose equivalent;
- (ii) Committed dose equivalent to any organ or tissue of concern; and
- (iii) Estimated intake and identity of radionuclides.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c)(5)

Include the following quantities for the summation of the external and internal dose:

- (i) Total effective dose equivalent in a year;
- (ii) For any organ or tissue assigned an internal dose during the year, the sum of the deep dose equivalent from external exposures and the committed dose equivalent to that organ or tissue; and
- (iii) Cumulative total effective dose equivalent received from external and internal sources while employed at the site or facility, since January 1, 1989.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(c)(6)

Include the dose equivalent to the embryo/fetus of a declared pregnant worker.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(d)

Documentation of all occupational exposure received during the current year shall be obtained when demonstrating compliance with §835.202(a). In the absence of formal records of previous occupational exposure during the year, a written estimate signed by the individual may be

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accepted.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(e)

Efforts shall be made to obtain records of prior years occupational internal and external exposure.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(f)

The records specified in this section that are identified with a specific individual shall be readily available to that individual.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(g)

Data necessary to allow future verification or reassessment of the recorded doses shall be recorded.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 702(h)

All records required by this section shall be transferred to the DOE upon cessation of activities at the site that could cause exposure to individuals.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 703

Author's Note: This requirement is implemented at both the site and facility level.

The following information shall be documented and maintained:

- (a) Results of surveys for radiation and radioactive material in the workplace as required by §§835.401, 835.403, and 835.404;
- (b) Results of surveys, measurements, and calculations used to determine individual occupational exposure from external and internal sources;
- (c) Results of surveys for the release of material and equipment as required by § 835.1101(d); and
- (d) Results of maintenance and calibration performed on:
 - (1) Instruments used for area monitoring and contamination control as required by 835.401; and
 - (2) Devices used for individual monitoring as required by §§835.401 and 835.402.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 704(a)

Training records shall be maintained, as necessary, to demonstrate compliance with §§835.901, 835.902, and 835.903.

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REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 704(b)

Actions taken to maintain occupational exposures as low as reasonably achievable, including the actions required for this purpose by §835.101, as well as facility design and control actions required by §§835.1001, 835.1002, and 835.1003, shall be documented.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 704(c)

Author's Note: This requirement is implemented at both the site and facility level.

Records shall be maintained to document the results of internal audits and other reviews of program content and implementation.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 704(d)

Author's Note: This requirement is implemented at both the site and facility level.

Written declarations of pregnancy shall be maintained.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 704(e)

Author's Note: This requirement is implemented at both the site and facility level.

Changes in equipment, techniques, and procedures used for monitoring in the workplace shall be documented.

11.2 Monitoring and Surveys

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 403(b)

Author's Note: This requirement is implemented at both the site and facility level.

Monitoring of radiation in the workplace shall be performed using stationary (area) or portable radiation instruments, or a combination thereof. The instruments shall be readily available and shall be capable of measuring ambient radiation dose rates for the purpose of controlling radiation exposures.

11.2.1 Radiation Monitors, Alarms and Surveys

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.2.2 Airborne Radioactivity Monitors, Alarms and Surveys

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Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.2.3 Contamination Monitoring and Surveys

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.3 Personnel Exposure Monitoring

11.3.1 Personnel Monitoring

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.3.2 Exposure Limits

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 202(a)

The occupational exposure to general employees resulting from DOE activities, other than planned special exposures under §835.204 and emergency exposure situations under §835.1302, shall be controlled so the following annual limits are not exceeded:

- (1) A total effective dose equivalent of 5 rems (0.05 sievert);
- (2) The sum of the deep dose equivalent for external exposures and the committed dose equivalent to any organ or tissue other than the lens of the eye of 50 rems (0.5 sievert);
- (3) A lens of the eye dose equivalent of 15 rems (0.15 sievert); and
- (4) A shallow dose equivalent of 50 rems (0.5 sievert) to the skin or to any extremity.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 202(b)

All occupational exposure received during the current year shall be included when demonstrating compliance with §835.202(a).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 202(c)

Exposures from background, therapeutic and diagnostic medical radiation, and voluntary participation in medical research programs shall not be included in dose records or in the assessment of compliance with the occupational exposure limits.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 204(a)

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Author's Note: This requirement is implemented at both the site and facility level.

A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in §835.202(a), provided that each of the following conditions is satisfied:

- (1) The planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limit in §835.202(a)(1) are unavailable or impractical;
- (2) The contractor management (and employer, if the employer is not the contractor) specifically requests the planned special exposure, in writing; and
- (3) Joint written approval from the appropriate DOE Headquarters program office and the Assistant Secretary for Environment, Safety and Health is received.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 204(b)

Author's Note: This requirement is implemented at both the site and facility level.

Prior to requesting an individual to participate in an authorized planned special exposure, the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits shall be determined.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 204(c)

Author's Note: This requirement is implemented at both the site and facility level.

An individual shall not receive a planned special exposure that, in addition to the doses determined in §835.204(b), would result in a dose exceeding the following:

- (1) A total effective dose equivalent of 5 rems (0.05 sievert) in the current year; and
- (2) A cumulative total effective dose equivalent of 25 rems (0.25 sievert).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 206(a)

Author's Note: This requirement is implemented at both the site and facility level.

The dose equivalent limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 sievert).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 206(b)

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Substantial variation above a uniform exposure rate that would satisfy the limits provided in §835.206(a) shall be avoided.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 206(c)

If the dose equivalent to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 sievert) by the time a worker declares her pregnancy, the declared pregnant worker shall not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 207

Author's Note: This requirement is implemented at both the site and facility level.

Any minor exposed to radiation and/or radioactive material during direct on-site access at a DOE site or facility shall not exceed 0.1 rem (0.001 sievert) total effective dose equivalent in a year.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 208

Author's Note: This requirement is implemented at both the site and facility level.

Any member of the public exposed to radiation and/or radioactive material during direct on-site access at a DOE site or facility shall not exceed 0.1 rem (0.001 sievert) total effective dose equivalent in a year.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 209(b)

Author's Note: This requirement is implemented at both the site and facility level.

With regard to inhalation exposures and external exposures from airborne radionuclides, compliance with this part shall be demonstrated through conformity with §835.101 and §835.202 which establishes the applicable regulatory limits.

11.3.3 Dosimetry Program

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 402(b)

Personnel external dosimetry programs shall be adequate to demonstrate compliance with §835.202, including routine dosimeter calibration and conformance with the requirements of the DOE Laboratory Accreditation Program for Personnel Dosimetry.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 402(d)

Internal dose evaluation programs shall be adequate to demonstrate compliance with §835.202.

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REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 801(a)

Radiation exposure data for individuals monitored in accordance with §835.402 shall be reported as specified in this section. The information shall include the data required under §835.702(c). Each notification and report shall be in writing and include: the DOE site or facility name, the name of the individual, and the individual's social security number or employee number.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 801(b)

Upon the request from an individual terminating employment, records of exposure shall be provided to that individual as soon as the data are available, but not later than 90 days after termination. A written estimate of the radiation dose received by that employee based on available information shall be provided at the time of termination, if requested.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 801(c)

Each DOE- or DOE-contractor-operated site or facility shall, on an annual basis, provide a radiation dose report to each individual monitored during the year at that site or facility in accordance with §835.402.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 801(d)

Detailed information concerning any individual's exposure shall be made available to the individual upon request of that individual, consistent with the provisions of the Privacy Act (5 U.S.C. 552a).

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 801(e)

When a DOE contractor is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, or planned special exposure in accordance with §835.204(e), the contractor shall also provide that individual with a report on his or her exposure data included therein. Such report shall be transmitted at a time not later than the transmittal to the Department.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 1304(b)

Author's Note: This requirement is implemented at both the site and facility level.

Nuclear accident dosimetry shall include the following:

- (1) A method to conduct initial screening of personnel involved in a nuclear accident to determine whether significant exposures to radiation occurred;
- (2) Methods and equipment for analysis of biological materials;

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(3) A system of fixed nuclear accident dosimeter units; and

(4) Personal nuclear accident dosimeters worn by all personnel who enter locations in which installed criticality alarm systems are required.

REQUIREMENT SOURCE: DOE ORDER 5480.11, Revision C03, Section 9.q(1)

Author's Note: Only (b), (c), and (e) apply.

(a) A method to conduct initial "screening" of personnel involved in nuclear accidents to determine if they have received a significant radiation exposure.

(b) Methods for analysis of biological materials (including sodium-24 activity in blood and phosphorus-32 activity in hair).

(c) A system of fixed units capable of yielding estimated radiation dose and the approximate neutron spectrum at their locations.

(d) Personnel dosimeters capable of furnishing sufficient information to determine neutron and gamma dose and/or dose equivalent.

(e) Counting facilities to evaluate fixed and/or personnel dosimeters, sodium in blood, and phosphorus in hair.

11.3.4 Calculation Methods and Models

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 4

Author's Note: This requirement is implemented at both the site and facility level.

Radiological units.

Unless otherwise specified, the quantities used in the records required by this part shall be clearly indicated in special units of curie rad, or rem, including multiples and subdivisions of these units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv), are only provided parenthetically in this part for reference with scientific standards. These SI units are not authorized for use in records required under this part.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 203(a)

The total effective dose equivalent during a year shall be determined by summing the effective dose equivalent from external exposures and the committed effective dose equivalent from intakes during the year. For purposes of compliance with this part, deep dose equivalent to the whole body may

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be used as effective dose equivalent for external exposures.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 203(b)

Determinations of the effective dose equivalent shall be made using the weighting factor values provided in §835.2.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 204(f)

The dose from planned special exposures is not to be considered in controlling future occupational dose of the individual under §835.202(a), but is to be included in records and reports required under this part.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 205(a)

Author's Note: This requirement is implemented at both the site and facility level.

Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin are to be assessed as specified in this section.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 205(b)

Author's Note: This requirement is implemented at both the site and facility level.

For purposes of demonstrating compliance with §835.202(a)(4), assessments shall be conducted as follows:

(1) Area of skin irradiated is 100 cm²[SIC] or more. The non-uniform dose equivalent received during the year shall be averaged over the 100 cm²[SIC] of the skin receiving the maximum dose, added to any uniform dose equivalent also received by the skin, and recorded as the shallow dose equivalent to any extremity or skin for the year.

(2) Area of skin irradiated is 10 cm²[SIC] or more, but is less than 100 cm²[SIC]. The non-uniform dose equivalent (H) to the irradiated area received during the year shall be added to any uniform dose equivalent also received by the skin, and recorded as the shallow dose equivalent to any extremity or skin for the year. H is the dose equivalent averaged over the 1 cm²[SIC] of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm²[SIC] divided by 100 cm²[SIC] (i.e., H = fD). In no case shall a value of f less than 0.1 be used.

(3) Area of skin irradiated is less than 10 cm². The non-uniform dose equivalent shall be averaged over the 1 cm² of skin receiving the maximum dose. This dose equivalent shall:

(i) Be recorded in the individual's occupational exposure history as a special entry; and

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(ii) Not be added to any other shallow dose equivalent to any extremity or skin recorded as the dose equivalent for the year.

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 209(c)

The estimation of internal dose shall be based on bioassay data rather than air concentration values unless bioassay data are:

- (1) unavailable;
- (2) inadequate; or
- (3) internal dose estimates based on representative air concentration values are demonstrated to be as or more accurate.

11.4 Radiation Area Access Control

11.4.1 Access Restrictions and Posting

Requirements for this subelement are located in the facility specific S/RID.

11.4.2 Radiation Work Permits

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.5 Radioactive Materials Management

11.5.1 Storage, Labels and Transportation

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.5.2 Movement of Material

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.5.3 Specific Nuclide Control

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.6 Contamination Control

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11.6.1 Personnel, Equipment and Area Contamination Control

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.6.2 Personnel, Equipment and Area Decontamination

Author's Note: Requirements for this subelement are located in the facility specific S/RID.

11.7 Laboratory Analysis

Author's Note: No Contract level requirements are applicable.

11.8 Radiological Protection Equipment and Supplies

Requirements pertaining to Radiological Protection Equipment and Supplies are contained in the facility specific S/RIDs.

11.8.1 Monitoring and Survey Instrumentation

REQUIREMENT SOURCE: 10 CFR 835, Dated 12-14-93, Part 401(c)

Author's Note: This requirement is implemented at both the site and facility level.

Instruments used for monitoring and contamination control shall be:

- (1) Periodically maintained and calibrated on an established frequency of at least once per year;
- (2) Appropriate for the type(s), levels, and energies of the radiation(s) encountered;
- (3) Appropriate for existing environmental conditions; and
- (4) Routinely tested for operability.

11.8.2 Respiratory Equipment and Supplies

Requirements to this subelement are located in contract level and facility OSHA functional areas.

11.8.3 Protective Clothing

Requirements pertaining to protective clothing are found in the facility specific S/RIDs.

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11.9 Radiation Protection of the Public and Environment

11.9.1 Dose Limits

Dose limits and other requirements related to general public exposures and exposures from discharges/effluents are included in the Environmental Protection Functional Area.

11.9.2 Liquid Waste Discharges

Requirements which specify control of radioactive liquid discharges to surface waters, aquifers or public sewerage systems are included in the Environmental Protection Functional Area and the Waste Management Functional Area.

11.9.3 Solid Waste Disposal

Requirements which regulate the disposal of solid radioactive waste are included in the Waste Management Functional Area.

11.9.4 Demonstration of Compliance

Requirements for the monitoring and surveillance of radioactive effluents are included in the Waste Management Functional Area and the Environmental Protection Functional Area.

11.10 Key Interfaces

To the extent practicable, all functional areas should consider their potential interface to Radiation Protection to ensure that plans and activities are reviewed based on the ALARA principle, and that potential releases to the environment are considered when radioactive materials are handled. Specific interface areas which have been identified are included as sub-elements.

11.10.1 Management Systems

An interface to Management Systems is needed to ensure that a commitment to radiation protection and ALARA is incorporated into every aspect of operations at the highest management level.

11.10.2 Quality Assurance

An interface to the Quality Assurance Functional Area is needed to ensure that the

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Radiation Protection Program is being implemented according to procedure, and that records are maintained such that they are retrievable and of good quality.

11.10.3 Configuration Management

Activities in the Configuration Management Functional Area must interface to the RP Functional Area to ensure that current radiation protection systems are not compromised by modifications, and that new activities receive the proper review in case new systems are needed.

11.10.4 Training and Qualifications

An interface to Training and Qualifications is necessary to ensure that the specific RP training requirements are included in the worker training profiles.

11.10.5 Emergency Planning

Because of the potential for emergency situations involving radioactive material and potential exposure of emergency response personnel, an interface to Emergency Planning is required.

11.10.6 Operations

An interface to the Operations Functional Area is needed to ensure that radiation protection and the ALARA principle is incorporated into daily operations.

11.10.7 Maintenance

An interface with the Maintenance Functional Area is needed because the monitoring systems used for radiation protection must have a maintenance plan, and because other areas of maintenance must be aware of potential radiation hazards.

11.10.8 Packaging and Transportation

Physical management of radioactive materials requires an interface to the Packaging and Transportation Functional Area to ensure proper labeling, packaging and transportation of those materials.

11.10.9 Environmental Protection

Because of the requirements for limiting release of radioactive materials to the

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environment, the RP Functional Area should interface to the Environmental Protection Functional Area to ensure a consistent approach to application of environmental protection requirements.

11.11 References

The following documents were used as requirement sources in the development of this S/RID:

10CFR835, Occupational Radiation Protection, 12-14-93

DOE 5480.11, Radiation Protection for Occupational Workers, Revision 03, 6/17/92

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RIDs by Document X-Reference Listing
Based on FDHC-RP-SD RID and including all documents.

10 CFR 835, Occupational Radiation Protection, Dated 12-14-93

DOE ORDER 5480.11, Radiation Protection for Occupational Workers, Revision C03

*** End of RIDs by Document X-Reference Listing ***

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12.0 Fire Protection

A Standards/Requirements Identification Document (S/RID) is the total list of the Environmental, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract level requirements for the Fire Protection (FP) program in place at Hanford. The FP Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement.

The reference documents and requirements included herein are those which mandate the

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inclusion of an element or subelement as an essential component in the development of a comprehensive Fire Protection Program in support of existing and future activities. It is not the intent of this document to identify all requirements which have a potential relevancy or application. For example, included in this document are references to NFPA Codes and Standards. This document has not specifically identified the requirements contained in applicable NFPA codes and standards. However, compliance with the salient details contained in NFPA Codes and Standards relevant to activities is required to be demonstrated. Additionally, some requirements contained in this document may be intentionally duplicated in facility S/RIDs. This is necessary in some cases to adequately capture implementation responsibilities at both the contract and facility level.

The requirements identified in this document are verbatim text from the referenced document. Due to the evolution cycle of documents, references identified in the requirements may not be to the latest revision. For example DOE Order 6430.1A references DOE Order 5480.7. The latest revision is 5480.7A.

Source document 5480.7A is utilized extensively throughout this document. Within the requirements extracted, by verbatim text, referrals are made to various sections within 5480.7A. Therefore, it is important to remember that requirements are associated with a topical element as defined in the table of contents. S/RID requirements are identified by source document, part, section or paragraph (e.g. DOE5480.7A Section 9.b.(15.).

Fire Department activities are to adhere with the requirements specified in applicable Washington State Administrative Codes (WACs). Therefore, the WACs are to be reviewed at regular intervals to verify that Fire Department activities comply with the current requirements specified.

Upon completion this document will be utilized as the basis to evaluate compliance of the Fire Protection Program being implemented at the Contract level with the requirements of DOE Orders and industry codes and standards.

The interface with other functional areas are defined to ensure total integration and support of a Fire Protection Program Plan across disciplines relevant to design, construction, and operational life activities. Section 12.7 provides a brief description of the interface with other functional areas.

12.1 Management and Administration

REQUIREMENT SOURCE: RLID 5480.7, Section 6.2

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Author's Note: The introduction and a and b are applicable to the company level. Subpart d(4), d(5) and d(8) are applicable to the facility level. Subpart l and m are applicable to both company and facility level.

In subpart J, prime contractors is intended to include all major subcontractors at the Hanford Site.

RL Contractors shall assure that facilities and programs under their jurisdiction provide a level of fire protection adequate to meet the objectives of DOE 5480.7A for protection of the public, personnel, environment, and property. RL Contractors shall also:

- a. Submit the "Annual Industrial Summary of Fire and Other Property Damage Experience" report (three copies) for the previous calendar year to the RL Director of QSH by February 1st of each year, as required by DOE 5484.1 and as supplemented by RL direction.
- b. Report fires to QSH and losses, in accordance with paragraph 8.8 of this directive.
- c. Property loss valuation shall be determined by utilizing the property valuation and loss estimation guidelines found in DOE 5484.1.
- d. Schedule and perform fire protection assessments for all facilities, including those for which the contractor has only landlord or lessee responsibility. Assure that the fire protection program elements, described in DOE 5480.7A and this directive, are being implemented.
 - (1) Annual fire protection assessments shall be made of facilities valued in excess of \$50 million; where considered to be moderate (Category 2 Hazard) or high hazard (Category 1 Hazard), as defined in DOE 5481.1B, for non-nuclear facilities and in DOE 5480.23, for nuclear facilities; or in which vital programs are involved.
 - (2) Fire protection assessments shall be made at least every two years of facilities valued at \$10 million to \$50 million.
 - (3) Fire protection assessments shall be made at least every three years of facilities valued and \$1 million to \$10 million.
 - (4) Except for paragraph 6.2d.(5) of this directive, fire protection facility assessments shall contain the required nature and scope elements contained in DOE 5480.7A. Facility assessments shall also contain findings and observations of fire protection deficiencies identified.
 - (5) Facilities, where property is less than \$1 million, shall not require a fire protection facility assessment that contains the required nature and scope elements contained in DOE 5480.7A, unless significant programmatic impacts, hazardous materials, or radioactive materials are involved. Such facility assessments shall be made at least every three years.

Exception: A fire protection assessment shall be made at least every three years of facilities

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valued at \$250,000 to \$ 1 million. The documented assessment for these facilities only needs to include findings, observations, and recommendations. Where applicable, these assessments should include, as a minimum, findings and observations and supporting documentation that identify fire hazards that could cause facility loss or life safety concerns.

