

### National Nuclear Security Administration

### **Index of Baseline Nuclear Safety Requirements**

#### NA-1 SD 251.1-2

Revision 3 June 1, 2006

An

Approved By:

6/1/6 Date

Jeraid S. Paul (for NA-1) Principal Deputy Administrator National Nuclear Security Administration

### **Change History**

First Effective Revision, Revision 3, June 1, 2006

#### **Changes from Draft Rev 2:**

Added basis for inclusion in Part I of the Index Added Supplemental Directive numbering Made an NA-1 procedure

#### Eliminated from Part I:

O151.1C 11/02/05	Comprehensive Emergency Management System
O225.1A 11/26/97	Accident Investigations
O430.1B 9/24/03	Real Property Asset Management
O440.1A 3/27/98	Worker Protection Management for DOE Federal and Contractor Employees
O450.1 Chg 2 12/07/05	Environmental Protection Program
O460.2A 12/22/04	Departmental Materials Transportation and Packaging Management
O470.2B 10/31/02	Independent Oversight and Performance Assurance Program
O5400.5, Chg 2 1/7/93	Radiation Protection of the Public and the Environment
O5480.30, Chg 1 3/14/01	Nuclear Reactor Safety Design Criteria (required explicitly by O420.1B)
O5530.3 Chg 1 4/10/92	Radiological Assistance Program
O5660.1B 5/26/94	Management of Nuclear Materials
M231.1-1A Chg 1 9/9/04	Environment, Safety and Health Reporting Manual
M231.1-2 8/19/03	Occurrence Reporting and Processing of Operations Information
M435.1-1 Chg 1 6-19-01	Radioactive Waste Management Manual
M440.1-1A 1-9-06	DOE Explosives Safety Manual (note: required by reference in O420.1B)
M460.2-1 9/23/02	Radioactive Material Transportation Practices Manual
M461.1-1 Chg 1 7-26-05 Note:	Packaging and Transfer of Materials of National Security Interest Manual Compliance with O5480.30 is required by O420.1B CRD I. 3.(b)(9) Compliance with M440.1-1A is required by O420.1B CRD I. 3.(c) Compliance with M461.1-1 is required by O461.1A CRD 15 Compliance with M435.1-1 is required by O435.1CRD 1

Added to Part II DOE O/M 413.3 DOE P/O 226.1 DOE G 414.1-5 DOE STD 1088-95 DOE N 203.1 DOE STD 3025-99

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#### Foreword

This Index defines those DOE Directives and Technical Standards that the National Nuclear Security Administration (NNSA) Administrator has determined have sufficient potential for impact on nuclear safety that Central Technical Authority (CTA) involvement is warranted in their development and certain decisions regarding application and change control.

Part I of this Index is designed for use by NNSA Site Office Managers. It lists the DOE Orders, Notices and Manuals for which CTA concurrence is needed on exemptions or decisions not to implement provisions of the associated Contractor Requirements Document. Included in this part are Orders, Notices and Manuals that directly impact the establishment, verification, and maintenance of the safety bases (defined per 10 CFR 830) for NNSA nuclear facilities.

Part II of the Index is designed for use by the NNSA points of contact for the DOE Directives and Technical Standards systems. It identifies the set of DOE Directives and Standards that require CTA concurrence prior to providing NNSA concurrence to any revision or cancellation.

This index was named and initially designed around the term 'Nuclear Safety Requirements.' Although this title has been retained, the document has been revised to index a well-defined set of DOE Directives and Standards that have significant potential to affect nuclear safety at NNSA nuclear facilities. The NNSA Administrator has provided direction on the management of these documents in contracts and change control in NA-1 SD 251.1-1, *CTA Management of Nuclear Safety Requirements,* available from the NNSA Chief of Defense Nuclear Safety.

