| | |
|---|---|
| Description of document: | Department of Energy Order DOE O 151.1C, Comprehensive Emergency Management System, 2005 |
| Request date: | 17-August-2014 |
| Released date: | 18-November-2014 |
| Posted date: | 15-December-2014 |
| Source of document: | FOIA/PA Officer<br>NNSA/Office of the General Counsel<br>P. O. Box 5400<br>Albuquerque, NM 87185-5400<br>Fax: (505) 284-7512<br>Email: FOIOfficer@nnsa.doe.gov |

National Nuclear Security Administration

Department of Energy
National Nuclear Security Administration
Office of the General Counsel
P. O. Box 5400
Albuquerque, NM 87185

NOV 18 2014

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

This letter is your final response to your August 17, 2014 Freedom of Information Act (FOIA) request for:

***A digital/electronic copy of the most recent NNSA Communications Plan.***

On September 16, 2014, we requested that you narrow the scope of your request. You clarified your request by asking for Emergency Management Material. We requested that the (NNSA) Public Affairs (PA) office conduct a search for responsive records.

PA searched and located the enclosed responsive document; *Comprehensive Emergency Management System, Objectives to establish policy and to assign and describe roles and responsibilities for the Department of Energy (DOE) Emergency Management System. The Emergency Management System applies to DOE and to the National Nuclear Security Administration (NNSA).*

On October 29, 2014 you confirmed that this document would satisfy your FOIA request. The enclosed CD contains those records in their entirety.

There are no fees chargeable to you for processing this request. If you have questions please contact Mr. Roberto Marquez by e-mail at Roberto.Marquez@nnsa.doe.gov, or write to the address above. Please reference Control Number FOIA 14-00253-R.

Sincerely,

Pamela Arias-Ortega

Pamela Arias-Ortega
Authorizing Official

Enclosure

# U.S. Department of Energy
**Washington, D.C.**

**ORDER**

**DOE O 151.1C**

Approved: 11-2-05

SUBJECT: COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM

1. OBJECTIVES.

   a. To establish policy and to assign and describe roles and responsibilities for the Department of Energy (DOE) Emergency Management System. The Emergency Management System provides the framework for development, coordination, control, and direction of all emergency planning, preparedness, readiness assurance, response, and recovery actions. The Emergency Management System applies to DOE and to the National Nuclear Security Administration (NNSA).

   b. To establish requirements for comprehensive planning, preparedness, response, and recovery activities of emergency management programs or for organizations requiring DOE/NNSA assistance.

   c. To describe an approach to effectively integrate planning, preparedness, response, and recovery activities for a comprehensive, all-emergency management concept.

   d. To integrate public information and emergency planning to provide accurate, candid, and timely information to site workers and the public during all emergencies.

   e. To promote more efficient use of resources through greater flexibility (i.e., the graded approach) in addressing emergency management needs consistent with the changing missions of the Department and its facilities.

   f. To ensure that the DOE Emergency Management System is ready to respond promptly, efficiently, and effectively to any emergency involving DOE/NNSA facilities, activities, or operations, or requiring DOE/NNSA assistance.

   g. To integrate applicable policies and requirements, including those promulgated by other Federal agencies (e.g., stockpiling stable iodine for possible distribution as a radiological protective prophylaxis) and interagency emergency plans into the Department's Emergency Management System. In compliance with the statutory requirements in 42 USC 7274k, DOE hereby finds that this Order is necessary for the fulfillment of current legal requirements and conduct of critical administrative functions.

   h. To eliminate duplication of emergency management effort within the Department.

2. CANCELLATIONS. The following Order is canceled: DOE O 151.1B, *Comprehensive Emergency Management System*, of 10-29-03. Cancellation of an Order does not, by itself, modify or otherwise affect any contractual obligation to comply with such an Order. Canceled Orders incorporated by reference in a contract will remain in effect until the contract is modified to delete the reference to the requirements in the canceled Orders.

3. APPLICABILITY.

a. DOE Elements. Except for the exclusions listed in paragraph 3c, this Order applies to all DOE/NNSA elements listed in Attachment 1.

The NNSA Administrator must assure that NNSA employees comply with their respective responsibilities under this Order.

b. DOE Contractors. Except for the exclusions listed in paragraph 3c, the Contractor Requirements Document (CRD), Attachment 2, sets forth requirements of this Order that will apply to contracts that include the CRD.

c. Exclusions.

(1) Generally accepted standards may be substituted for this Directive in accordance with the modified directives process described in the Secretarial Action Memorandum of 12-03-02 or appropriate successor documents. The Cognizant Field Element must coordinate a proposed alternative standard for emergency management with the Office of Emergency Operations. After this coordination, the proposed alternative standard, including any conditions added, must be approved by the Cognizant Field Element and then submitted to the Office of Emergency Operations and the Program Secretarial Officer(s) (PSO) for approval. If the Director, Office of Emergency Operations and the PSO(s) jointly approve the proposal, the alternative standard may be substituted. If the Director, Office of Emergency Operations and the PSO(s) disagree, the conflict must be elevated to the Deputy Secretary or designated Departmental Chief Operating Officer for resolution.

(2) The facilities and activities of the Naval Nuclear Propulsion Program and the Power Marketing Administrations are exempt from the requirements of this Order.

(3) All DOE/NNSA facilities subject to Nuclear Regulatory Commission (NRC) license requirements are specifically exempted from the requirements of this Order.

(4) If a DOE/NNSA element or contractor can demonstrate that it is subject to emergency management program requirements under the authority of

other Federal regulatory agencies, and those requirements are at least as stringent as the requirements of this Order, then an exemption may be requested.

(5) Requests for exemptions are approved jointly by Program Secretarial Officers and the Director, Office of Emergency Operations, with conflicts resolved by the Deputy Secretary or designated Departmental Chief Operating Officer. Requests for exemptions must be submitted from the Cognizant Field Element manager to the appropriate Program Secretarial Officer(s) and the Director, Office of Emergency Operations.

4. REQUIREMENTS.

a. General.

(1) DOE/NNSA sites/facilities, including DOE/NNSA transportation activities, DOE/NNSA offices in the field, and DOE Headquarters offices, must develop and participate in an integrated and comprehensive Emergency Management System to ensure that—

(a) the Department can respond effectively and efficiently to Operational Emergencies and Energy Emergencies and can provide Emergency Assistance so that appropriate response measures are taken to protect workers, the public, the environment, and the national security;

(b) emergencies are recognized, categorized and, as necessary, classified (determine the emergency class) promptly, and parameters associated with the emergency are monitored to detect changed or degraded conditions;

(c) emergencies are reported and notifications are made; and

(d) reentry activities are properly and safely accomplished, and recovery and post-emergency activities commence properly.

(2) Emergency **planning** must include identification of hazards and threats, hazard mitigation, development and preparation of emergency plans and procedures, and identification of personnel and resources needed for an effective response.

(3) Emergency **preparedness** must include acquisition and maintenance of resources, training, drills, and exercises.

(4) Emergency **response** must include the application of resources to mitigate consequences to workers, the public, the environment, and the national security, and the initiation of recovery from an emergency.

(5) **Recovery** must include planning for and actions taken following termination of the emergency to return the facility/operations to normal.

(6) **Readiness assurance** must include assessments and documentation to ensure that stated emergency capabilities are sufficient to implement emergency plans.

(7) The Headquarters Operations Center must serve as the point of contact for receipt of all emergency notifications and reports. Accordingly, the Headquarters Operations Center receives, coordinates, and disseminates emergency information to Headquarters elements and program office emergency points of contact, the White House Situation Room, and other Federal agencies.

(8) The Cognizant Field Element, as designated by the Lead Program Secretarial Officer, provides first (lowest) level of line management oversight of DOE/NNSA facilities/sites/activities.

(9) The Office of Security and Safety Performance Assurance provides independent oversight of the Comprehensive Emergency Management System.

(10) Implementation of a comprehensive emergency management program at a DOE/NNSA site/facility/activity must be commensurate with the hazards present at that site/facility/activity (i.e., it must be developed consistent with a graded approach).

(11) Responsibilities must be established in accordance with Chapter I of this Order.

(12) A Headquarters Emergency Management Team must be established, as necessary, for Operational Emergencies, Energy Emergencies, and Emergency Assistance. The Headquarters Emergency Management Team Plan describes the activation, mission and functions of the Headquarters Emergency Management Team.

(13) Each DOE/NNSA site/facility must have an Operational Emergency Base Program that implements the requirements of applicable Federal, State, and local laws/regulations/ordinances for fundamental worker safety programs (e.g., fire, safety, and security). These requirements are not unique to DOE/NNSA operations. See Chapter III.

(14) In addition to the Operational Emergency Base Program, each DOE/NNSA site/facility with hazardous materials (radioactive, chemical, biological agents and toxins) in sufficient quantities (radioactive or chemical materials) or representing specific biological agents/toxins, which pose a serious threat to workers, the public, or the environment, must develop and maintain a quantitative Emergency Planning Hazards Assessment (EPHA) and meet more detailed emergency planning requirements. See Chapter IV for specific requirements pertaining to Operational Emergency Hazardous Material Programs.

(a) Hazardous materials are any solid, liquid, or gaseous material that is toxic, flammable, radioactive, infectious, corrosive, chemically reactive, or unstable upon prolonged storage in quantities that could pose a threat to life, property, or the environment. Oil, as defined in 33 USC 1321, is "oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil." Consistent with Federal law, oil is not included in the definition of hazardous materials used in this Order.

(b) Significant quantities of radioactive and chemical materials are quantities that exceed the thresholds outlined in Chapter III, paragraph 3b.

(c) At a minimum, specific hazardous biological agents and toxins must include Federally regulated agents and toxins identified in lists published by the Department of Health and Human Services (HHS) in 42 CFR 73 and the Department of Agriculture (USDA) in 7 CFR 331 and 9 CFR 121. Toxins listed in 42 CFR 73 and 9 CFR 121 must exceed the minimum quantities specified to be Federally regulated.

(d) The protective action criteria for releases of hazardous materials are listed below.

1 For radioactive material - the Protective Action Guides (PAGs) promulgated by the Environmental Protection Agency (EPA) must be used.

2 For chemicals, the protective action criteria, listed in order of preference, must be used: Acute Exposure Guideline Levels (AEGLs) promulgated by the EPA; Emergency Response Planning Guidelines (ERPGs) published by the American Industrial Hygiene Association; and Temporary Emergency Exposure Limits (TEELs) developed by DOE.

For these criteria, the exposure level to be used represents no irreversible health effects.

3 For hazardous biological materials identified in Base Order, paragraph 4a (14) (c), protective action criteria are considered exceeded and immediate protective actions are required for any actual or potential release of agents or toxins outside of secondary containment barriers. Long-term protective action criteria are specified by State or local public health officials.

(15) To ensure protection of onsite worker health and safety and ensure consistent interfaces with offsite Emergency Response Organizations (EROs) during an emergency involving or affecting a leased facility owned by DOE/NNSA, arrangements with lessees must effectively integrate the activities of a leased facility into the DOE/NNSA site-wide emergency management program. These arrangements also pertain to Nuclear Regulatory Commission licensed facilities and must include-

(a) a description of how each of the lessee's emergency management program elements are integrated into the sitewide program; and

(b) a requirement that the tenant's hazardous material inventories be reported to the site emergency management organization annually. The tenant must also report prior to significant changes to the facility or to hazardous material inventories. For example, significant changes are those changes, which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B.

(16) Each DOE closure site/facility must adjust its Operational Emergency Hazardous Material Program to be commensurate with the hazards that remain.

(17) Each DOE/NNSA site/facility must declare an Operational Emergency when a major unplanned or abnormal event or condition occurs that: involves or affects DOE/NNSA facilities and activities by causing or having the potential to cause serious health and safety or environmental impacts; requires resources from outside the immediate/affected area or local event scene to supplement the initial response; and, requires time-urgent notifications to initiate response activities at locations beyond the event scene. In general, to be considered an Operational Emergency, an event or condition involving the uncontrolled release of a hazardous material must: immediately threaten or endanger personnel who are in close proximity of the event; have the potential for dispersal beyond the

immediate vicinity of the release in quantities that threaten the health and safety of onsite personnel or the public in collocated facilities, activities, and/or offsite; and have a potential rate of dispersal sufficient to require a time-urgent response to implement protective actions for workers and the public. Each DOE/NNSA site/facility must classify Operational Emergencies involving the uncontrolled airborne release of hazardous materials as an Alert, Site Area Emergency, or General Emergency, in order of increasing severity. See Chapter V.

(18) The Department's Energy Emergency Program must encompass events or conditions representing, causing, or having the potential to cause, a substantial impact on energy supply or infrastructure in a limited local area, region of the country, or the nation as a whole. See Chapter VI.

(19) As directed by Executive Order or other binding agreements, the Department's Emergency Assistance Program must encompass a DOE response to national security threats or other events or conditions requiring DOE assistance, expertise, resources, or assets, and including Continuity of Government and Continuity of Operations Programs. Accordingly, the Emergency Assistance Program must include all activities whereby Departmental resources, emergency response assets, personnel, and/or facilities are used to support Federal Plans, Presidential directions, and State, local, or Tribal agreements of mutual aid. See Chapter VII.

(20) Each DOE/NNSA site/facility must notify DOE/NNSA (as appropriate), and offsite officials when emergencies occur. The notification and reporting requirements within this Order have been coordinated with DOE requirements for non-emergency occurrence reporting. See Chapter VIII.

(21) Each DOE/NNSA site/facility must provide accurate, candid, and timely information about emergencies to workers and the public. See Chapter IX.

(22) Each DOE/NNSA site/facility must establish a readiness assurance program to ensure that stated emergency capabilities are sufficient to implement emergency plans. See Chapter X.

(23) Each DOE/NNSA site/facility, along with other DOE/NNSA offices, must document the emergency management program in an Emergency Plan. See Chapter XI.

(24) To develop an effective and efficient emergency management organization that meets the requirements of this Order and best meets local conditions, the Cognizant Field Element Manager may approve a written request from the contractor at a site with multiple facilities to place facility-specific

requirements in the CRD of this Order on a site-/contractor-level organization (such as a single, site-wide public information organization rather than separate organizations at each facility.) The Cognizant Field Element Manager may also decide to place facility-specific requirements on the Cognizant Field Element organization. Placing facility-specific requirements on the Cognizant Field Element or on a site-/contractor-level organization does not require an exemption from this Order.

(a) Requirements placed on the Cognizant Field Element or a site-/contractor-level organization must meet the requirements of the Operational Emergency Hazardous Material Program if the site contains both Operational Emergency Base Program and Operational Emergency Hazardous Material Program facilities.

(b) The Cognizant Field Element Manager must notify the Program Secretarial Officer(s) and the Director, Office of Emergency Operations, in writing of any such variations. The Cognizant Field Element Manager must ensure that the changes are noted in the emergency plan at the facility, site/contractor, and Cognizant Field Element levels, as appropriate, as well as in the program description in the Emergency Readiness Assurance Plan (ERAP).

b. Planning and Preparedness. Each site/facility and DOE/NNSA element must assess its emergency management needs to plan and implement a comprehensive emergency management program commensurate with the hazards present (i.e., consistent with a graded approach).

(1) Operational Emergencies.

(a) Sites/Facilities/Activities. All Departmental elements and contractors with responsibilities for site/facility operations and activities must participate in the development of comprehensive emergency management programs. Such programs must contribute to the Department's Comprehensive Emergency Management System by promoting effective and efficient integration of all applicable requirements, including those promulgated by other agencies.

(b) Cognizant Field Elements. Cognizant Field Elements must have trained emergency response staff and must provide sites/facilities/activities under their cognizance with the following:

1 direction to implement emergency management policy and requirements;

2 direction in emergency planning and preparedness activities;

3 support and assistance during emergencies; and

4 support and assistance in resolving issues in site/facility/activity emergency management programs, as well as assessments of site/facility/activity emergency management programs.

(2) Energy Emergencies. The Energy Emergency Program must be planned to ensure that the Department is capable of assisting in the prevention and mitigation of energy supply crises and their associated economic impacts. The program also must provide for DOE assistance for Presidentially declared emergencies invoking the Stafford Act (Public Law 93-288, as amended) and as implemented through the National Response Plan. The Energy Emergency Program may be implemented along with Emergency Assistance.

(3) Emergency Assistance. Emergency Assistance planning and preparedness must include preparation to deploy Departmental resources, emergency response assets, and personnel, and/or use of facilities to support Federal interagency plans and agreements, Presidential direction, and State, local, or Tribal agreements of mutual aid. Emergency Assistance may be implemented along with an Energy Emergency response.

(4) Headquarters.

(a) The Director, Office of Emergency Operations, is the single point of contact and control for all emergency management activities, and issues all policy, requirements, and guidance for the Department's Emergency Management System.

(b) Program Secretarial Officers ensure implementation of policy and requirements for activities conducted by sites/facilities and/or Cognizant Field Elements under their authority.

(c) The Administrator, NNSA, provides programmatic direction for the Department's radiological emergency response assets. The Assistant Secretary for Environmental Management provides programmatic direction for the Transportation Emergency Preparedness Program (TEPP). The Director of Nuclear Energy, Science, and Technology provides programmatic direction for space nuclear system applications, including space launch and space flight aborts. Programmatic direction for these programs

must be provided in coordination with the Director, Office of Emergency Operations.

c. Response.