(6) Fire protection facility assessments shall be retained by the contractor, and made available to RL representatives upon request. Copies of the two most recent assessment reports shall be kept readily accessible on file.

(7) Facility assessments findings, observations, and/or recommendations shall be entered into data base tracking system and assigned and appropriate prioritization, to ensure that effective actions are being taken to correct deficiencies identified in accordance with RLID 1000.1.

(8) MCFL and MPFL values described in the assessments shall be as required by DOE 5480.7A utilizing the property valuation and loss estimation guidelines found in DOE 5484.1.

(9) Maintain a list of facilities which require assessment, indicating the assessment frequency.

e. Perform FHA of facilities in accordance with DOE 5480.7A and EH-31.3, Guidance on Performance of Fire Hazard Analyses, memorandum dated 11-07-91. FHA shall be completed for all new facilities, as required by DOE 6430.1 version in effect, and all existing nuclear facilities, where safety analyses are required by DOE 5480.23. The development of a facility design basis fire in accordance with DOE 6430.1 version in effect, as required in safety analysis documentation, must be consistent with the MPFL event and documented in the facility FHA.

The FHA shall be referenced by the safety analysis documentation. MCFL and MPFL values described in the FHA shall be as required by DOE 5480.7A, utilizing the property valuation and loss estimation guidelines found in DOE 5484.1. New facility and nuclear facility FHA shall be reviewed and approved by QSH. When directed by the PSO, the FHA shall also follow the same review and approval process as safety analysis documentation for DOE 5480.23. A copy of the current FHA shall be retained by the contractor and be kept readily accessible on file.

f. Provide fire protection overview and assistance for subcontractor activities and facilities.

g. Carry out those responsibilities assigned by DOE 5480.7A, paragraphs 8i(1) through 8i(8), and comply with the applicable provisions of DOE 6430.1 versions in effect.

h. Establish a written and documented fire protection program for facilities and operations managed, including:

(1) A statement of management commitment to achieve the above stated objectives.

(2) A policy statement that implements DOE 5480.7A, other DOE fire protection related mandatory codes and standards, and requirements contained in this directive.

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(3) Fire protection criteria that reflect site-specific aspects of the fire protection program, including the organization and responsibilities of the fire protection staff, administrative aspects of the Fire Protection Program, and requirements for physical fire protection features.

(4) See paragraph 8.12 of this directive for guidance on developing the documented fire protection program.

i. Maintain a current statement of programmatic impact on every vital program, as determined by RL or the PSO. The statement of programmatic impact will be updated every three years. The statement will include facilities, material, and equipment that are vital to the operation of that program.

j. Each prime contractor shall have on staff at least one qualified Fire Protection Engineer (see paragraph 5.2).

k. Provide and maintain a system to ensure that the requirements of the DOE Fire Protection Program are documented and incorporated in the plans and specifications for all new facilities, and for major modifications of existing facilities. This includes review and comment by the fire protection engineering group of design documentation and testing of fire protection features.

l. Provide fire protection representation at the Hanford Fire Protection Forum meeting, as described in the Hanford Fire Protection Forum Charter.

m. Attend and provide representation at the monthly program interface meetings with the RL fire protection representative.

12.1.1 Management

REQUIREMENT SOURCE: 29 CFR 1910, Dated 07-01-95, Part 156(a)

Scope and application

(1) Scope. This section contains requirements for the organization, training, and personal protective equipment of fire brigades whenever they are established by an employer.

(2) Application. The requirements of this section apply to fire brigades, industrial fire departments and private or contractual type fire departments. Personal protective equipment requirements apply only to members of fire brigades performing interior structural fire fighting. The requirements of this section do not apply to airport crash rescue or forest fire fighting operations.

REQUIREMENT SOURCE: 29 CFR 1926, Dated 07-01-95, Part 150(a)(1)

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Occupational Health and Safety Standards for the Construction Industry - Fire Protection - General requirements. The employer shall be responsible for the development of a fire protection program to be followed throughout all phases of the construction and demolition work, and he shall provide for the firefighting equipment as specified in this subpart. As fire hazards occur, there shall be no delay in providing the necessary equipment.

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 8.i

Author's Note: Numbers 1 and 4 apply to Fluor Daniel Hanford Company, and all major subcontractors. Number 6 applies jointly to both the company level and the facility level. The rest of the numbers apply to the facility level.

Contractor Organizations.

As required by the PSO or the Heads of Field Organizations and directed by the Contracting Officer, contractors shall be required to:

- (1) Provide and maintain a level of fire protection to meet the objectives of paragraph 4, and the criteria of paragraph 9.
- (2) Provide and maintain a system to ensure that the requirements of the DOE fire protection program are documented and incorporated in the plans and specifications for all new facilities and for major modifications of existing facilities. This includes review and comment by a qualified fire protection engineer of plans, specifications and test procedures and results for fire protection features.
- (3) Assists DOE in coordinating fire safety assessments at those facilities included in the survey program, establish action plans for compliance with recommendations resulting from the assessments, and forward compliance plans, exemption requests, and other requested data to DOE field organizations.
- (4) Establish and maintain a list of facilities for which the contractor has fire protection assessment responsibility.
- (5) Conduct fire protection assessments of facilities according to the scope and frequency established by this Order.
- (6) Provide fire protection technical assistance to DOE.
- (7) Submit request for exemptions and fire safety equivalencies to the Head of the Field Organization for those facilities where compliance with specific program elements is not attainable and where an acceptable level of safety has been achieved.
- (8) Maintain or have access to an adequate fire protection staff, including a qualified fire

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protection engineer(s). Continuing education and training should be provided to maintain and enhance the level of competency of the fire protection staff.

12.1.2 Administrative

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9 Paragraph 1

A DOE facility shall be characterized by a level of fire protection sufficient to fulfill the requirements for the best protected class of industrial risks (Highly Protected Risks/Improved Risks). This program is characterized by the inclusion of a continuing, sincere interest on the part of management and employees in minimizing losses from fire and related perils and the inclusion of preventive features necessary to ensure the satisfaction of objectives related to safety.

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9 Paragraph 2

Based on the above paragraph the DOE Fire Protection Program shall meet or exceed the minimum requirements established by the National Fire Protection Association as directed by the PSO. Basic requirements shall include: a reliable water supply of acceptable capacity for fire suppression; noncombustible construction of an acceptable nature for the occupancy of the facility; automatic fire extinguishing systems; a fully staffed, trained, and equipped emergency response force; a means to summon the emergency response force in the event of a fire; and a means to notify and evacuate building occupants in the event of a fire. For areas subject to significant life safety risks, serious property damage, program interruption, or loss of safety class equipment as defined in the relevant facility SAR, additional protection measures may be necessary as determined by the AHJ.

12.2 Fire Protection Program

Note: Application of Codes and Standards .

The fire protection related codes and standards in effect when facility design commences (code of record) remain in effect for the life of the facility. When modifications of a substantial nature occur, as determined by the authority having jurisdiction (AHJ), the current edition of the code shall apply to the modification.

EXCEPTION: If there is significant hazard that endangers building occupants or the public, as determined by the AHJ, the facility shall be upgraded to the requirements of the current edition of the code of standards.

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 5 Introduction, and 5.a thru 5.h

5. **MANDATORY FIRE PROTECTION CRITERIA.** Fire protection criteria, delineated in the following codes, standards and other documents are the minimum requirements for the implementation of the DOE Fire Protection Program. These criteria are mandatory as a result of

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statutory requirements or DOE policy requirements. Where conflicts in the application of these codes and standards arise, the more restrictive requirements apply.

- a. Code of Federal Regulations (CFR) 29, Part 1910.
- b. CFR 29, Part 1926.
- c. National Fire Protection Association (NFPA) Codes and Standards.
- d. DOE 5480.4, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION STANDARDS, of 5-15-84, which specifies requirements for the application of environmental protection, safety, and health standards.
- e. DOE 6430.1A, GENERAL DESIGN CRITERIA, of 4-6-89, which provides general design criteria for use in the acquisition of the Department's facilities.
- f. DOE/EP-0108, "Standard for Fire Protection of AEC Electronic Computer Data Processing Systems".
- g. DOE/EV-0043, 8-79, "Standard on Fire Protection for Portable Structures".
- h. Other DOE Orders and statutory requirements, not listed above, that contain requirements of a more limited extent relating to the DOE Fire Protection Program.

12.2.1 Fire Protection Suppression Systems

Author's Note: Requirements relevant to fire protection suppression systems are addressed in the facility level S/RID.

12.2.2 Water Supply and Distribution Systems

12.2.2.1 Water Supply Systems

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9.b.(8)

Author's Note: Although facility involvement may be required for adequate implementation, this requirement is cited in this document because the company organization is responsible for the actual delivery of the water supply.

Fire Protection Water Supply - An automatic water supply for fire protection having a minimum two hours stored water capacity shall be maintained. Municipal supplies having the same capability are acceptable. Facilities having a MPFL in excess of \$50 million shall be provided with an additional, independent source of fire protection water.

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A water supply dedicated for fire protection may be necessary as determined by the PSO. A dedicated system shall be able to meet hose stream and sprinkler system demands.

A combined fire and process/domestic system shall be able to deliver the fire demand plus the maximum daily domestic demand for the required duration.

REQUIREMENT SOURCE: DOE ORDER 6430.1A, Division 15, Section 1540-99.0.5

Author's Note: The abbreviation DBA stands for Design Basis Accident.

On-site water supplies and other utilities shall be provided as necessary for emergency use. The design of each utility service or cooling water system shall consider the demands for normal operations, anticipated operational occurrences, and DBA conditions.

12.2.2.1.1 Mains, Water Storage, and Fire Pumps

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 1.d

Fire flows shall be available for a period of at least two hours. A minimum four-hour supply shall be provided for large building sites, or groups of combustible buildings. Combined systems serving fire protection and other water demands (domestic and/or process), the supply and its distribution system shall be adequately sized to serve the combined peak flow for all uses. When storage tanks are used for combined service water and fire protection water, the minimum volume for fire uses shall be assured by dedicated tank(s) or other physical means, such as a vertical standpipe.

12.2.2.1.2 Redundant Water Supply

REQUIREMENT SOURCE: DOE ORDER 6430.1A, Division 15, Section 1530-99.0[17]

Author's Note: The abbreviation DBE stands for Design Basis Earthquake.

The water supply for the permanent fire protection installation shall have a minimum of two reliable, independent sources each with sufficient capacity (based on maximum demand) for firefighting until other sources become available. Only one of these two sources shall be required to be DBE qualified.

12.2.2.2 Water Distribution System

12.2.2.2.1 Fire Hydrant Capacity

REQUIREMENT SOURCE: DOE ORDER 6430.1A, Division 2, Section 0266-4[02]

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Domestic water distribution systems that also serve fire protection requirements shall be designed to satisfy fire flow requirements plus 50 percent of the average domestic requirements plus any industrial or process demands that cannot be reduced during a fire.

REQUIREMENT SOURCE: DOE ORDER 6430.1A, Division 2, Section 0266-4[03]

Each fire hydrant within the distribution system must be capable of delivering 1000 gpm at a residual pressure of not less than 10 psi. Where domestic water distribution systems are to serve internal fire protection systems (i.e. sprinklers or foamite systems), adequate residual pressures shall be maintained for proper operation of such fire protection systems.

12.2.2.2.2 Dedicated Water Storage and Distribution Systems

REQUIREMENT SOURCE: DOE ORDER 6430.1A, Division 15, Section 1530- 9[1]

Wherever practical, dedicated fire water storage and distribution systems shall be used. If a dedicated fire water supply system cannot be provided, the fire protection water supply shall assure availability regardless of simultaneous process and domestic water usage.

12.2.2.2.3 Underground Fire Water System Design, Installation, Testing, and Operation

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 1.a

Distribution mains, either sanitary or raw water, that are being extended to supply water for domestic and/or process water and will provide water for fire suppression systems (sprinklers and/or hydrants), shall be at least 12 inches in diameter.

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 1.b

Sectional valves shall be installed in the following manner for new installations and water distribution main upgrades:

(1) Multiple sectional isolation valves shall be provided at each intersection between a supply source and a main loop (one valve for each leg).

(2) Sectional valves shall be installed in accordance with a point system, such that no more than six points accumulate between sectional valves. The points for this arrangement are: one point for a fire hydrant, and two points for an automatic sprinkler system.

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 1.c

Water supplies for fire protection shall be of the looped grid type, providing two points of supply and two-way flow with sectional valving arranged to provide alternate water flow paths from the source to any point in the distribution system, where MPFL exceeds \$1 million.

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12.2.3 Construction

REQUIREMENT SOURCE: RLID 5480.7, Section 8.4.a

Fire protection must be provided on all construction sites, as required by applicable sections of NFPA 241, Safeguarding Construction, Alteration, And Demolition Operations, and NFPA 1141, Fire Protection In Planned Building Groups.

REQUIREMENT SOURCE: RLID 5480.7, Section 8.4.b

Where underground water mains and hydrants are to be provided, they shall be installed, completed, and in service, prior to accumulation of combustible materials on the project site, and prior to the completion of any project structure.

REQUIREMENT SOURCE: RLID 5480.7, Section 8.4.c

Construction sites shall provide and maintain fire department vehicle access. The access roads shall have an unobstructed driving surface width of at least 20 feet during all weather conditions, and be able to withstand the live loads of fire department apparatus.

12.3 Fire Alarm and Detection

Requirements for Fire Alarm and Detection are located in the facility Fire Protection Functional Area. For Testing and Maintenance requirements, see Inspection, Testing, and Maintenance section of this document.

12.4 Fire Prevention (Building Design)

"Fire prevention requirements shall comply with 29 CFR 1910, NFPA 1, Fire Prevention Code and Authority, Responsibilities, and Duties of the Hanford Fire Marshall Attachment of the Fire Prevention Program description contained in the HANFORD CHAPTER of the DOE FIRE PROTECTION RESOURCE MANUAL."

Author's Note: Per DOE 5480.7A, this order has primacy over all other DOE Orders with respect to matters concerning Fire Protection.

Fire protection requirements for the storage and use of compressed gases, acetylene, hydrogen, flammable and combustible liquids, and LPG shall be in accordance with 29 CFR 1910 Subpart H, Hazardous Materials, and NFPA 1 Fire Prevention Code.

Electrical installations shall comply with the National Electrical Code, NFPA 70.

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Air filter units shall meet the requirements of UL 586 "High Efficiency Particulate Air Filter Units" and UL 900 "Test Performance for Air Filter Units".

Applicable requirements are found in the facility specific S/RID.

12.5 Fire, HAZMAT and Medical Support

Note: It is not currently known by legal interpretation if the WAC-246-976 and WAC-296-305 are required at Hanford by statute. Hanford Fire Department ambulance emergency medical services operate under the Mid-Columbia EMS AND TRAUMA councils designated Medical Program Director, and ambulances are licensed through the State of Washington Department of Health. Other Hanford Fire Department emergency services are provided in State jurisdictions (outside of Hanford boundaries) under mutual agreements. As such, compliance with WAC-246-976 and WAC-296-305 are included in this Fire Protection Functional Area.

12.5.1 Fire Department

Author's Note: The Hanford Fire Department is the designated incident command agency for hazardous materials events, fire suppression activities, emergency medical and ambulance needs, and special emergency rescue situations, excluding State Highways 240 and 24, which are the responsibility of the Washington State Patrol. This designation is registered by DOE-RL with the State of Washington.

REQUIREMENT SOURCE: RLID 5480.7, Section 6.3

Author's Note: In Subpart C, fire districts is meant to imply fire departments.

The Hanford Fire Department shall provide fire suppression, rescue, emergency medical and ambulance services, and hazardous material response, that are capable of dealing with the terminating emergency situations, which could threaten the operations, employees, environment, or property on the Hanford Site. The Hanford Fire Department shall also:

- a. Comply with applicable fire department provisions of DOE 5480.4 and DOE 5480.7A.
- b. Provide emergency response support, as required by agreements or contracts, to other entities or agencies, on the Hanford Site.
- c. Maintain mutual aid agreements with surrounding area fire districts.
- d. Develop, administer, and enforce the Fire Prevention Program for the Hanford Site, as

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contained in the Authority, Responsibilities, and Duties of the Hanford Fire Marshal Attachment of the Fire Prevention Program description contained in the Hanford Chapter of the DOE Fire Protection Resource Manual. The Fire Prevention Inspection Program shall apply to all site activities, including operations, demolition, and construction.

- e. Provide appropriate sitewide fire protection system inspection, testing, and maintenance for fire alarm and fire suppression systems.
- f. Perform self-contained breathing apparatus maintenance.
- g. Maintain confined space entry and other emergency rescue readiness, as required by 29 CFR 1910.
- h. Develop and maintain pre-fire plans for all major Hanford facilities and operations.
- i. Be the designated hazardous materials incident command agency for the Hanford Site.
- j. Act as the lead emergency response organization and provide incident command, as required by DOE 5480.4 for fire suppression, emergency medical and ambulance service, special emergency rescue, and hazardous material events for Hanford Site operations.
- k. Provide fire protection representation at the Hanford Fire Protection Forum meeting, as described in the Hanford Fire Protection Forum Charter.
- l. Attend and provide representation at the monthly program interface meetings with the RL fire protection representative.

12.5.1.1 Plans, Procedures, Devices, and Trained Personnel

REQUIREMENT SOURCE: RLID 5480.7, Section 8.7

Employees must be provided annual fire prevention training. The training must be documented and include:

- a. Good housekeeping practices.
- b. Proper response and notification in the event of fire.
- c. Instructions on the use of portable fire extinguishers. Employees, who perform fire watches, must receive hands-on portable fire extinguisher training, as required by 29 CFR 1910.
- d. Recognition of potential fire hazards.

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12.5.2 Contingency Plan and Emergency Responses

REQUIREMENT SOURCE: DOE ORDER 5500. 3A, Revision C01, Section 11.c.(7)

Medical Support. Provisions must be in place for medical support for workers, including those with radiological and/or hazardous material contamination, and must include:

- (a) Immediate, onsite first aid and emergency medical treatment capability;
- (b) Transportation of injured onsite personnel to onsite or offsite medical facilities, as appropriate; and
- (c) Documented arrangements with onsite and offsite medical facilities to accept and treat contaminated, injured personnel.

REQUIREMENT SOURCE: DOE/RL-91-28, Revision 1, Appendix 7A, Section 3.0

The overall responsibility for implementation of this Plan lies with the building emergency director (BED) or their designated alternates. The BED has the responsibilities of the Emergency Coordinator as discussed in WAC 173-303-360 and is also the Event Commander. A list of all BEDs and alternates is maintained at various locations throughout the Hanford Facility, and these individuals can be reached 24 hours a day. The BEDs have the authority to commit all necessary resources (both equipment and personnel) to respond to any emergency. Additional responsibilities have been delegated to Hanford Fire Department personnel who are authorized to act for the BED when the BED is absent. These Hanford Fire Department personnel have the authority to commit all necessary resources (both equipment and personnel) to respond to any emergency.

Response by a BED (or an Emergency Coordinator) usually is obtained through the DOE-RL single point-of-contact by dialing telephone number 811[SIC] or 373-3800 or 375-2400. The single point-of-contact has been designated as the contact point to mobilize a response to any Hanford Facility emergency. The single point-of-contact is available at all times and has the responsibility to initiate notifications to the BED or alternate to begin responses to emergencies, as well as to dispatch emergency responders (Hanford Fire Department, Hanford Patrol, or ambulance services). All emergency notifications to the BED, building managers, etc., can be made directly from the affected TSD unit or through the single point-of-contact.

The unit-specific DOE-RL technical contact responds to regulatory agency inquiries regarding this Plan. The unit-specific DOE-RL technical contact is accessed by contacting 373-3800 or 375-2400.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 340 Introduction and (1)

Facilities must be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or nonsudden release of dangerous waste or dangerous

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waste constituents to air, soil, or surface or ground water which could threaten the public health or the environment. This section describes preparations and preventive measures which help avoid or mitigate such situations.