## 1. SCOPE

The scope of this Index extends to those functions, responsibilities and authorities assigned to NNSA Central Technical Authority (CTA) and the Chief of Defense Nuclear Safety (CDNS) in the most current version of DOE-M-411.1-1C, *Safety Management Functions, Responsibilities and Authorities Manual*, and the NNSA *Safety Management Functions, Responsibilities and Authorities Manual* (*FRAM*). The scope includes the responsibilities of NNSA personnel needed to support the CTA.

# 2. APPLICABILITY

The parts of this Index are to be used by NNSA personnel subject to the authority of the NNSA Administrator in managing nuclear safety requirements, consistent with the NNSA FRAM. This Index falls within the definition of a Supplemental Directive as defined in Chapter IV of DOE M 251.1-1A. It is intended for use in conjunction with the NA-1 SD 251.1-1, *CTA Management of Nuclear Safety Requirements*, which is approved for NA-1 by NA-2. NA-1 SD 251.1-1 is available from the NNSA Chief of Defense Nuclear Safety (NA-2.1).

# **3. REFERENCES**

- 1. DOE-M-411.1-1C, Safety Management Functions, Responsibilities and Authorities Manual
- 2. NNSA Safety Management Functions, Responsibilities and Authorities Manual
- 3. NA-1 SD 251.1-1, CTA Management of Nuclear Safety Requirements
- 4. DOE M 251.1-1A, Directives System Manual

#### 4. Index Part I: Requirements in Contracts

This part of the Index identifies the DOE Orders, Notices and Manuals for which CTA concurrence is needed prior to granting exemptions or for approving decisions not to implement applicable Contractor Requirements Document provisions of the listed directives. Included in this part are Orders, Notices and Manuals that directly impact the establishment, verification, and maintenance of the safety bases (defined per 10 CFR 830) for NNSA nuclear facilities. Details on the use of this section are provided in NA-1 SD 251.1-1, *CTA Management of Nuclear Safety Requirements*.

Directive and Date		<u>Title/Comment</u>
O414.1C	6/17/05	Quality Assurance
O420.1B	12/22/05	Facility Safety
O425.1C	3/13/03	Startup and Restart of Nuclear Facilities
O433.1	6/1/01	Maintenance Management Program for DOE Nuclear Facilities
O435.1 Chg 1	8/28/01	Radioactive Waste Management
O452.1C	9/20/05	Nuclear Explosive and Weapon Surety Program
O452.2B	8/7/01	Safety of Nuclear Explosive Operations
O460.1B	4/4/03	Packaging and Transportation Safety
O461.1A	4/26/04	Packaging and Transfer or Transportation of Materials of National Security Interest
O5480.19, Chg 2	10/23/01	Conduct of Operations Requirements for DOE Facilities
O5480.20A, Chg	1 7/12/01	Personnel Selection, Qualification, Training and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities
Notes:		Compliance with O5480.30 is required by O420.1B CRD I. 3.(b)(9) Compliance with M440.1-1A is required by O420.1B CRD I. 3.(c) Compliance with M461.1-1 is required by O461.1A CRD 15 Compliance with M435.1-1 is required by O435.1CRD 1

### 5. Index Part II. Change Control

This part identifies the set of DOE Directives and Standards that have sufficient potential to affect nuclear safety that CTA concurrence must be obtained prior to providing NNSA concurrence on any revision or cancellation. Because different processes are used to maintain Directives and Standards, the documents controlled under these two systems are listed separately, with Directives System documents listed in Table II-1, and Standards Program documents listed in Table II-2.