(1) Operational Emergency Response.

(a) Site/Facility. Personnel and resources at the site/facility level comprise the primary response capability for an Operational Emergency.

1 Sites/facilities must direct appropriate emergency response within the area under their control and at the scene of the emergency, including effective coordination between the incident commander at the event scene and the individual in charge of overall management and coordination of site/facility response activities.

2 Sites/facilities must promptly notify local, State, Tribal, DOE/NNSA (as appropriate), and other regional Federal agencies when events categorized as Operational Emergencies occur.

(b) Cognizant Field Elements.

1 Cognizant Field Elements must monitor the facility response, provide support, and assist with issue resolution.

2 Cognizant Field Elements must monitor the notification process at the site/facility and make notifications of applicable DOE/NNSA emergency events as necessary or appropriate.

3 Cognizant Field Elements must coordinate interagency and public information activities at the regional level and coordinate directly with Headquarters.

4 The specific structure of Cognizant Field Element Emergency Management Teams depends on the relationship (contractual and geographic) to the site/facility. All Cognizant Field Element Emergency Management Teams must have a senior official who serves as an emergency manager with decision-making authority and responsibilities. Such individuals must be supported by personnel with communications, technical, liaison, and public affairs expertise.

5 The Cognizant Field Element Emergency Management Team may be activated for any emergency declaration.

(2) Energy Emergency Response. Response activities for Energy Emergencies are normally concentrated at DOE Headquarters. DOE responsibilities for Energy Emergencies are delineated within interagency Federal response and recovery plans, Executive Orders, and international agreements. DOE Headquarters must monitor Energy Emergencies for changing requirements and brief the White House and congressional offices when requested.

(3) Emergency Assistance Response. Response to events requiring DOE/NNSA Emergency Assistance must be directed to appropriate DOE/NNSA Headquarters elements. DOE/NNSA responsibilities for Emergency Assistance are delineated within interagency Federal response and recovery plans, Executive Orders, and/or international agreements. DOE Headquarters must monitor such events for changing requirements, brief the White House and congressional offices, and develop options for continuing Departmental operations and missions.

(4) Headquarters. DOE Headquarters must receive information on the facility, site, or area response; monitor the Cognizant Field Element response; provide appropriate support and assistance; assist with issue resolution; and coordinate interagency, congressional, and public information activities at the national level.

(a) The Headquarters Emergency Management Team for Operational Emergencies, Energy Emergencies, or Emergency Assistance must be formed and managed in accordance with the provisions of the Headquarters Emergency Response Plan. The Headquarters Emergency Management Team is normally activated only for emergencies that involve serious or potentially serious threats to the health and safety of workers and the public, the environment, or national security.

(b) In accordance with the provisions of the Headquarters Emergency Response Plan, the Emergency Management Team must use a matrix approach to provide technical and support personnel from appropriate Headquarters elements. The Headquarters Emergency Management Team must also coordinate any support needed from other Federal agencies and prepare Departmental briefings on the emergency.

(5) Response Termination. In general, response activities are terminated when the situation has been stabilized. At this point, potential threats to workers, the public, the environment, and national security have been

characterized; conditions no longer meet established emergency categorization criteria; and it appears unlikely that conditions will deteriorate. In coordination with response organizations, the emergency is then declared terminated and activities focus on recovery.

d. Recovery. Mitigative, cleanup, and restoration activities may begin prior to response termination. However, excluding recovery planning, recovery activities fully begin following response termination. Recovery activities require the coordinated efforts of the affected site/facility; its line management; the Office of Emergency Operations; the Office of Environment, Safety and Health; the Office of Environmental Management; General Counsel; and the Office of Congressional and Intergovernmental Affairs. Specific recovery requirements and procedures are established on a case-by-case basis.

5. RESPONSIBILITIES. See Chapter I.

6. IMPLEMENTATION.

a. Full compliance with the changes made to this Order must be accomplished within 1 year of its issuance.

b. If compliance is not or cannot be completed within 1 year from issuance of this Order, an implementation schedule must be developed by the Cognizant Field Element and submitted to the Program Secretarial Officer with the Emergency Readiness Assurance Plan due October 1, 2006.

c. Non-mandatory implementation guidance for this Order is published separately in the multi-volume DOE G 151.1-1 series of Emergency Management Guides (or replacements). DOE G 151.1-1 provides non-mandatory, supplemental information about preferred methods for implementing requirements, including lessons learned, suggested practices, instructions, and suggested performance measures.

7. CONTACT. For assistance regarding this directive, contact the Director, Office of Emergency Operations, at 202-586-9892.

SAMUEL W. BODMAN
Secretary of Energy

## CONTENTS

**Chapter V. OPERATIONAL EMERGENCY EVENTS AND CONDITIONS**



**Chapter VI. ENERGY EMERGENCY PROGRAM**



**Chapter VII. EMERGENCY ASSISTANCE PROGRAM**



**Chapter VIII. COMMUNICATIONS REQUIREMENTS**

**Chapter IX. PUBLIC AFFAIRS POLICY AND PLANNING REQUIREMENTS**



**Chapter X - READINESS ASSURANCE**



**Chapter XI. PROGRAM ADMINISTRATION**

## Chapter I

## RESPONSIBILITIES

1. DEPUTY SECRETARY. Serves as senior Departmental emergency management official.

2. NNSA ADMINISTRATOR. Serves as the NNSA senior emergency management official.

3. DIRECTOR, OFFICE OF EMERGENCY OPERATIONS. Serve as DOE's primary point of contact for all emergency management activities.

   a. Issues all policy, requirements, and guidance for the DOE/NNSA Emergency Management System.

   b. Coordinates all emergency management activities, including intra- and inter-Departmental and international activities, Departmental commitments, and exercise and response activities.

   c. Ensures the Emergency Management System provides a comprehensive and integrated approach to emergency management, including planning, preparedness, response, and recovery.

   d. Ensures emergency management program integrity through integration of all programs, systems, assets, capabilities, training, and response.

   e. Conducts emergency management program assistance.

   f. Establishes, charters, administers, convenes, and chairs the Standing Emergency Management Coordinating Committee.

   g. Establishes, charters, administers, convenes, and chairs the Emergency Management Advisory Committee.

   h. Serves as budget and staffing advocate for emergency management programs.

   i. Prepares and maintains the Headquarters Emergency Management Team Plan and corresponding implementing procedures for the Headquarters Emergency Management Team, in coordination with Program Secretarial Officers, and conducts appropriate Headquarters Emergency Management Team training.

   j. In accordance with the provisions of the Headquarters Emergency Management Team Plan, serves as the Emergency Manager or designates the Emergency

Manager for all initial activations of the Headquarters Emergency Management Team.

k. Maintains a trained cadre of experts capable of supporting a Headquarters response to an Operational Emergency and/or an emergency requiring Emergency Assistance resources and capabilities.

l. In coordination with the Program Secretarial Officers and the Cognizant Field Element managers, supports a readiness assurance program, consisting of evaluations, improvements, and ERAPs.

m. Manages the development of implementing policies, plans, and procedures for emergency response activities worldwide associated with nuclear weapons programs and facilities, and all radiological and nuclear emergencies on behalf of the United States Government.

n. Provides an annual status report on DOE and NNSA readiness assurance.

o. Ensures that effective communication systems and protocols are coordinated and maintained between the Headquarters Operations Center, the Program Secretarial Officer, and the Cognizant Field Element during emergencies.

4. STANDING EMERGENCY MANAGEMENT COORDINATING COMMITTEE.

a. Members include Deputy Assistant Secretary (DAS) or Associate Deputy Assistant Secretaries (ADAS) or equivalent level from Environmental Management; Science; Nuclear Energy, Science and Technology; Fossil Energy; Energy Efficiency and Renewable Energy; Civilian Radioactive Waste Management; and the Deputy or Associate Deputy Administrator of Defense Nuclear Nonproliferation and Defense Nuclear Programs. DAS or ADAS, or equivalent level, from Policy and International Affairs; Security and Safety Performance Assurance; and Environment, Safety and Health serve as *ex officio* members.

b. Identifies and resolves emergency management issues, or as necessary, refers issues to the Executive Committee for resolution.

5. EMERGENCY MANAGEMENT ADVISORY COMMITTEE.

a. Members include representatives appointed by Headquarters Program Secretarial Officers and Cognizant Field Element managers.

b. Provides support to the Director, Office of Emergency Operations, in identifying and resolving Department-wide emergency management issues.

6. HEADQUARTERS EMERGENCY MANAGER.

   a. Leads the Headquarters Emergency Management Team and, in conjunction with Cognizant Secretarial Officer organizations, designates the membership of the Team.

   b. Activates the Headquarters Emergency Management Team at the direction of the Deputy Secretary.

   c. Recommends to the Deputy Secretary when the Headquarters Emergency Management Team should be deactivated and if a recovery team is needed.

7. HEADQUARTERS EMERGENCY MANAGEMENT TEAM.

   a. Provide strategic direction for the overall Departmental response.

   b. Support the field response, if appropriate.

   c. Serve as the Departmental point-of-contact for national level coordination.

   d. Collect and analyze information about the emergency and response operations.

   e. Brief senior Departmental management about the emergency.

   f. Identify and address HQ-level concerns resulting from the emergency and its impacts.

   g. Coordinate HQ-level Public Affairs and Congressional Affairs-related activities.

   h. Provide advice and strategic level direction on both technical and programmatic issues.

8. PROGRAM SECRETARIAL OFFICERS.

   a. Ensure implementation of emergency management policy and requirements; maintain programs and systems consistent with policy and requirements.

   b. Ensure that budget submissions for facilities and activities (including transportation activities) are adequate for the effective implementation and maintenance of emergency management programs, emergency response assets and capabilities.

   c. In coordination with the Director, Office of Emergency Operations, and the Cognizant Field Elements, support a readiness assurance program, consisting of evaluations, improvements, and ERAPs.

d. Ensure full coordination with the Director, Office of Emergency Operations, and, when necessary, the Lead Program Secretarial Officer and the Cognizant Secretarial Officer, on all emergency management activities.

e. Within areas of programmatic responsibility, ensure the following.

(1) Readiness assurance activities are performed, and emergency preparedness activities, including emergency response exercises, are fully coordinated with the Director, Office of Emergency Operations.

(2) A system/program is established and maintained for 24-hour initial receipt and further dissemination of emergency notifications, and a current listing of personnel designated to perform the function is maintained and routinely provided to the Headquarters Operations Center.

(3) Specialized technical representatives and subject matter experts are provided when a Headquarters Emergency Management Team is convened.

(4) Training and response is adequate in Cognizant Field Element programs.

f. Conduct line management reviews of program-specific emergency management activities in coordination with the Director, Office of Emergency Operations.

g. Coordinate with the Director of Public Affairs and the Director, Office of Emergency Operations, to provide for the handling and control of information on emergency situations.

h. Assign the following:

(1) Deputy Assistant Secretary or Associate Deputy Assistant Secretary or equivalent level to serve on the Standing Emergency Management Coordinating Committee.

(2) Deputy Assistant Secretary or Associate Deputy Assistant Secretary or equivalent to serve as the senior Program Office representative on the Headquarters Emergency Management Team.

(3) Senior representatives for the Emergency Management Advisory Committee.

9. COGNIZANT FIELD ELEMENT MANAGERS. Function as the first (lowest) DOE/NNSA line management level.

a. Implement emergency management policy and requirements and maintain programs and systems consistent with policy and requirements.

b. Establish and maintain an effective, integrated emergency management program.

c. In coordination with the Director, Office of Emergency Operations, and the Program Secretarial Officers, support a readiness assurance program, consisting of evaluations, improvements, and ERAPs. Ensure appropriate measures of the effectiveness of contractor site/facility emergency management programs are incorporated in contractual arrangements.

(1) Approve site Emergency Plans, including annual updates, and submit approved site Emergency Plans to the Director, Office of Emergency Operations and the Program Secretarial Officer(s).

(2) Approve and submit approved Emergency Planning Zones to the Director, Office of Emergency Operations, and the Program Secretarial Officer(s).

(3) Assess the Cognizant Field Element emergency management program annually and record the results of the self-assessment in the Cognizant Field Element portion of the ERAP.

d. Coordinate with the Program Secretarial Officer(s) to ensure resources are available to implement this Order for facilities and activities under their cognizance.

e. Ensure development of appropriate emergency plan implementing procedures for timely and accurate emergency classification, notification, and reporting of emergency events for facilities under their cognizance. Establish pre-authorization criteria when possible.

f. Ensure emergency public information planning is integrated with the development and maintenance of Emergency Plans.

g. Ensure effective communication systems and protocols are coordinated and maintained with the Headquarters Operations Center regarding emergencies involving or affecting facilities or materials under DOE/NNSA jurisdiction or requiring DOE/NNSA assistance.

h. Review and approve Emergency Readiness Assurance Plans (ERAPs) that cover facilities under their supervision; prepare the Cognizant Field Element annual ERAP; submit it to the Program Secretarial Officer and the Director, Office of Emergency Operations, for inclusion in the annual report on the status of the Emergency Management System.

i. Where applicable, pre-designate a DOE/NNSA employee as—

(1) the On Scene Coordinator when DOE/NNSA is the lead agency for Federal responses under the National Contingency Plan or its replacement,

(2) the Senior Federal Official when DOE/NNSA is the Coordinating Agency under the Nuclear/Radiological Incident Annex of the National Response Plan (NRP) or its replacement, and/or

(3) the Senior Energy Official to coordinate Departmental activities under appropriate Federal plans.

j. Participate in the development and implementation of mutual assistance agreements with State, Tribal, and local authorities.

k. Ensure that Emergency Planning Hazards Assessments (EPHAs) and Hazards Surveys for emergency planning purposes are adequately performed and documented. Ensure EPHAs and Hazards Surveys are updated every three years, and prior to significant changes to the site/facility or to hazardous material inventories. For example, significant changes are those changes which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B. Review and approve EPHAs and Hazards Surveys and forward the approved EPHAs and/or Hazards Surveys to the Program Secretarial Officer(s) and the Director, Office of Emergency Operations.

l. Ensure Cognizant Field Element personnel and contractors participate in a continuing emergency preparedness program of training, drills, and exercises.

m. Conduct assessments of facility emergency management programs at least once every three years and review contractor self-assessment programs annually to ensure compliance with DOE directives and policy; provide the results/conclusions to the Program Secretarial Officer(s) and the Director, Office of Emergency Operations.

n. During an emergency, conduct appropriate and necessary emergency actions.

o. Implement corrective actions lessons learned from actual emergency responses and based on findings from evaluations, assessments, and appraisals.

p. Establish and maintain an Emergency Operations Center (EOC) to respond to emergency events if not collocated with the contractor's command center. To maintain continuous operations, an alternate facility must be available to replace the EOC.

q. Ensure that emergency plans and procedures are prepared, reviewed annually, and updated, as necessary, for all facilities under their purview and are integrated within the overall Cognizant Field Element emergency preparedness program.

r. Assign senior representatives to the Emergency Management Advisory Committee.

s. Comply with the requirements of the DOE 5530-series Orders or their replacements, which establish requirements for the radiological emergency response assets programs.

t. Integrate applicable policies and requirements, including those promulgated by other Federal agencies (e.g., stockpiling stable iodine for possible distribution as a radiological protective prophylaxis) and interagency emergency plans into appropriate DOE/NNSA emergency plans.

u. Notify contracting officers of affected contracts to incorporate the CRD of this Order into those contracts.

v. Effectively integrate the activities of a leased facility and Nuclear Regulatory Commission licensed facilities into the DOE/NNSA sitewide emergency management program, and ensure that lease arrangements include: a description of how each of the lessee's emergency management program elements is integrated into the sitewide program; and, a requirement that tenant hazardous material inventories are reported to the site emergency management organization annually or when inventories change.

w. Approve site exercise packages prior to the exercise.

10. SITE/FACILITY MANAGERS. The manager of a government-owned, government-operated site/facility must:

a. Develop, implement, maintain, and update, as necessary, an emergency management program, commensurate with the facility-specific hazards and consistent with Departmental directives and standards of performance.

b. Prepare and maintain emergency plans, procedures, and technical resource capabilities that address emergency classification, notification, reporting, response actions, training and drills, exercises, emergency public information, outreach and coordination, accident investigation, and applicable Federal statutes, State and local laws, DOE Orders, and implementing regulations and guidance.

c. Prepare and submit the following to the Cognizant Field Element manager for approval: Hazards Surveys and EPHAs, documentation to establish Emergency Planning Zones, Emergency Plans, and ERAPs.

d. Direct and/or support appropriate emergency response actions within the area under their control and at the scene of the emergency.

e. Participate in the development of mutual assistance agreements with State, Tribal, and local authorities.

f. Ensure the effectiveness of a continuing emergency preparedness program.

g. Establish and maintain an internal assessment program to ensure the readiness of emergency response capabilities, including developing and conducting a self-assessment program, as well as establishing systems and measures to monitor and evaluate line performance.

11. INITIATORS OF PROCUREMENT REQUESTS must specify in procurement requests if the requirements in the Contractor Requirements Document for this Order are to be applied to the award or subaward resulting from the procurement request.