(1) Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

- (a) An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel;
- (b) A device, such as a telephone or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;
- (c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- (d) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 340(2)

Access to communications or alarms. Personnel must have immediate access to the signalling devices described in the situations below:

- (a) Whenever dangerous waste is being poured, mixed, spread, or otherwise handled, all personnel involved must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (1) of this section;
- (b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone or a hand-held, two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (1) of this section.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 340(3)

Aisle space. The owner or operator must maintain aisle space to allow the unobstructed movement

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of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 340(4)

Arrangements with local authorities. The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations, unless the hazards posed by wastes handled at the facility would not require these arrangements:

- (a) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of dangerous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;
- (b) Arrangements to familiarize local hospitals with the properties of dangerous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility;
- (c) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and
- (d) Where more than one party might respond to an emergency, agreements designating primary emergency authority and agreements with any others to provide support to the primary emergency authority.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 340(5)

Where state or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(1)

Purpose. The purpose of this section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment in the event of an emergency circumstance, including a fire, explosion, or unplanned sudden or nonsudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or ground water by a facility. A contingency plan must be developed to lessen the potential impacts of such emergency circumstances, and the plan must be implemented immediately in such emergency circumstances.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(2)

Contingency plan. Each owner or operator must have a contingency plan at his facility for use in

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emergencies or sudden or nonsudden releases which threaten the public health and the environment. If the owner or operator has already prepared a spill prevention control and countermeasures (SPCC) plan in accordance with Part 112 of Title 40 CFR or Part 1510 of chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate dangerous waste management provisions that are sufficient to comply with the requirements of this section and WAC 173-303-360.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(3)

The contingency plan must contain the following:

- (a) A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360;
- (b) A description of the actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(5), Manifest system, reasons for not accepting dangerous waste shipments;
- (c) A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in WAC 173-303-340(4);
- (d) A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under WAC 173-303-360(1). Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates. For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application;
- (e) A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities; and
- (f) An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(4)

Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:

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- (a) Maintained at the facility; and
- (b) Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 350(5)

Amendments. The owner or operator must review and immediately amend the contingency plan, if necessary, whenever:

- (a) Applicable regulations or the facility permit are revised;
- (b) The plan fails in an emergency;
- (c) The facility changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency;
- (d) The list of emergency coordinators changes; or
- (e) The list of emergency equipment changes.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 360(1)

Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 360(2)

Emergency procedures. The following procedures must be implemented in the event of an emergency.

- (a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:
 - (i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

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- (ii) Notify appropriate state or local agencies with designated response roles if their help is needed.
- (b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal [sic] extent of any released materials.
- (c) Concurrently, the emergency coordinator must assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.
- (d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, he must report his findings as follows:
 - (i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and
 - (ii) He must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).
- (e) His assessment report must include:
 - (i) Name and telephone number of reporter;
 - (ii) Name and address of facility;
 - (iii) Time and type of incident (e.g., release, fire);
 - (iv) Name and quantity of material(s) involved, to the extent known;
 - (v) The extent of injuries, if any; and
 - (vi) The possible hazards to human health or the environment outside the facility.
- (f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- (g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- (h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
 - (i) The emergency coordinator must ensure that, in the affected area(s) of the facility:

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- (i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
- (ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- (j) The owner or operator must notify the department, and appropriate local authorities, that the facility is in compliance with (i) of this subsection before operations are resumed in the affected area(s) of the facility.
- (k) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, he must submit a written report on the incident to the department. The report must include:
 - (i) Name, address, and telephone number of the owner or operator;
 - (ii) Name, address, and telephone number of the facility;
 - (iii) Date, time, and type of incident (e.g., fire, explosion);
 - (iv) Name and quantity of material(s) involved;
 - (v) The extent of injuries, if any;
 - (vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable;
 - (vii) Estimated quantity and disposition of recovered material that resulted from the incident;
 - (viii) Cause of incident; and
 - (ix) Description of corrective action taken to prevent reoccurrence of the incident.

12.5.2.1 Site Emergency Organizations

REQUIREMENT SOURCE: DOE/RL-91-28, Revision 1, Appendix 7A, Section 7.6

The Hanford Facility has fire and patrol personnel trained and equipped to respond in emergency situations. The Hanford Fire Department is the Hazardous Materials Incident Command Agency for the Hanford Site and has a Hazardous Materials Response Team that is trained to stabilize and control hazardous materials emergencies. A description of equipment for hazardous materials responses available through the Hazardous Materials Response Team is given in Table 3. Locations of the four fire stations on the Hanford Facility are shown on Figure 1.

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The Hanford Patrol provides support to the Hanford Fire Department during an incident, including such activities as activation of area crash alarm telephone systems or area sirens (for evacuation or take cover), access control, traffic control, and assistance in emergency notifications.

12.5.2.2 Mutual Aid

Author's Note: Mutual Aid is addressed by subelement 12.5.1 (RLID5480.7, Section 6.3)

12.5.2.3 Medical Response

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.f

Emergency and Disaster Preparedness.

(1) Integrated Emergency and Disaster Preparedness Planning. The Site Occupational Medical Director is responsible for the development of the medical portion of the site emergency and disaster plan. This input shall be closely integrated with, and made a part of, the overall site emergency and disaster preparedness plan in accordance with DOE 5500.1B. It will require coordination and cooperation with management, emergency preparedness coordinators, safety, health physics, the industrial hygiene, fire and rescue units, security organizations, and offsite medical facilities.

(2) Integration with Community Emergency and Disaster Plans. The occupational medical portion of the site emergency and disaster plan shall also be integrated with surrounding community emergency and disaster plans to the extent consistent with the development of a mutual aid and assistance capability.

(3) Preplanning Requirements.

(a) The medical portion of the site emergency and disaster response capability shall be adequate to meet the type and severity of accidents and trauma dictated by the character and history of plant operations and conditions.

(b) Preplanning and rearrangements are key factors vital to the effectiveness of the medical portion of the site emergency and disaster plan and shall provide the following:

1 Onsite capabilities for medical aid and triage, and personnel decontamination by trained, qualified personnel which shall include onsite capability for cardiopulmonary resuscitation, cardiac defibrillation and advanced cardiac life support;

2 Services of health physicists and industrial hygienists to evaluate any associated radiological or chemical hazards affecting the environment, the casualties, or the general public, and to assist

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rescue and medical personnel;

3 Arrangements for hospital care shall include the capability to evaluate and treat injuries resulting from exposure to radiation and/or toxic materials, including internal and external contamination, as appropriate;

4 Services of medical specialists and consultants;

5 Services of rescue squads, ambulances (ambulance personnel shall meet the U.S. Department of Transportation guides or State requirements), and helicopters, as needed, with capability for handling radioactively contaminated casualties;

6 Medical aid coverage during evacuation operations from facilities and the site; and

7 Communication links between medical aid and triage teams, fire and rescue units, hospitals and hospital teams, local and State police, and DOE Emergency Operating Center.

12.6 Assessment

12.6.1 Fire Protection Investigation and Reporting

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 8

Fire investigations and reports shall be performed and prepared, in accordance with DOE 5000.3B and DOE 5485.1.

12.6.1.1 Design Assessment

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9.a.(2)

Author's Note: Frequencies determined by the AHJ are found in element 12.1, Management and Administration, Requirement Source RLID 5480.7, Section 6.2.d.

Author's Note:

*Headquarters requirements are not applicable to contractor.
Contractors/Facility Managers:*

- bullets 1-3 and 5 apply to facility;
- bullets 4 and 5 apply to company.

Program-Related applies to both company and facility levels.

- bullets 1, 3-6 apply to the company;

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- bullets 2-4 and 7-8 apply to the facility.

Facility-Related applies to facility-level.

Combined Aspects (Program & Facility) applies to both company and facility levels.

- bullets 1-3 apply to the company;
- bullets 3-7 apply to the facility.

Assessments. Documented evaluations of the fire protection program, including field walkthroughs of facilities, shall be performed as follows:

(a) Facilities/contractors shall be assessed to establish that they conform with DOE fire protection criteria.

(b) Minimum Frequency

Headquarters:

PSO assessment of field offices 3 years

EH assessment of program offices 3 years

Field Office:

Field office assessment of the fire protection program of each contractor 2 years

Contractors/Facility Managers:

Annual fire protection assessments shall be made of facilities valued in excess of \$50 million; where considered to be a moderate (Category 2 Hazard) or high hazard (Category 1 Hazard) as defined in DOE 5481.1B, SAFETY ANALYSIS AND REVIEW SYSTEM, for nonnuclear facilities and in DOE 5480.23, NUCLEAR SAFETY ANALYSIS REPORTS, for nuclear facilities; or in which vital programs are involved.

Fire protection assessments shall be made at least every two years of facilities plus equipment valued at \$10 million to \$50 million.

Remaining facilities shall be assessed at least every three years or at frequencies determined by the AHJ.

Comprehensive assessments of fire protection program elements shall be made every two years.

Copies of the two most recent assessment reports shall be kept on file.

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(c) Nature and Scope - Assessments shall include an evaluation of the following elements of the fire protection program:

Program-Related:

- Comprehensiveness of the fire protection program.
- Procedures for engineering design and review.
- Procedures for maintenance, testing and inspection.
- Fire protection engineering staff (number, qualifications, training).
- Fire suppression organization (personnel and training).
- Fire suppression mutual aid agreements.
- Management support.
- Exemptions and documented equivalencies.

Facility-Related:

- Fire protection of safety class equipment.
- Life safety considerations.
- Fire protection of vital programs.
- Fire protection of high value property.
- Fire suppression equipment.
- Water runoff.
- Pre-fire plans.
- Fire apparatus accessibility.
- Completeness of fire hazards analyses.
- Fire barrier integrity.
- Completeness of fire loss potential (MPFL/MCFL) determinations.
- Fire safety training.

Combined Aspects (Program & Facility):

- Inspection, testing, and maintenance reports.
- Adequacy of facility appraisal reports.
- Tests of fire suppression systems, water supplies, and procedures for maintaining these in working order.
- Administrative controls.
- Temporary protection and compensatory measures.
- Status of findings from previous assessments.
- Conformance with applicable Orders, codes and standards.

12.6.1.2 Inspection, Testing and Maintenance

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9.b.(5)

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Testing and Maintenance - Fire protection systems shall be tested and maintained in accordance with the applicable NFPA standards and as supplemented by criteria in the DOE Fire Protection Resource Manual.

12.6.2 Control of Fire Protection Impairments

REQUIREMENT SOURCE: DOE ORDER 5480. 7A, Section 9.b.(16)

Impairment Control - A fire protection system impairment program shall be provided for control of operation and tracking of impairments during periods when fire protection systems are out of service.

REQUIREMENT SOURCE: RLID 5480. 7, Section 8. 6

The Fire Protection Program must include a fire protection system impairment strategy to minimize the duration and impact of fire protection system impairments. Elements of the fire protection impairment strategy must provide that:

- a. Fire protection system impairments are identified, assigned priority, and promptly corrected in a reasonable amount of time.
- b. A documented impairment program is administrated by trained personnel.
- c. Fire protection staff and fire department personnel are advised and updated on impairments.
- d. A policy is established for immediate and expedient repair of impairments.
- e. Compensatory measures are implemented until the impaired system is restored.

12.7 Key Interfaces

The implementation and administration of a Fire Protection Program requires the identification of the interfaces with other functional areas. These interfaces are defined such that applicable requirements are defined and controlled in the appropriate functional area and are not repeated in any other functional area.

Specific interface boundaries between the Hanford Fire Department (HFD) and other functional areas are defined in the following sections:

12.7.1 Safeguards and Security

Key interfaces with WHC Safeguards and Security organization are necessary for

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successful completion of emergencies responses by HFD. This to include control of traffic and persons near the emergency site, securing the area for purposes of investigation and preservation of evidence. Safeguards and Security provides emergency dispatch services to HFD for all calls except box alarms.

12.7.2 Radiation Protection

Key interfaces with Radiation Protection are vital to the protection of HFD personnel when responding to emergencies where radiation is present or could be present. Coordinated support to provided both onsite and offsite for monitoring and hazard assessment.

12.7.3 Training and Qualification

Key interfaces with Training and Qualification are necessary for technical support of HFD activities, both emergency and non-emergency such as: taking of specialized training for haz mat personnel; delivery of training for rad workers; and coordination of required FDH training courses for managers, safety, and workers.

12.7.4 Environmental Protection

Key interfaces with Environmental Protection are necessary to continue compliance with the RCRA Permit for the Hanford Site as HFD completes all inspections as required by the permit and provides resources as listed in the permit application.

12.7.5 Emergency Management

Key interfaces with Emergency Management are necessary for HFD involvement in site-wide drills and exercises and during periods when emergencies occur by support HFD Incident Command system and interfacing with Event Scene Command (BED) in a coordinated manner.

Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

Key interfaces with EM are not required to support the activities of the Fire Protection Programs group.

12.7.6 Fire Protection Program

Key interfaces with Fire Protection Programs are necessary to ensure design features needed to mitigate fire hazards are incorporated into design and installation work done on

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Site as a part of fire engineering, fire protection, and fire prevention.

12.7.7 Construction

Key interfaces with Construction are necessary to maintain Codes and Standards compliance for a new and remodeled facilities related to fire prevention and fire protection services, water supplies, and installed fire protection systems and equipment.

12.7.8 Maintenance

Key interfaces with Maintenance are necessary to provide compliance with Fire and Life Safety Codes and Standards and to continue fire protection features of installed fire systems, portable equipment, fire prevention requirements, and other fire safety requirements.

12.7.9 Operations

Key interfaces with Operations are necessary to provide HFD support services for Acceptance Test Procedures (ATP's) on installed fire protection systems, Pre-Fire Plans, Fire Department Access, and other fire and life safety from fire requirements.

Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

Key interfaces between fire protection and Operations occur predominantly at the facility level. Operations supports Fire Protection Programs in the development of fire hazards analyses.

12.7.10 Waste Management

Key interfaces with Waste Management are necessary for control of hazardous materials or processes, inspection, maintenance and testing of fire protection systems, and performance of required fire prevention inspections under the RCRA requirements. Provides hazardous emergency response support as required.

12.7.11 Nuclear Safety

Key interfaces with Nuclear Safety are necessary due to the possibility of emergency situations involving radioactive materials either in storage, process, or transportation on-site or off-site.

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Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

The Nuclear Safety functional area supports the Fire Protection Programs functional area in the development of fire hazards analyses.

12.7.12 Occupational Safety and Health

Key interfaces with Occupational Safety and Health are necessary to ensure compliance with Fire Prevention and Protection Codes and Standards in effect on the Site.

Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

This functional area interfaces with the Fire Protection Programs group to ensure that the appropriate OSHA fire protection requirements are implemented in to site programs.

12.7.13 Configuration Management

Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

Configuration Management provides the procedures and processes for generating, storing, and retrieving the documents that are required by the fire protection program.

12.7.14 Engineering Program

Specific interface boundaries between the Fire Protection Programs organization are defined in the following section:

Key interfaces between fire protection and engineering occur predominantly at the facility level. Engineering Programs supports Fire Protection Programs in the development of fire hazards analyses.

12.8 References

The following documents were used as requirement sources in the development of this S/RID:

29 CFR 1926, Code of Federal Regulations, 7-1-95

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29 CFR 1910, Occupational Safety and Health Standards, 7-1-95

WAC-173-303, Dangerous Waste Regulations, 01-01-95

DOE ORDER 5480.7A, Fire Protection, 2-17-93

DOE ORDER 5480.8A, Contractor Occupational Medical Program, Revision 01, 6-26-92

DOE ORDER 5500.3A, Planning and Preparedness for Operational Emergencies, 4-30-91

DOE ORDER 6430.1A, General Design Criteria, 4-6-89

DOE/RL-91-28 Rev 1, Hanford Facility Dangerous Waste Permit Application, General Information, Appendix 7A, Hanford Facility Contingency Plan, May 93

RLID 5480.7, Fire Protection, 1-17-94

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**RIDs by Document X-Reference Listing
Based on FDHC-FP-SD RID and including all documents.**

29 CFR 1910, Occupational Safety and Health Standards, Dated 07-01-95

29 CFR 1926, Safety and Health Regulations for Construction, Dated 07-01-95

DOE ORDER 5480. 7A, Fire Protection

DOE ORDER 5480. 8A, Contract Occupational Medical Program, Revision C01

DOE ORDER 5500. 3A, Planning and Preparedness For Operational Emergencies, Revision C01

DOE ORDER 6430.1A, General Design Criteria

DOE/RL-91-28, Hanford Facility Contingency Plan, Revision 1

RLID 5480. 7, Fire Protection

WAC 173-303, Dangerous Waste Regulations, Dated 11-01-95

*** End of RIDs by Document X-Reference Listing ***

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13.0 Packaging and Transportation

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract requirements for the Packaging and Transportation (PT) program in place at Hanford. The PT Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement. Some of the requirements contained in the document were intentionally duplicated in facility S/RIDs. This was necessary to capture implementation responsibilities that occur at both the

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contract and facility level.

This S/RID applies to all of the onsite and offsite P&T activities associated with FDH.

The scope of the Packaging and Transportation Functional Area encompasses the programmatic controls for activities associated with onsite and offsite packaging and transportation of hazardous and radioactive materials and waste. The basis for selecting the requirements applicable to FDH is described in the following key points:

- Offsite shipments consist of both bulk and non-bulk packaging of hazardous and radioactive materials, as well as hazardous waste, dangerous waste, and low-level radioactive and TRU waste.
- Offsite radioactive shipments consist of limited quantity, low specific activity, and Type A and B quantities of radioactive material, as well as fissile classed, normal form, and special form materials.
- Offsite shipments are made by highway, rail, air, and vessel. Offsite shipment campaigns by vessel are made in accordance with a DOE-approved shipping plan.
- Onsite shipments/movements consist of essentially the same materials as for offsite shipments. Onsite rail shipments are in DOE-owned rail cars, which are maintained by a FDH subcontractor.
- Onsite shipments are not directly regulated by federal or state agencies. However, for onsite shipments, FDH has adopted federal and state requirements where appropriate, and has established equivalent safety standards where it is not feasible to comply with DOT regulations onsite.
- Maintenance of the vehicle fleet and driver qualifications/files are the responsibility of a FDH subcontractor, with oversight provided by the Transportation and Packaging Organization. Drug testing and physical examinations for drivers of commercial motor vehicles are performed by Hanford Environmental Health Foundation (HEHF), a DOE contractor.

13.1 Management and Administration

FDH will comply with all contractually imposed Packaging and Transportation regulations, unless specifically exempted by DOE. The P&T Functional Area identifies the WHC-CM-2-14 manual, Hazardous Material Packaging and Shipping, as the implementing

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document for all transportation and packaging related requirements.

13.2 Packaging and Transportation Operations

13.2.1 Packaging

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 85

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 87

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 23

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 24

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 27

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.2.4**

13.2.1.1 Radioactive Materials

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 47

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 61

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 413

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 415

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 416

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 417

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 421

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 422

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 423

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 424

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 426

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REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 427

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 428

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 431

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 441

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 442

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 443

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 447

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 457

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.3.5.1

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.3.5.2(d)

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.4.2.2

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.10.2

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.10.6

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.15.1

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.15.2

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.15.3

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.5.15.7

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,

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Section 10.5.15.8

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.5.2.1(e)**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.5.3.13**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.5.9.1**

REQUIREMENT SOURCE: WAC 470-12, Dated 03-21-60, Section 050(4)

13.2.1.2 Hazardous Materials

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 3

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 22

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 3.0.5**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.1.4**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.2.8**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.3.2**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.3.3**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.5.5**

13.2.2 Coordination and Planning of Base Technology

This subelement is not applicable to the FDH packaging and transportation operations.

13.2.3 Vehicle and Equipment Control and Maintenance

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REQUIREMENT SOURCE: 49 CFR 392, Dated 10-01-95, Part 2

13.2.3.1 Exclusive Use Vehicles

REQUIREMENT SOURCE: 49 CFR 174, Dated 10-01-95, Part 715

Author's Note: The requirement addresses "railcar."