<b>Directive</b>	Title
M251.1-1A	Directives System Manual
M231.1-1A Chg 1	Environment, Safety and Health Reporting Manual
M231.1-2	Occurrence Reporting and Processing of Operations Information
M411.1-1C	Safety Management Functions, Responsibilities, and Authorities Manual
M413.3-1	Program And Project Management For The Acquisition Of Capital Assets
M426.1-1A	Federal Technical Capability Manual
M435.1-1 Chg 1	Radioactive Waste Management Manual
M440.1-1A	DOE Explosives Safety Manual
M450.3-1	DOE Closure Process for Necessary and Sufficient Sets of Standards
M460.2-1	Radioactive Material Transportation Practices Manual
M461.1-1 Chg 1	Packaging and Transfer of Materials of National Security Interest Manual
M470.4-2 Chg 1	Physical Protection
M470.4-6	Nuclear Material Control and Accountability
N203.1	Software Quality Assurance
O151.1C	Comprehensive Emergency Management System
O225.1A	Accident Investigations
O226.1	Implementation of Department of Energy Oversight Policy
O231.1A Chg 1	Environment, Safety, and Health Reporting
O251.1A	Directives System
O252.1	Technical Standards Program
O360.1	Federal Employee Training
O413.3 Chg 1	Program And Project Management For The Acquisition Of Capital Assets
O414.1C	Quality Assurance
O420.1B	Facility Safety
O425.1C	Startup and Restart of Nuclear Facilities
O430.1B	Real Property Asset Management
O433.1	Maintenance Management Program for DOE Nuclear Facilities
O435.1 Chg 1	Radioactive Waste Management
O440.1A	Worker Protection Management for DOE Federal and Contractor Employees
O450.1 Chg 2	Environmental Protection Program
O451.1B Chg 1	National Environmental Policy Act Compliance Program
O452.1C	Nuclear Explosive and Weapon Surety Program

#### Table II-1. Directives System Documents That Require CTA Concurrence

O452.2B	Safety of Nuclear Explosive Operations
O460.1B	Packaging and Transportation Safety
O460.2A	Departmental Materials Transportation and Packaging Management
	Packaging and Transfer or Transportation of Materials of National Security
O461.1A	Interest
O470.2B	Independent Oversight and Performance Assurance Program
O5400.5, Chg 2	Radiation Protection of the Public and the Environment
O5480.19, Chg 2	Conduct of Operations Requirements for DOE Facilities
O5480.20A, Chg 1	Personnel Selection, Qualification, Training and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities
O5480.30, Chg 1	Nuclear Reactor Safety Design Criteria
O5530.3 Chg 1	Radiological Assistance Program
O5660.1B	Management of Nuclear Materials
P226.1	Department of Energy Oversight Policy
P410.1A	Promulgating Nuclear Safety Requirements
	Authorizing Use of the Necessary and Sufficient Process for Standards-Based
P450.3	Environment, Safety and Health Management
G151.1-1 series	Emergency Management Guide Volumes 1 through 7
G225.1A-1	Implementation Guide for Use with DOE Order 225.1 Accident Investigations
G231.1-1	Occurrence Reporting and Performance Analysis Guide
G231.1-2	Occurrence Reporting Causal Analysis Guide
G252.1-1	Technical Standards Program Guide
G414.1-1A	Management Assessment and Independent Assessment Guide
G414.1-2A	Quality Assurance Management System Guide for Use with 10 CFR 830.120 and DOE Order 414.1
G414.1-3	Suspect/Counterfeit Items Guide for Use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1B, Quality Assurance
G414.1-4	Safety Software Guide for Use with 10 CFR 830, Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance
G414.1-5	Corrective Action Program Guide
G420.1-1	Nonreactor Nuclear safety Design Criteria and Explosive Safety Criteria Guide for Use with DOE Order 420.1 Facility Safety
	Guide for the Mitigation of Natural Phenomena Hazards for DOE Nuclear
G420.1-2	Facility and Non-Nuclear Facilities
G421.1-1 series	Criticality Safety Good Practices Program Guide for DOE Nonreactor Nuclear Facilities
	Implementation Guide for Use in Developing Documented Safety Analyses to
G421.1-2	Meet Subpart B of 10 CFR 830
G423.1-1	Implementation Guide For Use In Developing Technical Safety Requirements
G424.1-1	Implementation Guide for use in Addressing Unreviewed Safety Question
G433.1-1	Nuclear Facility Maintenance Management Program Guide for Use with DOE Order 433.1
G435.1-1 series	Implementation Guide for Use with DOE Manual 435.1-l Chapters 1 through 4
0.155.1 1 501105	Worker Protection Management for DOE Federal and Contractor Employees
G440.1-1	Guide for use with DOE O 440.1
G440.1-2	Construction Safety Management Guide For Use With DOE Order 440.1