12. DIRECTOR, OFFICE OF ENERGY ASSURANCE develops and maintains the DOE Energy Emergency Program and necessary plans and implementing procedures. Provide copies of the plans to the Director, Office of Emergency Operations.

13. DIRECTOR, HEADQUARTERS OFFICE OF MANAGEMENT, BUDGET AND EVALUATION develops and maintains the DOE (and NNSA) Headquarters Occupant Emergency Program and necessary plans and implementing procedures.

14. DIRECTOR, HEADQUARTERS OFFICE OF PUBLIC AFFAIRS. In coordination with the NNSA Assistant Administrator for Public Affairs, develop and maintain the DOE Headquarters Emergency Public Information Plan and necessary implementing procedures. Provide copies of the plan to the Program Secretarial Officers and the Director, Office of Emergency Operations.

## Chapter II - [Reserved]

# Chapter III

## OPERATIONAL EMERGENCY BASE PROGRAM

1. GENERAL REQUIREMENTS. Each DOE/NNSA site/facility must have an Operational Emergency Base Program that provides the framework for response to serious events involving health and safety, the environment, safeguards, and security. These events are not unique to DOE/NNSA operations. Any event involving the release of oil is within the scope of the Operational Emergency Base Program.

2. RELATED REGULATIONS AND PLANS. The Operational Emergency Base Program must provide for compliance with the following regulations and plans developed by other Federal Agencies and DOE/NNSA Offices, and with those State and local planning and preparedness requirements that apply.

   a. Occupational Safety and Health Administration requirements for employee evacuation plans (29 CFR 1910.38) and notification systems (29 CFR 1910.165).

   b. Federal property management regulations for occupant emergency programs (41 CFR 102-74.235 to 102-74.260) and accident and fire prevention (41 CFR 102-74-360).

   c. Federal Emergency Management Agency requirements for emergency operations plans for State and local governments (44 CFR 302) that address similar hazards.

   d. Federal Energy Regulatory Commission requirements for emergency plans (18 CFR 12.20) to protect the health and safety of members of the public upstream and downstream of water projects (dams).

   e. Environmental Protection Agency requirements implementing the Clean Water Act through the National Pollution Discharge Elimination System (40 CFR 104 through 129). (Of particular note are requirements for contingency planning for oil spills through the 40 CFR 112 series, which mandates preparation of Spill Prevention Control and Countermeasure Plans).

   f. Environmental Protection Agency requirements implementing the provisions of the Safe Drinking Water Act (40 CFR 141-142).

   g. Environmental Protection Agency requirements implementing the Comprehensive Environmental Response, Compensation, and Liability Act, embodied in the 40 CFR 300 series, including Title III, the Emergency Planning and Community Right-to-Know Act, embodied at 40 CFR 355.

h. Department of Transportation requirements for emergency response information (49 CFR 172.600 series) and hazardous materials training (49 CFR 172.700 series).

i. DOE O 420.1A, *Facility Safety*, dated 5-20-02, which addresses requirements for fire protection programs. Some requirements must be incorporated into the facility emergency plan, including response by DOE/NNSA or local community fire departments.

j. DOE O 440.1A, *Worker Protection for DOE Federal and Contractor Employees,* dated 3-27-98, which addresses requirements for planning for treatment of the injured during emergency or disaster situations.

k. DOE O 470.1, *Safeguards and Security Program*, Chg 1, dated 6-21-96, which addresses requirements for appropriate protection levels for DOE interests and documentation in facility-specific Site Safeguards and Security Plans.

l. DOE N 473.9, *Security Conditions*, dated 7-8-04, which ensures that the Department uniformly meets the protection requirements specified in Presidential Decision Directive 39, *U.S. Policy on Counterterrorism (U).*

m. The *Health Insurance Portability and Accountability Act of 1996* (HIPAA), which restricts access to individual medical information.

3. PLANNING PHASE.

a. Hazards Survey. A Hazards Survey must be used to identify the conditions to be addressed by the comprehensive emergency management program. Much of the Hazards Survey should already have been done in the course of meeting other DOE and Federal agency requirements.

(1) Each Hazards Survey must—

(a) identify (e.g., in matrix or tabular form) the emergency conditions (e.g., fires, work place accidents, natural phenomena, etc.);

(b) describe the potential health, safety, or environmental impacts;

(c) indicate the need for further analyses of hazardous materials in an EPHA, based on the results of the hazardous material screening process described in paragraph 3b below; and

(d) identify the planning and preparedness requirements that apply to each type of hazard.

(2) A Hazards Survey may cover multiple facilities. One Hazards Survey may be prepared to cover an entire site.

(3) Hazards surveys must be updated every three years, and prior to significant changes to the site/facility or to hazardous material inventories. For example, significant changes are those changes which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B. Changes that result in a reduction of hazards with no adverse effect on safety or emergency preparedness or response may be included in the next scheduled review and update.

b. A Hazardous Material Screening Process must identify specific hazardous materials and quantities that, if released, could produce impacts consistent with the definition of an Operational Emergency. The potential release of these materials to the environment requires further analysis in an EPHA. The release of hazardous materials less than the quantities listed below does not require quantitative analysis in an EPHA.

(1) In general, to meet the definition of an Operational Emergency [See Chapter V], the release of a hazardous material must: immediately threaten or endanger personnel and emergency responders who are in close proximity of the event; have the potential for dispersal beyond the immediate vicinity of the release in quantities that threaten the health and safety of onsite personnel or the public in collocated facilities, activities, and/or offsite; and have a potential rate of dispersal sufficient to require a time-urgent response to implement protective actions for workers and the public.

(2) The hazardous material screening process must identify all hazardous materials in a facility/activity that require further analysis in an EPHA.

(a) Radioactive Materials:

1 All radioactive materials in a facility/activity must be subjected to a hazardous material screening process.

2 Radioactive materials that may be excluded from further analysis in an EPHA include: sealed radioactive sources that are engineered to pass the special form testing specified by the Department of Transportation (DOT) or the American National Standards Institute (ANSI); materials in solid form for which there is no plausible dispersal mechanism; materials stored in DOT Type B shipping containers with overpack, if the Certificates of

Compliance are current and the materials stored are authorized by the Certificate; and, materials used in exempt, commercially available products.

3 Radioactive hazardous materials that require further analysis in an EPHA include the radioactive materials listed in DOE-STD-1027-92 in quantities greater than the Category 3 values given in Attachment 1, Table A.1 of that Standard.

(b) Chemicals:

1 All chemicals in a facility/activity with known or suspected toxic properties must be subjected to a hazardous material screening process.

2 Chemicals that may be excluded from further analysis in an EPHA include: materials used in the same form, quantity, and concentration as a product packaged for distribution and use by the general public; materials that have a Health Hazard rating of 0, 1 or 2 based on NFPA 704; or solid or liquid materials that, because of their physical form or other factors (e.g., plausible dispersal mechanisms), do not present an airborne exposure hazard.

3 Chemical hazardous materials that require further analysis in an EPHA include chemicals with an assigned Health Hazard rating of 3 or 4 based on National Fire Protection Association (NFPA) 704 in quantities greater than a quantity that can be “easily and safely manipulated by one person” [see 29 CFR 1910.1450(b)]. Chemicals without an assigned Health Hazard rating require further analysis in an EPHA if the quantity is greater than a quantity that can be “easily and safely manipulated by one person.” Quantities of chemical hazardous materials considered to be "easily and safely manipulated by one person" can be locally-determined in accordance with the provisions of 29 CFR 1910.1450(b).

(c) Biological Hazardous Agents and Toxins. Hazardous biological agents and toxins identified in Base Order paragraph 4a (14) (c) require an EPHA and a Hazardous Material Program.

(d) The possibility that excluded materials could initiate, through fires or explosions, the release of other hazardous materials must be considered.

(3) If the screening process identifies at least one hazardous material requiring further analysis, the Hazards Survey must indicate that an EPHA is needed for that facility or activity.

(4) A description of the screening process and the results of its application to the hazardous materials in the facility/activity must be included in the Hazards Survey or incorporated by reference into supporting documentation.

(a) For facilities/activities requiring an EPHA, this documentation must be referenced or included in the EPHA.

(b) If the quantitative analysis indicates that all events would be classified as less than an Alert, an EPHA is not required to be maintained. The results of the hazardous material screening process and the quantitative analysis may be incorporated directly into the Hazards Survey or may be incorporated by reference in the Hazards Survey.

c. Existing Plans. Existing plans, such as catastrophic earthquake plans or mass casualty plans detailing compliance with Federal, State, and local standards, may be incorporated directly into the Operational Emergency Base Program or invoked by reference.

d. Planning Requirements. The Operational Emergency Base Program must provide for integrated planning to meet the response requirements identified in the Hazards Survey. At a minimum, the Operational Emergency Base Program must address the following:

(1) Emergency Response Organization. Assignment of an individual (e.g., building or facility manager or similar position) to manage and control all aspects of the site/facility response.

(2) Offsite Response Interfaces. Coordination with State, Tribal, and local agencies and organizations responsible for offsite emergency response (e.g., "911" emergencies) and for protection of the health and safety of the public.

(3) Emergency Categorization.

(a) Establishment of criteria for determining quickly if an event is an Operational Emergency. See Chapter V.

(b) An event must be categorized as an Operational Emergency as promptly as possible, but no later than 15 minutes after event recognition/identification/discovery.

(4) Communications. Prompt initial notification of workers, emergency response personnel, and response organizations, including DOE/NNSA elements and State, Tribal, and local organizations, and continuing effective communication among response organizations throughout an emergency. See Chapter VIII.

(5) Protective Actions. Evacuation or sheltering of employees, along with provisions to account for employees after emergency evacuation has been completed; protection of workers involved in response and clean-up covered by 29 CFR 1910.120.

(6) Medical Support. In accordance with DOE O 440.1A, provision of medical treatment and planning for mass casualty situations. Sharing patient information between onsite and offsite health care providers during emergencies must be coordinated in advance and consistent with the requirements of HIPAA.

(7) Public Information. See Chapter IX.

(8) Emergency Facilities and Equipment. Provision of facilities and equipment adequate to support emergency response, including the capability to notify employees of an emergency to facilitate the safe evacuation of employees from the work place, immediate work area, or both.

(9) Program Administration. See Chapter XI.

4. PREPAREDNESS PHASE.

a. Training and Drills.

(1) Initial training and periodic drills must be provided to all workers who may be required to take protective actions (e.g., shelter-in-place; assembly, evacuation). This training is required when they are employed, when their expected actions change, or when the emergency plan changes.

(2) Refresher training must be provided annually to certified operators and supervisors and those workers who are likely to witness a hazardous material release and who are required to notify proper authorities of the release.

(3) Emergency-related information and training on site-specific conditions and hazards must be made available to offsite personnel who may be

required to participate in response to an emergency at the DOE/NNSA site/facility.

b. Exercises.

(1) At a minimum, each site/facility must conduct building evacuation exercises consistent with Federal regulations [e.g., (41 CFR 102-74-360)], local ordinances, or National Fire Protection Association Standards. Exercises must be conducted at least annually to ensure that employees are able to safely evacuate their work area.

(2) For each site or facility, as applicable, the organization responsible for communications with DOE Headquarters, the Cognizant Field Element, and offsite agencies must test communications systems at least annually or as often as needed to ensure that communications systems are operational.

5. RESPONSE PHASE.

a. Response.

(1) Each site/facility must conduct activities to resolve the emergency situation.

(2) Reentry planning must include contingency planning to ensure the safety of reentry personnel, such as planning for the rescue of reentry teams. All individuals involved in reentry must receive a hazards/safety briefing prior to emergency response activities consistent with Federal, State, and local laws and regulations.

(3) Events exceeding the threshold levels for Operational Emergencies as detailed in Chapter V require notification in accordance with Chapter VIII.

b. Termination and Recovery. Termination must be coordinated with State, Tribal, and local agencies and organizations responsible for offsite emergency response and notification. Recovery must include establishment of criteria for resumption of normal operations. Recovery must also include investigation of the root cause(s) of the emergency and corrective action(s) to prevent recurrence in accordance with Departmental requirements (e.g., see DOE O 225.1A, *Accident Investigations*, dated 11-26-97, DOE O 231.1A, *Environment, Safety, and Health Reporting,* with *Change 1*dated 6-3-04, and DOE 5480.19, *Conduct of Operations Requirements for DOE Facilities*, with *Change 2,* dated 10-23-01).

# Chapter IV

## OPERATIONAL EMERGENCY HAZARDOUS MATERIAL PROGRAM

1. GENERAL REQUIREMENTS. The Operational Emergency Hazardous Material Program adds to the Operational Emergency Base Program. If required based on the findings of the Hazards Survey (see Chapter III), DOE/NNSA sites/facilities and activities must establish and maintain a quantitative EPHA. The EPHA must be used to define the provisions of the Operational Emergency Hazardous Material Program, ensuring that the program is commensurate with the hazards identified. The EPHA provides the basis for establishing a graded approach that will meet the program requirements outlined in this chapter.

2. RELATED REGULATIONS AND PLANS. The following regulations and plans have been developed by Congress, other Federal agencies, and DOE/NNSA offices. They establish requirements similar to those required within the Operational Emergency Hazardous Material Program and should be integrated, where applicable, to ensure a standard approach and continuity of effort. Newly issued or revised regulations and plans should be incorporated in accordance with corresponding implementation requirements or as soon as reasonably achievable (e.g., during the performance of the Emergency Planning Hazards Assessment review/update).

   a. Congress has directed that emergency planning and preparedness be improved for hazardous material releases through provisions of the Resource Conservation and Recovery Act of 1976, the Oil Pollution Act of 1990, and the Clean Air Act Amendments of 1990. Implementing regulations have been issued or are forthcoming.

   b. The Environmental Protection Agency has published emergency planning requirements in the 40 CFR 68 series for industries using hazardous materials.

   c. The Environmental Protection Agency has published regulations regarding emergency planning for hazardous material waste sites through the 40 CFR 260 and 265 series. These requirements are generally implemented at DOE/NNSA sites as part of the Resource Conservation and Recovery Act Part B permit process, with an emergency plan being part of the permit submission.

   d. The Environmental Protection Agency has established requirements in 40 CFR 116 and 117 for limiting discharge of hazardous chemicals through the National Pollution Discharge Elimination System permits.

   e. The Occupational Safety and Health Administration has established requirements for preventing or minimizing the consequences of catastrophic release of toxic, reactive, flammable, or explosive chemicals in 29 CFR 1910.119.

f. The Occupational Safety and Health Administration has established requirements for emergency planning, preparedness, and response in 29 CFR 1910.120.

g. The Nuclear Regulatory Commission (NRC) has established emergency planning and preparedness requirements as part of its licensing process for reactors, in 10 CFR 50, in particular Appendix E, and for other facilities using special nuclear materials, in 10 CFR 70. This applies only to those facilities licensed by the NRC.

h. The Federal Radiological Emergency Response Plan has been replaced by the Nuclear/Radiological Incident Annex of the National Response Plan (NRP), to guide Federal response to a peacetime radiological accident.

i. The National Oil and Hazardous Substances Pollution Contingency Plan, or National Contingency Plan, is published in 40 CFR 300 to provide the organizational structure and procedures for Federal preparation for and response to discharges of oil and releases of hazardous substances.

j. The Environmental Protection Agency has published Protective Action Guides to which the exposure level resulting from radiological releases is compared for determining whether protective actions should be implemented.

k. The American Industrial Hygiene Association has published Emergency Response Planning Guidelines to which the exposure level resulting from the release of non-radiological material is compared for determining whether protective actions should be implemented.

3. PLANNING PHASE.

a. Emergency Planning Hazards Assessment.

(1) The release of or loss of control of hazardous materials must be quantitatively analyzed in an Emergency Planning Hazards Assessment (EPHA).

(a) If the EPHA indicates the potential for an Alert, Site Area Emergency, or General Emergency, as defined in Chapter V, the results of the analysis must be used to determine the necessary personnel, resources, and equipment for the Operational Emergency Hazardous Material Program.

(b) If the quantitative analysis indicates that all events would be classified as less than an Alert, an EPHA is not required to be maintained. The results of the hazardous material screening process and the quantitative analysis may be incorporated directly into the Hazards Survey or may be incorporated by reference in the

Hazards Survey. The minimum program requirements must encompass the requirements for Hazardous Waste Operations and Emergency Response found in 29 CFR 1910.120 and the requirements specified in Chapter III of this Order.

(2) An accurate and timely method for tracking changes in operations processes, or accident analyses that involve hazardous materials (e.g., introduction of new materials, new uses, significant changes in inventories, modification of material environments) must be established and maintained for each facility/activity. The method must allow sufficient time for emergency management personnel to review the EPHA and modify plans and procedures, as necessary. For example, significant changes are those changes which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B.

(3) The EPHA must be reviewed at least every three years and updated prior to significant changes to the site/facility or hazardous material inventories. Changes that result in a reduction of hazards with no adverse effect on safety or emergency preparedness and response may be included in the next scheduled review and update.

(4) The EPHA must include a determination of the size of the Emergency Planning Zone (EPZ). The EPZ is the geographic area surrounding the site/facility for which special planning and preparedness actions are taken or need to be taken to reduce or minimize the impact to onsite personnel and public health and safety in the event of an Operational Emergency involving hazardous materials. Assumptions, methodology, models, and evaluation techniques used in the Emergency Planning Hazards Assessment must be documented.