REQUIREMENT SOURCE: 49 CFR 177, Dated 10-01-95, Part 843

13.2.3.2 Commercial Motor Vehicles

REQUIREMENT SOURCE: 49 CFR 383, Dated 10-01-95, Part 23

REQUIREMENT SOURCE: 49 CFR 383, Dated 10-01-95, Part 23(a)(2)

REQUIREMENT SOURCE: 49 CFR 393, Dated 10-01-95, Part 1

13.2.3.3 Vehicle Inspection, Repair, and Maintenance

REQUIREMENT SOURCE: 49 CFR 107, Dated 10-01-95, Part 502(b) - (d)

REQUIREMENT SOURCE: 49 CFR 392, Dated 10-01-95, Part 9(a)

REQUIREMENT SOURCE: 49 CFR 396, Dated 10-01-95, Part 3(a) Intro

REQUIREMENT SOURCE: 49 CFR 396, Dated 10-01-95, Part 3(a)(1)

REQUIREMENT SOURCE: 49 CFR 396, Dated 10-01-95, Part 17(g)

13.2.3.4 Inspector Qualifications and Records

REQUIREMENT SOURCE: 49 CFR 396, Dated 10-01-95, Part 19(a)

13.2.3.5 IM Portable Tanks

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 32(h)

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 32(k)

13.2.4 Onsite Material Tracking

Onsite material tracking requirements are addressed at the facility level in the

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Environmental Protection and Safeguards and Security functional areas.

13.2.5 Offsite Transportation Management

13.2.5.1 Licensing and Registration

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 3

REQUIREMENT SOURCE: 49 CFR 107, Dated 10-01-95, Part 608(a)

REQUIREMENT SOURCE: 49 CFR 107, Dated 10-01-95, Part 620(a)

REQUIREMENT SOURCE: 49 CFR 107, Dated 10-01-95, Part 620(c)

REQUIREMENT SOURCE: 49 CFR 385, Dated 10-01-95, Part 21(a)

13.2.5.2 Import/Export Shipments

REQUIREMENT SOURCE: 49 CFR 171, Dated 10-01-95, Part 12

Author's Note: International Maritime Dangerous Goods (IMDG).

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 477

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 478

13.2.5.3 Hazardous Waste/Materials Transport

REQUIREMENT SOURCE: 49 CFR 171, Dated 10-01-95, Part 2

REQUIREMENT SOURCE: 49 CFR 171, Dated 10-01-95, Part 3

REQUIREMENT SOURCE: 49 CFR 397, Dated 10-01-95, Part 101(a)

13.2.6 Marking, Labeling and Placarding

13.2.6.1 Marking Requirements

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 300

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.7.1.1(b)

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13.2.6.2 Labeling Requirements

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 400

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 402

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.7.2.1(b)

13.2.6.3 Placarding Requirements

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 500

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 502

13.2.7 Shipping Papers, Bills of Lading and Manifests

REQUIREMENT SOURCE: 40 CFR 262, Dated 07-01-95, Part 20

REQUIREMENT SOURCE: 40 CFR 262, Dated 07-01-95, Part 21

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 370(2)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 370(3)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 370(4)

13.2.7.1 Shipping Papers

REQUIREMENT SOURCE: 49 CFR 171, Dated 10-01-95, Part 11, Introduction and (a) thru (c)

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 201

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 204

REQUIREMENT SOURCE: 49 CFR 177, Dated 10-01-95, Part 817

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.8.1.1(b)

REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37, Section 10.8.1.1(c)

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**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.8.1.1(h), Paragraph 1**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.8.1.2(a)**

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 10.8.2**

13.2.7.2 Shipment Records

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(1)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(2)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(3)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(4)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(5)

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 210(6)

13.2.8 Shipment Plans

A Transportation Plan shall be prepared by the contractor and submitted to the appropriate Field Element with information on shipments of spent nuclear fuel, high-level waste, and high-visibility shipments and campaigns as determined by the cognizant Program Office (PO). The plan shall consist of information describing material type, shipping dates, estimated number and weight of shipments, mode of transport, carrier proposed route, packaging description, and cargo security arrangements, if required.

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

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 97

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 22a

13.2.10 Emergency Response Information

REQUIREMENT SOURCE: 49 CFR 172, Dated 10-01-95, Part 600

13.2.11 Receipt Inspection

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13.2.11.1 Radiation/Contamination Surveys

Radiation and Contamination requirements are contained in the Radiation Protection Functional Area.

13.2.12 Loading Operations

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 448

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 459

REQUIREMENT SOURCE: 49 CFR 177, Dated 10-01-95, Part 848

13.2.13 Transportation Operations

13.2.13.1 Dangerous Waste Transportation

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 060(1)

13.2.13.2 Bracing

REQUIREMENT SOURCE: 49 CFR 177, Dated 10-01-95, Part 834

13.3 Offsite Safety

13.3.1 Package Standards and Certifications

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 43

13.3.2 Safety Analysis

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 476

13.3.3 Design, Fabrication, Assembly and Testing QA for OffSite Shipping Containers

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 31

13.3.3.1 QA Testing

REQUIREMENT SOURCE: 10 CFR 71, Dated 04-01-96, Part 41

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 28

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REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 461

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 462

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 463

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 465

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 466

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 468

REQUIREMENT SOURCE: 49 CFR 173, Dated 10-01-95, Part 469

**REQUIREMENT SOURCE: DANGEROUS GOODS REGULATIONS, Revision ED-37,
Section 5.0.2.7**

13.3.4 Physical Protection for Security

The Safeguards and Security Department implements security requirements for onsite and offsite shipments of radioactive material, including special nuclear material shipments. Applicable requirements are addressed in the FDH S/RID for the Safeguards and Security functional area.

13.3.5 Nuclear Explosives, Components, and Assemblies

No requirements applicable to FDH P&T were identified under this sub-element.

13.4 Onsite Safety

Onsite hazardous materials transfers shall comply with the Hazardous Materials Regulation, or the site -or facility- specific cognizant Operations or Field Office approved Transportation Safety Document that describes the methodology and compliance process to meet equivalent safety for any deviation from the Hazardous Materials Regulations.

An equivalent degree of safety shall be provided for onsite shipments as is afforded by the shipping regulations of DOT. It is RL's policy to use DOT/DOE/NRC approved containers whenever technically and economically practical for onsite shipments and to keep the exposure to individuals during the transportation and handling of material packages as low as practical."

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13.4.1 Coordination of Material Transfers

Refer to 13.4.

13.4.2 Safety Analyses

Refer to 13.4.

13.4.3 Requirements for Potentially Explosive and Hazardous Materials

Refer to 13.4

13.4.4 Personnel Protection During Movement of Hazardous Materials

Refer to 13.4.

13.5 Key Interfaces

13.5.1 Training and Qualification

Training and Qualification requirements are located in the Training and Qualification Functional Area.

13.5.2 Safeguards and Security

The Safeguards and Security (SAS) Department ensures implementation of SAS requirements for onsite and offsite shipments of radioactive material, including special nuclear material shipments. Additionally, SAS provides escort services for shipments of hazardous and special nuclear materials as required.

13.5.3 Nuclear Safety

P&T key interfaces with nuclear safety operations are addressed in facility S/RIDs.

13.5.4 Emergency Management

The FDH Contract level Emergency Preparedness Organization coordinates contractor emergency response to transportation accidents involving DOE-owned hazardous material shipments both on and off the Hanford Site. Additionally, this organization develops and maintains implementing procedures for contractor response to transportation accidents involving DOE-owned hazardous material shipments both on and off the Hanford Site and

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provides support to DOE-Headquarters on emergency preparedness matters related to transportation.

13.6 References

The following references were used as source documents:

10 CFR, 1996, Part 71, Packaging and Transportation of Radioactive Material, U.S. Nuclear Regulatory Commission, Washington, D.C.

40 CFR, 1995, Chapter I, Parts 260-299, Protection of Environment, Office of Federal Register, Washington, D.C.

49 CFR, 1995, Subtitle B - Other Regulations Relating to Transportation, Parts 100 to 399.

Dangerous Goods Regulations, 1996, International Air Transport Association (IATA), Geneva, Switzerland.

WAC-173-303, 1995, Dangerous Waste Regulations, Washington Administrative Code, Olympia, Washington.

WAC-470-12, 1995, Transportation of Dangerous Cargoes, Advisory Committee on, Washington Administrative Code, Olympia, Washington.

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RIDs by Document X-Reference Listing
Based on FDHC-PT-SD RID and including all documents.

10 CFR 71, Packaging and Transportation of Radioactive Material, Dated 04-01-96

40 CFR 262, Standards Applicable to Generators of Hazardous Waste, Dated 07-01-95

49 CFR 107, Hazardous Materials Program Procedures, Dated 10-01-95

49 CFR 171, General Information, Regulations, and Definitions, Dated 10-01-95

49 CFR 172, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information and Training Requirements, Dated 10-01-95

49 CFR 173, Shippers -- General Requirements for Shipments and Packagings, Dated 10-01-95

49 CFR 174, Carriage by Rail., Dated 10-01-95

49 CFR 177, Carriage by Public Highway., Dated 10-01-95

49 CFR 383, Commercial Driver's License Standards; Requirements and Penalties, Dated 10-01-95

49 CFR 385, Safety Fitness Procedures, Dated 10-01-95

49 CFR 392, Driving of Commercial Motor Vehicles, Dated 10-01-95

49 CFR 393, Parts and Accessories Necessary for Safe Operations, Dated 10-01-95

49 CFR 396, Inspection, Repair and Maintenance, Dated 10-01-95

49 CFR 397, Transportation of Hazardous Materials, Driving and Parking Rules, Dated 10-01-95

DANGEROUS GOODS REGULATIONS, Dangerous Goods Regulations, Revision ED-37

WAC 173-303, Dangerous Waste Regulations, Dated 11-01-95

WAC 470-12, Transporting Rules, Dated 03-21-60

*** End of RIDs by Document X-Reference Listing ***

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ENVIRONMENTAL RESTORATION**

14.0 Environmental Restoration

A Standards/Requirements Identification Document (S/RID) is the total list of the ES&H requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Environmental Restoration Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

In consideration that Environmental Restoration activities are not planned within the near future and are not within the scope of the Fluor Daniel Hanford contract, the development of a S/RID for this Functional Area is not appropriate.

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DECONTAMINATION AND DECOMMISSIONING**

15.0 Decontamination and Decommissioning

A Standards/Requirements Identification Document (S/RID) is the total list of the ES&H requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH Contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Decontamination and Decommissioning Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

In consideration that D&D activities are not planned within the near future and are not within the scope of the Fluor Daniel Hanford contract, the development of a S/RID for this Functional Area is not appropriate.

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WASTE MANAGEMENT**

16.0 Waste Management

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Waste Management Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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RESEARCH AND DEVELOPMENT AND EXPERIMENTAL ACTIVITIES**

17.0 Research and Development and Experimental Activities

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Research and Development and Experimental Activities Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

In consideration that Research and Development activities are not planned within the near future and are not within the scope of the Fluor Daniel Hanford contract, the development of a S/RID for this Functional Area is not appropriate.

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NUCLEAR SAFETY**

18.0 Nuclear Safety

A Standards/Requirements Identification Document (S/RID) is the total list of the ES&H requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health (ES&H) Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

JUSTIFICATION OF FUNCTIONAL AREA NONAPPLICABILITY

The Nuclear Safety Functional Area has been determined to be nonapplicable for purposes of Fluor Daniel Hanford Contract S/RID development for the following reason:

Activities for this Functional Area are outside the criteria stated above in that the applicable requirements/standards are the direct responsibility of specific facility managers and are identified in facility level S/RIDs.

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19.0 Occupational Safety and Health

Fluor Daniel Hanford (FDH) and its major subcontractors identify and maintain Standards/ Requirements Identification Documents (S/RIDs) both at the Fluor Daniel Hanford Contract level and at the facility or project level. FDH develops the contract level S/RID. The S/RIDs process is based on Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 90-2. In Recommendation 90-2, the Board recommended that (1) particular applicable standards be identified, (2) the adequacy of the standards be evaluated, and (3) the extent to which the standards were being applied to the facilities be established. The OS&H functional area defined in this S/RID document is described in general accordance with the July 30, 1993 Environmental Safety and Health (ES&H) Configuration Guide, Revision 0. Presentation is in the form of program elements and subelements. The specific Department of Energy (DOE) Orders, regulations, industry codes and standards which serve as the basis for each element/subelement are identified and aligned with each subelement.

DOE has directed that facilities or projects with approved S/RIDs continue with the S/RIDs process, as opposed to initiating the Necessary and Sufficient Process. FDH and its subcontractors have approved S/RIDs and therefore, the Necessary and Sufficient Process will not be implemented. The concept of necessary and sufficient is utilized within a number of applications, including S/RIDs to ensure that the requirements used are appropriate to the hazards associated with a work task or activities associated with a facility, but do not add inappropriate requirements, such as those that do not contribute to increased safety.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements, applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

The FDH Office of ES&H will assist the Project Directors and act as Interpretive Authorities in the development of S/RIDs for the functional areas supported by ES&H. FDH Office of ES&H specific roles in the S/RID process consist of the following:

- act as lead for development of PHMC S/RIDs in the ES&H functional areas
- provide support to subcontractors in the development of facility-specific S/RIDs or other requirements identification process, as requested.

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The FDH Contract S/RID or other requirements identification documentation, will be subject to review and concurrence by the Project Director and subcontractor ESH&Q organization, under the controls of the FDH Quality Assurance S/RID Coordination Group, and will then be submitted to the DOE by the FDH Office of ES&H for approval.

The facility S/RIDs development process is the responsibility of the Project Director and the appropriate line managers within the associated subcontractor organization. The S/RIDs will be internally reviewed by the subcontractor for adequacy. FDH Office of ES&H Work Controls will provide review support through the designated Interpretive Authority to the Project Director at the request of the Project Director. The development and maintenance of the facility-specific S/RIDs will be under the controls of the FDH Quality Assurance S/RID Coordination Group. The Project Directors will be responsible for submitting facility-specific S/RIDs to DOE-RL for approval.

Any lower-tier requirements that are deemed appropriate and necessary by the line managers, such as activity-specific S/RIDs, will be the responsibility of the appropriate line managers, with approval by the Project Director. FDH Office of ES&H Interpretive Authorities will conduct reviews and provide recommendations at the Project Director's request. Maintenance, change control, and development of lower tiered S/RIDs will be under the controls of the FDH Quality Assurance S/RID Coordination Group. Each facility will be held accountable to the DOE-RL approved set of requirements.

The following standards and/or requirements are applicable to work and activities conducted/accomplished by FDH contractors. The actual applicability to a specific facility or work activity/project is determined through the Standards/Requirements Identification Document (S/RID) process. Upon approval of an S/RID by the appropriate DOE authority, that set of standards/requirements is applicable to the facility, work/activity or project and supercedes the FDH contractual list of applicable Directives.

19.1 Management and Administration

REQUIREMENT SOURCE: PUBLIC LAW 91-596, Revision 1, Section 5(a)(1)

Each employer - shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

19.1.1 Program Policy

Although the Voluntary Protection Program (VPP) is not presently a regulatory

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requirement, its principles are integrated into all contract level activities and are required to meet a FDH performance agreement with DOE-RL.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (a)(1)

Employers are advised and encouraged to institute and maintain in their establishments a program which provides systematic policies, procedures, and practices that are adequate to recognize and protect their employees from occupational safety and health hazards.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (a)(4)

The extent to which the program is described in writing is less important than how effective it is in practice. As the size of a worksite or the complexity of a hazardous operation increases, however, the need for written guidance increases to ensure clear communication of policies and priorities and consistent and fair application of rules.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (b)(1)

Management commitment and employee involvement are complementary. Management commitment provides the motivating force and the resources for organization. In an effective program, management regards worker safety and health as a fundamental value of the organization and applies its commitment to safety and health protection with as much vigor as to other organizational purposes. Employee involvement provides the means through which workers develop and/or express their own commitment to safety and health protection, for themselves and for their fellow workers.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (b)(2)

Worksite analysis involves a variety of worksite examinations, to identify not only existing hazards but also conditions and operations in which changes might occur to create hazards. Unawareness of a hazard which stems from failure to examine the worksite is a sure sign that safety and health policies and/or practices are ineffective. Effective management actively analyzes the work and worksite, to anticipate and prevent harmful occurrences.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (b)(3)

Hazard prevention and control are triggered by a determination that a hazard or potential hazard exists. Where feasible, hazards are prevented by effective design of the job site or job. Where it is not feasible to eliminate them, they are controlled to prevent unsafe and unhealthful exposure. Elimination or control is accomplished in a timely manner, once a hazard or potential hazard is recognized.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(1)(i)

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State clearly a worksite policy on safe and healthful work and working conditions, so that all personnel with responsibility at the site and personnel at other locations with responsibility for the site understand the priority of safety and health protection in relation to other organizational values.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(1)(iii)

Provide visible top management involvement in implementing the program, so that all will understand that management's commitment is serious.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(1)(iv)

Provide for and encourage employee involvement in the structure and operation of the program and in decisions that affect their safety and health, so that they will commit their insight and energy to achieving the safety and health program's goal and objectives.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(1)(v)

Assign and communicate responsibility for all aspects of the program, so that managers, supervisors, and employees in all parts of the organization know what performance is expected of them.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(2)(i)

So that all hazards are identified:

- (A) Conduct comprehensive baseline worksite surveys for safety and health and periodic comprehensive update surveys;
- (B) Analyze planned and new facilities, processes, materials, and equipment; and
- (C) Perform routine job hazard analyses.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(2)(ii)

Provide for regular site safety and health inspections, so that new or previously missed hazards and failures in hazard controls are identified.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(3)(i)

So that all current and potential hazards, however detected, are corrected or controlled in a timely manner, establish procedures for that purpose, using the following measures;

- (A) Engineering techniques where feasible and appropriate;

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- (B) Procedures for safe work which are understood and followed by all affected parties, as a result of training, positive reinforcement, correction of unsafe performance, and if necessary, enforcement through a clearly communicated disciplinary system;
- (C) Provision of personal protective equipment; and
- (D) Administrative controls, such as reducing the duration of exposure.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(3)(iv)

Establish a medical program which includes availability of first aid on site and of physician and emergency medical care nearby, so that harm will be minimized if an injury or illness does occur.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(4)(i)

Ensure that all employees understand the hazards to which they may be exposed and how to prevent harm to themselves and others from exposure to these hazards, so that employees accept and follow established safety and health protections.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(4)(ii)

So that supervisors will carry out their safety and health responsibilities effectively, ensure that they understand those responsibilities and the reasons for them, including:

- (A) Analyzing the work under their supervision to identify unrecognized potential hazards;
- (B) Maintaining physical protections in their work areas; and
- (C) Reinforcing employee training on the nature of potential hazards in their work and on needed protective measures, through continual performance feedback and, if necessary, through enforcement of safe work practices.

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(4)(iii)

Ensure that managers understand their safety and health responsibilities, as described under (c)(1), "Management Commitment and Employee Involvement," so that the managers will effectively carry out those responsibilities.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9

Requirements. The manager of the contractor organization performing the actual work or job-related task shall assure compliance with the requirements of this paragraph. These requirements are necessary elements for implementing and maintaining an effective industrial

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hygiene program and providing protection in accordance with the standards of DOE 5480.4, Attachment 2, paragraph 2.d.(3).

