

DOE M 457.1-1

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CONTROL OF IMPROVISED NUCLEAR DEVICE INFORMATION

**U.S. DEPARTMENT OF ENERGY
Office of Nuclear Weapon Surety and Quality**

DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Office of Nuclear Weapon Surety and Quality

CONTROL OF IMPROVISED NUCLEAR DEVICE INFORMATION

1. **PURPOSE.** This Manual provides direction for controlling and providing access to improvised nuclear device (IND) information for the Department of Energy (DOE). Such information will be protected through the establishment of a new nuclear weapon data (NWD) category called Sigma 20. This Manual supplements DOE O 457.1, Nuclear Counterterrorism, dated 02-07-06, which establishes DOE requirements and responsibilities to protect IND concepts and designs.
2. **CANCELLATIONS.** None.
3. **APPLICABILITY.**
 - a. All Departmental Elements. Except for the exclusions in paragraph 3c, this Manual applies to all departmental elements. (See Attachment 1 for a complete list of all departmental elements. This list automatically includes departmental elements created after the Manual is issued.)

The Administrator of the National Nuclear Security Administration (NNSA) will assure that NNSA employees and contractors comply with their respective responsibilities under this Manual.
 - b. DOE/NNSA Contractors.
 - (1) Except for the exclusions in paragraph 3c, the Contractor Requirements Document (CRD), Attachment 2, sets forth requirements of this Manual that will apply to contracts that include the CRD.
 - (2) The CRD must be included in all contracts that involve or could potentially involve accessing or generating nuclear weapon design information.
 - (3) The Assistant Deputy Administrator for Military Application and Stockpile Operations is responsible for telling contracting officers which contracts are affected by this Manual. Once notified, contracting officers are responsible for incorporating the CRD into each affected contract.
 - c. Exclusions. In accordance with the responsibilities and authorities assigned by Executive Order 12344 and to ensure consistency throughout the joint Navy and DOE organization of the Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors will implement and oversee all requirements and practices pertaining to this DOE Manual for activities under the Deputy Administrator's cognizance.
4. **SUMMARY.** This Manual is composed of two chapters that provide direction for the establishment of an NWD category called Sigma 20 for controlling and providing access to IND information. Chapter I describes the responsibilities of organizations within DOE/NNSA for the administration and management of Sigma 20 NWD. Chapter II details the procedures for protecting Sigma 20 NWD. Attachment 1 is a complete listing

of DOE organizations to which this Manual is applicable and organizations that are prohibited from accessing sensitive IND information without specific approval from the Assistant Deputy Administrator for Military Application and Stockpile Operations. Attachment 2 is the Contractor Requirements Document. This Manual incorporates and finalizes these procedures and supplements other guidance related to IND information control.

5. REFERENCES.

- a. Title XXXII of P.L. 106-65, National Nuclear Security Administration Act, as amended, which established a separately organized agency within the Department of Energy.

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- c. DOE O 470.4, Safeguards and Security Awareness Program, dated 8-26-05, which establishes the roles and responsibilities for the U.S. Department of Energy Safeguards and Security Program.
- d. DOE M 470.4-1, Safeguards and Security Program Planning and Management, dated 8-26-05, which establishes program planning and management requirements for the Departments Safeguards and Security Program.
- e. DOE M 470.4-2, Physical Protection, dated 8-26-05, which establishes requirements for the physical protection of safeguards and security interests.
- f. DOE M 470.4-4, Information Security, dated 8-26-05, which establishes security requirements for the protection and control of information and matter required to be classified or controlled by statutes, regulations, or Department of Energy directives.
- g. DOE M 470.4-5, Personnel Security, which establishes the overall objectives and requirements for the Department of Energy Personnel Security Program.
- h. Classification Guide, CG-RER-1, DOE Classification and UCNI Guide for Radiological Emergency Response (U), dated July 2002 (Secret RD).
6. CONTACTS. Questions concerning the Manual should be addressed to the Office of Nuclear Weapon Surety and Quality at 202-586-4582.

