### **U.S. Department of Energy**

Washington, D.C.

## ORDER

DOE O 232.1A

Approved: 07-21-97 Effective Date: 08-01-97 Review Date: 07-21-99

# SUBJECT: OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION INFORMATION

- 1. <u>OBJECTIVES</u>. It is Department of Energy (DOE) policy to ensure that the Office of the Secretary and both DOE and DOE contractor line management are kept fully informed on a timely basis of events that could adversely affect national security or the safeguards and security interests of DOE; the health and safety of the public or the workers; the environment; the intended purpose of DOE facilities; or the credibility of the Department. This information is analyzed for generic implications and for opportunities to improve operations. The following objectives are established in support of this policy.
  - a. To establish and maintain a system for reporting operations information related to DOE-owned and -leased facilities and processing that information to identify the root causes of Unusual, Off-Normal, and Emergency Occurrences and provide for appropriate corrective action.
  - b. To perform the following:
    - (1) Timely identification, categorization, notification, and reporting to DOE management of reportable occurrences at DOE-owned and -leased facilities.
    - (2) Review of reportable occurrences to assess the significance, root causes, generic implications, and the need for corrective actions.
    - (3) Timely evaluation and implementation of appropriate corrective actions.
    - (4) Dissemination of Occurrence Reports to DOE operations and facilities to prevent similar occurrences and facilitate analyses.
    - (5) Maintenance of a central DOE system for reporting, processing, retrieving and analyzing unclassified, nonsensitive Occurrence Reports.

 <u>CANCELLATION</u>. DOE O 232.1, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, of 9-25-95 is canceled. Cancellation of an Order does not, by itself, modify or otherwise affect any contractual obligation to comply with such an Order. Canceled Orders that are incorporated by reference in a contract shall remain in effect until the requirements in the CRD for this Order are applied to applicable contracts.

#### 3. <u>APPLICABILITY</u>.

- a. <u>DOE Elements.</u> Except for the exclusions in paragraph 3.c, this order applies to all DOE Elements.
- b. <u>Contractors.</u> Except for the exclusions in paragraph 3.c, the Contractor Requirements Document (CRD), Attachment 1, sets forth requirements that are to be applied to the universe of DOE contractors and subcontractors thereunder who are awarded contracts for the management and operation of DOE-owned and -leased facilities.

#### c. <u>Exclusions.</u>

- (1) Operations information for activities regulated by the Nuclear Regulatory Commission or a State under an agreement with the Nuclear Regulatory Commission.
- (2) Power Marketing Administrations' reporting of major electrical power outages, disturbances, and fuel shortages subject to the emergency power system reporting requirements prescribed in 10 CFR 205, 350 through 354, "Report of Major Electric Utility Systems Emergencies."
- (3) The Naval Nuclear Propulsion Program, as described in Executive Order 12344 and Public Law 98-525, "The Department of Defense Authorization Act, 1985."

#### 4. <u>REQUIREMENTS</u>.

- a. An Occurrence Reporting Program shall be implemented to ensure appropriate and timely identification, categorization, response, notification, investigation, and reporting of abnormal conditions and events, in accordance with DOE M 232.1-1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION.
- b. Implementing procedures shall be developed or revised for the Occurrence Reporting Program to ensure appropriate categorization, notification, reporting, and investigation of events and/or conditions.

- (1) Implementation procedures shall be submitted for approval to the responsible DOE Secretarial Office within 4 months of incorporation of the requirements in the CRD into a new or existing contract.
- (2) Implementation procedures shall be considered automatically approved 2 months after submittal, if they are not deliberately approved or rejected by DOE prior to the automatic approval.
- (3) A copy of the implementing procedure shall be provided to EH-33 upon approval.
- c. Supporting information pertaining to each Occurrence Report (e.g., graphs, analyses) shall be retained in accordance with Departmental Records Disposition Schedules, as required by 36 CFR Chapter 12, Subchapter B.
- d. Lessons learned from the facility's respective occurrences and the operations information obtained from other similar DOE facilities shall be collected and disseminated.
- e. Immediately following an occurrence:
  - appropriate immediate response(s) shall be taken to ensure that the facility/operation is stabilized or returned to a safe condition, any potential environmental effects are stabilized, and workers are treated for injuries sustained; and
  - (2) abnormal events and conditions shall be identified, the Facility Manager promptly notified, and appropriate information pertaining to such occurrences recorded and archived.
- f. The event shall be categorized.
  - (1) Types and categories of reportable occurrences.

Types of reportable occurrences involve, but are not limited to: facility conditions; environmental concerns; personnel safety; radiological protection; safeguards and security; transportation; loss or damage to DOE property; defective items, materials, or services (including counterfeit/suspect parts); nuclear explosive events; and cross-category items to include related occurrences, near miss events, and potential concerns. The following guidelines and Section 9 of DOE M 232.1-1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, shall be used to develop criteria to categorize reportable occurrences.

<u>Emergencies</u>. Emergencies are defined in DOE O 151.1, COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM. Emergency Occurrences are the most serious occurrences and require an increased alert status for onsite personnel and, in specified cases, for offsite authorities. The detailed initial notification requirements, definitions, criteria, and classifications of emergencies and appropriate responses are provided in DOE O 151.1. Written Occurrence Reports shall be completed in accordance with this Order.

