S

ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 661471

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] *Direct Revision* [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	R. Whitehurst, CVD Engineering, X3-78, 376-4663	[X] Yes [] No	8/22/00
	6. Project Title/No./Work Order No. Spent Nuclear Fuel Project Cold Vacuum Drying Facility/W-441	7. Bldg./Sys./Fac. No. 142-K/CVDF	8. Approval Designator Q
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) SNF-3089, Rev. 0	10. Related ECN No(s). N/A	11. Related PO No. N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks. 12b, 12c, 12d)	N/A	N/A Design Authority/Cog. Engineer Signature & Date	N/A Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

13b. Design Baseline Document? [] Yes [] No

GS

This revision of the Cold Vacuum Drying Facility Security System Design Description – System 54 updates the document to reflect changes in the operation of the facility and changes in the supporting design documents. The major operational changes involve the reduction from five ~~operating~~ bays to three bays. The supporting design documents have been revised due to recent changes in DOE Orders.

Security Rev 1 9/1/00

BB 8/25/00

USQ Screening Number: CVD-00-1504

14a. Justification (mark one)	14b. Justification Details
Criteria Change [] Design Improvement [] Environmental [] Facility Deactivation [] As-Found [X] Facilitate Const [] Const. Error/Omission [] Design Error/Omission []	The operating strategy for the facility has changed since the Security System Design Description was originally written. This revision incorporates that latest operating strategy. In addition updates the SDD to meet the changes in the DOE Orders involving security equipment and procedures that drive the basin design requirements. The changes have been written so that this document will not become a sensitive document causing additional document control requirements. The design verification method for GS components is by informal review in accordance with EN-6-027-01. Documentation of this review is accomplished by the approval signatures provided on page 2 of this ECN.

15. Distribution (include name, MSIN, and no. of copies)

See distribution

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A-7900-013-2 (10/97)

ENGINEERING CHANGE NOTICE	Page 2 of 2	1. ECN (use no. from pg. 1) 661471

16. Design Verification Required	17. Cost Impact				18. Schedule Impact (days)	
	ENGINEERING		CONSTRUCTION			
[X] Yes	Additional	[N/A] $	Additional	[N/A] $	Improvement	[N/A]
[] No	Savings	[N/A] $	Savings	[N/A] $	Delay	[N/A]

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	[]	N/A	[X]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

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
N/A		

21. *Approvals*

Signature		Date		Signature	Date
Design Authority	R. Whitehurst	8/23/00	Design Agent		
Cog. Eng.			PE		
Cog. Mgr.	C.S. Haller	8/30/00	QA		
QA	H. M. Chafin	8/23/00	Safety		
Safety	N/A		Design		
Environ.			Environ.		
Other	B.A. Gilkeson	8/25/00	Other		

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

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SNF-3089
Revision 1

Cold Vacuum Drying Facility Security System Design Description System 54

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200
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Cold Vacuum Drying Facility Security System Design Description System 54

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R. Whitehurst
Fluor Hanford

Date Published
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Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
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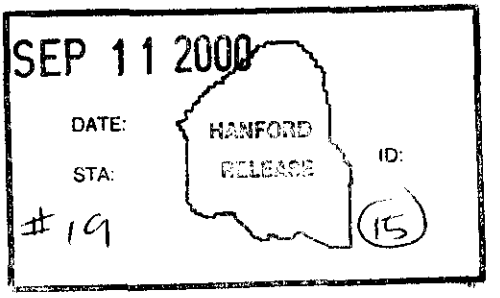
Richland, Washington



Chris Braden 9/11/00
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Total Pages: 28

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Rev 1 pg a

RECORD OF REVISION	(1) Document Number SNF-3089, Rev. 1	Page 1

(2) Title

Cold Vacuum Drying Facility Security System Design Description

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) Original release EDT 626822	S.A. Brisbin 5/18/99	C.S. Haller 5/18/99
1 RS	ECN 661471 The design criteria updated to meet DOE Orders, and the operating philosophy changed from 5 bays to 2 bays. These changes are reflected throughout the document, along with minor editorial changes.	R. Whitehurst	C.S. Haller ana for C. Haller per telecon 8/30/00