BY ORDER OF THE DEPUTY SECRETARY OF ENERGY:



CLAY SELL
Deputy Secretary

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**ATTACHMENT 1. ALL DEPARTMENTAL ELEMENTS TO WHICH DOE M 457.1-1 IS
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ATTACHMENT 2. CONTRACTOR REQUIREMENTS DOCUMENT

CHAPTER I. RESPONSIBILITIES

1. **BACKGROUND.** DOE has determined that information relating to IND information needs enhanced protection and has established the Sigma 20 NWD category to provide additional controls for this type of information. Access to Sigma 20 NWD is limited to those individuals with a "Q" access authorization (or for the Department of Defense, the equivalent based on a Single Scope Background Investigation (SSBI)), Sigma 20 authorization, and valid need-to-know (See Chapter II, Operating Procedures).
2. **SCOPE, PURPOSE, AND JUSTIFICATION.** This Manual contains guidance on the implementation of procedures to control and limit access to sensitive IND information. The requirements contained in this Manual are in addition to the requirements for protecting classified information contained in DOE M 470.4-4, *Information Security*, dated 8-26-05, and associated Orders and Manuals. Implementation plans are necessary only for requirements that cannot be implemented with existing resources or within six months of the effective date of this Manual. These plans shall be developed within 90 days of the effective date of this Manual and submitted to the Office of Nuclear Weapon Surety and Quality. Implementation plans ensure that full implementation of the Manual is accomplished within one year of the effective date of the Manual.
3. **ADMINISTRATION AND MANAGEMENT RESPONSIBILITIES.**
 - a. **Assistant Deputy Administrator for Military Application and Stockpile Operations (ADAMASO).**
 - (1) Appoints the DOE/NNSA Headquarters (HQ) Sigma 20 Coordinator and an alternate to manage implementation of Sigma 20 operating procedures.
 - (2) Oversees implementation of Sigma 20 operating procedures, including designating locations within the DOE complex which may perform IND design-related work and notifying contracting officers which contracts are affected by this Manual.
 - (3) Determines which locations within the DOE complex require a Sigma 20 Site Coordinator to meet operational needs. Confirms, in writing, nominees for Sigma 20 Site Coordinators and alternates, and ensures their names are given to the DOE/NNSA HQ Sigma 20 Coordinator. The senior manager of the Sigma 20-approved location will nominate that location's Sigma 20 Site Coordinator as well as an alternate, if necessary.
 - (4) Approves Sigma 20 access authorizations for individuals within organizations denoted with an asterisk in Attachment 1. Individuals within these organizations require the approval of the ADAMASO to gain Sigma 20 access. Access requests will be sent to the DOE/NNSA HQ Sigma 20 Coordinator who will forward the request along with his or her approval/disapproval recommendation to the ADAMASO. The ADAMASO will then review the request, make a determination, and inform the DOE/NNSA HQ Sigma 20 Coordinator of the decision.

b. DOE/NNSA HQ Sigma 20 Coordinator.

- (1) Responsible for the overall implementation of this Manual, to include validation of Sigma 20 site readiness.
- (2) Develops policies and procedures in coordination with appropriate organizations to identify and protect Sigma 20 NWD.
- (3) Establishes and leads an IND Evaluation Committee (INDEC) to provide technical advice and recommendations on "nominations" of information to assign as Sigma 20 NWD.
- (4) Coordinates with the DOE Office of Classification on the development and updating of classification guidance.
- (5) Approves Sigma 20 access authorizations for individuals belonging to organizations within DOE/NNSA HQ that do not have an asterisk in Attachment 1, other DOE/NNSA locations that do not have a local Sigma 20 Site Coordinator, and outside agencies.
- (6) Makes Sigma 20 access approval recommendations for individuals belonging to organizations denoted with an asterisk in Attachment 1, and forwards the request and recommendation to the ADAMASO. The ADAMASO will make the determination of Sigma 20 access for these individuals. The DOE/NNSA HQ Sigma 20 Coordinator will notify these individuals of the Sigma 20 access determination.
- (7) Serves as a backup point of contact for Sigma 20 actions at other sites, as needed.
- (8) Manages the Sigma 20 training program so that personnel authorized Sigma 20 are knowledgeable of the procedures for protecting Sigma 20 NWD.
- (9) Periodically reviews the access roster to ensure that those approved for Sigma 20 access require continued access to Sigma 20 NWD for the performance of their duties.
- (10) Maintains rosters or databases of all DOE/NNSA personnel currently approved for Sigma 20 access and enters the complete list in the Weapon Data Access Control System (WDACS) (or its replacement). Any changes to the access list must be entered within 10 working days.
- (11) Maintains a current list of Sigma 20 Site Coordinators and periodically distributes this contact list to all Sigma 20 Site Coordinators.
- (12) Approves, in writing, the transfer of all documents, media, and hardware containing Sigma 20 NWD to outside agencies and ensures that controls are in place at receiving organizations before transmission.