(5) The Office of Secure Transportation (OST) must develop an EPHA for OST shipments to provide the technical planning basis for the OST Operational Emergency Hazardous Material Program.

(6) An EPHA must be developed for shipments that do not satisfy governing DOT regulations and specifications for commercial hazardous materials transport. However, if a shipment satisfies DOT regulations and specifications, then an EPHA is not required.

b. Planning Requirements.

(1) Emergency Response Organization. This organization must be established and maintained for each site/facility with overall responsibility for the initial and ongoing response to and mitigation of an emergency. Control

at the event/incident scene must be consistent with the National Incident Management System's Incident Command System, which integrates local agencies and organizations that provide onsite response services.

(2) Offsite Response Interfaces. Offsite response interfaces have the same requirements as for the Operational Emergency Base Program although additional offsite organizations may be involved.

(3) Emergency Classification. Provisions must be established to categorize and classify (determine the emergency class) emergency events.

(a) Hazardous material emergencies involving DOE/NNSA facilities must be classified in accordance with Chapter V.

(b) Site/facility-specific Emergency Action Levels must be developed for the spectrum of potential Operational Emergencies identified by the Emergency Planning Hazards Assessment and must include protective actions corresponding to each Emergency Action Level (EAL).

(4) Communications. See Chapter VIII.

(5) Consequence Assessment. Provisions must be established to adequately assess the potential or actual onsite and offsite consequences of an emergency.

(a) Consequence assessments must—

1 be timely throughout the emergency;

2 be integrated with the event classification and protective action process;

3 incorporate monitoring of specific indicators and field measurements; and

4 be coordinated with Federal, State, local, and Tribal organizations.

(b) The National Atmospheric Release Advisory Center (NARAC) capability must be used as the primary source of consequence assessment information, the backup to a primary source of consequence assessment, the primary source for consequence assessment at distances beyond the scope of local consequence assessment capability, or as a source for corroborating or confirming consequence assessment information.

1 If the facility has the potential for an Operational Emergency classified as a General Emergency, the facility/site must have connectivity to NARAC capabilities and procedures to use the NARAC capability effectively as part of near real-time consequence assessment activities for the mode (primary, backup, corroborating) selected by the facility.

2 If the facility has the potential for an Operational Emergency classified as a Site Area Emergency, the facility/site must have procedures in place to activate or request NARAC capabilities and must be able to use those capabilities as part of near real-time consequence assessment activities.

3 All DOE/NNSA facilities/sites that have access to NARAC or have procedures in place to activate or request NARAC capabilities must ensure that facility/site meteorological data and information on source terms for actual or potential releases of hazardous materials to the atmosphere are available or can be made available to NARAC in a timely manner to facilitate near real-time computations.

(6) Protective Actions. Protective actions must be predetermined for onsite personnel and the public and must include—

(a) methods for controlling, monitoring, and maintaining records of personnel exposures to hazardous materials;

(b) procedures to implement the separate protective actions of evacuation and sheltering of employees;

(c) methods for controlling access to contaminated areas and for decontaminating personnel or equipment exiting the area;

(d) actions that may be taken to increase the effectiveness of protective actions [i.e., heating, ventilation, and air conditioning (HVAC) shutdown during sheltering];

(e) methods for providing timely recommendations to appropriate State, Tribal, or local authorities of protective actions, such as sheltering, evacuation, relocation, and food control; and

(f) specific protective action criteria, based on the Base Order, paragraph 4a(14), for use in protective action decision making.

(7) Medical Support. Medical support must be planned in accordance with DOE O 440.1A for workers contaminated by hazardous material. Medical support must include documented arrangements with onsite and offsite medical facilities to accept and treat contaminated, injured personnel.

(8) Public Information. See Chapter IX.

(9) Emergency Facilities and Equipment. Facilities and equipment adequate to support emergency response must be available and maintained as follows.

(a) A facility must be available for use as a command center.

(b) Provisions must be established for use of an alternate location if the primary command center is not available.

(c) Adequate personal protective equipment and other equipment and supplies must be available and operable to meet the needs determined by the results of the Emergency Planning Hazards Assessment.

(10) Program Administration. See Chapter XI.

4. PREPAREDNESS PHASE.

a. Training and Drills. A coordinated program of training and drills for developing and/or maintaining specific emergency response capabilities must be an integral part of the emergency management program. The program must apply to emergency response personnel and organizations that the site/facility expects to respond to onsite emergencies. Emergency-related information must be available to offsite response organizations. The program must consist of self-study/homework, training, and drills.

(1) Training. Both initial training and annual refresher training must be provided for the instruction of and demonstration of proficiency by all personnel (i.e., primary and alternate) comprising the emergency response organization.

(2) Drills. Drills must provide supervised, "hands-on" training for members of emergency response organizations.

b. Exercises. A formal exercise program must be established to validate all elements of the emergency management program over a five-year period. Each exercise must have specific objectives and must be fully documented (e.g., by scenario packages that include objectives, scope, timelines, injects, controller instructions, and evaluation criteria). Exercises must be evaluated. A critique process, which

includes gathering and documenting observations of the participants, must be established. Corrective action items identified as a result of the critique process must be incorporated into the emergency management program.

(1) Sites/Facilities.

(a) Each DOE/NNSA facility subject to this chapter must exercise its emergency response capability annually and include at least facility-level evaluation and critique. Evaluations of annual facility exercises by Departmental entities (e.g., Cognizant Field Element, Program Secretarial Officer or Headquarters Office of Security and Safety Performance Assurance) must be performed periodically so that each facility has an external Departmental evaluation at least every three years.

(b) Site-level emergency response organization elements and resources must participate in a minimum of one exercise annually. This site exercise must be designed to test and demonstrate the site's integrated emergency response capability. For multiple-facility sites, the basis for the exercise must be rotated among facilities.

(c) Offsite response organizations must be invited to participate in site-wide exercises at least once every three years.

(d) Annual emergency response exercises must be supported by documentation that contains, but is not limited to, the exercise scope, its objectives and corresponding evaluation criteria, a narrative description of the scenario, timeline, and a list of participants. Documentation for site exercises must be approved by the Cognizant Field Element. After approval, the Cognizant Field Element submits the approved exercise package to the Program Secretarial Officer(s), and the Director, Office of Emergency Operations for information, preferably 30 days prior to the conduct of the exercise.

(e) Evaluation reports for facility and site exercises must be completed within 30-working days and submitted to the Cognizant Field Element, the Program Secretarial Officer(s), and the Director, Office of Emergency Operations.

(f) Corrective action plans must be completed within 30-working days of receipt of the final facility and site exercise evaluation report.

(g) Completion of corrective actions for all facility and site exercises must include a verification and validation process, independent of

those who performed the corrective action, that verifies that the corrective action has been put in place and that validates that the corrective action has been effective in resolving the original finding. Corrective actions involving revision of procedures or training of personnel should be completed before the next exercise.

(2) Emergency Response Assets. Exercises of each of the Department's radiological emergency response assets must be conducted at least once every three years. These assets include the Accident Response Group (ARG), Nuclear Emergency Support Team (NEST), Federal Radiological Monitoring and Assessment Center (FRMAC), Aerial Measuring System (AMS), National Atmospheric Release Advisory Center (NARAC), Radiation Emergency Assistance Center/Training Site (REAC/TS), and Radiological Assistance Program (RAP).

5. RESPONSE PHASE.

a. Response. Emergencies involving hazardous materials require time-urgent response actions to minimize or prevent unacceptable consequences. Events must be classified on the basis of potential severity of the consequences as detailed in Chapter V. Response actions must be implemented accordingly.

(1) Declaration of an Alert does not necessarily require the activation of response centers, but does require availability of personnel and resources to—

(a) continuously assess pertinent information for DOE/NNSA decision makers, offsite authorities, the public, and other appropriate entities;

(b) conduct appropriate assessments, investigations, or preliminary sampling and monitoring;

(c) mitigate the severity of the occurrence or its consequences; and

(d) prepare for other response actions should the situation become more serious, requiring emergency response organizations to mobilize or activate resources.

(2) Declaration of a Site Area Emergency requires the same response as for an Alert plus—

(a) initiation of predetermined protective actions for onsite personnel;

(b) notification and assembly of emergency response personnel and equipment to activate response centers and to establish communications, consultation, and liaison with offsite authorities;

(c) provision of information to the public and the media;

(d) implementation of or assistance in any evacuations and sheltering; and

(e) mobilization of appropriate emergency response groups or protective/security forces for immediate dispatch should the situation become more serious.

(3) Declaration of a General Emergency requires the same response as for a Site Area Emergency, plus the notification, mobilization, and dispatch of all appropriate emergency response personnel and equipment, including appropriate DOE emergency response assets, and liaison with offsite authorities for the recommendation of predetermined public protective actions.

b. Termination and Recovery.

(1) Predetermined criteria for termination of emergencies must be established/developed.

(2) The means must exist for estimating exposure to hazardous materials and for protecting workers and the general public from exposure during reentry and recovery activities.

(3) Recovery procedures must include: dissemination of information to Federal, State, Tribal, and local organizations regarding the emergency and possible relaxation of public protective actions; planning for decontamination actions; establishment of a recovery organization; development of reporting requirements; and establishment of criteria for resumption of normal operations.

(4) Emergencies, once categorized, must not be downgraded to a lower significance category unless the original categorization was incorrect. An event determined to be an emergency will remain so until the emergency response is terminated. In general, the emergency classification (i.e., Alert, Site Area Emergency, General Emergency) should not be downgraded until termination of the event. However, emergency classification must be reviewed periodically to ensure the classification is commensurate with response activities.

# Chapter V

## OPERATIONAL EMERGENCY EVENTS AND CONDITIONS

1. GENERAL. Operational Emergencies are major unplanned or abnormal events or conditions that: involve or affect DOE/NNSA facilities and activities by causing or having the potential to cause serious health and safety or environmental impacts; require resources from outside the immediate/affected area or local event scene to supplement the initial response; and, require time-urgent notifications to initiate response activities at locations beyond the event scene. Such emergencies represent, cause, or have the potential to cause the events or conditions described below.

   Incidents that can be controlled by employees or maintenance personnel in the immediate/affected facility or area are not Operational Emergencies. Incidents that do not pose a significant hazard to safety, health, and/or the environment and that do not require a time-urgent response are not Operational Emergencies.

   Note that the initiating events described below are not all-inclusive. Other initiating events that warrant categorization as Operational Emergencies must be included in site/facility-specific procedures. Less severe events are reported through the process described in DOE O 231.1A, *Environment, Safety, and Health Reporting,* dated 8-19-03.

2. EVENTS THAT DO NOT REQUIRE CLASSIFICATION. An Operational Emergency must be declared when events occur that represent a significant degradation in the level of safety at a site/facility and that require time-urgent response efforts from outside the site/facility. These events do not require classification (i.e., as Alert, Site Area Emergency, or General Emergency). Such events include the following.

   a. Health and Safety. The following events or conditions represent, cause, or have the potential to cause serious health and safety impacts to workers or members of the public.

      (1) The discovery of radioactive or other hazardous material contamination from past DOE/NNSA operations that may have caused, is causing, or may reasonably be expected to cause uncontrolled personnel exposures exceeding protective action criteria.

      (2) An offsite hazardous material event not associated with DOE/NNSA operations that is observed to have or is predicted to have an impact on a DOE/NNSA site, such that protective actions are required for onsite DOE/NNSA workers.

      (3) An occurrence (e.g., earthquake, tornado, aircraft crash, fire, explosion) that causes or can reasonably be expected to cause significant structural

damage to DOE/NNSA facilities, with confirmed or suspected personnel injury or death.

(4) Any facility evacuation in response to an actual occurrence that requires time-urgent response by specialist personnel, such as hazardous material responders or mutual aid groups not normally assigned to the affected facility.

(5) An unplanned nuclear criticality.

(6) Any mass casualty event.

b. Environment. The following events or conditions represent, cause, or have the potential to cause serious detrimental effects on the environment.

(1) Any actual or potential release of hazardous material or regulated pollutant to the environment, in a quantity greater than five times the Reportable Quantity (RQ) specified for such material in 40 CFR 302, that could result in significant offsite consequences, such as major wildlife kills, wetland degradation, aquifer contamination, or the need to secure downstream water supply intakes.

(2) Any release of greater than 1,000 gallons (24 barrels) of oil to inland waters; greater than 10,000 gallons (238 barrels) of oil to coastal waters; or a quantity of oil that could result in significant off-site consequences (e.g., need to relocate people, major wildlife kills, wet-land degradation, aquifer contamination, need to secure downstream water supply intakes, etc.) [Oil as defined by the Clean Water Act (33 U.S.C. 1321) means any kind of oil and includes petroleum.]

c. Security and Safeguards. (Security incidents are also subject to reporting in accordance with DOE O 471.4, *Incidents of Security Concern*. Per this Order, foreign involvement in security incidents must be reported to the Office of Counterintelligence.) The following events or conditions represent, cause, or have the potential to cause degradation of security or safeguards conditions with actual or potential direct harm to people or the environment.

(1) Actual unplanned detonation of an explosive device or a credible threat of detonation resulting from the location of a confirmed or suspicious explosive device.

(2) An actual terrorist attack or sabotage event involving a DOE/NNSA site/facility or operation.

(3) Kidnapping or taking hostage(s) involving a DOE/NNSA site/facility or operation.

d. Offsite DOE Transportation Activities. The following events or conditions represent an actual or potential release of hazardous materials from a DOE/NNSA shipment.

(1) Any accident/incident involving an offsite DOE/NNSA shipment containing hazardous materials that causes the initial responders to initiate protective actions at locations beyond the immediate/affected area. .

(2) Failures in safety systems threaten the integrity of a nuclear weapon, component, or test device.

(3) A transportation accident results in damage to a nuclear explosive, nuclear explosive-like assembly, or Category I/II quantity of Special Nuclear Materials.

e. Hazardous Biological Agent or Toxins. The following events or conditions involving the release of a hazardous biological agent or toxin [identified in Base Order, paragraph 4a(14)(c)] represent major failure of safety systems, protocols, and/or practices with the potential to have a serious impact on health and safety of workers, collocated workers, emergency responders, members of the public, or the environment:

(1) Any actual or potential release of a hazardous biological agent or toxin outside of the secondary barriers of the biocontainment area.

3. EVENTS REQUIRING CLASSIFICATION. Operational Emergencies must be classified as either an Alert, Site Area Emergency, or General Emergency, in order of increasing severity, when events occur that represent a specific threat to workers and the public due to the release or potential release of significant quantities of hazardous materials from DOE/NNSA facilities/activities/operations, as described below. Classification aids in the rapid communication of critical information and the initiation of appropriate time-urgent emergency response actions. Events listed in paragraph 2, this chapter, that serve as initiating events for the release of hazardous materials must be classified under the provisions of this section.

a. Alert. An Alert must be declared when events are predicted, are in progress, or have occurred that result in one or more of the following.

(1) An actual or potential substantial degradation in the level of control over hazardous materials.

(a) The radiation dose from any release to the environment of radioactive material or a concentration in air of other hazardous material is expected to exceed either—

1 a site-specific criterion corresponding to 10 percent of the applicable Protective Action Criterion [see Base Order, paragraph 4a(14)] at or beyond the facility boundary, or

2 the applicable Protective Action Criterion [see Base Order, paragraph 4a(14)] at or beyond 30 meters from the point of release to the environment.

(b) It is not expected that the applicable Protective Action Criterion [see Base Order, paragraph 4a(14)] will be exceeded at or beyond the facility boundary.

(2) An actual or potential substantial degradation in the level of safety or security of a nuclear weapon, component, or test device that would not pose an immediate threat to workers or the public.

(3) An actual or potential substantial degradation in the level of safety or security of a facility or process that could, with further degradation, produce a Site Area Emergency or General Emergency.

b. Site Area Emergency. A Site Area Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

(1) An actual or potential major failure of functions necessary for the protection of workers or the public. The radiation dose from any release of radioactive material or concentration in air from any release of other hazardous material is expected to exceed the applicable Protective Action Criterion [see Base Order, paragraph 4a(14)] at or beyond the facility boundary. The Protective Action Criterion is not expected to be exceeded at or beyond the site boundary.

(2) An actual or potential threat to the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers in the immediate area, but not the public.

(3) Actual or potential major degradation in the level of safety or security of a facility or process that could, with further degradation, produce a General Emergency.

c. General Emergency. A General Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

(1) Actual or imminent catastrophic reduction of facility safety or security systems with potential for the release of large quantities of hazardous

materials to the environment. The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous material is expected to exceed the applicable Protective Action Criterion [see Base Order, paragraph 4a(14)] at or beyond the site boundary.

(2) Actual or likely catastrophic failures in safety or security systems threatening the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers and the public.

# Chapter VI

## ENERGY EMERGENCY PROGRAM

1. GENERAL REQUIREMENTS. The Energy Emergency Program must ensure that the Department is capable of providing analysis and recommendations on mitigating potential energy supply crises, economic impacts, widespread energy distribution interruptions, and/or energy infrastructure recovery advice. The program recognizes that resources and expertise within the Department may be requested to support an energy emergency response. The program also recognizes that DOE assistance may be required in support of a Presidentially-declared emergency invoking the Stafford Act, as amended, and implemented through the National Response Plan. The Energy Emergency Program may be implemented coincident with implementation of the Emergency Assistance Program (Chapter VII).