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.a Introduction

Directives. Internal directives or operating procedures shall be developed to implement industrial hygiene programs. These directives may be incorporated into existing documents covering safety and health programs. The directives shall clearly specify the authority and responsibilities of the organizational staff administering the industrial hygiene program. The directives shall also specify the responsibilities of other functional organizations. Topics that should be addressed are:

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.a(1)

The Operating Organization having line safety and health responsibilities should be required to: (a) conduct operation consistent with established health and safety procedures; (b) include the industrial hygiene staff in the design review process whenever new construction or remodeling of an existing process is planned; and (c) request the industrial hygiene staff to evaluate the effectiveness of proposed environmental control equipment and approve procedures for its use.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.a(3)

Purchasing and Contracting Organizations should be required to:

(a) participate as requested by the industrial hygiene staff to assure that potentially hazardous material or equipment being procured are adequately identified, evaluated, and controlled; and

(b) require contractors or subcontractors performing potentially hazardous operations within a DOE or DOE-controlled facility to comply with the mandatory industrial hygiene standards of DOE 5480.4 and make provisions to allow the industrial hygiene staff to monitor compliance.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.b Introduction

Functions. The industrial hygiene program shall be designed to preserve employee health and well-being. This shall be accomplished by identification, evaluation, and control of environmental factors and stresses found in the workplace. These environmental factors and stresses include: chemical (e.g., liquid, particulate, vapor, and gas); physical (e.g., electromagnetic radiation, noise, vibration, and magnetic fields); biological (e.g., agents of infectious diseases); and ergonomic (e.g., body position in relation to task, repetitive motion, and mental or physical fatigue). The contractor industrial hygiene program must have the following features:

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.b(1)

Identification of Health Hazards. The industrial hygiene staff shall identify and document existing and potential occupational health hazards through: knowledge and assessment of the operations;

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periodic walk-through surveys; information provided by interorganizational communication; the review of proposed projects, facilities, engineering plan, and specifications; and maintenance of a hazards inventory or tracking system.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.d(1)

The staff responsible for the direction and operation of the industrial hygiene program must be professionally qualified, adequate in number, and have sufficient time and authority to design and implement the industrial hygiene program set forth in this Order.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 1

Author's Note: As applicable to their work in GOCO facilities, contractors shall comply with DOE-prescribed OSHA Standard 29 CFR 1904, "Recording and Reporting Occupational Injuries and Illnesses." Occurrence Reporting requirements are fully addressed in the Contract and facility level Management Systems Functional Areas.

In addition, Title 29 CFR Part 1915, "Occupational Safety and Health Standards for Shipyard Employees," Title 29 CFR Part 1918, "Safety and Health Regulations for Longshoring," and Title 29 CFR 1928, "Occupational Safety and Health Standards for Agriculture," do not apply to the Hanford Site.

DOE Order 5483.1A has been canceled. However, contractors are required to comply with canceled DOE Orders until contractually relieved from doing so.

DOE Prescribed OSHA Standards. As applicable to their work in GOCO facilities, contractors shall comply with the following DOE-prescribed OSHA standards:

- a. "Occupational Safety and Health Standards," Title 29 CFR Part 1910.
- b. "Safety and Health Regulations for Construction," Title 29 CFR Part 1926.
- c. "Occupational Safety and Health Standards for Shipyard Employees," Title 29 CFR Part 1915.
- d. "Safety and Health Regulations for Longshoring," Title 29 CFR Part 1918.
- e. "Occupational Safety and Health Standards for Agriculture," Title 29 CFR Part 1928.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 5.b

b. All contractor employees shall be instructed by the contractor initially and periodically (at least annually) regarding the requirements outlined by the DOE safety and health poster, DOE Forms 5480.2 and 5480.3 or DOE Forms EV-632 and EV-632S, as appropriate. Questions concerning the DOE poster may be brought to the attention of the contractor or to the field organization.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 5.c

c. All contractor employees shall be fully informed (at least annually) by the contractor of their

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rights, protections, and obligations, which include nondiscrimination; the filing of complaints; availability of the DOE-prescribed OSHA standards and of complaint form DOE F 5480.4 (Attachment II-1); and accompaniment of the DOE inspector during the conduct of compliance inspections or during the conduct of inspections based on the filing of complaints.

19.1.2 Occupational Safety and Health Goals and Objectives

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(1)(ii)

Establish and communicate a clear goal for the safety and health program and objectives for meeting that goal, so that all members of the organization understand the results desired and the measures planned for achieving them.

19.2 Hazard Anticipation, Identification and Evaluation

19.2.1 Hazard Assessment Program

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (a)(2)

An effective program includes provisions for the systematic identification, evaluation, and prevention or control of general workplace hazards, specific job hazards, and potential hazards which may arise from foreseeable conditions.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.a(5)

Employees should be required to:

- (a) observe all safety and health rules;
- (b) use all prescribed personal protective equipment;
- (c) follow established health and safety practices and procedures; and
- (d) notify supervisors immediately of suspected exposures to harmful agents or conditions.

19.2.2 Hazard Reporting System

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(2)(iii)

So that employee insight and experience in safety and health protection may be utilized and employee concerns may be addressed, provide a reliable system for employees, without fear of reprisal, to notify management personnel about conditions that appear hazardous and to receive timely and appropriate responses; and encourage employees to use the system.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 5.a

- a. All contractor employees shall be instructed by the contractor to:

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(1) Observe the DOE-prescribed OSHA standards applicable to their work and report promptly to the contractor any condition which may lead to a violation of these standards.

(2) Report emergencies and respond to warning signals which may be activated in the event of fire, radiation, or other possible emergencies.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter II, Section 1

Author's Note: Section "b" is an alternative to section "a".

a. Initially, contractor employees or representatives thereof should attempt resolution of their complaints by submitting to their contractor management, either directly or through their authorized employee representative, reports of any conditions or practices which they consider hazardous to their safety or health, or which they believe are in violation of the DOE-prescribed OSHA standards.

b. Contractor employees or their representatives may submit complaints directly to the DOE field organization safety and health manager or the CO or CO representative, particularly in situations where the complainant wishes to remain anonymous (to the contractor), or where the complainant believes that unsafe/unhealthful conditions still exist or violations of standards still remain after being brought to the attention of and addressed by contractor management.

c. Complaints may be submitted to either contractor management or to the DOE by completing DOE F 5480.4 (Attachment II-1), by sending a letter or telegram, or by oral means. Oral complaints shall be recorded on DOE F 5480.4 by DOE and/or the contractor. Irrespective of the means of submission, the complaint should set forth with reasonable particularity the pertinent facts and circumstances involved. In all situations where the complaint is submitted to DOE and anonymity is requested by the complainant, the DOE shall not divulge the complainant's identity to contractor personnel or to any other persons not essential to the processing and investigation of the complaint.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter II, Section 2

a. Should the contractor receive a complaint from an employee or an authorized representative, the contractor shall confer with the employee or the authorized representative and conduct a joint inspection of the conditions or circumstances identified by the complaint.

b. Should the field organization receive a complaint, the facts and circumstances of the complaint shall be reviewed and, if determined necessary by the DOE, an inspection shall be made to investigate the complaint allegations within 15 days of receipt of the complaint. However, the inspection should be made as immediately as is possible. In making the inspection, the same procedures set forth on pages I-5 through I-7, paragraphs 6b-g, shall apply. Follow-up compliance inspections shall be conducted, as appropriate.

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REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter II, Section 3

Author's Note: Section "b" is an alternative to section "a".

IMMINENT DANGER COMPLAINTS - SUBMISSION AND INSPECTION.

- a. Any employee or authorized representative of employees who believes that an imminent danger exists, shall bring this matter to the attention of the appropriate contractor, supervisor, or designated official. If the imminent danger is determined to be valid, the contractor shall take immediate and effective remedial actions to remove employees from the danger area and/or eliminate the danger. The contractor shall conduct an inspection as soon as possible thereafter to assure that appropriate actions have been taken to preclude recurrence of the imminent danger situation.
- b. The employee or the authorized representative also may visit or call the DOE at the field organization level to request an immediate elimination of the danger and an inspection of the alleged imminent danger situation. DOE shall ascertain immediately whether there is a reasonable basis for the imminent danger complaint. If the complaint is determined to be valid, DOE shall take immediate and effective actions to remove employees from the danger area and/or eliminate the danger. This may be accomplished by conducting an immediate DOE inspection and/or by contacting the contractor immediately. In any event DOE shall conduct an inspection as soon as possible to assure that appropriate actions have been taken to preclude recurrence of the imminent danger situation. In making the inspection, the same procedures set forth on pages I-5 through I-7, paragraphs 6b-g, shall apply. Follow-up compliance inspections shall be conducted as appropriate.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter II, Section 4

Author's Note: Section "b" is an alternative to section "a".

- a. The contractor shall inform each complainant of the results of the inspection and the actions taken to address and/or correct the safety and health concerns, problems, and/or violations of the DOE-prescribed OSHA standards noted by a complaint filed with the contractor.
- b. For complaints filed with DOE, DOE shall provide a written response to the complainant within 15 days after the completion of the complaint inspection, except, obviously, in those situations where the complainant's identity cannot be determined. The response shall be sent to the complainant's home address, unless he or she has specifically requested that mail be sent to his or her place of employment. The response shall provide the results of the DOE inspection prompted by the complaint, and shall document all actions taken on complaint-related allegations of unsafe/unhealthful conditions and/or violations of the DOE-prescribed OSHA standards. If it is determined that no inspection is necessary, DOE shall respond to the complainant within 15 days of receipt of the complaint and state why an inspection was not conducted.

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REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter II, Section 5

COMPLAINT RESOLUTION. Contractor employees or representatives thereof who are not satisfied with the adequacy or effectiveness of the field organization's investigation of or response to their complaint allegations may submit a written request for complaint resolution to the Director of Operational Safety (EP-32). The request must include the pertinent facts and particulars, and the basis for the request (e.g., inadequate action taken on violation of a standard, or no employee or representative allowed to participate in inspection), along with a copy of the original complaint and the field organization's response thereto. EP-32 shall conduct an investigation of the situation, in coordination with the appropriate program office(s). Within 30 days of receipt of the request, EP-32 shall provide a written response to the employee or representative thereof, and to the field organization. The response shall indicate the actions taken or planned as a result of the request for complaint resolution.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter III, Section 1

NONDISCRIMINATION.

- a. No contractor shall discharge or in any manner demote, reduce in pay, coerce, restrain, threaten, or take any other negative actions against any contractor employee as a result of the employee's filing of a complaint, or in any other fashion, exercising on behalf of himself or herself or others any right set forth in this Order.
- b. Any employee who believes he or she has been discharged or in any other manner discriminated against, in violation of this Order, may file a complaint with the cognizant CO or CO representative within 30 days after the alleged discrimination, setting forth the nature of the alleged discrimination. The CO or CO representative, the safety and health director, and other appropriate elements of the field organization shall investigate the complaint, and if it is found that such discrimination has occurred, the field organization shall assure that appropriate measures are taken by the contractor, including rehiring or reinstatement of the employee, restoration of lost seniority, and back pay. The field organization shall report the disposition of the matter to the contractor employee filing the complaint of alleged discrimination within 30 days after receipt of the complaint.

19.2.3 Investigation of Occurrences, Accidents, and Near Misses

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(2)(iv)

Provide for investigation of accidents and "near miss" incidents, so that their causes and means for their prevention are identified.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter III, Section 4

ACCIDENT INVESTIGATIONS. Accident investigations shall be conducted in accordance with

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DOE 5484.1, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, of 2-24-81.

REQUIREMENT SOURCE: DOE ORDER 5484.1, Revision C07, Chapter II, Section 1.e(1)

All occupational injuries and illnesses shall be investigated to determine corrective action appropriate to minimize or preclude similar injuries and illnesses. A report shall be made on Form 5484.3, Supplementary Record of Occupational Injuries and Illnesses, Attachment 1, for occupational illnesses as defined by the occupational Safety and Health Administration, and for lost work day cases and nonfatal cases without lost work days as defined in 29 CFR 1904.

REQUIREMENT SOURCE: DOE ORDER 5484.1, Revision C07, Chapter II, Section 1.e(2)

All accidents involving Government-owned, -rented, or -leased vehicles (including Interagency Motor Pool vehicles) or privately owned vehicles while operated on official business shall be investigated and the number of such occurrences reported on Form 5484.4, Tabulation of Property Damage Experience, Attachment 2. The investigation for each accident causing \$250 or more damage and/or injury shall be recorded on SF-91A, Investigation Report of Motor Vehicle Accident, Attachment 3, and copies submitted to the System Safety Development Center (SSDC), EG&G Idaho, Inc., on or before the 25th of the month following the end of the quarter in which the accident occurred.

REQUIREMENT SOURCE: DOE ORDER 5484.1, Revision C07, Chapter II, Section 1.e(3)

All accidents resulting in Department of Energy or other property damage or loss shall be investigated. The investigation for each loss exceeding \$1000 shall be recorded on Form 5484.5, Report of Property Damage or Loss, Attachment 4, and copies submitted to the System Safety Development Center (SSDC), EG&G Idaho, Inc., on or before the 25th of the month following the end of the quarter in which the accident occurred.

19.2.4 Injury and Illness Trend Analysis

REQUIREMENT SOURCE: 54 FR 3904, Dated 01-26-89, Guidelines, (c)(2)(v)

Analyze injury and illness trends over time, so that patterns with common causes can be identified and prevented.

19.2.5 Occupational Safety and Health Hazard Inventory System

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.f(1)

An inventory of occupational health hazards shall be maintained. The inventory should be a listing of potential chemical, physical, and biological health hazards by location and/or job category of users and indicate when the hazards were present.

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REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.f(5)

Industrial hygiene hazard inventories, reports, and monitoring data shall be readily accessible to the medical organization responsible for operating the medical monitoring program. Records access shall be provided to employees or designated representatives of employees in accordance with OSHA Regulation 29 CFR 1910.20 and DOE Privacy Act Regulation 10 CFR 1008.17(b)(5).

19.3 OS&H Hazard Prevention and Control

19.3.1 Hazard Monitoring, Sampling, and Surveillance

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.b(2)

Hazard Evaluation. Once potential health hazards are identified, the industrial hygiene staff must determine the extent of the hazard through appropriate consultation with other professionals, sound judgment, and the application of established standards or guides and such evaluation techniques as air sampling and bioassay. A report shall be sent to the first level supervisor with the industrial hygiene staff's evaluation of whether occupational exposures are within permissible limits, together with supporting evidence. The permissible exposure limits used in hazard evaluation shall not exceed those in the mandatory industrial hygiene standards of DOE 5480.4, Attachment 2, paragraph 2.d.(3). When a potential health hazard is identified that has no assigned permissible exposure limit, a guideline on evaluation and control should be developed based on the best available information (refer to paragraph 10.a.(1)).

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.e

Facilities, Instrumentation, and Technical Support Personnel shall be available to implement the requirements of this Order. Provisions shall be made to take and analyze air and water samples and bioassay specimens, and to test, calibrate, and maintain instruments. Where it is impractical to provide these services on-site, the services of off-site laboratory facilities and instrument services shall be retained.

19.3.2 Hazard Controls

REQUIREMENT SOURCE: DOE ORDER 5480. 4, Revision C04, Attachment 2, Section 2.d.(3)(a)

"TLVs R(SUPERSCRIPT) Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment with Intended Changes," most current edition (ACGIH).

REQUIREMENT SOURCE: DOE ORDER 5480. 4, Revision C04, Attachment 2, Section 2.d.(3)(b)

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Author's Note: ANSI Standard Z88.2-1980 has been superceded by ANSI Standard Z88.2-1992.

ANSI Standard Z88.2 - 1980, "Practices for Respiratory Protection" (ANSI).

REQUIREMENT SOURCE: DOE ORDER 5480. 4, Revision C04, Attachment 2, Section 2.e.(5)(a) and (b)

- (a) ANSI/NFPA 70-1981, "National Electrical Code" (ANSI).
- (b) ANSI C2-1981, "National Electrical Safety Code" (ANSI).

19.3.3 Safety Inspection and Maintenance

Requirements pertaining to Safety Inspection and Maintenance are located in the Occupational Safety and Health and Maintenance Functional Areas of the facility level S/RID.

19.3.4 Construction Safety and Health

DOE Order 5483.1A, Chapter I, Section 1 compliance as previously stated in subelement 19.1.1 Program Policy, includes compliance with 29 CFR 1926 "Safety and Health Regulations for Construction." Specific breakdown is included in the Occupational Safety and Health Functional Area of the facility level S/RID.

19.4 Occupational Health Program

Subelement 19.4 Occupational Health Program is the responsibility of the Occupational Medical Contractor (OMC), which works closely with, but not within the same contract as the PHMC. The requirement identified in subelement 19.4.1, Health Examinations, provides a general indication of how the two contract organizations interface.

19.4.1 Health Examinations

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.a(2)

Contractor management shall furnish the Site Occupational Medical Director with information on potential, physical, chemical, and biological hazards in the worksite.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.a(3)

Prior to the performance of a periodic health examination, the contractor management shall provide to the OHE a summary of potential exposures to hazardous agents or tasks and any worksite exposures in excess of OSHA/DOE permissible exposure limits pertaining to the employees to be

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examined.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.a(4)

Contractor management should afford the Site Occupational Medical Director or designee the opportunity to participate in new materials and process review committees, safety committees, and other health-related meetings.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.b(3)(a)

Preplacement Evaluations.

1 A medical evaluation of an individual shall be conducted after the job offer, but prior to the performance of job duties, and in the case of an employee, prior to a job transfer. The health status and fitness for duty of the individual shall be determined, thereby assuring that assigned duties can be performed in a safe and reliable manner and consistent with the Americans with Disabilities Act of 1990.

2 Contractor management shall provide to the Site Occupational Medical Director a job task analysis pertaining to the applicant/employee to enable the medical examiner to assess the individual as required in 11b(3)(a)1.

3 The scope of the initial preplacement evaluation shall be a comprehensive examination as outlined in paragraph 11b(2). The Site Occupational Medical Director shall determine additional examination content, considering such factors as special physical or mental requirements of the job, potential hazardous exposures, or medical surveillance requirements mandated by the Occupational Safety and Health Act, 29 CFR 1910 or 29 CFR 1926.

4 Those contractor operations requiring large numbers of preplacement evaluations may defer the comprehensive evaluation of individuals not assigned to hazardous work or potentially hazardous exposures after a review of the individual's medical history. The evaluation shall be performed within 6 months of the hire date.

5 The occupational medical department shall be informed of all job transfers. The Occupational Medical Director or designee should determine whether a medical evaluation is necessary.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.b(3)(e)

Return-to-Work Health Evaluations.

1 Occupational Injury or Illness. All employees with occupationally-related injuries or illnesses shall be evaluated before returning to work. The scope and content of this evaluation shall be determined by the OHE, based upon the nature and extent of the injury or disease, and shall be sufficient to ensure that the employee may return to work without undue health risk to self or

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others. Written clearance from the occupational medical department shall be required before such an employee may return to work.

2 Nonoccupational Injury or Illness. Contractor management, in the following situations, shall ensure that employees will not be allowed to return to work until they receive a health evaluation and written clearance from the occupational medical department. Situations warranting evaluation and clearance include nonoccupational-related illnesses or injuries causing absence from work for 5 consecutive workdays or more, procedures or treatments that would affect negatively the employee's ability to perform in a safe and reliable manner, and hospitalization. The employee shall provide relevant medical information from their private physician to assist in this determination. The final decision for health-related work recommendations shall reside with the Site Medical Director if a disagreement exists regarding return-to-work suitability.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.b(3)(f)

Termination Health Evaluations. A health status review shall be made available for all terminating employees. Based upon the information obtained, a health examination (the content to be determined by the Site Occupational Medical Director) shall be conducted, whenever possible, on employees with known occupational illnesses or injuries, documented or presumed exposures required by OSHA regulations, or when more than 1 year has elapsed since the last examination. This should include a review of the medical record, associated exposure information, and a signed response by the employee to each of the following questions:

- 1 Have there been recent occupational illnesses or injuries not previously reported?
- 2 Have you ever been informed of an exposure to radiation or toxic materials above permissible limits?
- 3 Do you have any complaints or concerns related to prior illnesses, injuries, or exposures?
- 4 Do you have any current medical complaints?

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.b(6)

Medical Monitoring. The industrial hygiene staff shall inform the medical organization of potential and existing health hazards identified, the results of hazard evaluations, and other industrial hygiene information needed for operation of a medical monitoring program. The industrial hygiene staff should be available to accompany medical staff on periodic worksite visits (refer to DOE 5480.1A, Chapter VIII, paragraph 4a(2)).

19.4.2 Health Maintenance and Preventive Medicine

Health Maintenance and Preventive Medicine are medical services that are provided by the

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Occupational Medical Contractor (OMC), outside of the PHMC Contract.

19.4.3 Diagnosis and Treatment

Diagnosis and Treatment are medical services that are provided by the Occupational Medical Contractor (OMC), outside of the PHMC Contract.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.c(1)

Occupational Injury or Disease.