- (13) Updates and maintains this Manual.
- (14) In cases of emergency, deviations from this Manual may be approved by the DOE/NNSA HQ Sigma 20 Coordinator (or alternate), the Director of the Office of Nuclear Weapon Surety and Quality (NA-121), the Assistant Deputy Administrator for Military Application and Stockpile Operations (NA-12), or the Deputy Administrator for Defense Programs (NA-10).

c. Sigma 20 Site Coordinators.

- (1) Develop an implementation plan for requirements that cannot be implemented with existing resources or within six months of the effective date of this Manual. Implement Sigma 20 operating procedures within one year of publication of this Manual, ensure compliance, and serve as points of contact for all issues related to Sigma 20 NWD information control at their respective sites.
- (2) Coordinate with knowledgeable classification authorities on Sigma 20 NWD.
- (3) Approve all Sigma 20 authorizations at their respective sites. Designate, in writing, a single alternate to approve Sigma 20 authorizations, if required.
- (4) Maintain rosters or databases of all site personnel currently approved for Sigma 20 access, and enter the complete list in the Weapon Data Access Control System (WDACS) (or its replacement). Any changes to the access list must be entered within 10 working days.
- (5) Manage the Sigma 20 training program at their respective sites so that personnel authorized Sigma 20 access are knowledgeable of the procedures for protecting Sigma 20 NWD.
- (6) Ensure records of accountable matter containing Sigma 20 NWD are maintained at their respective sites, that annual inventories of this material are performed, and that summaries of these inventories are provided to the DOE/NNSA HQ Sigma 20 Coordinator, when requested.
- (7) Coordinate Sigma 20 site plans with local onsite organizations and the DOE/NNSA HQ Sigma 20 Coordinator.
- (8) Coordinate with Sigma 20 Site Coordinators at other sites as required.

d. Associate Administrator for Defense Nuclear Security. Responsible for the overall direction and management of security programs at DOE/NNSA facilities. This includes the physical, personnel, materials control and accounting, classified and sensitive information protection, and technical security programs.

- e. **DOE/NNSA Originating Organizations.** In conjunction with their Sigma 20 Site Coordinators or designees, identify sensitive IND information, and mark such information as Sigma 20 NWD.
- f. **Contracting Officers.** After being notified, incorporate DOE M 457.1-1 CRD into affected contracts via the laws, regulations, and DOE directives clause of contracts.

4. **DEFINITIONS.**

- a. **Documents.** Written or printed information; charts; maps; paintings; drawings; engravings; sketches; photographic prints; exposed or developed film; working notes and papers; reproductions of such things by any means or process; and sound and video recordings by magnetic, optical, or any other electronic means.
- b. **Hardware.** Training aids and device mock-ups.
- c. **Improvised Nuclear Device.** A device, incorporating fissile materials, designed or constructed outside of an official government agency and which has, appears to have, or is claimed to have the capability to produce a nuclear explosion. (While numerous definitions of INDs exist, this definition intends to cover specific information that will be protected as Sigma 20 NWD. See CG-RER-1 for more details.)
- d. **Matter.** Any combination of documents, media, or hardware.
- e. **Media.** Removable electronic, optical, or magnetic media including hard drives, zip™, jazz™, floppy diskettes, CDs, DVDs, tapes, static/"flash" memory sticks, cards, etc.
- f. **Nuclear Weapon Data.** Restricted Data or Formerly Restricted Data concerning the design, manufacture, or utilization (including theory, development, storage, characteristics, performance, and effects) of nuclear weapons or nuclear weapon components, including information related to INDs.
- g. **Sigma 20 NWD.** A specific category of NWD that pertains to sensitive improvised nuclear device information.
- h. **Sigma 20 Authorization.** A formal authorization by a DOE element or contractor organization with responsibility for Sigma 20 NWD for a specific individual to access that specific category of information.