2. RELATED REGULATIONS AND PLANS.

   a. DOE has established requirements in 10 CFR 205.350 for maintaining current information regarding the status of electrical energy supply systems.

   b. The Department of Homeland Security has published the National Response Plan, which meets requirements established in Public Law 93-288, as amended. The National Response Plan provides the framework for a coordinated Federal response in support of State and local governments.

3. PLANNING PHASE.

   a. Hazards Assessment. Hazards assessments for energy emergencies are routinely conducted by the Energy Information Administration and the Assistant Secretary of Policy and International Affairs through short- and long-range forecasts.

   b. Planning Requirements. The Headquarters Energy Emergency Management Plan and Implementing Procedures must include the following:

      (1) plan for supply crises due to, but not limited to, international political situations, defense mobilization, natural or technological disasters, energy system sabotage, major accidents involving energy systems, and labor strikes or lockouts;

      (2) Emergency Management Team procedures for energy emergencies, including activation and staffing;

      (3) the definition of potential emergencies for which the program is responsible and for which procedures will be developed;

(4) Energy Emergency Management Plan activation thresholds for plan implementation;

(5) the process for developing, maintaining, and activating procedures related to the National Response Plan Emergency Support Function #12 (Energy) and other Emergency Support Functions (ESFs) where DOE is a support agency;

(6) specific planned roles and resources from Headquarters offices or DOE/NNSA offices in the field required in response to energy emergency scenarios;

(7) reporting formats for documenting the situation and the DOE response;

(8) processes for monitoring and analyzing the energy situation and for responding to an energy emergency, including recovery.

4. PREPAREDNESS PHASE. The Headquarters Energy Emergency Management Plan must establish a readiness assurance program, including training, drills, exercises, and evaluation of readiness for energy emergencies.

5. RESPONSE PHASE.

a. An energy emergency must be declared after events of significant magnitude have occurred, activation of ESF #12 (Energy) or other ESFs involving DOE as a support agency for energy-related activities, or as directed by the Deputy Secretary. See Chapter VIII.

b. Declaration of an energy emergency requires the availability of appropriate DOE personnel and resources to continuously assess pertinent information for DOE decision makers and to provide recommendations or coordination to other Federal agencies or industries to mitigate the severity of the occurrence or its consequences.

c. At the request of the Deputy Secretary or as events warrant, appropriate members of the Emergency Management Team must convene in the Headquarters Operations Center to—

(1) provide timely assessments of the dimensions of the energy emergency as required under interagency plans or as requested by the Secretary;

(2) establish communications, consultation, and liaison with appropriate energy industry entities and other Federal agencies, as appropriate; and

(3) notify appropriate energy emergency response assets, experts, and resources to respond according to the severity of the situation.

# Chapter VII

## EMERGENCY ASSISTANCE PROGRAM

1. GENERAL REQUIREMENTS. The Emergency Assistance Program includes all activities whereby Departmental resources, emergency response assets, personnel, and/or facilities are deployed in support of Federal interagency plans; international agreements; Presidential direction; and State, local, or Tribal agreements of mutual aid. The Emergency Assistance Program may be implemented along with the Energy Emergency Program (Chapter VI).

2. RELATED REGULATIONS AND PLANS.

   a. Homeland Security Presidential Directive 5 (HSPD-5) directs measures to enhance the ability of the United States to manage domestic incidents, including development of a National Response Plan (NRP) that integrates Federal Government domestic prevention, preparedness, response, and recovery plans into one all-discipline, all-hazards plan.

   b. The Federal Radiological Emergency Response Plan has been replaced by the Nuclear/Radiological Incident Annex of the National Response Plan (NRP), to guide Federal response to a peacetime radiological accident.

   c. The National Oil and Hazardous Substances Pollution Contingency Plan (also called the National Contingency Plan) is published in 40 CFR 300 to provide the organizational structure and procedures for Federal responses to discharges of oil and releases of hazardous substances. This plan will be integrated into or replaced by the NRP described above.

   d. The Continuity of Government Operations Plan provides the capability to maintain essential Government services and emergency functions in the most serious of events affecting national security.

   e. The Continuity of Operations Plan provides a capability to ensure that essential Departmental missions and functions can be performed without disruption during an emergency or other situation.

   f. The DOE 5530-series Orders describe the programmatic requirements of the Department's radiological emergency response assets.

3. PLANNING PHASE.

   a. Emergency Assistance planning must encompass, but not be limited to, the capability to provide—

(1) support and direction as prescribed in the National Response Plan (NRP), the Nuclear/Radiological Incident Annex to the NRP, and the National Contingency Plan (until superceded by a rulemaking based on the NRP);

(2) the means to support Presidential direction to continue operations of critical Departmental functions in the event that Headquarters facilities are inoperable;

(3) direction and support as prescribed in the Presidentially-mandated National Security Emergency Planning requirements and Continuity of Government concept of operations; and

(4) technical and response assistance to organizations and agencies with which the Department has entered into mutual aid agreements.

b. The Headquarters Emergency Assistance Plan and Implementing Procedures must—

(1) document Emergency Management Team procedures for Emergency Assistance including activation and staffing;

(2) define potential emergencies for which the program is responsible and for which procedures must be developed;

(3) identify specific planned roles and resources from Headquarters offices or DOE/NNSA offices in the field required in response to Emergency Assistance scenarios; and

(4) establish reporting formats to document the situation and DOE/NNSA response activities.

c. Plans and procedures developed in accordance with the DOE 5530-series Orders for the Department's radiological emergency response assets must be cross-referenced in the Headquarters Emergency Assistance Plan and implementing procedures.

4. PREPAREDNESS PHASE. The Headquarters Emergency Assistance Plan must establish a readiness assurance program, including training and drills, exercises, and evaluation of readiness for emergencies.

5. RESPONSE PHASE. The Administrator, NNSA, has responsibility for the deployment of the radiological emergency response assets. The Headquarters Emergency Manager must coordinate with appropriate response teams (e.g., Defense Nuclear Programs, Energy Information Administration, Cognizant Field Element) and

ensure deployment of radiological emergency response asset personnel and energy emergency response personnel. Coordination with the Executive Branch, other Federal agencies, or other governments will be accomplished by Headquarters.

# Chapter VIII

## COMMUNICATIONS REQUIREMENTS

1. GENERAL. Requirements in this chapter pertaining to notification and reporting apply to Operational Emergencies, Energy Emergencies, and Emergency Assistance. This section emphasizes Operational Emergencies because of the criticality of timely notification and reporting during such emergencies. Communications requirements for emergencies do not supplant other required notifications and reporting delineated under other legislation, implementing regulations, and DOE Orders.

2. PLANNING PHASE.

   a. For Operational Emergencies, provisions must be established for prompt initial notification of workers and emergency response personnel and organizations, including appropriate DOE/NNSA elements and other Federal, State, Tribal, and local organizations. Provisions must also be established for continuing effective communication among the response organizations throughout an emergency.

   b. Notification and reporting responsibilities for Energy Emergencies and Emergency Assistance must be established to support appropriate plans and agreements.

3. PREPAREDNESS PHASE. Adherence to Operational Emergency notification and reporting requirements must be demonstrated in all emergency management exercises. Preparedness responsibilities for Energy Emergencies and Emergency Assistance must be established to support appropriate plans and agreements.

4. RESPONSE PHASE.

   a. Initial Emergency Notifications. For Operational Emergencies, initial emergency notifications must be made to workers, emergency response personnel, and organizations, including DOE/NNSA elements and other local, State, Tribal, and Federal organizations.

      (1) The Manager/Administrator of each DOE-/NNSA- or contractor-operated site/facility must—

         (a) notify State and local officials and the Cognizant Field Element Emergency Operation Center and Headquarters Operations Center within 15 minutes and all other organizations within 30 minutes of the declaration of an Alert, Site Area Emergency, or General Emergency [Chapter V, paragraph 3];

(b) notify the Cognizant Field Element Emergency Operation Center and Headquarters Operations Center within 30 minutes of the declaration of an Operational Emergency not requiring classification [Chapter V, paragraph 2]; and

(c) notify local, State, and Tribal organizations within 30 minutes or as established in mutual agreements for declaration of an Operational Emergency not requiring classification [Chapter V, paragraph 2].

(2) Headquarters Watch Office staff in the Headquarters Operations Center and Headquarters Emergency Management Team personnel must be responsible for the following.

(a) Receive notifications of Operational Emergencies and disseminate such information to Program Secretarial Officer representatives and, where appropriate, to Headquarters organizations of other Federal agencies. The Headquarters Operations Center must disseminate notifications involving Energy Emergencies and Emergency Assistance to the appropriate Headquarters Cognizant Secretarial Offices and affected DOE/NNSA offices in the field.

(b) Facilitate communications among Headquarters organizations, DOE/NNSA field organizations, and contractor personnel.

(3) At a minimum, emergency notification to the Headquarters Operations Center must consist of a phone call providing as much information as is known at the time. The same information must be provided by e-mail or a fax either immediately prior to or following the phone call. Information for initial notification includes as much as possible of the following:

(a) that an Operational Emergency has been declared and, if appropriate, the classification of the emergency;

(b) the description of the emergency;

(b) the date and time the emergency was discovered;

(c) the damage and casualties;

(d) whether the emergency has stopped other facility/site operations or program activities;

(e) the protective actions taken and/or recommended;

(f) the notifications made;

(g) the weather conditions at the scene of the emergency;

(h) the level of any media interest at the scene of the emergency or at the facility/site; and

(i) the contact information of the DOE or NNSA on-scene point of contact.

b. Emergency Status Updates. Emergency status reports must be forwarded to the next-higher Emergency Management Team on a continuing basis until the emergency is terminated.

c. Responder Communications. Effective communications methods must be established between event scene responders, emergency managers, and response facilities.

d. Final Emergency Report. Following termination of emergency response, and in conjunction with the Final Occurrence Report (see DOE M 231.1-2), each activated Emergency Management Team must submit a final report on the emergency response to the Emergency Manager for submission to the Director, Office of Emergency Operations.

e. Recovery Reporting. Reporting requirements must be specified during recovery planning.

f. Review for Classified and Unclassified Controlled Information. All reports and releases must be reviewed for classified or unclassified controlled information (e.g., Unclassified Controlled Nuclear Information) prior to being provided to personnel not authorized access to such information, entered into databases not authorized for such information, or transmitted using non-secure communications equipment.

g. Energy Emergencies and Emergency Assistance Response. Responsibilities for Energy Emergencies and Emergency Assistance must be established to support appropriate plans and agreements.

# Chapter IX

## PUBLIC AFFAIRS POLICY AND PLANNING REQUIREMENTS

1. GENERAL. The Department must provide accurate, candid, and timely information, consistent with requirements of the Freedom of Information Act and the Privacy Act, to site workers and the public during all emergencies, so as to establish facts and avoid speculation.

2. PLANNING PHASE.

   a. Public affairs policy and planning requirements apply for all emergencies or when the Department is obligated by law, Executive Order, interagency agreement, or other accord to provide technical support and assistance in accidents, defense mobilization, war, or other emergencies, including those involving another government agency, private organization, or nation.

   b. These policies and planning requirements must apply in conjunction with the United States' international commitments to the International Energy Program, the International Energy Agency, the North Atlantic Treaty Organization, and the International Atomic Energy Agency, or through the Department's commitments under the Defense Production Act.

   c. The Department must establish an Emergency Public Information Program that includes adequate plans for all emergencies at DOE/NNSA, or contractor facilities, as well as potential offsite emergencies that may involve DOE/NNSA resources or personnel.

   d. Each Cognizant Field Element and site/facility must prepare an Emergency Public Information Plan. The same plan can cover multiple facilities on a site. The plans must provide the following.

      (1) identification of personnel, resources, facilities, and coordination procedures necessary to provide emergency public information;

      (2) training and exercises for personnel who will interact with the media;

      (3) a methodology for informing workers and the public of DOE/NNSA emergency plans and protective actions, before and during emergencies;

      (4) coordination of public information efforts with State, local, and Tribal governments, and Federal emergency response plans, as appropriate.

e. The Director, Headquarters Office of Public Affairs, in coordination with the NNSA Assistant Administrator for Public Affairs, must prepare an Emergency Public Information Plan.

(1) This plan must:

(a) Identify the personnel, resources, and facilities necessary to support the Headquarters Emergency Manager and provide emergency public information to the national media, the White House Situation Room, the Department of Homeland Security (DHS) National Homeland Security Operations Center (HSOC); and Congress; and

(b) Specify the coordination procedures between public information efforts at the Headquarters and those conducted at the Cognizant Field Element and site/facility level, as well as with State, local, and Tribal governments, and other Federal agencies, as appropriate.

(2) Copies of the Headquarters Emergency Public Information Plan must be provided to the Cognizant Field Element Managers, the Program Secretarial Officers and the Director, Office of Emergency Operations.

3. PREPAREDNESS PHASE. Adherence to emergency public information policies and requirements must be demonstrated during exercise evaluations, appraisals, and approved training programs.

4. RESPONSE PHASE.

a. The Emergency Public Information Plan must be applied during deployment of the following Departmental emergency response assets: the Aerial Measuring System (AMS), the Accident Response Group (ARG), the National Atmospheric Release Advisory Center (NARAC), the Federal Radiological Monitoring and Assessment Center (FRMAC), the Nuclear Emergency Support Team (NEST), the Radiological Assistance Program (RAP), and the Radiation Emergency Assistance Center/Training Site (REAC/TS).

b. The Cognizant Field Element and contractor personnel must cooperatively ensure that an adequate public information program is established and maintained, commensurate with site hazards, to ensure that information can be provided to the public and the media during an emergency.

(1) For Operational Emergency Base Program facilities, the emergency public information program must have provisions in place to establish a media center. A media center is a designated location where Cognizant Field

Element and contractor personnel can conduct the necessary briefings and press conferences regarding an Operational Emergency at the facility.

(2) For Operational Emergency Hazardous Material Program facilities, the emergency public information program must have provisions in place to establish a Joint Information Center (JIC). A JIC is a working location, where multiple jurisdictions gather, process and disseminate public information during an emergency. The JIC must be adequately staffed with personnel trained to serve as spokesperson and newswriter. Personnel must be assigned to the JIC to provide support in media services, public inquiry, media inquiry, JIC management and administrative activities, and media monitoring. Persons with technical expertise related to the emergency and with spokesperson training must also be assigned to the JIC. The JIC must be established, directed, and coordinated by the senior Cognizant Field Element public affairs manager or a designee.

c. In situations involving classified or unclassified controlled information, the Department must provide sufficient publicly releasable information to explain the emergency response and protective actions required for the health and safety of workers and the public.

d. Public announcements in areas involving classified or unclassified controlled information must be reviewed by the appropriate official before release to ensure that no classified or unclassified controlled information is contained in the announcement.

e. The Cognizant Field Element must assign a DOE, NNSA, or contractor public information officer to the emergency public information response team involved in a significant offsite response deployment.

f. A Headquarters official or team must provide support to the affected Program Offices/Emergency Management Team and/or requesting Cognizant Field Element, as appropriate.

g. The DOE/NNSA (as appropriate) Director of Public Affairs and the Headquarters Emergency Manager must be informed of all DOE/NNSA emergency public information actions. These notifications must be made as soon as practicable.

h. Initial news releases or public statements must be approved by the Cognizant Field Element official responsible for emergency public information review and dissemination. Following initial news releases and public statements, updates must be coordinated with the DOE/NNSA (as appropriate) Director of Public Affairs and the Headquarters Emergency Manager.

i. An emergency public information communications system must be established among Headquarters, Cognizant Field Element, and on-scene locations.

# Chapter X

## READINESS ASSURANCE

1. GENERAL. A readiness assurance program provides assurances that emergency plans, implementing procedures, and resources are adequate and sufficiently maintained, exercised, and evaluated, and that improvements are made in response to identified needs. Each DOE/NNSA emergency management program must implement a readiness assurance program consisting of the following components:

   a. Evaluations (including appraisals and assessments). Identify findings (i.e., weaknesses or deficiencies) in emergency management programs and/or provide assurances that emergency capabilities are sufficient to implement emergency plans. Readiness assurance evaluation activities can include: program and exercise evaluations, tracking performance indicators, and no-notice exercises;

   b. Improvements. Ensure that appropriate and timely improvements are made in response to needs identified through coordinated emergency planning, resource allocation, program assistance activities, evaluations, training, drills, and exercises; and,

   c. Emergency Readiness Assurance Plans (ERAPs). Document the readiness of the emergency management program based on emergency planning and preparedness activities and the results of the readiness assurance program, including evaluations and improvements. The ERAP is a planning tool to identify and develop needed resources and improvements, and to highlight changes and achievements in the program.

2. EVALUATIONS. Program Secretarial Officers and Cognizant Field Elements must periodically review and evaluate the ability of DOE/NNSA facilities and/or DOE/NNSA contractor-operated facilities to meet requirements of the Emergency Management System. Program and exercise evaluations (including appraisals and assessments) must be based on specific standards and criteria, issued by the Director, Office of Emergency Operations. Tracking performance indicators and conducting no-notice exercises can provide useful information about program readiness.

   a. Program Evaluations

      (1) DOE/NNSA facilities and DOE/NNSA contractor-operated facilities must conduct an annual self-assessment of their emergency management programs. Self-assessment results must be documented in the ERAP submitted to the Cognizant Field Element.