G440.1-5	Fire Safety Program for use with DOE O 420.1 and DOE O 440.1
G450.1-1, -1A, -2	Implementation Guides for Use with DOE Order 450.1
G450.3-1, -2, -3	Documentation for Work Smart Standards Applications Volumes 1 through 3
G450.4-1B series	Integrated Safety Management System Guide Volumes 1 through 2
G460.1-1 series	Implementation Guide for Use with DOE Order 460.1A, Packaging and Transportation Safety
G460.2- 1	Implementation Guide for Use with DOE Order 460.2 Departmental Materials Transportation and Packaging Management

### Table II-2. Standards Program Documents That Require CTA Concurrence

<u>Number</u> DOE-STD-1020-2002	<u><b>Title</b></u> Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities
DOE-STD-1021-93	Natural Phenomena Hazards Performance Categorization Guidelines for Structures, Systems, and Components
DOE-STD-1022-94	Natural Phenomena Hazards Characterization Guide
DOE-STD-1023-95	Natural Phenomena Hazards Assessment Criteria
DOE-STD-1027-92	Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23
DOE-STD-1030-96	Guide to Good Practices for Lockouts and Tagouts
DOE-STD-1063-2000	Facility Representatives
DOE-STD-1066-99	Fire Protection Design Criteria
DOE-STD-1073-2003	Department of Energy Standard Configuration Management
DOE-STD-1083-95	Requesting and Granting Exemptions to Nuclear Safety Rules
DOE-STD-1088-95	Fire Protection for Relocatable Structures
DOE-STD-1090-2004	Hoisting and Rigging Standard
DOE-HDBK-1099-96	Establishing Nuclear Facility Drill Programs
DOE-STD-1104-96	Review and Approval of Nuclear Facility Safety Basis Documents (Documented Safety Analysis and Technical Safety Requirements
DOE-STD-1134-99	Review Guide for Criticality Safety Evaluations
DOE-HDBK-1148-2002	Work Smart Standards (WSS) Users Handbook
DOE-STD-1158-2002	Self-Assessment Standard for DOE Contractor Criticality Safety Programs
DOE-STD-1186-2004	Specific Administrative Controls
DOE-STD-3006-2000	Planning and Conduct of Operational Readiness Reviews (ORR)
DOE-STD-3007-93	Guidelines for Preparing Criticality Safety Evaluations at Department of Energy Non-Reactor Nuclear Facilities
DOE-STD-3009-94	Preparation Guide for U.S. DOE Nonreactor Nuclear Facility Safety Analysis Reports
DOE-HDBK-3010-94	Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities
DOE-STD-3011-2002	Guidance for Preparation of Basis for Interim Operation (BIO) Documents
DOE-HDBK-3012-2003	Guide To Good Practices For Operational Readiness Reviews (ORR), Team Leader's Guide
DOE-STD-3013-2004	Stabilization, Packaging, And Storage Of Plutonium-Bearing Materials
DOE-STD-3014-96	Accident Analysis for Aircraft Crash into Hazardous Facilities
DOE-STD-3015-2001	Nuclear Explosive Safety Study Process
DOE-DP-STD-3016-99	Hazard Analysis Reports for Nuclear Explosive Operations
DOE-STD-3020-97	Specification for HEPA Filters Used by DOE Contractors
DOE-STD-3024-98	Content of System Design Descriptions
DOE STD-3025-99	QA Inspection and Testing of HEPA Filters
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