CHAPTER II. OPERATING PROCEDURES

1. **OPERATING PRINCIPLES.** The following principles apply to the protection of Sigma 20 NWD.
 - a. Access to and distribution of Sigma 20 NWD must be restricted to those persons with appropriate Sigma 20 authorization, valid need-to-know, and DOE "Q" access authorization (or for the Department of Defense, the equivalent based on a Single Scope Background Investigation (SSBI)).
 - b. All Sigma 20 NWD is categorized as Restricted Data (RD) and classified at the Secret or Top Secret level. Differences between Secret and Top Secret Sigma 20 operating procedures are outlined in this Manual.
 - c. As documents, media, and hardware created before the implementation date of this Manual are accessed for any reason and are found to contain what is now determined to be Sigma 20 NWD, they must be properly marked with the Sigma 20 caveat and handled according to the operating procedures outlined in this Manual.
 - d. Technical discussion and/or distribution of Sigma 20 NWD within DOE (including NNSA and other locations) is restricted to personnel as indicated in paragraph 1a of this chapter, and dissemination of Sigma 20 NWD outside of the DOE is limited to that which is absolutely essential to accomplish required tasks, as approved by the DOE/NNSA Headquarters (HQ) Sigma 20 Coordinator.

(b)(2)High

2. **CONTROL PROCESS FOR SIGMA 20 NWD.**

- a. Identification of Sigma 20 NWD.

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(b)(2)High

- (2) Documents, media, and hardware found to contain information identified as Sigma 20 NWD must be marked as such and handled according to these operating procedures.
- b. **Marking.** This requirement applies to all matter containing or depicting Sigma 20 NWD. Basic marking requirements found in DOE M 470.4-4 must be followed for Sigma 20 NWD, with the following additions:
 - (1) Documents and Media.

(b)(2)High

(b)(2)High

- (d) **DOE M 470.4-4 provides requirements for cover sheets. For Sigma 20 documents, the cover sheet must indicate that Sigma 20 authorization is required before viewing the contents.**
 - (e) **All media containing Sigma 20 NWD must be clearly marked with the classification level of the media as well as Sigma 20.**
- (2) **Hardware. When marking hardware designated as Sigma 20 NWD, the requirements found in DOE M 470.4-4 will be followed.**

(b)(2)High

c. Accountability.

(b)(2)High

(b)(2)High

d. **Storage Requirements.** The storage requirements found in DOE M 470.4-4 must be followed for Sigma 20 documents, with the following additions:

- (1) **Access to Storage Containers.** Only personnel authorized Sigma 20 access may have access to security containers (and their combinations) that have Sigma 20 NWD.

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(b)(2)High

e. Use.

- (1) **All Sigma 20 NWD. Use of Sigma 20 NWD outside of a vault or VTR requires continuous control of the Sigma 20 matter by a person with the proper authorization and need-to-know. Within a vault or VTR, Sigma 20 matter requires continuous control by a person with the proper authorization and need-to-know, unless all personnel authorized access to the vault or VTR have Sigma 20 authorization.**

(b)(2)High

f. Receipt and Transmission. The receipt and transmission requirements found in DOE M 470.4-4 must be followed for Sigma 20 NWD. Only personnel that have Sigma 20 authorization may transmit or receive Sigma 20 NWD. Additionally, the following apply to the transfer of Sigma 20 NWD:

- (1) **Documents and Media.**

(b)(2)High

(b)(2)High

- (c) **Top Secret Sigma 20 may be sent via the Defense Courier Service or the Department of State Courier System.**
- (d) **A classified mail channel or a Statement of Security Assurance must be established. It is the sender's responsibility to ensure that one is initiated or already in place prior to sending the material. This procedure applies even if the information is being hand carried or faxed. Please contact the Safeguards and Security Information Management System Coordinator to confirm a site can receive Sigma 20 NWD prior to sending.**
- (e) **Transferring documents or media containing Sigma 20 NWD outside of NNSA and primary DOE organizations (as defined in Attachment 1) requires approval prior to transfer. Approval must be granted in writing.**
 - (1) **The Sigma 20 Site Coordinators have authority to approve transfer of Sigma 20 NWD within DOE/NNSA (See attachment 1) and the nuclear weapons laboratories.**
 - (2) **Only the DOE/NNSA HQ Sigma 20 Coordinator has authority to transfer Sigma 20 NWD to outside agencies.**

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3. **PROCEDURES FOR RESTRICTING ACCESS AND LIMITING DISTRIBUTION.**

a. **Within the Department of Energy (Attachment 1).**

- (1) **The senior manager of each DOE site that handles Sigma 20 NWD must nominate a Sigma 20 Site Coordinator to be responsible for ensuring compliance with the procedures in this Manual, including approving Sigma 20 authorizations at the site. The nominee must have sufficient stature in the organization to ensure that effective methods for implementing these procedures are established at the site.**

(b)(2)High

b. **Outside the Department of Energy.**

- (1) **Individuals outside DOE must have Sigma 20 authorization before they can be given Sigma 20 NWD.**

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- (2) **The following provisions also apply to individuals outside DOE.**

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- (2) Sponsoring organizations are required to inform the DOE/NNSA HQ Sigma 20 Coordinator as access needs change (e.g., if personnel change jobs).**
- (b) Access to Sigma 20 NWD by personnel outside of DOE will be on a case-by-case basis. Some agencies and/or offices may require special procedures. These cases will be handled by the DOE/NNSA HQ Sigma 20 Coordinator in coordination with the specified agencies and/or offices.**

ALL DEPARTMENTAL ELEMENTS TO WHICH DOE M 457.1-1 IS APPLICABLE

Office of the Secretary

Departmental Representative to the Defense Nuclear Facilities Safety Board*

National Nuclear Security Administration

- Office of the Administrator
- Office of Counterterrorism
- Office of Congressional, Intergovernmental, and Public Affairs*
- Office of Defense Nuclear Nonproliferation*
- Office of Defense Nuclear Security
- Office of Defense Programs
- Office of Emergency Operations
- Office of Environment, Safety and Health*
- Office of General Counsel*
- Office of Infrastructure and Environment*
- Office of Management and Administration*
- Office of Policy Planning, Assessment, and Analysis

Office of the Chief Information Officer*

Office of Congressional and Intergovernmental Affairs*

Office of General Counsel*

Office of the Inspector General

Office of Intelligence and Counterintelligence

Office of Nuclear Energy, Science and Technology*

Office of Policy and International Affairs*

Office of Science*

Office of Security and Safety Performance Assurance*

Office of Civilian Radioactive Waste Management*

Office of Economic Impact and Diversity *

Office of Electricity Delivery and Energy Reliability*

Office of Energy Efficiency and Renewable Energy*

Energy Information Administration*

Office of Environment, Safety and Health*

Office of Environmental Management*

Office of Fossil Energy*

Office of Hearings and Appeals*

Office of Legacy Management*

Office of Management, Budget and Evaluation/ Chief Financial Officer*

Office of Public Affairs*

Bonneville Power Administration*

Attachment 1

DOE M 457.1-1

Page 2

Southeastern Power Administration*

Southwestern Power Administration*

Western Area Power Administration*

*** Except as approved by the Assistant Deputy Administrator for Military Application and Stockpile Operations, access to Sigma 20 information is prohibited for personnel within these organizations.**

CONTRACTOR REQUIREMENTS DOCUMENT**DOE M 457.1-1, *Control of Improvised Nuclear Device Information***

This Contractor Requirements Document (CRD) establishes the requirements for Department of Energy (DOE) contractors, including National Nuclear Security Administration (NNSA) contractors, whose contracts involve or could potentially involve accessing or generating nuclear weapon design information.