- (a) The management of occupational injury or disease shall be in accordance with the laws and regulations of the State in which the facility is located.
- (b) Diagnosis and treatment of occupational injury or disease shall be prompt with emphasis placed on rehabilitation and return to work at the earliest time compatible with job safety and employee health.
- (c) Contractor management has the responsibility to establish procedures to ensure that all employees with occupational injuries or illnesses receive written clearance from the occupational medical department before being permitted to return to work.
- (d) The responsible firstline management and health and safety groups (health physics, industrial hygiene, or safety) shall be given notification of unhealthy work situations detected by the occupational medical staff.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.c(3)

Monitored Care. Monitored care of ill or injured employees by occupational medical physicians is highly desirable to maximize recovery and safe return to work and to minimize lost time and associated costs. Contractor management has the responsibility to advise the occupational medical department when an employee has been absent because of an illness or injury for more than 5 consecutive workdays, or has experienced excessive absenteeism. Worker's compensation cases should be monitored when appropriate through frequent return visits and physician-to-physician communication with private physicians where applicable. The goal is to assist the employees in their recovery and to facilitate their return to duty at the earliest practicable time. Reasonable accommodations or restrictions may be a part of this rehabilitation process and need to be closely coordinated with the human resources department and line management.

19.4.4 Fitness for Duty

Fitness for Duty is a determination of medical services that is provided by the Occupational Medical Contractor (OMC), outside of the PHMC Contract.

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19.4.5 Medical Facilities and Equipment

Medical Facilities and Equipment are the responsibility of the Occupational Medical Contractor (OMC), outside of the PHMC Contract.

19.4.6 Professional Development of Occupational Staff

Professional Development of Occupational Staff is a responsibility of the Occupational Medical Contractor (OMC), outside of the PHMC Contract.

19.4.7 Health Records and Reporting

General Health Records and Reporting is a responsibility of the Occupational Medical Contractor (OMC), outside of the PHMC Contract. PHMC related requirements for job related injuries and illnesses are contained in subelement 19.6, Recordkeeping and Reporting.

REQUIREMENT SOURCE: DOE ORDER 5480. 8A, Revision C01, Section 11.e

Requirements for Medical Records.

(1) Records Maintenance. The maintenance of complete medical records developed by the medical department for each employee from the time of the first examination or treatment is a basic requirement. A personal health record shall be maintained for each employee identifying name, date of birth, and social security number. The contractor may use additional identification systems as desired.

(2) Confidentiality.

(a) The confidentiality of all employee medical records, including the results of health examinations, shall be observed by all members of the occupational medical staff. Such records shall remain in the exclusive custody and control of the occupational medical department. Disclosure of information from an employee's health records shall not be made without written consent, except as permitted by law or Federal regulation.

(b) Computerized or microfilmed medical records and information shall remain under the custody and control of the Site Occupational Medical Director with disclosure as defined in paragraph 11e(2)(a) above.

(3) Access to Employee Medical Records. Access to employee medical records shall be in accordance with:

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- (a) The Privacy Act as codified in 10 CFR 1008.17(b)(1); and
- (b) "Access to Exposure and Medical Records" as codified in 29 CFR 1910.20 (OSHA Standard).

(4) Identification of Medical Records. It shall be the responsibility of contractor management to provide the Site Occupational Medical Director with information to enable the coding or flagging of records to reflect current job titles, specific job certifications or limitations, assigned work areas, and work hazards.

(5) Work Restriction Registry. The Medical Director will advise contractor management of appropriate work restrictions. Contractor management should maintain a central work restriction registry.

(6) Retention of Medical Records. All employee health records shall be retained in accordance with DOE 1324.2A. However, inactive records may be retired to low-cost storage in an onsite records holding area or a Federal Records Center. To protect the confidentiality of the records, the shipping cartons shall be sealed and the transfer documents shall note that access to the records is limited to personnel of the Contractor Medical Department. If resources are available, the files may be microfilmed and the paper records destroyed.

19.5 Occupational Safety and Health Training

General Training requirements are contained in the Training and Qualification Functional Areas of the FDH Contract level and facility level S/RIDs. OSHA driven specific training such as HAZWOPPER, HAZCOM, Lockout/Tagout are included in the Occupational Safety and Health Functional Area of the facility level S/RID.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.a(4)

First-line Supervisors should be required to:

- (a) maintain healthful working conditions within his or her own organization and implement industrial hygiene recommendations;
- (b) train employees to perform assignments in a safe manner; and
- (c) follow administrative procedures to allow appropriate disciplinary action to be taken when health and safety rules are violated.

19.6 Recordkeeping and Reporting

As applicable to their work in GOCO facilities, contractors shall comply with

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DOE-prescribed OSHA Standard 29 CFR 1904, Recording and Reporting Occupational Injuries and Illnesses.

19.6.1 Occupational Injury and Illness Reporting

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 5.d

All contractor employees shall be informed that the contractor is required to monitor the employee's workplace for radiation exposure and known toxic materials or harmful physical agents which are used or produced at the GOCO facility, and to maintain records of the data as required by Title 29 CFR Part 1910.20, "Access to Employee Exposure and Medical Records." Employees or their authorized representatives are to be provided with an opportunity to observe monitoring or measuring for toxic materials and harmful physical agents and to have access to the results thereof. Each employee or former employee or representative thereof, within 15 days of a written request, shall be provided access to or copies of any records of cumulative recorded occupational radiation dose or any monitoring or bioassay records relevant to potential exposure to toxic materials or harmful physical agents during employment. Employees will be notified of any information indicating that a radiation dose or an exposure to toxic materials or harmful physical agents may have exceeded the limits specified by the DOE-prescribed OSHA standards.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter III, Section 2

Author's Note: DOE Order 1324.1 has been superceded by DOE Order 1324.5B.

RECORDKEEPING.

- a. Contractors subject to the provisions of DOE PR 9-50.704-2(a) shall be responsible for recording and reporting recordable occupational illnesses and injuries, as required by DOE 5484.1, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, of 2-24-81.
- b. All contractors shall be responsible for maintaining records of employees exposures to toxic materials or harmful physical agents as appropriate. Such records shall be maintained in perpetuity.
- c. A central file of all violations of DOE-prescribed OSHA standards noted during inspections (and abatement actions) shall be maintained by field organizations. A central file also shall be maintained by the field organizations of formal employee safety and health complaints and their disposition. Upon request, any of these safety and health violation or complaint-related records shall be made available for review by employees directly affected by such information, or by their authorized representatives. DOE 1324.1, RECORDS DISPOSITION, of 5-28-80, Attachment IV, DOE Records Schedule 25, paragraph 1b, specifies the retention period for these records.

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d. DOE contractors subject to the provisions of DOE PR 9-50.704-2(a) shall respond to requests for injury/illness recordkeeping information from the U.S. Department of Labor, Bureau of Labor Statistics, or the Bureau's cooperating State agencies, as appropriate. The information shall be returned to the requestor on OSHA Form 200-S (included with the request) in accordance with the instructions accompanying the request, and a copy thereof shall be provided to the safety and health director of the field organization. The contractor shall include a statement on the OSHA Form 200-S which states: "With respect to work performed under contract with the DOE at (name of contractor and/or GOCO facility) this employer is not subject to the Occupational Safety and Health Act of 1970, under section 4(b)(1) of that Act."

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter III, Section 3

3. POSTING.

- a. Each DOE contractor shall post DOE Forms 5480.2 and 5480.3 or DOE Forms EV-632 and EV-632S, as appropriate, and include the information specified.
- b. Each year, from 2-1 until 3-1, DOE contractors subject to the provisions of DOE PR 9-50.704-2(a) shall post a completed DOE Form EV-102A.
- c. The required forms shall be posted in a sufficient number of places to permit contractor employees working in or frequenting any portion of the GOCO facility to observe the information on the way to or from their place of employment.

19.6.2 Occurrence Reporting

Occurrence Reporting requirements are contained in the Contract and facility level Management Systems Functional Areas.

19.6.3 OS&H Record Management and Exposure Reporting

REQUIREMENT SOURCE: DOE ORDER 1324.5B, Attachment 2

CONTRACTOR REQUIREMENTS

As a minimum requirement, for records maintained under the contract: (1) Adequate and proper documentation shall be created and maintained for all activities carried out under the contract. (2) A records management program shall be established that provides for having all records approved for disposition by the National Archives and Records Administration. This shall be accomplished by having an approved records disposition schedule for every records series maintained.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.f(2)

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The industrial hygiene staff's evaluation of potential health hazards shall be documented in written reports. If a deficiency is identified the report shall recommend corrective actions. The report, along with any response from line management and/or documentation of corrective actions, shall be retained.

REQUIREMENT SOURCE: DOE ORDER 5480.10, Section 9.f(3)

The data resulting from occupational environmental monitoring shall be easily retrievable. Monitoring data should be tabulated along with information on the location and operation monitored, the identity and job classification of the employees associated with the operation, estimated time-weighted average or short-term exposure levels, and a reference to the sampling and analytical methods used.

REQUIREMENT SOURCE: DOE ORDER 5483.1A, Chapter I, Section 5.e

All contractor employees or former employees shall have access to their personal safety, health, and medical records consistent with the provisions of the Freedom of Information Act and the Privacy Act.

19.7 KEY INTERFACES

19.7.1 Management Systems

The Management Systems Functional Area provides the necessary controls for developing, using, and maintaining facility policies and procedures. In addition, the Health and Safety Organization shall participate in occurrence/event reporting activities which are included in this area.

19.7.2 Quality Assurance

The Quality Assurance Function Area interfaces with the Occupational Safety and Health Functional Area by establishing the organization's approach to the management of quality (e.g., appropriate retention of documents and records, quality work processes, hardware quality requirements, and independent assessments).

19.7.3 Configuration Management

No key interface was identified for this area.

19.7.4 Training and Qualification

Training is an integral part of any effective health and safety program. The OS&H

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Program provides the necessary information and support to the training program to ensure that effective health and safety training is developed and conducted. The training organization shall properly document all health and safety training and maintain all such documentation in accordance with established procedures.

19.7.5 Emergency Management

The OS&H Program provides the Emergency Management Functional Area with the necessary emergency planning support to ensure proper use and delineation of OS&H regulations and procedures. The OS&H Organization shall also provide support for exercises and training.

19.7.6 Safeguards and Security

The Safeguards and Security organization has a limited interaction with the OSH Program concerning the safe handling of firearms and explosives.

19.7.7 Engineering Program

The Engineering Program Functional Area defines the processes necessary to design engineering controls for health and safety hazards. This interface is essential during the actual design or pre-engineering phase.

19.7.8 Construction Program

All construction activities shall adhere to the Federal OSHA Regulations 29CFR1926. The construction organization will interface with the CSB organization to ensure understanding and adherence with established health and safety controls.

19.7.9 Operations

On-going operations depend on OSHA regulations, facility OSH policy and management commitment to allow safe operations. The OSH Functional Area should perform workplace walkdowns, surveillance, and appraisals as frequently as possible to ensure OSH requirements are being followed. Operations should work closely with the OSH Program on any routine and non-routine programs.

19.7.10 Maintenance

The Maintenance Functional Area interfaces with the OS&H Program during all routine and non-routine maintenance activities. All personnel health and safety training shall be

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completed and hazard controls implemented prior to performing work.

The facility specific Maintenance functional area provides exposure records and/or accident/illness records to the PHMC Occupational Safety and Health organization. The Maintenance Functional Area interfaces and complies with the Facility Specific Occupational Safety and Health Programs and requirements.

19.7.11 Radiation Protection

Personnel working in radiological controlled areas must adhere to all As-Low-As-Reasonably-Achievable (ALARA) policies and Occupational Safety and Health Act (OSHA) controls. The Radiation Protection Functional Area must coordinate all routine and non-routine activities with the OS&H Program.

19.7.12 Fire Protection

An integrated approach is taken between the Occupational Safety and Health Functional Area and the Fire Protection Function Area to ensure current standards and guidelines for protection of workers are appropriately coordinated. The Hanford Fire Department provides SCBA maintenance and testing for the Occupational Safety and Health Organization as well as the site.

19.7.13 Packaging and Transportation

The packaging and transportation of materials (both nuclear and non-nuclear) involves significant interaction with the OSH Program. Specific subjects of concern include safe handling of hazardous materials and chemicals, hoisting and rigging, personal protective equipment, etc.

19.7.14 Environmental Restoration

No key interface was identified for this area.

19.7.15 Decontamination and Decommissioning

No key interface was identified for this area.

19.7.16 Waste Management

The Waste Management Functional Area relies on the Occupational Safety and Health Functional Area for health and safety controls. The Occupational Safety and Health

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Functional Area provides implementing procedures to control hazardous or toxic materials; physical hazards; hazards identification, surveillance, and communication ; asbestos removal operations; hazardous materials handling and emergency response; posting of danger signs and tags; storage of pressurized gases; lockout and tag-out activities ; and explosive/ combustible materials handling.

19.7.17 Research and Development and Experimental Activities

No key interface was identified for this area.

19.7.18 Nuclear Safety

Occupational Safety and Health provides information to the Nuclear Safety Functional Area regarding requirements to mitigate health related effects from hazardous substance and physical hazards.

19.7.19 Occupational Safety and Health

Occupational Safety and Health requires interface between industrial safety and industrial hygiene disciplines as well as between these two disciplines and performance and awareness.

19.7.20 Environmental Protection

The Occupational Safety and Health Functional Area routinely interfaces with the Environmental Protection Functional Area to ensure worker safety in responding to environmental incidents.

19.8 References

For a list of source documents for this functional area, see attachment titled: "RIDs By Document X-Reference Listing."

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RIDs by Document X-Reference Listing
Based on FDHC-OH-SD RID and including all documents.

**54 FR 3904, Safety And Health Program Management Guidelines: Issuance Of Voluntary Guideline:
Notice, Dated 01-26-89**

DOE ORDER 1324.5B, Records Management Program

DOE ORDER 5480. 4, Environmental Protection, Safety and Health Protection Standards, Revision C04

DOE ORDER 5480. 8A, Contract Occupational Medical Program, Revision C01

DOE ORDER 5480.10, Contractor Industrial Hygiene Program

**DOE ORDER 5483.1A, Occupational Safety and Health Program for DOE Contractor Employees at
Government-Owned Contractor-Operated Facilities**

**DOE ORDER 5484.1, Environmental Protection, Safety, and Health Protection Information Reporting
Requirements, Revision C07**

PUBLIC LAW 91-596, Public Law 91-596, Revision 1

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Fluor Daniel Hanford Contract

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20.0 Environmental Protection

A Standards/Requirements Identification Document (S/RID) is the total list of the Environment, Safety and Health (ES&H) requirements to be implemented by a contract, facility, or activity. These requirements are appropriate to the life cycle phase to achieve an adequate level of protection for worker and public health and safety, and the environment during design, construction, operation, decontamination and decommissioning, and environmental restoration. S/RIDs are living documents, to be revised appropriately based on change in the FDH contract or facility's mission or configuration, a change in the facility's life cycle phase, or a change to the applicable standards/requirements. S/RIDs encompass health and safety, environmental, and safeguards and security (S&S) standards/requirements related to the functional areas listed in the U.S. Department of Energy (DOE) Environment, Safety and Health Configuration Guide.

The Fluor Daniel Hanford (FDH) Contract S/RID contains standards/requirements applicable to FDH and FDH subcontractors, necessary for safe operation of Project Hanford Management Contract (PHMC) facilities, that are not the direct responsibility of the facility manager (e.g., a site-wide fire department). Facility S/RIDs contain standards/requirements applicable to a specific facility that are the direct responsibility of the facility manager.

S/RIDs are prepared by those responsible for managing the operation of facilities or the conduct of activities that present a potential threat to the health and safety of workers, public, or the environment, including:

- Hazard Category 1 and 2 nuclear facilities and activities, as defined in DOE 5480.23.
- Selected Hazard Category 3 nuclear, and Low Hazard non-nuclear facilities and activities, as agreed upon by RL.

This S/RID defines the FDH Contract level requirements for the Environmental Protection (EP) program in place at Hanford. The EP Functional Area defined in this document is described in general accordance with the Environmental, Safety, and Health (ES&H) Configuration Guide, Revision 0, dated July 30, 1993, and is presented in the form of program elements and subelements. The specific DOE Orders, regulations, industry codes/standards, guidance documents and good industry practices which serve as the basis for each element/subelement are identified and aligned with each subelement.

The EP Functional Area encompasses all requirements necessary to ensure compliance with

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applicable environmental laws and regulations. It also includes additional requirements which further prevent, reduce, or control, to the extent practicable, environmental damage by DOE operations. The EP Functional Area includes the requirements necessary to protect environmental media, biota, and cultural and natural resources. By preventing, reducing, and controlling environmental impacts, hazardous exposures to personnel and the public are also prevented, reduced, and controlled.

The EP Functional Area is divided into elements to aid in identifying and categorizing applicable environmental requirements in accordance with the structure outlined in the ES&H Configuration Guide. The elements described are not necessarily environmental protection programs--they provide categories of identified requirements from which environmental protection activities are implemented.

FDH has no direct implementation responsibility for the requirements in this S/RID, but does hold its subcontractors accountable, through subcontract provisions, for complying with applicable ES&H requirements, which are necessary to protect the workers, the public, and the environment. All requirements in this S/RID are recognized here as responsibilities beyond the functional charter of FDH EP, but nevertheless within the scope of the FDH EP S/RID. Some requirements in this S/RID are intentionally duplicated in facility S/RIDs. This is necessary to capture implementation responsibilities being met by the facility in conjunction with a support group or contractor. In addition, many of the activities addressed in the EP S/RID are normally not directly implemented by a facility manager, but are performed by a support subcontractor as a service to the facility. These activities, although identified in this document, remain the responsibility of facility managers who control funding for the activity. Such activities should be addressed in the appropriate facility S/RIDs. Finally, some activities within the FDH EP S/RID are implemented through the Hanford Environmental Management Program or other programs. Such activities are the responsibility of the central group with funding to implement them.

20.1 Environmental Policy Management

In addition to facility and activity level S/RIDs, FDH utilizes Management Directives for applicable tasks, defined contractually with RL, of a defined scope of work at the Hanford Site. To carry out its duties related to protection of the environment, FDH uses CM 7-5, Environmental Compliance Manual (ECM). All unique management and administrative responsibilities necessary to advance environmental protection activities are contained in the ECM. The ECM is consistent with the EP S/RID, yet contains a broader range of requirements specific to major environmental laws that must be followed by all FDH subcontractors at Hanford. Though facilities may only be responsible to implement a subset of the ECM requirements, their S/RIDs must be consistent with the contents of the

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ECM.

20.2 Permits

20.2.1 National Pollution Discharge Elimination System

The EPA has not delegated authority to Washington State to issue NPDES permits to federal facilities. Therefore, the EPA is the permitting authority for the Hanford Site and the federal NPDES regulations are applicable.

Specific conditions can be found in "Authorization to Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Construction Activity", Permit No. WAR-00-000F, September 9, 1992, "Authorization for Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Industrial Activity", Permit No. WAR-10-000F, September 9, 1992, "Authorization to Discharge under the National Pollutant Discharge Elimination System", Permit No. WA000374-3, NPDES Permit No. WA-002591-7, and all State Waste Discharge Permits issued by Ecology pursuant to WAC 173-216.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 21(a)

Duty to apply. Any person who discharges or proposes to discharge pollutants or who owns or operates a ``sludge-only facility'' and who does not have an effective permit, except persons covered by general permits under §122.28, excluded under §122.3, or a user of a privately owned treatment works unless the Director requires otherwise under §122.44(m), shall submit a complete application (which shall include a BMP program if necessary under 40 CFR 125.102) to the Director in accordance with this section and part 124.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 21(d)(3)(i)

All applicants for EPA-issued permits, other than POTWs, new sources, and ``sludge-only facilities,'' must complete Forms 1 and either 2b or 2c of the consolidated permit application forms to apply under §122.21 and paragraphs (f), (g), and (h) of this section.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 26(a)(6)

Non-municipal separate storm sewers. For storm water discharges associated with industrial activity from point sources which discharge through a non-municipal or non-publicly owned separate storm sewer system, the Director, in his discretion, may issue: a single NPDES permit, with each discharger a co-permittee to a permit issued to the operator of the portion of the system that discharges into waters of the United States; or, individual permits to each discharger of storm water associated with industrial activity through the non-municipal conveyance system.