A-7320-005 (08/91) WEF168

COLD VACUUM DRYING FACILITY SECURITY SYSTEM DESIGN DESCRIPTION

SYSTEM 54

Fluor Hanford

Richland, Washington

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LIST OF FIGURES

1.0 INTRODUCTION

1.1 SYSTEM IDENTIFICATION

This system design description (SDD) addresses the Cold Vacuum Drying (CVD) Facility security system. The system's primary purpose is to provide reasonable assurance that breaches of security boundaries are detected and assessment information is provided to protective force personnel. In addition, the system is utilized by Operations to support reduced personnel radiation goals and to provide reasonable assurance that only authorized personnel are allowed to enter designated security areas.

1.2 LIMITATIONS OF THIS SDD

This SDD has been prepared with available information taken from reviewed and approved design documents and drawings. If design changes to the security system are incorporated into the design documentation, this SDD will be revised as appropriate.

1.3 OWNERSHIP OF THIS SDD

The CVD Facility Design Authority assigned to the security system is responsible for the accuracy and technical content of this SDD. Any questions on the system or content of this document shall be resolved through the design authority.

1.4 DEFINITIONS/GLOSSARY

See Section 1.5 *Acronyms*.

1.5 ACRONYMS

ALARA	as low as reasonably achievable
BMS	balanced magnetic switch
CAS	Central Alarm Station
CCTV	closed-circuit television
CVD	Cold Vacuum Drying
DOE	U.S. Department of Energy
DRD	design requirements document
GS	general service
LA	Limited Area
MCO	multi-canister overpack
NEMA	National Equipment Manufacturers Association
NPH	natural phenomena hazard
PPA	Property Protection Area
RL	U.S. Department of Energy, Richland Operations Office
SAR	safety analysis report
SAS	Safeguards & Security
SDD	System Design Description
SES	Security & Emergency Services
SNF	spent nuclear fuel
TSR	technical safety requirement
UPS	uninterruptible power supply

2.0 GENERAL OVERVIEW

2.1 SYSTEM FUNCTIONS

The security system for the CVD Facility consists of motion sensors, balanced magnetic switch (BMS), trouble buttons , closed-circuit television (CCTV), and automated access control sub-systems. The system's primary purpose is to provide reasonable assurance that breaches of security boundaries are detected and assessment information is provided to protective force personnel. In addition, the system is utilized by Operations to support reduced personnel radiation goals and to provide reasonable assurance that only authorized personnel are allowed to enter designated security areas.

2.2 SYSTEM CLASSIFICATION

All security system components are classified as general service (GS) and are designed and qualified to performance Category 1 criteria per HNF-PRO-097, *Engineering Design and Evaluation.*

2.3 BASIC OPERATIONAL OVERVIEW

The CVD Facility has two designated security areas, shown in Figure 2-1:

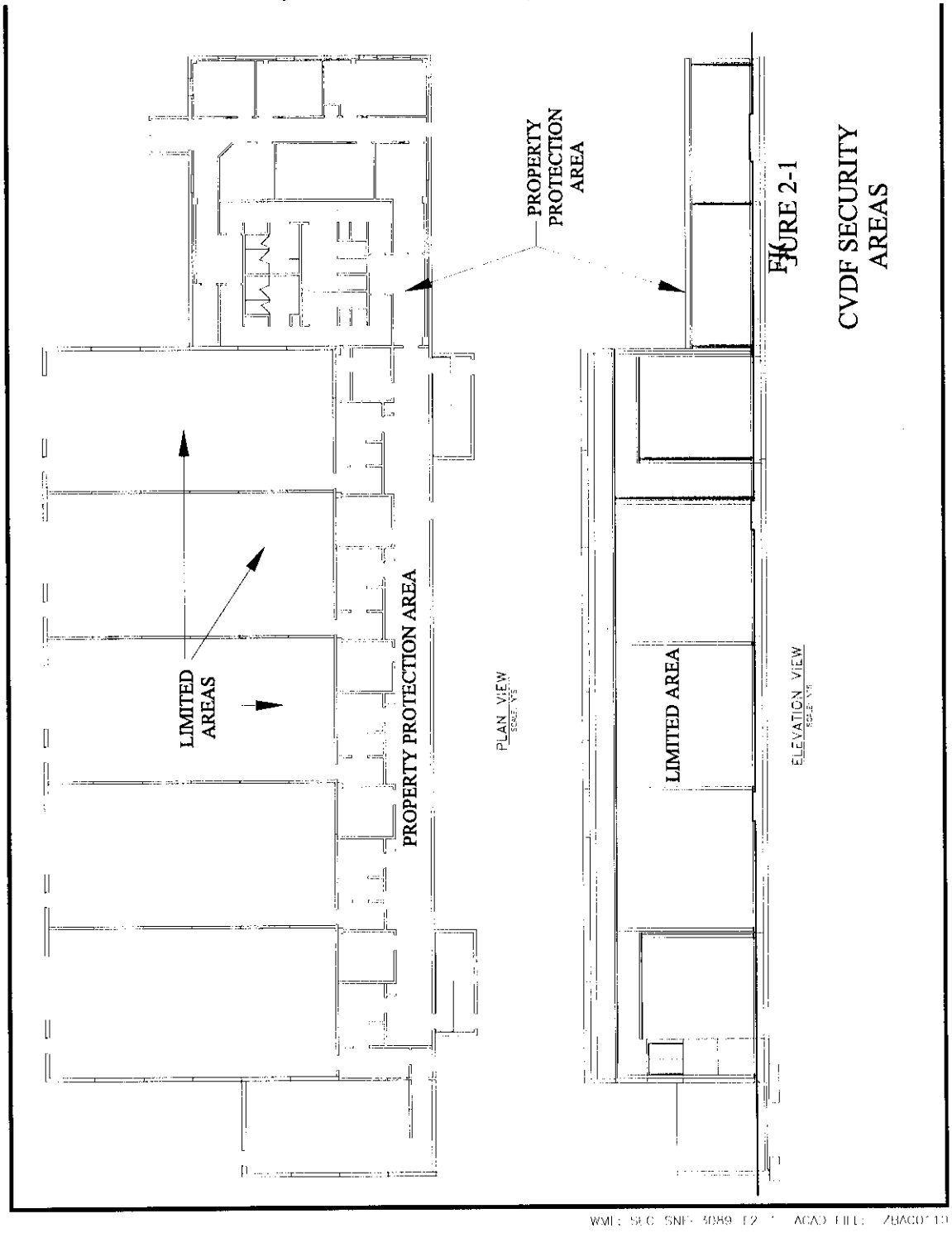
1. Limited Area (LA) – Bays 3, 4, and 5 are designated LAs.

2. Property Protection Area (PPA) -- All areas surrounding the facility as well as Bays 1 and 2, the administrative areas outside the bays, corridor, and control room are designated PPA.

The security system includes the following components:

1. Automated access control system
2. CCTV
3. Motion Sensors
4. BMS
5. Trouble Buttons
6. Hand Geometry

Figure 2-1. CVD Facility Security Areas



Detailed information regarding the administration of the security system can be found in the Operations Administration Procedure for the CVD Facility. The administration procedure establishes the responsibilities and security access control requirements for the facility.

All CVD Facility security alarm data and signals from the security components are multiplexed and transmitted from the CVD Facility to the central alarm station (CAS) located in the 200 West Area. The security system and communication transmission lines are dedicated to the security system. Servicing and support for the security system are performed by the Project Hanford Security Engineering and Maintenance organization.

3.0 REQUIREMENTS AND BASES

This section addresses operational and functional requirements for the CVD Facility security system. Design parameters for the security system were based on physical security and protective force requirements, material control and accountability requirements, operational security procedures, and administrative controls traceable to the U.S. Department of Energy (DOE) directives.