      (2) The Cognizant Field Element must:

(a) consolidate facility self-assessment results in the Cognizant Field Element ERAP; and

(b) assess the Cognizant Field Element emergency management program annually and record the results of the self-assessment in the Cognizant Field Element portion of the ERAP.

(3) Each DOE/NNSA Cognizant Field Element must evaluate the emergency management program at each site/facility under its supervision. Each site/facility must be evaluated at least once every three years. The Cognizant Field Element must notify the Program Secretarial Officer of its evaluation schedule.

(4) Program Secretarial Officers must schedule and perform periodic evaluations of emergency management programs every three years.

b. Exercise Evaluations. See Chapter IV, paragraph 4b.

c. Performance Indicators. Contractor facilities/sites must participate in a program of performance indicators (including performance measures and metrics) to capture and track objective data regarding the performance of emergency management programs in key functional areas.

d. No-Notice Exercises. Contractor facilities/sites must participate in a program of No-Notice Exercises, conducted at the discretion of the Director, Office of Emergency Operations, to determine if the facility/site ERO accomplishes selected objectives based on applicable plans, procedures, and/or other established requirements. Facility/site involvement is limited to providing trusted agents and responding when the exercise is conducted.

3. IMPROVEMENTS.

a. Program Assistance. Upon request, the Director, Office of Emergency Operations will schedule and conduct emergency management program assistance to Headquarters Program Offices, Cognizant Field Elements, DOE/NNSA offices in the field, and DOE/NNSA sites/facilities and activities, including NNSA radiological emergency response assets, as needed. To ensure consistent guidance, the Director, Office of Emergency Operations must request participation from Cognizant Secretarial Officer(s) and the Cognizant Field Elements.

b. Corrective Actions. These requirements supplement those in DOE O 414.1A, *Quality Assurance*. Continuous improvement in the emergency management program results from implementation of corrective actions for findings (e.g., deficiencies, weaknesses) in all types of evaluations, including both internal and external evaluations.

(1) Reports of Cognizant Field Element evaluations (assessments) conducted in accordance with Chapter X, paragraph 2a(3) above must be submitted to the Program Secretarial Officer(s) and the Director, Office of Emergency Operations. Evaluation reports must be completed within 30-working days.

(2) Corrective action plans must be developed within 30-working days of receipt of the final evaluation report. Corrective actions must be completed as soon as possible. Corrective actions addressing revision of procedures or training of personnel should be completed before the next annual self-assessment of the program.

(3) Completion of corrective actions must include a verification and validation process, independent of those who performed the corrective action, that verifies that the corrective action has been put in place, and validates that the corrective action has been effective in resolving the original finding.

(4) See Chapter IV, paragraph 4b, for corrective actions related to findings from exercise evaluations.

c. Lessons Learned. The readiness assurance program must include a system for incorporating and tracking lessons learned from training, drills, actual responses, and a site-wide lessons learned program. Program Secretarial Officers, Cognizant Field Elements and DOE- /NNSA- and/or DOE/NNSA contractor-operated facilities must participate in the DOE/NNSA Corporate Lessons Learned Program. DOE–STD–7501–99, *The DOE Corporate Lessons Learned Program*, provides guidance on use of the system.

4. EMERGENCY READINESS ASSURANCE PLANS (ERAPs).

a. Facilities and Activities. Facilities and offsite transportation activities must submit an ERAP to the Cognizant Field Element by September 30 of each year. In keeping with 31 U.S.C. 1115 and 1116, this report must identify what the goals were for the fiscal year that ended coincident with the due date for this report (e.g., September 30) and the degree to which these goals were accomplished. This report must also identify the goals for the next fiscal year (e.g., which starts on October 1).

b. Cognizant Field Element. Each Cognizant Field Element must submit an ERAP, summarizing its programs and its facility and activity submissions, to the Program Secretarial Officer and the Director, Office of Emergency Operations, by November 30 of each year. In keeping with 31 U.S.C. 1115 and 1116, this report must identify what the goals were for the fiscal year that just ended (on September 30) and the degree to which these goals were accomplished. This

report must also identify the goals for the current fiscal year (which started on October 1).

c. ERAP Submittal and Approval.

(1) The Cognizant Field Element manager must review and approve ERAPs that cover facilities under their supervision and submit a consolidated ERAP to the Director, Office of Emergency Operations and the Cognizant Secretarial Officer by November 30.

(2) The Director, Office of Emergency Operations must prepare, in coordination with the Cognizant Secretarial Officers, an annual status report that summarizes the Cognizant Field Element ERAPs by April 30.

# Chapter XI

## PROGRAM ADMINISTRATION

1. PERSONNEL REQUIREMENTS. Each Cognizant Field Element manager, and each manager/administrator of a DOE-, NNSA- and/or DOE/NNSA contractor-operated site/facility subject to this Order must designate an individual to administer emergency management. This individual must develop and maintain the emergency plan, develop the Emergency Readiness Assurance Plan and annual updates, develop and conduct training and exercise programs, coordinate assessment activities, develop related documentation, and coordinate emergency resources.

2. REVIEW FOR CLASSIFIED OR UNCLASSIFIED CONTROLLED INFORMATION. If the relevant site/facility/activity is generating classified information or Unclassified Controlled Nuclear Information (UCNI), or is conducting classified or UCNI operations, then all emergency preparedness documents, such as plans, procedures, scenarios, and assessments, must be reviewed for classified information and UCNI by the appropriate official using current guidance. If the EPHAs do not contain classified information or UCNI, they must be reviewed by the emergency management program administrator to determine if they contain potentially exploitable information. EPHAs containing potentially exploitable information must be protected as Official Use Only under exemption 2 of the Freedom of Information Act.

3. EMERGENCY PLANS. The emergency plan must document the emergency management program and describe the provisions for response to an Operational Emergency.

4. EMERGENCY PLAN IMPLEMENTING PROCEDURES. Emergency Plan Implementing Procedures must describe how emergency plans must be implemented.

5. EMERGENCY OPERATING RECORDS PROTECTION PROGRAM. A program must be established to ensure that vital records, regardless of media, essential to the continued functioning or reconstitution of an organization during and after an emergency, are available, per 36 CFR 1236.

## DOE ELEMENTS TO WHICH DOE O 151.1C IS APPLICABLE

Office of the Secretary
Departmental Representative to the Defense Nuclear Facilities Safety Board
Energy Information Administration
National Nuclear Security Administration
Office of the Chief Information Officer
Office of the Chief Financial Officer
Office of Civilian Radioactive Waste Management
Office of Congressional and Intergovernmental Affairs
Office of Counterintelligence
Office of Electric Transmission and Distribution
Office of Energy Assurance
Office of Energy Efficiency and Renewable Energy
Office of Environment, Safety and Health
Office of Environmental Management
Office of Fossil Energy
Office of General Counsel
Office of Human Capital Management
Office of Intelligence
Office of Legacy Management
Office of Management
Office of Nuclear Energy, Science and Technology
Office of Policy and International Affairs
Office of Public Affairs
Office of Science
Office of Security
Office of Security and Safety Performance Assurance

# CONTRACTOR REQUIREMENTS DOCUMENT

## DOE O 151.1C, *Comprehensive Emergency Management System*

Regardless of the performer of the work, the contractor is responsible for compliance with the requirements of this Contractor Requirements Document (CRD). The contractor is responsible for flowing down the requirements of this CRD to subcontracts at any tier to the extent necessary to ensure the contractor's compliance with the requirements. That is, the contractor must (1) ensure that it and its subcontractors comply with the requirements of this CRD to the extent necessary to ensure the contractor's compliance and (2) only incur costs that would be incurred by a prudent person in the conduct of competitive business.

This CRD requires that contractors integrate numerous requirements including this CRD to DOE O 151.1C, *Comprehensive Emergency Management System*, dated 11-2-05, and existing statutes and regulations into a comprehensive emergency management system. Other sources for related requirements which must be integrated include 29 U.S.C. 654(a), 42 U.S.C. 7412(r), regulations developed by DOE and other Federal agencies, State and local requirements, Federal interagency emergency plan requirements, and the requirements of other DOE directives addressing emergency issues. Regulatory topics related to emergency management issues include fire; safety; hazardous wastes; community right-to-know; hazardous material transport; and security, fundamental worker safety, and environmental protection programs.

1. GENERAL REQUIREMENTS. Contractors must develop and implement a Comprehensive Emergency Management System designed to—

    a. minimize the consequences of all emergencies involving or affecting Departmental facilities, and activities (including transportation operations/activities);

    b. protect the health and safety of all workers and the public from hazards associated with DOE/NNSA operations and those associated with decontamination, decommissioning, and environmental restoration;

    c. prevent damage to the environment; and

    d. promote effective and efficient integration of all applicable policies, recommendations, and requirements, including Federal interagency emergency plans.

2. OPERATIONAL EMERGENCY BASE PROGRAM. Contractors must implement and document an integrated Operational Emergency Base Program (see also DOE O 151.1C, Chapter III) for each facility and activity.

a. The Operational Emergency Base Program must be based on a Hazards Survey. A Hazards Survey is an examination of the features and characteristics of the facility or activity to identify the generic emergency events and conditions (including natural phenomena such as earthquakes and tornadoes; wild land fires; and other serious events involving or affecting health and safety, the environment, safeguards, and security at the facility) and the potential impacts of such emergencies. [See also DOE O 151.1C, Chapter III, paragraph 3a.]

(1) Each Hazards Survey must—

(a) identify (e.g., in matrix or tabular form) the emergency conditions (e.g., fires, work place accidents, natural phenomena, etc.);

(b) describe the potential health, safety, or environmental impacts;

(c) indicate the need for further analyses of hazardous materials in an Emergency Planning Hazards Assessment (EPHA), based on the results of the hazardous material screening process described in paragraph 2b below; and

(d) identify the planning and preparedness requirements that apply to each type of hazard.

(2) Each Hazards Survey may cover multiple facilities. One Hazards Survey may be prepared to cover an entire site.

(3) Hazards surveys must be updated every three years and prior to significant changes to the site/facility or to hazardous material inventories. For example, significant changes are those changes which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B. Changes that result in a reduction of hazards with no adverse effect on safety or emergency preparedness or response may be included in the next scheduled review and update.

b. A Hazardous Material Screening Process must identify specific hazardous materials and quantities that, if released, could produce impacts consistent with the definition of an Operational Emergency. The potential release of these materials to the environment requires further analysis in an EPHA. The release of hazardous materials less than the quantities listed below does not require quantitative analysis in an EPHA.

(1) In general, to meet the definition of an Operational Emergency [CRD paragraph 11], the release of a hazardous material must: immediately threaten or endanger personnel and emergency responders who are in close proximity of the event; have the potential for dispersal beyond the

immediate vicinity of the release in quantities that threaten the health and safety of onsite personnel or the public in collocated facilities, activities, and/or offsite; and have a potential rate of dispersal sufficient to require a time-urgent response to implement protective actions for workers and the public.

(2) The hazardous material screening process must identify all hazardous materials in a facility/activity that require further analysis in an EPHA.

(a) Radioactive Materials:

1 All radioactive materials in a facility/activity must be subjected to a hazardous material screening process.

2 Radioactive materials that may be excluded from further analysis in an EPHA include: sealed radioactive sources that are engineered to pass the special form testing specified by the Department of Transportation (DOT) or the American National Standards Institute (ANSI); materials in solid form for which there is no plausible dispersal mechanism; materials stored in DOT Type B shipping containers with overpack, if the Certificates of Compliance are current and the materials stored are authorized by the Certificate; and, materials used in exempt, commercially available products.

3 Radioactive hazardous materials that require further analysis in an EPHA include the radioactive materials listed in DOE-STD-1027-92 in quantities greater than the Category 3 values given in Attachment 1, Table A.1., of that Standard.

(b) Chemicals:

1 All chemicals in a facility/activity with known or suspected toxic properties must be subjected to a hazardous material screening process.

2 Chemicals that may be excluded from further analysis in an EPHA include: materials used in the same form, quantity, and concentration as a product packaged for distribution and use by the general public; materials that have a Health Hazard rating of 0, 1 or 2 based on National Fire Protection Association (NFPA) 704; or solid or liquid materials that because their physical form, or other factors (e.g., plausible

dispersal mechanisms), do not present an airborne exposure hazard.

3 Chemical hazardous materials that require further analysis in an EPHA include chemicals with an assigned Health Hazard rating of 3 or 4, based on National Fire Protection Association (NFPA) 704, in quantities greater than a quantity that can be "easily and safely manipulated by one person" [see 29 CFR 1910.1450(b)]. Chemicals without an assigned Health Hazard rating require further analysis in an EPHA if the quantity is greater than a quantity that can be "easily and safely manipulated by one person." Quantities of chemical hazardous materials considered to be "easily and safely manipulated by one person" can be locally-determined in accordance with the provisions of 29 CFR 1910.1450(b).

(c) Hazardous Biological Agents and Toxins. At a minimum, specific hazardous biological agents and toxins must include Federally regulated agents and toxins identified in lists published in Department of Health and Human Services (HHS) regulations [42 CFR 73] and Department of Agriculture (USDA) regulations [7 CFR 331 and 9 CFR 121], and require an EPHA and a Hazardous Material Program. Toxins listed in 42 CFR 73 and 9 CFR 121 must exceed the minimum quantities specified to be Federally regulated.

(d) The possibility that excluded materials could initiate, through fires or explosions, the release of other hazardous materials must be considered.

(3) If the screening process identifies at least one hazardous material requiring further analysis, the Hazards Survey must indicate that an EPHA is needed for that facility or activity.

(4) A description of the screening process and the results of its application to the hazardous materials in the facility/activity must be included in the Hazards Survey or incorporated by reference into supporting documentation.

(a) For facilities/activities requiring an EPHA, this documentation must be referenced or included in the EPHA.

(b) If the quantitative analysis indicates that all events would be classified as less than an Alert, an EPHA is not required. The results of the hazardous material screening process and the

quantitative analysis may be incorporated directly into the Hazards Survey or may be incorporated by reference in the Hazards Survey.

c. The Operational Emergency Base Program must —

(1) provide the framework for response to serious events involving health and safety, the environment, safeguards, and security; and

(2) ensure all requirements of DOE regulations and directives, regulations developed by other Federal agencies, and, if applicable, State and local requirements addressing emergency issues are seamlessly integrated without duplication of emergency management effort.

3. OPERATIONAL EMERGENCY HAZARDOUS MATERIAL PROGRAM. For each facility, operation, and activity involved in producing, processing, handling, storing, or transporting hazardous materials (radioactive, chemical, hazardous biological agents and toxins) that has the potential to pose a serious threat to workers, the public, or the environment,

a. The contractor has a general duty to—

(1) identify the hazards that may result from an unplanned release of hazardous materials;

(2) strive to prevent unplanned releases of hazardous materials from DOE/NNSA facilities;

(3) take any steps necessary to prevent releases; and

(4) use feasible means to eliminate or materially reduce the hazard to workers and the public.

b. The contractor executes this general duty by developing and documenting an integrated Operational Emergency Hazardous Material Program, which does the following:

(1) Identifies hazards and the potential consequences from unplanned releases of (or loss of control over) hazardous materials, using accepted assessment techniques. If this assessment, called an Emergency Planning Hazards Assessment (EPHA), is required, it is used as the technical planning basis for determining the extent and scope of the Operational Emergency Hazardous Material Program.

(a) If the EPHA indicates the potential for an Alert, Site Area Emergency, or General Emergency, as defined in Chapter V, the results of the analysis must be used to determine the necessary

personnel, resources, and equipment for the Operational Emergency Hazardous Material Program.

(b) If the quantitative analysis indicates that all events would be classified as less than an Alert, an EPHA is not required to be maintained. The results of the hazardous material screening process and the quantitative analysis may be incorporated directly into the Hazards Survey, or may be incorporated by reference in the Hazards Survey. The minimum program requirements must encompass the requirements for Hazardous Waste Operations and Emergency Response found in 29 CFR 1910.120 and the requirements specified in paragraph 2 of this CRD.

(c) An accurate and timely method for tracking changes in operations, processes, or accident analyses that involve hazardous materials (e.g., introduction of new materials, new uses, significant changes in inventories, modification of material environments) must be established and maintained for each facility/activity. The method must allow sufficient time for emergency management personnel to review the EPHA and modify plans and procedures, as necessary. For example, significant changes are those changes which would result in an unreviewed safety question for nuclear facilities, as defined in 10 CFR 830, or in an unreviewed safety issue for accelerator facilities, as defined in DOE O 420.2B.

(d) The EPHA must be reviewed at least every three years and updated prior to significant changes to the site/facility or hazardous material inventories. Changes that result in a reduction of hazards with no adverse effect on safety or emergency preparedness and response may be included in the next scheduled review and update.

(e) The EPHA must include a determination of the size of the Emergency Planning Zone (EPZ). The EPZ is the geographic area surrounding the site/facility for which special planning and preparedness actions are taken or need to be taken to reduce or minimize the impact to onsite personnel and public health and safety in the event of an Operational Emergency involving hazardous materials. Assumptions, methodology, models, and evaluation techniques used in the EPHA must be documented.