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this CRD. The contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the requirements. In doing so, the contractor must not unnecessarily or imprudently flow down requirements to subcontractors. That is, the contractor will ensure that it and its subcontractors comply with the requirements of this CRD and incur only those costs that would be incurred by a prudent person in the conduct of competitive business.

Contractor sites that are authorized to access Sigma 20 Nuclear Weapon Data (NWD) must nominate Sigma 20 Site Coordinators. The senior manager of the Sigma 20-approved location will submit a nomination for that location's Sigma 20 Site Coordinator, as well as an alternate if necessary, to the Assistant Deputy Administrator for Military Application and Stockpile Operations (NA-12) who will approve these nominations.

Sigma 20 Site Coordinators will have the following responsibilities:

- (1) Develop an implementation plan for requirements that cannot be implemented with existing resources or within six months of the effective date of this Manual. Implement Sigma 20 operating procedures within one year of publication of this Manual, ensure compliance, and serve as points of contact for all issues related to Sigma 20 NWD information control at their respective sites.
- (2) Coordinate with knowledgeable classification authorities on Sigma 20 NWD.
- (3) Approve all Sigma 20 authorizations at their respective sites. Designate, in writing, a single alternate to approve Sigma 20 authorizations, if required.
- (4) Maintain rosters or databases of all site personnel currently approved for Sigma 20 access, and enter the complete list in the Weapon Data Access Control System (WDACS) (or its replacement). Any changes to the access list must be entered within 10 working days.
- (5) Manage the Sigma 20 training program at their respective sites so that personnel authorized Sigma 20 access are knowledgeable of the procedures for protecting Sigma 20 NWD.
- (6) Ensure records of accountable matter containing Sigma 20 NWD are maintained at their respective sites, that annual inventories of this material are performed, and that summaries of these inventories are provided to the DOE/NNSA HQ Sigma 20 Coordinator, when requested.

- (7) Coordinate Sigma 20 site plans with local onsite organizations and the DOE/NNSA HQ Sigma 20 Coordinator.
- (8) Coordinate with Sigma 20 Site Coordinators at other sites as required.

OPERATING PROCEDURES

1. OPERATING PRINCIPLES. The following principles apply to the protection of Sigma 20 NWD.
 - a. Access to and distribution of Sigma 20 NWD must be restricted to those persons with appropriate Sigma 20 authorization, valid need-to-know, and DOE "Q" access authorization (or for the Department of Defense, the equivalent based on a Single Scope Background Investigation (SSBI)).
 - b. All Sigma 20 NWD is categorized as Restricted Data (RD) and classified at the Secret or Top Secret level. Differences between Secret and Top Secret Sigma 20 operating procedures are outlined in this CRD.
 - c. As documents, media, and hardware created before the implementation date of this CRD are accessed for any reason and are found to contain what is now determined to be Sigma 20 NWD, they must be properly marked with the Sigma 20 caveat and handled according to the operating procedures outlined in this CRD.
 - d. Technical discussion and/or distribution of Sigma 20 NWD within DOE (including NNSA and other locations) is restricted to personnel as indicated in paragraph 1a of this CRD, and dissemination of Sigma 20 NWD outside of the DOE is limited to that which is absolutely essential to accomplish required tasks, as approved by the DOE/NNSA Headquarters (HQ) Sigma 20 Coordinator.

(b)(2)High

2. CONTROL PROCESS FOR SIGMA 20 NWD.

- a. Identification of Sigma 20 NWD.

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(b)(2)High

(2) Documents, media, and hardware found to contain information identified as Sigma 20 NWD must be marked as such and handled according to these operating procedures.

b. Marking. This requirement applies to all matter containing or depicting Sigma 20 NWD. Basic marking requirements found in DOE M 470.4-4 must be followed for Sigma 20 NWD, with the following additions:

(1) Documents and Media.