3.1 GENERAL REQUIREMENTS

3.1.1 System Functional Requirements

System functional requirements are considered sensitive; therefore, they are not provided in this document. Requests for information should be directed to the Project Hanford Safeguards and Security (SAS) Organization.

3.1.2 Subsystem and Major Components

All security system major components, instrumentation and controls are classified as GS and are designed and/or qualified to performance Category 1 criteria per HNF-PRO-097, *Engineering Design and Evaluation.*

3.1.3 Boundaries and Interfaces

System Boundaries

The layout and arrangement of security system components within the CVD Facility is designed to provide reasonable assurance that breaches of security boundaries are detected and that assessment information is provided to protective force personnel. In addition, the system is utilized by Operations to support reduced personnel radiation goals and to provide reasonable assurance that only authorized personnel are allowed to enter and exit the designated security areas.

System Interfaces

1. A designated room is provided for security equipment.

2. CCTV monitors are installed in the CVD Facility control room, as required. Video and alarm information is linked to the CAS, as required.

3.1.4 Codes, Standards, and Regulations

The standards and source documents that apply to the design of the CVD Facility security system are listed below:

ASTM A121, *Fencing, Fence Wire, Posts, and Accessories*

W-A-450C/GEN, *Federal Specification Components for Interior Alarm Systems*

DOE O 470.1, *Contractor Safeguards and Security Program Requirements*

DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*

DOE 5633.3B, *Control and Accountability of Nuclear Materials*

RLID 473.1, *Protection of Safeguards and Security Interests*

DOE 6430.1A, *General Design Criteria*

Hanford Site Standard Lock Specifications, Locking Hardware, and Finish Hardware, dated May 1997

HNF-PRO-6234, *Operability Testing of Installed Intrusion Detector Sensors*

FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000*

HNF-MP-599, *Project Hanford Quality Assurance Program Description.*

HNF-SD-SNF-DRD-002, *Spent Nuclear Fuel Project Cold Vacuum Drying Facility Design Requirements Document*, Rev. 4, DE&S Hanford, Richland, Washington.

3.1.5 Operability

The Project Hanford SAS Organization determine operability requirements.

3.1.6 Safety Analysis Report (SAR) Functional Requirements

There are no SAR functional requirements associated with the CVD Facility security system.

3.2 SPECIAL REQUIREMENTS

3.2.1 Radiation and Other Hazards

The principal source of radiation hazards in the facility from spent nuclear fuel (SNF) is when a loaded cask-multi-canister overpack (MCO) is present in any of the bays. Security personnel do not routinely enter the bays. There are no specific hazards to security equipment located in the bays from radiation exposure.

3.2.2 As Low As Reasonably Achievable (ALARA)

Radiation protection features have been incorporated into the design of the CVD Facility to reduce radiation exposures to security equipment and personnel consistent with ALARA objectives.

No unique ALARA requirements or worker radiological exposure issues are identified for security personnel or the security system.

3.2.3 Nuclear Criticality Safety

There are no criticality safety requirements for the security system.

3.2.4 Industrial Hazards

There are no unique or specific industrial safety hazards associated with the operation of the security system.

3.2.5 Operating Environment and Natural Phenomena

Natural phenomena hazards (NPHs) include seismic events, high winds, tornadoes, flooding, lightning strikes, and surcharge loads from accumulation of snow or volcanic ash. Natural hazards were evaluated for the design of the CVD Facility. There are no design requirements for the CVD Facility security system traceable to the NPH evaluation.

3.2.6 Human Interface Requirements

Security system monitoring is performed at the 200 West CAS. The design of the CAS is outside the scope of the CVD Facility.

3.2.7 Specific Commitments

There are no specific commitments applicable to the CVD Facility security system.

3.3 ENGINEERING DISCIPLINARY REQUIREMENTS

The CVD Facility security system design conforms to the codes, standards, and source documents listed under Section 3.1.4. Certain additional requirements are considered sensitive; therefore, they are omitted from this document.