(f) The Office of Secure Transportation (OST) must develop an EPHA for OST shipments to provide the technical planning basis for the OST Operational Emergency Hazardous Material Program.

(g) An EPHA must be developed for shipments that do not satisfy governing DOT regulations and specifications for commercial

hazardous materials transport. However, if a shipment satisfies DOT regulations and specifications, then an EPHA is not required.

(2) Adjusts its Operational Emergency Hazardous Material Program to be commensurate with hazards that remain after a decontamination and decommission action is completed at each DOE closure site/facility.

(3) Develops, implements, documents, and maintains an effective, integrated emergency management program that is commensurate with the hazards and that addresses the following program elements: program administration; training and drills; exercises; readiness assurance; emergency response organization; offsite response interfaces; emergency facilities and equipment; emergency categorization and classification; notifications and communications; consequence assessment; protective actions and reentry; emergency medical support; emergency public information; and termination and recovery.

c. The contractor at a site with multiple facilities may place facility-specific requirements in their emergency program on a site-/contractor-level organization (such as a single, site-wide public information program rather than separate programs at each facility.) The contractor must gain approval, in writing, from the Cognizant Field Element before replacing the facility-specific requirements with site-/contractor-level requirements. Replacing facility-specific requirements with site- or contractor-specific requirements does not require an exemption from this CRD.

(1) The contractor placing requirements on a site-/contractor-level organization must meet the requirements of the Operational Emergency Hazardous Material Program if the site contains both Operational Emergency Base Program and Operational Emergency Hazardous Material Program facilities.

(2) After gaining approval of the Cognizant Field Element Manager, the contractor must note those requirements placed on the site-/contractor-level organization in the emergency plan at both the facility and site/contractor levels, as well as in the program description of the Emergency Readiness Assurance Plan (ERAP).

4. PROGRAM ADMINISTRATION. Effective organizational management and administrative control of the facility emergency management program must be provided by establishing and maintaining authorities and resources necessary to plan, develop, implement, and maintain a viable, integrated, and coordinated comprehensive emergency management program. [See DOE O 151.1C, Chapter XI, Program Administration.]

a. The contractor at all DOE/NNSA facilities must designate an individual to administer emergency management. This individual must develop and maintain

the emergency plan, develop the ERAP and annual updates, develop and conduct training and exercise programs, coordinate assessment activities, develop related documentation, and coordinate emergency resources.

b. The contractor at all DOE/NNSA facilities that are generating classified information or Unclassified Controlled Nuclear Information (UCNI), or are conducting classified or UCNI operations, must review all emergency preparedness documents, such as plans, procedures, scenarios, and assessments for classified information and UCNI. This review must be conducted by the appropriate official using current guidance. If the EPHAs do not contain classified information or UCNI, they must be reviewed by the emergency management program administrator to determine if they contain potentially exploitable information. EPHAs containing potentially exploitable information must be protected as Official Use Only under exemption 2 of the Freedom of Information Act.

c. The contractor at all DOE/NNSA facilities must document the emergency management program in an emergency plan that also describes the provisions for response to an Operational Emergency.

d. The contractor at all DOE/NNSA facilities must develop Emergency Plan Implementing Procedures to describe how emergency plans must be implemented.

e. The contractor at all DOE/NNSA facilities must establish a program to ensure that vital records, regardless of media, essential to the continued functioning or reconstitution of an organization during and after an emergency, are available, per 36 CFR 1236.

5. TRAINING AND DRILLS. A comprehensive, coordinated, and documented program of training and drills must be an integral part of the emergency management program to ensure that preparedness activities for developing and maintaining program-specific emergency response capabilities are accomplished. [See DOE O 151.1C, Chapter III, paragraph 4a, and Chapter IV, paragraph 4a, Training and Drills.]

a. The contractor at all DOE/NNSA facilities must —

(1) Provide initial training and periodic drills to all workers who may be required to take protective actions (e.g., shelter-in-place; assembly, evacuation). This training is required when they are employed, when their expected actions change, or when the emergency plan changes.

(2) Provide refresher training annually to certified operators and supervisors and those workers who are likely to witness a hazardous material release and who are required to notify proper authorities of the release.

(3) Make available emergency-related information and training on site-specific conditions and hazards to offsite personnel who may be required to participate in response to an emergency at the DOE/NNSA site/facility.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also establish a coordinated program of training and drills for developing and/or maintaining specific emergency response capabilities as an integral part of the emergency management program. The program must apply to emergency response personnel and organizations that the site/facility expects to respond to onsite emergencies. Emergency-related information must be available to offsite response organizations. The program must consist of self-study/homework, training, and drills.

(1) Training. Both initial training and annual refresher training must be provided for the instruction of and demonstration of proficiency by all personnel (i.e., primary and alternate) comprising the emergency response organization.

(2) Drills. Drills must provide supervised, "hands-on" training for members of emergency response organizations.

6. EXERCISES. A formal exercise program must validate all elements of an emergency management program over a 5-year period. The exercise program must validate facility- and site-level emergency management program elements by initiating response to simulated, realistic emergency events/conditions in a manner that, as nearly as possible, replicates an integrated emergency response to an actual event. Planning and preparation must use an effective, structured approach that includes documentation of specific objectives, scope, time lines, injects, controller instructions, and evaluation criteria for realistic scenarios. Each exercise must be conducted, controlled, evaluated, and critiqued effectively and reliably. Lessons-learned must be developed, resulting in corrective actions and improvements. [See also DOE O 151.1C, Chapter IV, paragraph 4b, Exercises.]

a. The contractor at all DOE/NNSA facilities must —

(1) At a minimum, conduct building evacuation exercises consistent with Federal regulations [e.g., (41 CFR 102-74-360)], local ordinances, and National Fire Protection Association Standards. Exercises must be conducted at least annually to ensure that employees are able to evacuate their work area safely.

(2) Test communications systems with DOE Headquarters, the Cognizant Field Element, and offsite agencies at least annually or as often as needed to ensure that communications systems are operational.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also establish a formal exercise program to validate all elements of the emergency management program over a 5-year period. Each exercise must have specific objectives and must be fully documented (e.g., in scenario packages that include objectives, scope, timelines, injects, controller instructions, and evaluation criteria). Exercises must be evaluated. A critique process, which includes gathering and documenting observations of the participants, must be established. Corrective action items identified as a result of the critique process must be incorporated into the emergency management program.

(1) Each DOE/NNSA facility subject to this CRD paragraph must exercise its emergency response capability annually and include at least facility-level evaluation and critique. Evaluations of annual facility exercises by Departmental entities (e.g., Cognizant Field Element, Program Secretarial Officer or Headquarters Office of Security and Safety Performance Assurance) must be performed periodically so that each facility has an external Departmental evaluation at least every three years.

(2) Site-level emergency response organization elements and resources must participate in a minimum of one exercise annually. This site exercise must be designed to test and demonstrate the site's integrated emergency response capability. For multiple-facility sites, the basis for the exercise must be rotated among facilities.

(3) Offsite response organizations must be invited to participate in site-wide exercises at least once every three years.

(4) Annual emergency response exercises must be supported by documentation that contains, but is not limited to, the exercise scope, its objectives and corresponding evaluation criteria, a narrative description of the scenario, timeline, and a list of participants. Documentation for site exercises must be approved by the Cognizant Field Element.

(5) Evaluation reports for facility and site exercises must be completed within 30 working days and submitted to the Cognizant Field Element, the Program Secretarial Officer(s), and the Director, Office of Emergency Operations.

(6) Corrective action plans must be completed within 30 working days of receipt of the final facility and site exercise evaluation report.

(7) Completion of corrective actions for facility and site exercises must include a verification and validation process, independent of those who performed the corrective action, that verifies that the corrective action has been put in place and that validates the corrective action has been effective

in resolving the original finding. Corrective actions involving revision of procedures or training of personnel should be completed before the next exercise.

(8) Exercises of each of the Department's radiological emergency response assets must be conducted at least once every three years. These assets include the Accident Response Group (ARG), Nuclear Emergency Support Team (NEST), Federal Radiological Monitoring and Assessment Center (FRMAC), Aerial Measuring System (AMS), National Atmospheric Release Advisory Center (NARAC), Radiation Emergency Assistance Center/Training Site (REAC/TS), and Radiological Assistance Program (RAP).

7. READINESS ASSURANCE. The emergency management Readiness Assurance Program must establish a framework and associated mechanisms for assuring that emergency plans, implementing procedures, and resources are adequate by ensuring that they are sufficiently maintained, exercised, and evaluated (including assessment and appraisal) and that appropriate and timely improvements are made in response to needs identified through coordinated and comprehensive emergency planning, resource allocation, training and drills, exercises, and evaluations. [See also DOE O 151.1C, Chapter X, Readiness Assurance.]

The contractor at all DOE/NNSA facilities must implement a readiness assurance program consisting of evaluations, improvements and ERAPs.

a. Evaluations

(1) Self-assessments. The contractor must conduct an annual self-assessment of their emergency management programs. Program and exercise evaluations (including appraisals and assessments) must be based on specific standards and criteria, issued by the Director, Office of Emergency Operations. Self-assessment results must be documented in the ERAP submitted to the Cognizant Field Element.

(2) Exercise Evaluations. See CRD paragraph 6.

(3) Performance Indicators. Contractor facilities/sites must participate in a program of performance indicators (including performance measures and metrics) to capture and track objective data regarding the performance of emergency management programs in key functional areas.

(4) No-Notice Exercises. Contractor facilities/sites must participate in a program of No-Notice Exercises, conducted at the discretion of the Director, Office of Emergency Operations, to determine if the facility/site Emergency Response Organization (ERO) accomplishes

selected objectives based on applicable plans, procedures, and/or other established requirements. Facility/site involvement is limited to providing trusted agents and responding when the exercise is conducted.

b. Improvements

(1) Corrective Actions. These requirements supplement those in the CRD to DOE O 414.1A, *Quality Assurance*. Continuous improvement in the emergency management program results from implementation of corrective actions for findings (e.g., deficiencies, weaknesses) in all types of evaluations, including both internal and external evaluations.

(a) Corrective action plans must be developed within 30-working days of receipt of the final evaluation report. Corrective actions must be completed as soon as possible. Corrective actions addressing revision of procedures or training of personnel should be completed before the next annual self-assessment of the program.

(b) Completion of corrective actions must include a verification and validation process, independent of those who performed the corrective action, that verifies that the corrective action has been put in place, and validates that the corrective action has been effective in resolving the original finding.

(c) See CRD, paragraph 6b(6) and (7) for corrective actions related to findings from exercise evaluations.

(2) Lessons Learned. The readiness assurance program must include a system for incorporating and tracking lessons learned from training, drills, actual responses, and a site-wide lessons learned program. DOE/NNSA contractor-operated facilities must participate in the DOE/NNSA Corporate Lessons Learned Program. DOE-STD-7501–99, *The DOE Corporate Lessons Learned Program*, provides guidance on use of the system.

c. Emergency Readiness Assurance Plan. Facilities and offsite transportation activities must submit an ERAP to the Cognizant Field Element by September 30 of each year. In keeping with 31 U.S.C. 1115 and 1116, this report must identify what the goals were for the fiscal year that ended, coincident with the due date for this report (e.g., September 30), and the degree to which these goals were accomplished. This report must also identify the goals for the next fiscal year (e.g., which starts on October 1).

8. EMERGENCY RESPONSE ORGANIZATION. An Emergency Response Organization (ERO), a structured organization with overall responsibility for initial and ongoing

emergency response and mitigation, must be established and maintained for each facility/site. The ERO must establish effective control at the scene of an event/incident and integrate ERO activities with those of local agencies and organizations that provide onsite response services. An adequate number of experienced and trained personnel, including designated alternates, must be available on demand for timely and effective performance of ERO functions. [See also DOE O 151.1C, Chapter III, paragraph 3d(1) and DOE O 151.1C, Chapter IV, paragraph 3b(1), Emergency Response Organization.]

a. The contractor at all DOE/NNSA facilities must assign an individual (e.g., building or facility manager or similar position) to manage and control all aspects of the site/facility response.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also establish and maintain an ERO for each site/facility with overall responsibility for the initial and ongoing response to and mitigation of an emergency. Control at the event/incident scene must be consistent with the National Incident Management System's Incident Command System, which integrates local agencies and organizations that provide onsite response services.

9. OFFSITE RESPONSE INTERFACES. Effective interfaces must be established and maintained to ensure that emergency response activities are integrated and coordinated with the Federal, Tribal, State, and local agencies and organizations responsible for emergency response and protection of the workers, public, and environment. [See also DOE O 151.1C, Chapter III, paragraph 3d(2) and Chapter IV, paragraph 3b(2), Offsite Response Interfaces.]

The contractor at all DOE/NNSA facilities must coordinate with State, Tribal, and local agencies and organizations responsible for offsite emergency response (e.g., "911" emergencies) and for protection of the health and safety of the public.

10. EMERGENCY FACILITIES AND EQUIPMENT. Facilities and equipment adequate to support emergency response must be available, operable, and maintained. At a minimum, facilities must include an adequate and viable command center. Equipment must include, but not be limited to, personnel protective equipment, detectors, and decontamination equipment. [See also DOE O 151.1C, Chapter III, paragraph 3d(8) and Chapter IV, paragraph 3b(9), Emergency Facilities and Equipment.]

a. The contractor at all DOE/NNSA facilities must provide facilities and equipment adequate to support emergency response, including the capability to notify employees of an emergency to facilitate the safe evacuation of employees from the work place, immediate work area, or both.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also establish and maintain facilities and equipment adequate to support emergency response as follows.

(1) A facility must be available for use as a command center.

(2) Provisions must be established for use of an alternate location if the primary command center is not available.

(3) Adequate personal protective equipment and other equipment and supplies must be available and operable to meet the needs determined by the results of the EPHA.

11. CATEGORIZATION AND CLASSIFICATION. Operational Emergencies are major unplanned or abnormal events or conditions that: involve or affect DOE/NNSA facilities and activities by causing or having the potential to cause serious health and safety or environmental impacts; require resources from outside the immediate/affected area or local event scene to supplement the initial response; and, require time-urgent notifications to initiate response activities at locations beyond the event scene. In general, to be considered an Operational Emergency, an event or condition involving the uncontrolled release of a hazardous material must: immediately threaten or endanger personnel who are in close proximity of the event; have the potential for dispersal beyond the immediate vicinity of the release in quantities that threaten the health and safety of onsite personnel or the public in collocated facilities, activities, and/or offsite; and have a potential rate of dispersal sufficient to require a time-urgent response to implement protective actions for workers and the public.

In addition to being categorized as Operational Emergencies, events involving the actual or potential airborne release of (or loss of control over) hazardous materials from an onsite facility or activity also require prompt and accurate classification as an Alert, Site Area Emergency, or General Emergency, based on health effects parameters measured or estimated at specific receptor locations (e.g., facility and site boundaries) and compared with protective action criteria. Predetermined conservative onsite protective actions and offsite protective action recommendations must be associated with the classification of these Operational Emergencies (as an Alert, Site Area Emergency or General Emergency). [See also DOE O 151.1C, Chapter III, paragraph 3d(3), Emergency Categorization; Chapter IV, paragraph 3b(3), Emergency Classification; and Chapter V, Operational Emergency Events and Conditions.]

a. The contractor at all DOE/NNSA facilities must —

(1) Establish criteria for determining quickly if an event is an Operational Emergency.

(2) Declare an Operational Emergency when events occur that represent a significant degradation in the level of safety at a site/facility and that require time-urgent response efforts from outside the site/facility. These events do not require further classification (i.e., as Alert, Site Area Emergency, or General Emergency). Such events include the following.

(a) Health and Safety. The following events or conditions represent, cause, or have the potential to cause serious health and safety impacts to workers or members of the public.

1 The discovery of radioactive or other hazardous material contamination from past DOE/NNSA operations that may have caused, is causing, or may reasonably be expected to cause uncontrolled personnel exposures exceeding protective action criteria.

2 An offsite hazardous material event not associated with DOE/NNSA operations that is observed to have or is predicted to have an impact on a DOE/NNSA site, such that protective actions are required for onsite DOE/NNSA workers.

3 An occurrence (e.g., earthquake, tornado, aircraft crash, fire, explosion) that causes or can reasonably be expected to cause significant structural damage to DOE/NNSA facilities, with confirmed or suspected personnel injury or death.

4 Any facility evacuation in response to an actual occurrence that requires time-urgent response by specialist personnel, such as hazardous material responders or mutual aid groups not normally assigned to the affected facility.

5 An unplanned nuclear criticality.

6 Any mass casualty event.

(b) Environment. The following events or conditions represent, cause, or have the potential to cause serious detrimental effects on the environment.

1 Any actual or potential release of hazardous material or regulated pollutant to the environment, in a quantity greater than 5 times the Reportable Quantity (RQ) specified for such material in 40 CFR 302, that could result in significant offsite consequences, such as major wildlife kills, wetland degradation, aquifer contamination, or the need to secure downstream water supply intakes.