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- (i) All storm water discharges associated with industrial activity that discharge through a storm water discharge system that is not a municipal separate storm sewer must be covered by an individual permit, or a permit issued to the operator of the portion of the system that discharges to waters of the United States, with each discharger to the non-municipal conveyance a co-permittee to that permit.
- (ii) Where there is more than one operator of a single system of such conveyances, all operators of storm water discharges associated with industrial activity must submit applications.
- (iii) Any permit covering more than one operator shall identify the effluent limitations, or other permit conditions, if any, that apply to each operator.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 26(a)(7)

Combined sewer systems. Conveyances that discharge storm water runoff combined with municipal sewage are point sources that must obtain NPDES permits in accordance with the procedures of §122.21 and are not subject to the provisions of this section.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 41(a)

Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

REQUIREMENT SOURCE: 40 CFR 122, Dated 07-01-95, Part 41(a)(1)

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

20.2.2 Stormwater Discharge

Specific conditions can be found in "Authorization to Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Construction Activities", Permit NO. WAR-00-000F, September 9, 1992, and "Authorization to Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Industrial Activity", Permit NO. WAR-10-000F, September 9, 1992.

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20.2.3 Clean Air Permits

DOE/RL-95-07, "Hanford Site Air Operating Permit Application," dated May 25, 1995, has been filed with the Washington State Department of Ecology. Once a permit is issued, it will list commitments that FDH and other contractors on the Hanford Site included in the application intend to perform (anticipated November 1997).

REQUIREMENT SOURCE: WAC 173-401, Dated 11-04-93, Section 100(1)

The provisions in this chapter establish the elements of a comprehensive Washington state air operating permit program consistent with the requirements of Title V of the Federal Clean Air Act (FCAA) (42 U.S.C. 7401, et seq.).

REQUIREMENT SOURCE: WAC 173-401, Dated 11-04-93, Section 100(2)

All sources subject to this regulation shall have a permit to operate that assures compliance by the source with all applicable requirements. While chapter 173-401 WAC does not impose substantive new requirements, it does require that fees be imposed on sources and that certain procedural measures be adopted especially with respect to compliance.

REQUIREMENT SOURCE: WAC 173-401, Dated 11-04-93, Section 600

Permit content.

(1) Each permit shall contain terms and conditions that assure compliance with all applicable requirements at the time of permit issuance. Every requirement in an operating permit shall be based upon the most stringent of the following requirements:

- (a) The FCAA and rules implementing that act, including provisions of the approved state implementation plan;
- (b) Chapter 70.94 RCW and rules implementing that chapter. This includes requirements in regulatory orders issued by the permitting authority;
- (c) In permits issued by a local air pollution control authority, the requirements of any order or regulation adopted by that authority;
- (d) Chapter 70.98 RCW and rules adopted thereunder; and
- (e) Chapter 80.50 RCW and rules adopted thereunder.

(2) Legal authority. The permit shall specify and reference the origin of and authority for each term or condition, and identify any difference in form as compared to the applicable requirement

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upon which the term or condition is based.

(3) Acid rain. Where an applicable requirement of the FCAA is more stringent than an applicable requirement of regulations promulgated under Title IV of the FCAA, both provisions shall be incorporated into the permit and shall be enforceable by the administrator.

(4) Where an applicable requirement based on the FCAA and rules implementing that act (including the approved state implementation plan) is less stringent than an applicable requirement promulgated under state or local legal authority, both provisions shall be incorporated into the permit in accordance with WAC 173-401-625.

REQUIREMENT SOURCE: WAC 173-401, Dated 11-04-93, Section 605(1)

Emission standards and limitations.

(1) General. Each permit shall contain emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance.

REQUIREMENT SOURCE: WAC 173-401, Dated 11-04-93, Section 605(2)

Alternative emission limits. If the Washington state implementation plan allows a determination of an alternative emission limit at a chapter 401 source, equivalent to that contained in the plan, to be made in the permit issuance, renewal, or significant modification process, the permitting authority may elect to use such process. Any permit containing such equivalency determination shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 060(7)

Each federal facility that comes under the authority of this chapter shall hold one license for each site, base, or installation. When applicable, the license shall be part of the facility's air operating permit.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 060(8)

Facilities may request a single categorical license which identifies limits and conditions of operation for similar multipurpose temporary and/or portable emission units. When applicable, the license shall be part of the facility's air operating permit.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 060(9)

All facilities with licensed emission units, except for radioactive materials licensees, shall submit a request to the department for renewal of their radioactive air emissions license at least sixty days prior to expiration of the license or as required by the air operating permit. All renewal requests

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shall include a summary of the operational status of all emission units, the status of facility compliance with the standards of WAC 246-247-040, and the status of any corrective actions necessary to achieve compliance with the requirements of this chapter. Facilities with licensed emission units that also hold a radioactive materials license issued by the department shall submit this information along with their radioactive material license renewal submittal. If the department is unable to renew a radioactive air emissions license before its expiration date, the existing license, with all of its requirements and limitations, remains in force until the department either renews or revokes the license.

20.2.4 RCRA TSD Facility Permits

The Hanford Facility Permit (the Permit) dictates all requirements for final status TSD units. All operating TSD units that have not yet been incorporated into the Permit must operate pursuant to the interim status standards of WAC 173-303-400 until final status permitting is achieved. In addition, Ecology intends to incorporate closure plans for all TSD units into the Permit, even those for which final status is not sought. Therefore, although the requirements of WAC 173-303-610 are applicable to all TSD units, all closure and postclosure plan(s) that are developed must be approved by Ecology and incorporated into the Permit. Such plans must be followed as a condition of the Permit.

REQUIREMENT SOURCE: TRIPARTY AGREEMENT, Revision 6, Attachment 2, Section 6.3, Paragraphs 1 and 2

TREATMENT, STORAGE, AND DISPOSAL CLOSURE PROCESS

The DOE will follow applicable Federal and State statutes, regulations and guidance documents, and written policy determinations that pertain to the closure process for TSD groups/units.

The TSD units containing mixed waste will normally be closed with consideration of all hazardous substances, which includes radioactive constituents. Hazardous substances not addressed as part of the TSD closure may be addressed under CERCLA past-practice (CPP) authority in accordance with the process defined in Section 7.0.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 400(3) and (3)(a)

Standards.

(a) Interim status standards are the standards set forth by the Environmental Protection Agency in 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, and DD which are incorporated by reference into this regulation (including, by reference, any EPA requirements specified in those subparts which are not otherwise explicitly described in this chapter), and:

(i) The land disposal restrictions of WAC 173-303-140; the facility requirements of WAC

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173-303-280 through 173-303-440; and the corrective action requirements of WAC 173-303-646(2);

(ii) WAC 173-303-630(3), for containers. In addition, for container storage, the department may require that the storage area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being stored, or due to a history of spills or releases from stored containers. Any new container storage areas constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7).

(iii) WAC 173-303-640 (5)(d), for tanks; and

(iv) WAC 173-303-805.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 400(3)(b)

For purposes of applying the interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, and DD to the state of Washington facilities, the federal terms have (and in the case of the wording used in the financial instruments referenced in Subpart H of Part 265, must be replaced with) the following state of Washington meanings:

- (i) "Regional administrator" means the "department" except for 40 CFR Parts 270.2; 270.3; 270.5; 270.10(e)(1),(2) and (4); 270.10(f) and (g); 270.11(a)(3); 270.14(b)(20); 270.32(b)(2); and 270.51;
- (ii) "Hazardous" means "dangerous";
- (iii) "Compliance procedure" has the meaning set forth in WAC 173-303-040, Definitions;
- (iv) "EPA hazardous waste numbers" mean "dangerous waste numbers".

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 400(3)(c)

In addition to the changes described in (b) of this subsection, the following modifications are made to interim status standards of 40 CFR Part 265 Subparts F through R, Subpart W, and Subparts AA, BB, and DD:

- (i) The words "the effective date of these regulations" means:
 - (A) November 19, 1980, for facilities which manage any wastes designated by 40 CFR Part 261;
 - (B) For wastes which become designated by 40 CFR Part 261 subsequent to November 19, 1980, the effective date is the date on which the wastes become regulated;
 - (C) March 12, 1982, for facilities which manage wastes designated only by WAC 173-303-080

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through 173-303-100 and not designated by 40 CFR Part 261;

(D) For wastes which become designated only by WAC 173-303-080 through 173-303-100 and not designated by 40 CFR Part 261 subsequent to March 12, 1982, the effective date is the date on which the wastes become regulated.

(ii) "Subpart N - landfills" has an additional section added which reads: "An owner/operator must not landfill an organic carcinogen or an EHW, as defined by WAC 173-303-080 through 173-303-100, except at the EHW facility at Hanford";

(iii) "Subpart R - underground injection" has an additional section which reads: "Owners and operators of wells are prohibited from disposing of EHW or an organic carcinogen designated under WAC 173-303-080 through 173-303-100";

(iv) "Subpart M - land treatment," section 265.273(b) is modified to replace the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080";

(v) "Subpart F - ground water monitoring," section 265.91(c) includes the requirement that: "Groundwater monitoring wells must be designed, constructed, and operated so as to prevent groundwater contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells";

(vi) "Subpart H - financial requirements" has an additional section which reads: "Any owner or operator who can provide financial assurances and instruments which satisfy the requirements of WAC 173-303-620 will be deemed to be in compliance with 40 CFR Part 265 Subpart H". In 40 CFR Parts 265.143(g) and 265.145(g) the following sentence does not apply to the state: "If the facilities covered by the mechanisms are in more than one Region, identical evidence of financial assurance must be submitted to, and maintained with the Regional Administrators of all such Regions." In addition, the following sections and any cross-reference to these sections are not incorporated by reference: 40 CFR Parts 265.149 and 265.150; and

(vii) "Subpart J - tank systems" section 265.193(a) is modified so that the dates by which secondary containment (which meets the requirements of that section) must be provided are the same as the dates in WAC 173-303-640 (4)(a).

(viii) "Subpart J - tank systems" section 265.191(a) is modified so that the date by which an assessment of a tank system's integrity must be completed is January 12, 1990.

(ix) "Subpart G - closure and post-closure" section 265.115 is modified to read "Within 60 days of completion of closure of each dangerous waste management unit (including tank systems and container storage areas) and within 60 days of completion of final closure..." In addition, the clean-up levels for removal or decontamination set forth at WAC 173-303-610 (2)(b) apply.

(x) "Subpart B - general facility standards. References to "EPA" (etc.), means the "department"

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except at 40 CFR 265.11. Additionally, references to "administrator" (etc.), means the "director" except at 40 CFR 265.12(a)."

(xi) The following sections and any cross-reference to these sections are not incorporated or adopted by reference:

- (A) 40 CFR Parts 260.1 (b)(4)-(6) and 260.20-22.
- (B) 40 CFR Parts 264.1 (d) and (f); 265.1 (c)(4); 264.149-150 and 265.149-150; 264.301(k); and 265.430.
- (C) 40 CFR Parts 268.5 and 6; 268 Subpart B; 268.42(b); and 268.44.
- (D) 40 CFR Parts 270.1 (c)(1)(i); 270.60(b); and 270.64.
- (E) 40 CFR Parts 124.1 (b)-(e); 124.4; 124.5(e); 124.9; 124.10 (a)(1)(iv); 124.12(e); 124.14(d); 124.15 (b)(2); 124.16; 124.17(b); 124.18; 124.19; and 124.21.
- (F) 40 CFR Parts 2.106(b); 2.202(b); 2.205(i); 2.209 (b)-(c); 2.212-213; and 2.301-311.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 610(2) and (2)(a)

Closure performance standard. The owner or operator must close the facility in a manner that:

- (a)(i) Minimizes the need for further maintenance;
- (ii) Controls, minimizes or eliminates to the extent necessary to protect human health and the environment, postclosure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products to the ground, surface water, ground water, or the atmosphere; and
- (iii) Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 610(2)(b)

Where the closure requirements of this section, or of WAC 173-303-630(10), 173-303-640(8), 173-303-650(6), 173-303-655(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), 173-303-670(8), 173-303-680 (2) through (4), or 40 CFR 264.1102 (incorporated by reference at WAC 173-303-695) call for the removal or decontamination of dangerous wastes, waste residues, or equipment, bases, liners, soils or other materials containing or contaminated with dangerous wastes or waste residue, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

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- (i) For soils, ground water, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations, chapter 173-340 WAC as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate, see WAC 173-340-700 through 173-340-760, excluding WAC 173-340-745; and
- (ii) For all structures, equipment, bases, liners, etc., clean closure standards will be set by the department on a case-by-case basis in accordance with the closure performance standards of WAC 173-303-610 (2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 610(7) and (7)(a)

Postclosure care and use of property.

(a) Postclosure care for each dangerous waste management unit subject to postclosure requirements must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

- (i) Ground water monitoring and reporting as required by WAC 173-303-645, 173-303-650, 173-303-655, 173-303-660, 173-303-665, and 173-303-680; and
- (ii) Maintenance and monitoring of waste containment systems as applicable.

20.3 Environmental Monitoring, Surveillance and Inspections

This element addresses monitoring, surveillance, and inspection activities.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter IV, Section 4

Environmental Monitoring Plans. A written environmental monitoring plan shall be prepared for each site, facility, or process that uses, generates, releases, or manages significant pollutants or hazardous materials. The plan shall contain the rationale and design criteria for the monitoring program, extent and frequency of monitoring and measurements, procedures for laboratory analyses, quality assurance requirements, program implementation procedures, and direction for the preparation and disposition of reports. The plan shall be approved by the appropriate Head of Field Organization, or his or her designee. The plan shall be reviewed annually and updated as needed. The plan shall identify and discuss two major activities: (a) effluent monitoring, and (b) environmental surveillance. The plan shall reflect the importance of monitoring as a critical element of an effective environmental protection program. The plan shall be reviewed annually and updated every 3 years.

20.3.1 Groundwater Monitoring

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Groundwater Monitoring requirements for interim status TSD units are those of 40 CFR 265, Subpart F as referenced (with changes) by WAC 173-303-400(3). Groundwater Monitoring requirements for final status units are those requirements incorporated into the Hanford Facility Permit (WA 7890008967) based upon the standards of WAC 173-303-645.

An agreement was reached in December 1991 to include all miscellaneous waste streams and/or any new waste streams discharged to the ground under the State of Washington waste discharge permit program (WAC 173-216). Some of the "216 State Waste Discharge Permit" sites also require groundwater monitoring.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter IV, Section 9

Groundwater Monitoring Program. Groundwater that is or could be affected by DOE activities shall be monitored to determine and document the effects of operations on groundwater quality and quantity and to demonstrate compliance with DOE requirements and applicable Federal, State, and local laws and regulations.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter IV, Section 9.a

Groundwater Monitoring Plans. A groundwater monitoring plan shall be developed as a specific element of all environmental monitoring plans and the Groundwater Protection Management Program required in page III-2, subparagraph 4.a. The plan shall identify all DOE requirements and regulations applicable to groundwater protection and include monitoring strategy. The elements of the groundwater monitoring program shall be specified (sampling plan, sampling, analysis, and data management), as shall the rationale or purpose for selecting these elements.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter IV, Section 9.b

General Requirements - Groundwater monitoring programs shall be conducted on-site and in the vicinity of DOE facilities to:

- (1) Obtain data for the purpose of determining baseline conditions of groundwater quality and quantity;
- (2) Demonstrate compliance with and implementation of all applicable regulations and DOE Orders;
- (3) Provide data to permit the early detection of groundwater pollution or contamination;
- (4) Provide a reporting mechanism for detected groundwater pollution or contamination;

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- (5) Identify existing and potential groundwater contamination sources and to maintain surveillance of these sources;
- (6) Provide data upon which decisions can be made concerning land disposal practices and the management and protection of groundwater resources.

REQUIREMENT SOURCE: WAC 173-304, Dated 10-28-85, Section 490(1)

Applicability. These requirements apply to owners and operators of landfills, piles, landspreading disposal facilities, and surface impoundments that are required to perform ground water monitoring under WAC 173-304-400.

20.4 Environmental Control Standards

Based on the description of this element in the ES&H Configuration Guide and current charter responsibilities, the company-level environmental control standards were combined under element 20.2, "Permits". Remaining standards are managed at the facility level.

20.5 Pollution Prevention

SEN 37-92, "Waste Minimization Crosscut Plan Implementation", establishes the organizational and management arrangements necessary to implement the recommendations and strategies of the Waste Minimization Crosscut Plan developed in response to SEN-25A-91.

REQUIREMENT SOURCE: 40 CFR 262, Dated 07-01-95, Appendix, Item 16, Para. 3

In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements.

REQUIREMENT SOURCE: 40 CFR 262, Dated 07-01-95, Part 41

A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Regional Administrator by March 1 of each even numbered year. The Biennial Report must be submitted on EPA Form 8700-13A, must cover generator activities during the previous year, and must include the following information:

- (1) The EPA identification number, name, and address of the generator;
- (2) The calendar year covered by the report;

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- (3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year;
- (4) The name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage or disposal facility within the United States;
- (5) A description, EPA hazardous waste number (from 40 CFR Part 261, subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States. This information must be listed by EPA identification number of each such off-site facility to which waste was shipped.
- (6) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- (7) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.
- (8) The certification signed by the generator or authorized representative.

(b) Any generator who treats, stores, or disposes of hazardous waste on-site must submit a biennial report covering those wastes in accordance with the provisions of 40 CFR Parts 270, 264, 265, and 266. Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR 262.56.

REQUIREMENT SOURCE: 40 CFR 264, Dated 07-01-95, Part 75

Biennial report.

The owner or operator must prepare and submit a single copy of a biennial report to the Regional Administrator by March 1 of each even numbered year. The biennial report must be submitted on EPA form 8700-13B. The report must cover facility activities during the previous calendar year and must include:

- (a) The EPA identification number, name, and address of the facility;
- (b) The calendar year covered by the report;
- (c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;
- (d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each

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generator;

- (e) The method of treatment, storage, or disposal for each hazardous waste;
- (f) [Reserved]
- (g) The most recent closure cost estimate under §264.142, and, for disposal facilities, the most recent post-closure cost estimate under §264.144; and
- (h) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- (i) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.
- (j) The certification signed by the owner or operator of the facility or his authorized representative.

REQUIREMENT SOURCE: 42 USC 13101, Dated 08-01-95, Section (b)

Policy.

The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter III, Section 4.b

A Waste Minimization Program that will contain goals for minimizing the volume and toxicity of all wastes that are generated, with annual reductions if programmatic requirements allow. Changes in waste quantity, volume and toxicity that are achieved shall be compared with quantities generated in the previous year. The proposed methods of treatment, storage, and disposal that accomplish waste minimization that are technically and economically practicable shall be reported as appropriate. Waste minimization plans required by specific legislation, such as RCRA, shall be included as a part of this program plan. This plan shall be completed no later than 18 months after the effective date of this Order. The plan shall be reviewed annually and updated every 3 years.

REQUIREMENT SOURCE: DOE ORDER 5400.1, Revision C01, Chapter III, Section 4.c

A Pollution Prevention Awareness Program that shall be specifically identified in his or her

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environmental protection statement. All mission statements and project plans shall recognize a requirement for pollution prevention, where appropriate. The documented program, including elements for employee awareness through specific training, special awareness campaigns, and incentives and award programs shall be implemented. This plan shall be completed no later than 12 months after the effective date of this Order. The plan shall be reviewed annually and updated every 3 years.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 180 Introduction and (1)

Before transporting dangerous waste or offering dangerous waste for transport off the site of generation, the generator must prepare a manifest and must follow all applicable procedures described in this section.