3.3.1 Civil and Structural

1. All open pipeline conduit runs or penetrations from the LA shall either terminate within the LA or be welded shut.

2. Signs shall be posted in accordance with DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests* and FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

3. The facility shall be illuminated at all times in accordance with DOE Order 6430.1A and FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

4. Unattended openings in the walls or ceilings leading into the bays that are greater than 96 square inches in area and greater than six inches in the smallest dimension and located within 18 feet of the ground, roof, or ledge of a lower security area or located diagonally or directly opposite windows, fire escapes, roof escapes, roofs, or other openings in uncontrolled adjacent buildings or located six feet from uncontrolled openings in the same barrier will incorporate compensatory measures such as rebar (5/8 inch rebar on six-inch centers), segmented duct, etc.

5. Additional requirements are listed in FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

Basis: DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*; FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000;* and DOE 6430.1A, *General Design Criteria.*

3.3.2 Mechanical and Materials

1. All locks, locking hardware, and finish hardware shall meet the "Hanford Site Standard Lock Specifications" (*Locks, Locking Hardware, and Finish Hardware*, dated May 1997) for furnishing and installing all finish hardware items necessary for completion of the project.

2. All pedestrian doors from the LAs shall be equipped with panic hardware for emergency egress.

3. All security cabinets (alarm contacts accumulation points, uninterrupted power supply (UPS), video equipment) shall be provided with tamper switches on both front and backsides and lockable cabinet doors. Junction boxes shall be tamper protected.

4. Additional requirements are listed in FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

Basis: DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*; DOE 6430.1A, *General Design Criteria*; FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000;* and *Hanford Site Standard Lock Specifications*, dated May 1997.

3.3.3 Chemical and Process

There are no chemical or process design requirements for the CVD Facility security system.

3.3.4 Electrical Power

All security sensors, cameras, and video transmission equipment, and partial interior building lighting are provided by a UPS. Lighting must be on a separate UPS, which is not part of the security system. Additional requirements are listed in FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

Basis: W-A-450C/GEN, *Federal Specification Components for Interior Alarm Systems*; DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*; DOE 6430.1A, *General Design Criteria*; FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000*; and the CVD Facility Vulnerability Assessment.

3.3.5 Instrumentation and Control

1. All interior video equipment shall provide real-time video signal transmission capabilities (30 frames per second) and comply with the 75-ohm, RS-170 video standard.

2. Security sensors, video, and other associated security transmission lines internal to the CVD Facility shall be installed in electrical metallic tubing-type conduit and/or liquid-tight flex conduit. Rigid conduit shall be used where security system conduit is located below the height of 7 feet to preclude possible mechanical damage. All conduit covers shall be secured with tamper-resistant bolts or screws.

3. All security system junction boxes are to have a National Equipment Manufactures Association (NEMA) Type 3 (or better) rating with a minimum 1/4-inch recessed or lipped cover edge and no unused knockouts. No wiring splices or junctions are allowed between the security sensors and the security system acquisition point unless they occur within an approved tamper switch-equipped junction box.

4. Security system and communication transmission lines shall be dedicated to the security system.

5. Additional requirements are listed in FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

Basis: W-A-450C/GEN, *Federal Specification Components for Interior Alarm Systems;* DOE M 5632.1C-1; *Manual for Protection and Control of Safeguards and Security Interests*; FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000;* and DOE 6430.1A, *General Design Criteria.*

3.3.6 Computer Hardware and Software

There are no computer hardware and software design requirements for the CVDF security system.

3.3.7 Fire Protection

There are no fire protection requirements provided specifically for the CVD Facility security system.

3.4 TESTING AND MAINTENANCE REQUIREMENTS

3.4.1 Testability

Equipment shall include features to facilitate testing as dictated by Project Hanford Security Operations organization.

Basis: Good engineering practice.

3.4.2 Technical Safety Requirement (TSR)-Required Surveillances

There are no TSR-required surveillances that apply to the CVD Facility security system.