2 Any release of greater than 1,000 gallons (24 barrels) of oil to inland waters; greater than 10,000 gallons (238 barrels) of oil to coastal waters; or a quantity of oil that could result

in significant off-site consequences (e.g., need to relocate people, major wildlife kills, wet-land degradation, aquifer contamination, need to secure downstream water supply intakes, etc.) [Oil as defined by the Clean Water Act (33 U.S.C. 1321) means any kind of oil and includes petroleum.]

(c) Security and Safeguards. (Security incidents are also subject to reporting in accordance with DOE O 471.4, *Incidents of Security* Concern. Per this Order, foreign involvement in security incidents must be reported to the Office of Counterintelligence.) The following events or conditions represent, cause, or have the potential to cause degradation of security or safeguards conditions with actual or potential direct harm to people or the environment.

1 Actual unplanned detonation of an explosive device or a credible threat of detonation resulting from the location of a confirmed or suspicious explosive device.

2 An actual terrorist attack or sabotage event involving a DOE/NNSA site/facility or operation.

3 Kidnapping or taking hostage(s) involving a DOE/NNSA site/facility or operation.

(d) Offsite DOE Transportation Activities. The following events or conditions represent an actual or potential release of hazardous materials from a DOE/NNSA shipment.

1 Any accident/incident involving an offsite DOE/NNSA shipment containing hazardous materials that causes the initial responders to initiate protective actions at locations beyond the immediate/affected area.

2 Failures in safety systems threaten the integrity of a nuclear weapon, component, or test device.

3 A transportation accident results in damage to a nuclear explosive, nuclear explosive-like assembly, or Category I/II quantity of Special Nuclear Materials.

(e) Hazardous Biological Agent or Toxins. The following events or conditions involving the release of a hazardous biological agent or toxin [identified in 42 CFR 73, 7 CFR 331 and 9 CFR 121] represent major failure of safety systems, protocols, and/or practices with the potential to have a serious impact on health and

safety of workers, collocated workers, emergency responders, members of the public, or the environment:

Any actual or potential release of a hazardous biological agent or toxin outside of the secondary barriers of the biocontainment area.

(3) Categorize an event as an Operational Emergency as promptly as possible, but no later than 15 minutes after event recognition/identification/ discovery.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also establish procedures to classify emergency events (as an Alert, Site Area Emergency, General Emergency).

(1) Hazardous material emergencies involving DOE/NNSA facilities must be classified Operational Emergencies as either an Alert, Site Area Emergency, or General Emergency, in order of increasing severity, when events occur that represent a specific threat to workers and the public due to the release or potential release of significant quantities of hazardous materials. Classification aids in the rapid communication of critical information and the initiation of appropriate time-urgent emergency response actions. Events, listed in paragraph 11a, above, that serve as initiating events for the release of hazardous materials must be classified under the provisions of this section.

(a) Alert. An Alert must be declared when events are predicted, are in progress, or have occurred that result in one or more of the following.

1 An actual or potential substantial degradation in the level of control over hazardous materials.

a The radiation dose from any release to the environment of radioactive material or a concentration in air of other hazardous material is expected to exceed either—

i. a site-specific criterion corresponding to 10 percent of the applicable protective action criterion [see Base Order, paragraph 4a(14)] at or beyond the facility boundary; or

ii. the applicable protective action criterion at or beyond 30 meters from the point of release to the environment.

b It is not expected that the applicable protective action criterion will be exceeded at or beyond the facility boundary.

2 An actual or potential substantial degradation in the level of safety or security of a nuclear weapon, component, or test device that would not pose an immediate threat to workers or the public.

3 An actual or potential substantial degradation in the level of safety or security of a facility or process that could, with further degradation, produce a Site Area Emergency or General Emergency.

(b) Site Area Emergency. A Site Area Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

1 An actual or potential major failure of functions necessary for the protection of workers or the public. The radiation dose from any release of radioactive material or concentration in air from any release of other hazardous material is expected to exceed the applicable protective action criterion [see Base Order, paragraph 4a(14)] at or beyond the facility boundary. The protective action criterion is not expected to be exceeded at or beyond the site boundary.

2 An actual or potential threat to the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers in the immediate area, but not the public.

3 Actual or potential major degradation in the level of safety or security of a facility or process that could, with further degradation, produce a General Emergency.

(c) General Emergency. A General Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

1 Actual or imminent catastrophic reduction of facility safety or security systems with potential for the release of large quantities of hazardous materials to the environment. The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous

material is expected to exceed the applicable protective action criterion [see Base Order, paragraph 4a(14)] at or beyond the site boundary.

2 Actual or likely catastrophic failures in safety or security systems threatening the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers and the public.

(2) Site/facility-specific Emergency Action Levels (EALs) must be developed for the spectrum of potential Operational Emergencies identified by the EPHA and must include protective actions corresponding to each EAL.

12. NOTIFICATIONS AND COMMUNICATIONS. Initial emergency notifications must be made promptly, accurately and effectively to workers and emergency response personnel/organizations, appropriate DOE/NNSA elements, and other Federal, Tribal, State, and local organizations and authorities. Accurate and timely follow-up notifications must be made when conditions change, when the emergency classification level (as an Alert, Site Area Emergency, General Emergency) is upgraded, or when the emergency is terminated. Continuous, effective, and accurate communication among response components and/or organizations must be reliably maintained throughout an Operational Emergency. [See also DOE O 151.1C, Chapter III, paragraph 3d(4), Communications, and Chapter VIII, Communications Requirements.]

The contractor at all DOE/NNSA facilities must —

a. Provide prompt initial notification of workers, emergency response personnel, and response organizations, including DOE/NNSA elements and State, Tribal, and local organizations;

b. Notify State and local officials and the Cognizant Field Element Emergency Operations Center (EOC) and Headquarters Operations Center within 15 minutes and all other organizations within 30 minutes of the declaration of an Alert, Site Area Emergency, or General Emergency;

c. Notify the Cognizant Field Element EOC and Headquarters Operations Center within 30 minutes of the declaration of an Operational Emergency not requiring classification [per CRD paragraph 11a(2)]; and

d. Notify local, State, and Tribal organizations within 30 minutes or as established in mutual agreements for declaration of an Operational Emergency not requiring classification [per CRD paragraph 11a(2)].

e. At a minimum, emergency notification to the Headquarters Operations Center must consist of a phone call providing as much information as is known at the time. The same information must be provided by e-mail or a fax, either

immediately prior to or following the phone call. Information for initial notification includes as much as possible of the following:

(1) that an Operational Emergency has been declared and, if appropriate, the classification of the emergency;

(2) the description of the emergency;

(3) the date and time the emergency was discovered;

(4) the damage and casualties;

(5) whether the emergency has stopped other facility/site operations or program activities;

(6) the protective actions taken and/or recommended;

(7) the notifications made;

(8) the weather conditions at the scene of the emergency;

(9) the level of any media interest at the scene of the emergency or at the facility/site; and

(10) the contact information of the DOE or NNSA on-scene point of contact.

f. Provide for continuing effective communication among response organizations throughout an emergency.

g. Establish effective communications methods between event scene responders, emergency managers, and response facilities.

h. Forward emergency status reports to the next-higher Emergency Management Team on a continuing basis until the emergency is terminated.

i. Each activated Emergency Management Team must submit a final report on the emergency response to the Emergency Manager for submission to the Director, Office of Emergency Operations, following termination of emergency response, and in conjunction with the Final Occurrence Report (see DOE M 231.1-2).

j. Review all reports and releases for classified or unclassified controlled information (e.g., Unclassified Controlled Nuclear Information) prior to being provided to personnel not authorized access to such information, entered into databases not authorized for such information, or transmitted using non-secure communications equipment.

13. CONSESQUENCE ASSESSMENT. Estimates of onsite and offsite consequences of actual or potential releases of hazardous materials must be computed and assessed correctly and in a timely manner throughout the emergency. Consequence assessments must be: integrated with emergency classification and protective action decision-making; incorporated with facility and field indications and measurements; and coordinated with offsite agencies. [See DOE O 151.1C, Chapter IV, paragraph 3b(5), Consequence Assessment.]

The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must establish provisions to assess the potential or actual onsite and offsite consequences of an emergency.

a. Consequence assessments must—

(1) be timely throughout the emergency;

(2) be integrated with the emergency classification and protective action process;

(3) incorporate monitoring of specific indicators and field measurements; and

(4) be coordinated with Federal, State, local, and Tribal organizations.

b. If the facility has the potential for an Operational Emergency classified as a General Emergency, the facility/site must have connectivity to NARAC capabilities and procedures to use the NARAC capability effectively as part of near real-time consequence assessment activities for the mode (primary, backup, corroborating) selected by the facility.

c. If the facility has the potential for an Operational Emergency classified as a Site Area Emergency, the facility/site must have procedures in place to activate or request NARAC capabilities and must be able to use those capabilities as part of near real-time consequence assessment activities.

d. All DOE/NNSA facilities/sites that have access to NARAC or have procedures in place to activate or request NARAC capabilities must ensure that facility/site meteorological data and information on source terms for actual or potential releases of hazardous materials to the atmosphere are available or can be made available to NARAC in a timely manner to facilitate near real-time computations.

14. PROTECTIVE ACTIONS AND REENTRY. Protective actions must be promptly and effectively implemented or recommended for implementation, as needed, to minimize the consequences of emergencies and to protect the health and safety of workers and the public. Protective actions must be implemented individually or in combination to reduce exposures to a wide range of hazardous materials. Protective actions must be reassessed throughout an emergency and modified as conditions change. Reentry activities must be

planned, coordinated, and accomplished properly and safely. [See also DOE O 151.1C, Chapter III, paragraph 3d(5) and Chapter IV, paragraph 3b(6), Protective Actions.]

a. The contractor at all DOE/NNSA facilities must —

(1) develop procedures to implement the separate protective actions of evacuation and sheltering of employees;

(2) develop a procedure to account for employees after emergency evacuation has been completed;

(3) ensure the protection of workers, covered by 29 CFR 1910.120, involved in response and clean-up.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also predetermine protective actions for onsite personnel and the public, and must include —

(1) methods for controlling, monitoring, and maintaining records of personnel exposures to hazardous materials;

(2) procedures to implement the separate protective actions of evacuation and sheltering of employees;

(3) methods for controlling access to contaminated areas and for decontaminating personnel or equipment exiting the area;

(4) actions that may be taken to increase the effectiveness of protective actions [i.e., heating, ventilation, and air conditioning (HVAC) shutdown during sheltering];

(5) methods for providing timely recommendations to appropriate State, Tribal, or local authorities of protective actions, such as sheltering, evacuation, relocation, and food control; and

(6) specific protective action criteria, based on the Base Order, paragraph 4a(14), for use in protective action decision making.

15. EMERGENCY MEDICAL SUPPORT. Medical support for contaminated or injured personnel must be planned and promptly and effectively implemented. Arrangements with offsite medical facilities to transport, accept, and treat contaminated, injured personnel must be documented. [See also DOE O 151.1C, Chapter III, paragraph 3d(6) and Chapter IV, paragraph 3b(7), Medical Support; and DOE O 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees,* dated 3-27-98.]

a. The contractor at all DOE/NNSA facilities must—

(1) provide medical treatment and planning for mass casualty situations. [See also DOE O 440.1A.]

(2) coordinate in advance the sharing of patient information between onsite and offsite health care providers during emergencies, consistent with the requirements of Health Insurance Portability and Accountability Act of 1996 [42 USC 300].

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also —

(1) Provide medical support for workers contaminated by hazardous material [See also DOE O 440.1A.]

(2) Document arrangements with onsite and offsite medical facilities to accept and treat contaminated, injured personnel.

16. EMERGENCY PUBLIC INFORMATION. Accurate, candid, and timely information must be provided to workers, the news media, and the public during an emergency to establish facts and avoid speculation. Emergency public information efforts must be coordinated with DOE and NNSA (if appropriate); State, local, and Tribal governments; and Federal emergency response organizations, as appropriate. Workers and the public must be informed of emergency plans and planned protective actions before emergencies. [See also DOE O 151.1C, Chapter IX, Public Affairs Policy and Planning Requirements.]

a. The contractor at all DOE/NNSA facilities must prepare an Emergency Public Information Plan. The same plan can cover multiple facilities on a site.

(1) The plans must provide—

(a) identification of personnel, resources, facilities, and coordination procedures necessary to provide emergency public information;

(b) a program for training and exercises of personnel who will interact with the media;

(c) a methodology for informing workers and the public of DOE/NNSA emergency plans and protective actions, before and during emergencies;

(d) coordination of public information efforts with State, local, and Tribal governments, and Federal emergency response plans, as appropriate.

(2) The emergency public information program must have provisions in place to establish a media center. A media center is a designated location where

Cognizant Field Element and contractor personnel can conduct the necessary briefings and press conferences regarding an Operational Emergency at the facility.

(3) In situations involving classified or unclassified controlled information, the contractor must provide sufficient publicly releasable information to explain the emergency response and protective actions required for the health and safety of workers and the public.

(4) Public announcements in areas involving classified or unclassified controlled information must be reviewed by the appropriate official before release to ensure that no classified or unclassified controlled information is contained in the announcement.

(5) When directed by the cognizant field element, a contractor public information officer must be assigned to the emergency public information response team involved in a significant offsite response deployment.

(6) The DOE/NNSA (as appropriate) Director of Public Affairs and the Headquarters Emergency Manager must be informed of all DOE/NNSA emergency public information actions. These notifications must be made as soon as practicable.

(7) Initial news releases or public statements must be approved by the Cognizant Field Element official responsible for emergency public information review and dissemination. Following initial news releases and public statements, updates must be coordinated with the DOE/NNSA (as appropriate) Director of Public Affairs and the Headquarters Emergency Manager.

(8) An emergency public information communications system must be established among Headquarters, Cognizant Field Element, and on-scene locations.

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also have provisions in place to establish a Joint Information Center (JIC). A JIC is a working location, where multiple jurisdictions gather, process and disseminate public information during an emergency. The JIC must be adequately staffed with personnel trained to serve as spokesperson and newswriter. Personnel must be assigned to the JIC to provide support in media services, public inquiry, media inquiry, JIC management and administrative activities, and media monitoring. Persons with technical expertise related to the emergency and with spokesperson training must also be assigned to the JIC. The JIC must be established, directed, and coordinated by the senior Cognizant Field Element public affairs manager or a designee.

c. The contractor providing personnel for the Departmental emergency response assets [the Aerial Measuring System (AMS), the Accident Response Group (ARG), the National Atmospheric Release Advisory Center (NARAC), the Federal Radiological Monitoring and Assessment Center (FRMAC), the Nuclear Emergency Support Team (NEST), the Radiological Assistance Program (RAP), and the Radiation Emergency Assistance Center/Training Site (REAC/TS)] must apply the Emergency Public Information Plan during deployment of the assets.

17. TERMINATION AND RECOVERY. An Operational Emergency can be terminated only after a predetermined set of criteria has been met and termination has been coordinated with offsite agencies. Recovery from a terminated Operational Emergency must include: communication and coordination with State, Tribal, and local government and other Federal agencies; planning, management, and organization of the associated recovery activities; and ensuring the health and safety of the workers and public. [See also DOE O 151.1C, Chapter III, paragraph 5b and Chapter IV, paragraph 5b, Termination and Recovery.]

a. The contractor at all DOE/NNSA facilities must—

(1) coordinate termination with State, Tribal, and local agencies and organizations responsible for offsite emergency response and notification and

(2) establish criteria for resumption of normal operations (i.e., recovery). Recovery must also include provisions for investigation of the root cause(s) of the emergency and corrective action(s) to prevent recurrence in accordance with Departmental requirements (e.g., see DOE O 225.1A, *Accident Investigations,* dated 11-26-97, DOE O 231.1A, *Environment, Safety, and Health Reporting,* with *Change 1*dated 6-3-04, and DOE 5480.19, *Conduct of Operations Requirements for DOE Facilities,* with *Change 2,* dated 10-23-01).

b. The contractor at DOE/NNSA Operational Emergency Hazardous Material Program facilities must also—

(1) establish predetermined criteria for termination of emergencies;

(2) have the means for estimating exposure to hazardous materials and for protecting workers and the general public from exposure during reentry and recovery activities;

(3) develop recovery procedures that include dissemination of information to Federal, State, Tribal, and local organizations regarding the emergency and possible relaxation of public protective actions; planning for decontamination actions; establishment of a recovery organization;

development of reporting requirements; and establishment of criteria for resumption of normal operations;

(4) not downgrade emergencies, once categorized, to a lower significance category unless the original categorization was incorrect. An event determined to be an emergency will remain so until the emergency response is terminated. In general, the emergency classification (i.e., Alert, Site Area Emergency, General Emergency) should not be downgraded until termination of the event. However, emergency classification must be reviewed periodically to ensure the classification is commensurate with response activities.

18. REFERENCES. The following Chapters of DOE O 151.1C, *Comprehensive Emergency Management System,* dated 11-2-05, and the associated Emergency Management Guides (DOE G 151.1-1 series) provide additional discussion.

a. Chapter I. Responsibilities

b. Chapter III. Operational Emergency Base Program

c. Chapter IV. Operational Emergency Hazardous Material Program

d. Chapter V. Operational Emergency Events and Conditions

e. Chapter VIII. Communications Requirements

f. Chapter IX. Public Affairs Policy and Planning Requirements

g. Chapter X. Readiness Assurance

h. Chapter XI. Program Administration