(1) This subsection describes the form and contents of dangerous waste manifests. 40 CFR Part 262 Appendix - Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions) is adopted by reference. The manifest must be EPA Form 8700-22 and, if necessary, EPA Form 8700-22A. The manifest must be prepared in accordance with the instructions for these forms, as described in the uniform manifest Appendix of 40 CFR Part 262, and in addition must contain the following information in the specified shaded items of the uniform manifest:

- (a) Item D - The first transporter's telephone number must be provided in this space;
- (b) Item F - If a second transporter is used, then the second transporter's telephone number must be provided in this space;
- (c) Item H - The designated receiving facility's telephone number must be provided in this space;
- (d) Item I, and R if the continuation sheet 8700-22A is used - The dangerous waste number (e.g., F001, D006, WT02, P102) must be provided in this space for each corresponding waste entered and described under Item 11, and 28 if the continuation sheet 8700-22A is used. As discussed in subsection (5) of this section, dangerous waste numbers WL01 or WL02 may be used in this space for labpacks;
- (e) Item O, (on the continuation sheet 8700-22A) - If a third transporter is used, then the third transporter's telephone number must be provided in this space; and
- (f) Item Q, (on the continuation sheet 8700-22A) - If a fourth transporter is used, then the fourth transporter's telephone number must be provided in this space.

REQUIREMENT SOURCE: WAC 173-307, Dated 05-02-91, Section 030 WAC Plans Part (1)

Part One. Part one shall include:

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- (a) A written policy articulating management and corporate support for the plan and a commitment to implement planned activities and achieve established goals.
- (b) The plan scope and objectives.
- (c) A description of the facility type, a description of product(s) made and/ or services provided, and a statement or listing of the current level(s) of production or service activity in units of measure appropriate to the industry or activity;
- (d) A general overview of the processes used in production or service activities (a schematic drawing may be included);
- (e) A statement providing, for the last calendar year, the total pounds of extremely hazardous waste and total pounds of dangerous waste reported on Form 4, Generator Annual Dangerous Waste Report, and, if applicable, the total pounds of toxic releases reported on Form R under SARA Title III, Section 313; and
- (f) A description of current reduction, recycling, and treatment activities and documentation of hazardous substance use reduction and hazardous waste reduction efforts completed prior to the first plan due date specified in WAC 173-307-050. Clearly separate the explanations of reduction activities from recycling and other management activities.

20.5.1 Affirmative Procurement Program

The requirements for implementing an Affirmative Procurement Program are cited from Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention," in lieu of 40 CFR 248 - 250, 40 CFR 252, and 40 CFR 253.

REQUIREMENT SOURCE: EXECUTIVE ORDER 12873, Revision 1, Section 402(b)

For the currently designated EPA guideline items, which are:

- (i) concrete and cement containing fly ash;
- (ii) recycled paper products;
- (iii) re-refined lubricating oil;
- (iv) retread tires; and
- (v) insulation containing recovered materials; and for all future guideline items, agencies shall ensure that their affirmative procurement programs require that 100 percent of their purchases of products meet or exceed the EPA guideline standards unless written justification is provided that a product is not available competitively within a reasonable time frame, does not meet appropriate performance standards, or is only available at an unreasonable price.

REQUIREMENT SOURCE: EXECUTIVE ORDER 12873, Revision 1, Section 701

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Contractor Operated Facilities. Contracts that provide for contractor operation of a government-owned or leased facility, awarded after the effective date of this order, shall include provisions that obligate the contractor to comply with the requirements of this order within the scope of its operations. In addition, to the extent permitted by law and where economically feasible, existing contracts should be modified.

REQUIREMENT SOURCE: EXECUTIVE ORDER 12873, Revision 1, Section 705

Recycling Programs. Each Executive agency that has not already done so shall initiate a program to promote cost effective waste prevention and recycling of reusable materials in all of its facilities. The recycling programs implemented pursuant to this section must be compatible with applicable State and local recycling requirements. Federal agencies shall also consider cooperative ventures with State and local governments to promote recycling and waste reduction in the community.

20.6 Recordkeeping, Reports and Notifications

20.6.1 Incident Investigation and Reporting

Specific conditions can be found in "Authorization to Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Construction Activity", Permit No. WAR-00-000F, September 9, 1992, "Authorization for Discharge under the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Industrial Activity", Permit No. WAR-10-000F, September 9, 1992, "Authorization to Discharge under the National Pollutant Discharge Elimination System", Permit No. WA000374-3, NPDES Permit No. WA-002591-7, and all State Waste Discharge Permits issued by Ecology pursuant to WAC 173-216.

REQUIREMENT SOURCE: 40 CFR 302, Dated 07-01-95, Part 6(a)

Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he has knowledge of any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center ((800) 424-8802; in Washington, D.C. (202) 426-2675).

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 145(1)

Purpose and applicability. This section sets forth the requirements for any person responsible for a spill or discharge of a dangerous waste or hazardous substance into the environment, except when such release is otherwise permitted under state or federal law. For the purposes of complying with this section, a transporter who spills or discharges dangerous waste or hazardous substances during transportation will be considered the responsible person. This section applies when any dangerous

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waste or hazardous substance is intentionally or accidentally spilled or discharged into the environment (unless otherwise permitted) such that human health or the environment is threatened, regardless of the quantity of dangerous waste or hazardous substance.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 145(2)

Notification. Any person who is responsible for a spill or nonpermitted discharge must immediately notify the individuals and authorities described for the following situations:

- (a) For spills or discharges onto the ground or into groundwater or surface water, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, notify the appropriate regional office of the department of ecology;
- (b) For spills or discharges which result in emissions to the air, notify all local authorities in accordance with the local emergency plan. If necessary, check with the local emergency service coordinator and the fire department to determine all notification responsibilities under the local emergency plan. Also, in western Washington notify the local air pollution control authority, or in eastern Washington notify the appropriate regional office of the department of ecology.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 080(5)

The facility shall notify the department within twenty-four hours of any shutdown, or of any transient abnormal condition lasting more than four hours or other change in facility operations which, if allowed to persist, would result in emissions of radioactive material in excess of applicable standards or license requirements. If requested by the department, the facility shall submit a written report within ten days including known causes, corrective actions taken, and any preventive measures taken or planned to minimize or eliminate the chance of recurrence.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 080(11)

The facility shall respond in writing in a timely manner, or within a time limit set by the department. The inspection results which require the facility to implement corrective actions or any other actions so directed by the department.

20.6.2 Reporting Requirements

As used in this requirement, the term "facility" includes all buildings, structures, plants, processes, and operations on the contiguous Hanford Site under the control of the DOE.

REQUIREMENT SOURCE: 40 CFR 61, Dated 07-01-95, Part 94

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Author's Note: Only paragraph (a) applies to this document.

Compliance and reporting.

(a) Compliance with this standard shall be determined by calculating the highest effective dose equivalent to any member of the public at any offsite point where there is a residence, school, business or office. The owners or operators of each facility shall submit an annual report to both EPA headquarters and the appropriate regional office by June 30 which includes the results of the monitoring as recorded in DOE's Effluent Information System and the dose calculations required by §167; 61.93(a) for the previous calendar year.

(b) In addition to the requirements of paragraph (a) of this section, an annual report shall include the following information:

- (1) The name and location of the facility.
- (2) A list of the radioactive materials used at the facility.
- (3) A description of the handling and processing that the radioactive materials undergo at the facility.
- (4) A list of the stacks or vents or other points where radioactive materials are released to the atmosphere.
- (5) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each control device.
- (6) Distances from the points of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat.
- (7) The values used for all other user-supplied input parameters for the computer models (e.g., meteorological data) and the source of these data.
- (8) A brief description of all construction and modifications which were completed in the calendar year for which the report is prepared, but for which the requirement to apply for approval to construct or modify was waived under §167; 61.96 and associated documentation developed by DOE to support the waiver. EPA reserves the right to require that DOE send to EPA all the information that normally would be required in an application to construct or modify, following receipt of the description and supporting documentation.
- (9) Each report shall be signed and dated by a corporate officer or public official in charge of the facility and contain the following declaration immediately above the signature line: ``I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for

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obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001."

(c) If the facility is not in compliance with the emission limits of §167; 61.92 in the calendar year covered by the report, then the facility must commence reporting to the Administrator on a monthly basis the information listed in paragraph (b) of this section, for the preceding month. These reports will start the month immediately following the submittal of the annual report for the year in noncompliance and will be due 30 days following the end of each month. This increased level of reporting will continue until the Administrator has determined that the monthly reports are no longer necessary. In addition to all the information required in paragraph (b) of this section, monthly reports shall also include the following information:

- (1) All controls or other changes in operation of the facility that will be or are being installed to bring the facility into compliance.
- (2) If the facility is under a judicial or administrative enforcement decree, the report will describe the facilities performance under the terms of the decree.
- (d) In those instances where the information requested is classified, such information will be made available to EPA separate from the report and will be handled and controlled according to applicable security and classification regulations and requirements.

REQUIREMENT SOURCE: 40 CFR 370, Dated 07-01-95, Part 21

MSDS reporting.

- (a) Basic requirement. The owner or operator of a facility subject to this subpart shall submit an MSDS for each hazardous chemical present at the facility according to the minimum threshold schedule provided in paragraph (b) of §370.20 to the committee, the commission, and the fire department with jurisdiction over the facility.
- (b) Alternative reporting. In lieu of the submission of an MSDS for each hazardous chemical under paragraph (a) of this section, the owner or operator may submit the following:
 - (1) A list of the hazardous chemicals for which the MSDS is required, grouped by hazard category as defined under §370.2 of this part;
 - (2) The chemical or common name of each hazardous chemical as provided on the MSDS; and
 - (3) Except for reporting of mixtures under §370.28(a)(2), any hazardous component of each hazardous chemical as provided on the MSDS.
- (c) Supplemental reporting.

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- (1) The owner or operator of a facility that has submitted an MSDS under this section shall provide a revised MSDS to the committee, the commission, and the fire department with jurisdiction over the facility within three months after discovery of significant new information concerning the hazardous chemical for which the MSDS was submitted.
- (2) After October 17, 1987, the owner or operator of a facility subject to this section shall submit an MSDS for a hazardous chemical pursuant to paragraph (a) of this section or a list pursuant to paragraph (b) of this section within three months after the owner or operator is first required to prepare or have available the MSDS or after a hazardous chemical requiring an MSDS becomes present in an amount exceeding the threshold established in §370.20(b).
- (d) Submission of MSDS upon request. The owner or operator of a facility that has not submitted the MSDS for a hazardous chemical present at the facility shall submit the MSDS for any such hazardous chemical to the committee upon its request. The MSDS shall be submitted within 30 days of the receipt of such request.

REQUIREMENT SOURCE: 40 CFR 370, Dated 07-01-95, Part 25

Inventory reporting.

- (a) Basic requirement. The owner or operator of a facility subject to this subpart shall submit an inventory form to the commission, the committee, and the fire department with jurisdiction over the facility. The inventory form containing Tier I information on hazardous chemicals present at the facility during the preceding calendar year above the threshold levels established in §370.20(b) shall be submitted on or before March 1 of each year, beginning in 1988.
- (b) Alternative reporting. With respect to any specific hazardous chemical at the facility, the owner or operator may submit a Tier II form in lieu of the Tier I information.
- (c) Submission of Tier II information. The owner or operator of a facility subject to this Section shall submit the Tier II form to the commission, committee, or the fire department having jurisdiction over the facility upon request of such persons. The Tier II form shall be submitted within 30 days of the receipt of each request.
- (d) Fire department inspection. The owner or operator of a facility that has submitted an inventory form under this section shall allow on-site inspection by the fire department having jurisdiction over the facility upon request of the department, and shall provide to the department specific location information on hazardous chemicals at the facility.

REQUIREMENT SOURCE: 40 CFR 372, Dated 07-01-95, Part 30(a)

For each toxic chemical known by the owner or operator to be manufactured (including imported), processed, or otherwise used in excess of an applicable threshold quantity in §372.25 at its covered facility described in §372.22 for a calendar year, the owner or operator must submit to EPA and to

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the State in which the facility is located a completed EPA Form R (EPA Form 9350-1) in accordance with the instructions referred to in subpart E of this part.

REQUIREMENT SOURCE: EXECUTIVE ORDER 12856, Revision 1, Section 3-304(b)

Author's Note: This report is prepared for submission by RL as owner of the Hanford Site. Compliance determinations are based on the use of toxic chemicals and required reports include all releases, transfers, and waste generation from the activities of all contractors under the control of RL. Its preparation is contingent on the availability of timely information from all FDH organizations and other independent RL contractors.

The head of each Federal agency shall comply with these provisions without regard to the Standard Industrial Classification (SIC) delineations that apply to the Federal agency's facilities, and such reports shall be for all releases, transfers, and wastes at such Federal agency's facility without regard to the SIC code of the activity leading to the release, transfer, or waste. All other existing statutory or regulatory limitations or exemptions on the application of EPCRA section 313 shall apply to the reporting requirements set forth in section 3-304(a) of this order.

REQUIREMENT SOURCE: WAC 173-303, Dated 11-01-95, Section 390(2)

Annual reports. The owner or operator of a facility that holds an active EPA/state identification number must prepare and submit a single copy of an annual report to the department by March 1 of each year. The report form and instructions in the Dangerous Waste Annual Report (which may be obtained from the department) must be used for this report. In addition, any facility which ships dangerous waste off-site must comply with the annual reporting requirements of WAC 173-303-220. The annual report must cover facility activities during the previous calendar year and must include, but is not limited to the following information:

- (a) The EPA/state identification number, name, and address of the facility;
- (b) The calendar year covered by the report;
- (c) For off-site facilities, the EPA/state identification number of each dangerous waste generator from which the facility received a dangerous waste during the year. For imported shipments, the report must give the name and address of the foreign generator;
- (d) A description and the quantity of each dangerous waste the facility received during the year. For off-site facilities, this information must be listed by EPA/state identification number of each generator;
- (e) The method of treatment, storage, or disposal for each dangerous waste;
- (f) The most recent closure cost estimate under WAC 173-303-620(3) (or 40 CFR 265.142 for interim status facilities), and for disposal facilities, the most recent post-closure cost estimate under

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WAC 173-303-620(5) (or 40 CFR 265.144 for interim status facilities); and

(g) The certification signed in accordance with the requirements of WAC 173-303-810(12).

REQUIREMENT SOURCE: WAC 173-400, Dated 09-13-96, Section 105 Introduction

The owner or operator of a source shall upon notification by the director of ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures.

REQUIREMENT SOURCE: WAC 173-400, Dated 09-13-96, Section 105(1)

Emission inventory. The owner(s) or operator(s) of any air contaminant source shall submit an inventory of emissions from the source each year. The inventory may include stack and fugitive emissions of particulate matter, PM10, sulfur dioxide, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, and other contaminants, and shall be submitted (when required) no later than one hundred five days after the end of the calendar year. The owner(s) or operator(s) shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 080(2)

All reporting and recordkeeping requirements of 40 CFR 61, subparts H and I published in the Federal Register on December 15, 1989, are adopted by reference, as applicable as specified by the reference subparts.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 080(3)

The facility shall annually submit to the department the information requirements adopted in subsection (2) of the section, as applicable, along with the following additional information, as applicable:

- (a) The results of emission measurements for those emission units subject only to periodic confirmatory measurements;
- (b) Wind rose or joint frequency table;
- (c) Annual average ambient temperature;
- (d) Annual average emission unit gas temperature, if available; (e) Annual total rainfall;
- (f) Annual average emission unit flow rate and total volume of air released during the calendar year.

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If this additional information is available in another annual report, the facility may instead provide a copy of that report along with the information requirements in this subsection. Annual reports are due by June 30 for the previous calendar year's operations.

REQUIREMENT SOURCE: WAC 246-247, Dated 04-04-94, Section 080(6)

The facility shall file a report of closure with the department whenever operations producing emissions of radioactive material are permanently ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC is required, as applicable, in accordance with WAC 246-247-060.

20.7 Key Interfaces

This element describes key functional area interfaces including waste management, emergency management, and radiological protection. These interfaces represent areas where there is the potential for overlap of requirements, and the need for review of more than one functional area to appreciate the total program in any one functional area.

20.7.1 Waste Management

The EP Functional Area provides for the development and implementation of programs for protection of the environment. This program provides oversight to the Waste Management Functional Area which focuses more narrowly on the identification, characterization, and management of radioactive, mixed, and dangerous wastes.

20.7.2 Emergency Management

The Emergency Management Functional Area defines the emergency planning, preparedness, and response activities which are required by the various permits and plans included in the EP Functional Area. The Emergency Management Functional Area focuses on the preparation for and response to off-normal events.

20.7.3 Radiation Protection

The Radiation Protection Functional Area provides the control standards with which the EP programs must comply to provide protection to human health and the environment.

20.8 References

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The following documents were used in the creation of this S/RID:

40 CFR 61, National Emission Standards for Hazardous Air Pollutants, U.S. Environmental Protection Agency, amendments as of 07/01/95

40 CFR 122, National Pollutant Discharge Elimination System Permits, U.S. Environmental Protection Agency, amendments as of 07/01/95

40 CFR 262, Standards Applicable to Generators of Hazardous Wastes, U.S. Environmental Protection Agency, amendments as of 07/01/95

40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, U.S. Environmental Protection Agency, amendments effective through 07/01/95

40 CFR 302, Designation, Reportable Quantities, and Notification Requirements for Hazardous Substances under CERCLA, U.S. Environmental Protection Agency, amendments as of 07/01/95

40 CFR 370, Hazardous Chemical Reporting: Community Right-To-Know, U.S. Environmental Protection Agency, amendments as of 07/01/95

40 CFR 372, Toxic Chemical Release Reporting: Community Right-To-Know, U.S. Environmental Protection Agency, amendments as of 07/01/95

42 USC 13101, Pollution Prevention Act of 1990, U.S. Congress, 11/05/90

DOE 5400.1, General Environmental Protection Program, DOE Order 5400.1, U.S. Department of Energy, 11/09/88

Executive Order 12856, Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements, Presidential Office, 08/03/93

Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention, Presidential Office, 58 FR 54911, 10/22/93

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Rev. 6, 2/96

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HNF-SD-MP-SRID-002, REVISION 1
ENVIRONMENTAL PROTECTION**

WAC 173-303, Dangerous Waste Regulations, Washington Department of Ecology,
10/19/95

WAC 173-304, Minimum Functional Standards for Solid Waste Handling, amendments as
of 01/01/95

WAC 173-307, Plans, Washington Department of Ecology, amendments as of 01/01/95

WAC 173-400, General Regulations for Air Pollution Sources, Washington Department of
Ecology, amendments as of 01/01/95

WAC 173-401, Operating Permit Regulations, Washington Department of Ecology,
effective amendments as of 01/01/95

WAC 246-247, Radioactive Air Emissions, Washington State Department of Health,
amendments as of 01/01/95

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RIDs by Document X-Reference Listing
Based on FDHC-EP-SD RID and including all documents.

40 CFR 61, National Emission Standards for Hazardous Air Pollutants, Dated 07-01-95

40 CFR 122, EPA Administered Permit Programs: The National Pollutant Discharge Elimination System, Dated 07-01-95

40 CFR 262, Standards Applicable to Generators of Hazardous Waste, Dated 07-01-95

40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, Dated 07-01-95

40 CFR 302, Designation, Reportable Quantities, and Notification, Dated 07-01-95

40 CFR 370, Hazardous Chemical Reporting: Community Right-to-Know, Dated 07-01-95

40 CFR 372, Toxic Chemical Release Reporting: Community Right-to-Know, Dated 07-01-95

42 USC 13101, Findings & Policy, Dated 08-01-95

DOE ORDER 5400.1, General Environmental Protection Program, Revision C01

EXECUTIVE ORDER 12856, Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements, Revision 1

EXECUTIVE ORDER 12873, Federal Acquisition, Recycling, and Waste Prevention, Revision 1

TRIPARTY AGREEMENT, Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement), Revision 6

WAC 173-303, Dangerous Waste Regulations, Dated 11-01-95

WAC 173-304, Minimum Function Standards for Solid Waste Handling, Dated 10-28-85

WAC 173-307, Plans, Dated 05-02-91

WAC 173-400, General Regulations For Air Pollution Sources, Dated 09-13-96

WAC 173-401, Operating Permit Regulations, Dated 11-04-93

WAC 246-247, Radiation Protection -- Air Emissions, Dated 04-04-94

***** End of RIDs by Document X-Reference Listing *****

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