3.4.3 Non-TSR Inspections and Testing

The CVD Facility security system shall be acceptance and performance tested by Project Hanford SAS and the U.S. Department of Energy, Richland Operation Office (RL) Security and Emergency Services (SES) organizations before acceptance of the system from the contractor.

3.4.4 Maintenance

Equipment shall include features to facilitate maintenance as dictated by Project Hanford Technical Security Engineering and Maintenance.

3.5 OTHER REQUIREMENTS

3.5.1 Facility Requirements

1. The LAs shall be kept free of nonessential equipment or supplies. Essential materials are to be positioned in such a manner that they do not hinder the operation or effectiveness of sensors and cameras. The area within 100 feet of the CVD Facility shall be kept free and clear of nonessential equipment and obstructions.

Basis: Good operating practice.

2. The fencing around the CVD Facility shall be maintained as a compound boundary. Additional requirements are listed in FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000*

Basis: DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*, and CVD Facility Vulnerability Assessment.

3. Industrial alarms (e.g., fire, radiation, and process alarms), shall not interface with the security system, or annunciate at the 200 West Area CAS.

Basis: DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*.

3.5.2 Special Installation Requirements

Project Hanford Security Engineering and Maintenance is responsible for providing oversight during the design and construction phases of the CVD Facility. This includes precise location of all security components.

3.5.3 Reliability, Availability, and Preferred Failure Modes

Project Hanford Security Engineering and Maintenance is responsible for monitoring reliability and availability of the security equipment.

3.5.4 Quality Assurance

The security system fabrication quality assurance/control program is based on the application of a graded approach as described in the *Project Hanford Quality Assurance Program Description*, HNF-MP-599.

4.0 SYSTEM DESCRIPTION

4.1 CONFIGURATION

4.1.1 Description of System, Subsystems, and Major Components

A general description is provided in this section regarding the overall approach to facility security for the CVD Facility. This description does not include specific information relating to functional requirements, subsystems and major components, and interfaces which may be considered to be security sensitive.

The CVD Facility has two designated security areas, as shown in Figure 2-1:

1. Limited Area -- Bays 3, 4, and 5 are designated as an LA.

2. Property Protection Area -- All areas surrounding the facility as well as Bays 1 and 2, the administrative areas outside the bays, corridor, and control room are designated as a PPAs.

The security system includes the following components:

1. Automated access control system
2. CCTV
3. Motion Sensors
4. BMS
5. Trouble Buttons
6. Hand Geometry

Detailed information regarding the operation of the security system can be found in the Operations Administration Procedure for the CVD Facility. The administration procedure establishes the responsibilities and security access control requirements for the facility.

All CVD Facility security alarm data and signals from the security components are multiplexed and transmitted from the CVD Facility to the CAS in the 200 West Area. The security system and communication transmission lines are dedicated to the security system.

Servicing and maintenance for the security system are performed by the Project Hanford Security Engineering and Maintenance organization.

All CCTV channels also are transmitted to the CVD Facility control room. A UPS ensures the system has constant power.

4.1.2 Boundaries and Interfaces

System Boundaries

The layout and arrangement of security system components within the CVD Facility is designed to provide reasonable assurance that breaches of security boundaries are detected and that assessment information is provided to protective force personnel. In addition, the system is utilized by Operations to support reduced personnel radiation goals and to provide reasonable assurance that only authorized personnel are allowed to enter and exit the designated security areas.

System Interfaces

The security equipment room (Room 126) houses components that collect, process, and display incoming information from the security system. These components include the alarm security multiplexer, video switcher and multiplexer, video monitors, UPS battery cabinet, and communication modem(s).

A bay status panel and two video monitors are installed in the CVD Facility control room (Room 107).

4.1.3 Physical Location and Layout

Specific locations of security equipment are considered sensitive and omitted from this document. Information may be obtained from Project Hanford SAS, if required.

4.1.4 Principles of Operation

Specific principles of information are considered sensitive; therefore, they are omitted from this document.