(b)(2)High

(b)(2)High

- (d) **DOE M 470.4-4 provides requirements for cover sheets. For Sigma 20 documents, the cover sheet must indicate that Sigma 20 authorization is required before viewing the contents.**
 - (e) **All media containing Sigma 20 NWD must be clearly marked with the classification level of the media as well as Sigma 20.**
- (2) **Hardware. When marking hardware designated as Sigma 20 NWD, the requirements found in DOE M 470.4-4 will be followed.**

(b)(2)High

c. Accountability.

(b)(2)High

(b)(2)High

(b)(2)High

d. **Storage Requirements.** The storage requirements found in DOE M 470.4-4 must be followed for Sigma 20 documents, with the following additions:

- (1) **Access to Storage Containers.** Only personnel authorized Sigma 20 access may have access to security containers (and their combinations) that have Sigma 20 NWD.

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e. Use.

- (1) **All Sigma 20 NWD. Use of Sigma 20 NWD outside of a vault or VTR requires continuous control of the Sigma 20 matter by a person with the proper authorization and need-to-know. Within a vault or VTR, Sigma 20 matter requires continuous control by a person with the proper authorization and need-to-know, unless all personnel authorized access to the vault or VTR have Sigma 20 authorization.**

(b)(2)High

f. **Receipt and Transmission. The receipt and transmission requirements found in DOE M 470.4-4 must be followed for Sigma 20 NWD. Only personnel that have Sigma 20 authorization may transmit or receive Sigma 20 NWD. Additionally, the following apply to the transfer of Sigma 20 NWD:**

- (1) **Documents and Media.**

(b)(2)High

- (c) **Top Secret Sigma 20 may be sent via the Defense Courier Service or the Department of State Courier System.**
- d) **A classified mail channel or a Statement of Security Assurance must be established. It is the sender's responsibility to ensure that one is initiated or already in place prior to sending the material. This procedure applies even if the information is being hand carried or faxed. Please contact the Safeguards and Security Information Management System Coordinator to confirm a site can receive Sigma 20 NWD prior to sending.**
- e) **Transferring documents or media containing Sigma 20 NWD outside of NNSA and primary DOE organizations (as defined in Attachment 1) requires approval prior to transfer. Approval must be granted in writing.**
 - (1) **The Sigma 20 Site Coordinators have authority to approve transfer of Sigma 20 NWD within DOE/NNSA (See attachment 1) and the nuclear weapons laboratories.**
 - (2) **Only the DOE/NNSA HQ Sigma 20 Coordinator has authority to transfer Sigma 20 NWD to outside agencies.**

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3. **PROCEDURES FOR RESTRICTING ACCESS AND LIMITING DISTRIBUTION.**

a. **Within the Department of Energy (Attachment 1).**

- (1) **The senior manager of each DOE site that handles Sigma 20 NWD must nominate a Sigma 20 Site Coordinator to be responsible for ensuring compliance with the procedures in this CRD, including approving Sigma 20 authorizations at the site. The nominee must have sufficient stature in the organization to ensure that effective methods for implementing these procedures are established at the site.**

(b)(2)High

b. **Outside the Department of Energy.**

- (1) **The contractor must deny access to Sigma 20 NWD to individuals outside DOE unless the DOE/NNSA HQ Sigma 20 Coordinator has approved such access.**

(b)(2)High

(b)(2)High

- (2) The following provisions also apply to individuals outside DOE.

(b)(2)High

- (2) Sponsoring organizations are required to inform the DOE/NNSA HQ Sigma 20 Coordinator as access needs change (e.g., if personnel change jobs).
- (b) Access to Sigma 20 NWD by personnel outside of DOE will be on a case-by-case basis. Some agencies and/or offices may require special procedures. These cases will be handled by the DOE/NNSA HQ Sigma 20 Coordinator in coordination with the specified agencies and/or offices.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the specific procedures and protocols that must be followed to ensure the integrity and security of the data. This includes regular audits, backups, and strict access controls to prevent unauthorized access or tampering.