4.1.5 System Reliability

Security sensors, video, and other associated security transmission lines internal to the CVD Facility are installed in electrical metallic tubing-type conduit and/or liquid-tight flex conduit. Rigid conduit is used where security system conduit is located below the height of 7 feet to preclude possible mechanical damage. All conduit covers are secured with tamper-resistant bolts or screws.

4.1.6 System Control Features

Specific system control features are considered sensitive; therefore, they are omitted from this document.

4.2 OPERATIONS

The system's primary purpose is to provide reasonable assurance that breaches of security boundaries are detected and that assessment information is provided to protective force personnel. In addition, the system is utilized by Operations to support reduced personnel radiation goals and to provide reasonable assurance that only authorized personnel are allowed to enter and exit the designated security areas.

The CVD Facility security system is a dedicated stand-alone system. Security instrumentation and controls are located in Room 126 of the CVD Facility, where access control, sensor-status and CCTV data are compiled and evaluated. Bay status and CCTV data also are displayed in the CVD Facility control room (Room 107). Alarm data and signals from security components in the CVD Facility are multiplexed and transmitted by modem link to the CAS in the 200 West Area. A sub-multiplexer and camera switcher enables CCTV data to be displayed at the CAS in the 200 West Area. All security system communication transmission lines between the CVD Facility and the CAS are dedicated lines. All security sensors, cameras, sensor and video transmission equipment are provided with an UPS with a minimum of 8 hours run time at full load. The CVD Facility UPS, rather than a security UPS, is used for interior lighting. Industrial alarms (e.g., fire, radiation, and process alarms) for the CVD Facility do not interface to the security system or annunciate at the CAS in the 200 West Area.

Support and maintenance of the security system are provided by the Project Hanford Security Engineering and Maintenance organization.

Detailed information regarding the administration of the security system will be found in the Operations Administration Procedure for the CVD Facility. The administration procedure establishes the responsibilities and security access control requirements for the facility.

4.3 TESTING AND MAINTENANCE

The security system will be performance tested by Project Hanford SAS and RL SES organizations before acceptance of the system from the contractor. After the system acceptance and validation, the Project Hanford SAS organization will be responsible for testing and maintenance of all security system components in the facility.

APPENDIX A

SOURCE DOCUMENTS

1. ASTM A121, *Fencing, Fence Wire, Posts, and Accessories.*

2. W-A-450C/GEN, *Federal Specification Components for Interior Alarm Systems.*

3. DOE O 470.1, *Contractor Safeguards and Security Program Requirements*, U.S. Department of Energy, Washington, D.C.

4. DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*, U.S. Department of Energy, Washington, D.C.

5. DOE 5633.3B, *Control and Accountability of Nuclear Materials*, U.S. Department of Energy, Washington, D.C.

6. DOE 6430.1A, *General Design Criteria*, U.S. Department of Energy, Washington, D.C.

7. RLID 473.1, *Protection of Safeguards and Security Interests*, U.S. Department of Energy-Richland Operations Office, Richland, Washington.

8. *Hanford Site Standard Lock Specifications, Locking Hardware, and Finish Hardware,* dated May 1997.

9. HNF-PRO-6234, *Operability Testing of Installed Intrusion Detection Sensors.*

10. HNF-MP-599, *Project Hanford Quality Assurance Program Description.*

11. HNF-SD-SNF-DRD-002, *Spent Nuclear Fuel Project Cold Vacuum Drying Facility Design Requirements Document,* Rev. 4, Duke Engineering and Services Hanford, Richland, Washington.

12. FH-0001976, *Revised Security Concept and Design Criteria For the Cold Vacuum Drying Facility May 2000.*

APPENDIX B

SYSTEM DRAWINGS

Security system drawings are considered sensitive; therefore, they are not specifically identified in this document. See H-1-82090 for a listing of CVD Facility Security drawings.

APPENDIX C

SYSTEM PROCEDURES

Procedures for the security system have been revised to include the CVD Facility requirements. Refer to the Appendix A, *Source Documents*, for security system procedures and requirements. The Operations Administration Procedures are in the development stages.