<u>Unusual Occurrences</u>. An Unusual Occurrence is a non-emergency occurrence that exceeds the Off-Normal Occurrence threshold, is related to safety, safeguards and security, environmental or health protection, performance or operation of a facility. Unusual Occurrences require immediate notification to DOE.

<u>Off-Normal Occurrences</u>. Off-Normal Occurrences are abnormal or unplanned events or conditions that adversely affect, potentially affect, or are indicative of degradation in the safety, safeguards and security, environmental or health protection, performance or operation of a facility.

- (2) Categorization.
  - (a) If the event is categorized as an Emergency in accordance with DOE O 151.1, COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM, then the notification of the Emergency shall be made as required in DOE O 151.1 and the written Occurrence Reports prepared in accordance with this Order (DOE O 232.1A).
  - (b) If the event is not categorized as an Emergency, then the event shall be categorized as an Unusual or Off-Normal Occurrence as soon as practical but, in all cases, within 2 hours of identification by the facility staff.
  - (c) If the category is not clear or the occurrence exceeds the threshold of more than one criteria, the occurrence shall be categorized at the higher level being considered. As an example, discovery of a defective item, material, or service, normally reportable as an Off Normal Occurrence, that caused the reduction of safety margin below that prescribed in the authorization basis, would be reported as an Unusual Occurrence.
  - (d) The occurrence category shall either be elevated, maintained, or lowered as information is made available.

#### DOE O 232.1A 07-21-97

- g. The Facility Representative and the Headquarters (HQ) Emergency Operations Center (EOC) shall be notified of an Unusual Occurrence as soon as practical but, in all cases, within 2 hours of categorization. The HQ EOC shall notify the Program Manager of all Unusual Occurrences.
  - (1) If an Off-Normal Occurrence is upgraded to an Unusual Occurrence, the Facility Manager shall notify the HQ EOC that an existing occurrence has been upgraded and provide the HQ EOC with the Occurrence Report number. The HQ EOC will make any required internal DOE HQ notifications.
  - (2) Follow-up notifications shall be made to DOE for any further degradation in the level of safety or impact on the environment, safeguards and security, health, or operations of the facility or other worsening conditions subsequent to the previous notification, including upgrading to an Emergency in accordance with DOE O 151.1, COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM.
- h. A Notification Report shall be prepared and submitted as soon as practical but, in all cases, before the close of the next business day from the time of categorization (not to exceed 80 hours).
- i. An Update Report shall be prepared and submitted when significant and new information is available or upon request of DOE.
- j. Changes in categorization shall be documented in an Update Report and submitted before the close of the next business day from the time of recategorization (not to exceed 80 hours).
- k. A Final Report shall be prepared and submitted to the Facility Representative when the root cause of the occurrence has been analyzed, corrective actions determined with actual or target completion dates identified, and lessons learned identified. The Final Report shall be submitted as soon as possible, but no later than 45 calendar days after initial categorization. If the required analysis cannot be completed within 45 calendar days, an Update Report shall be submitted within the 45 days and include a detailed explanation of the delay and an estimated date for submittal of the Final Report.
- 1. Final occurrence reports shall be reviewed and approved or rejected within 10 calendar days of receipt by the Facility Representative and forwarded to the Program Manager for approval or if the Final Report is not approved, returned to the Facility Manager with a written explanation.

- m. Final occurrence reports shall be reviewed and approved or rejected within 14 calendar days of receipt by the Program Manager. If the Final Report is not approved, it shall be returned to the Facility Manager with a written explanation.
- n. If the Final Report was rejected by either the Facility Representative or Program Manager, a revised Final Report shall be prepared and submitted within 21 calendar days of disapproval.
- 5. <u>RESPONSIBILITIES</u>. Specific organizational responsibilities are contained in DOE M 232.1-1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, and include:
  - a. <u>Assistant Secretary for Environment, Safety and Health (EH-1)</u>. Establish and maintain policies and guidance material for the Occurrence Reporting Program and assess implementation of this Order to identify needed improvements, especially as related to the Environment, Safety and Health functional areas of responsibility.
  - b. <u>Secretarial Officers</u>. Delegate responsibilities and authority for implementing this Order; review and approve the Facility/Site Implementation Procedure; ensure that the requirements in the CRD for this Order are applied to applicable contracts within 3 months after approval of this Order, establish agreements with Heads of Field Elements; review Occurrence Reports for indications of deteriorating or poor performance; and if deemed necessary, formally request the Secretary of Energy to grant an exemption to the reporting requirements of this Order, after obtaining concurrence from the Office of Environment, Safety and Health.
  - c. <u>Director, Office of Emergency Management (NN-60</u>). Ensure that the Emergency Operations Center is prepared to receive and record incoming initial notifications of Unusual Occurrences and disseminate these reports to appropriate Headquarters organizations.
  - d. <u>Heads of Field Elements.</u> Ensure that the requirements in the CRD for this Order are applied to applicable contracts within 3 months after approval of this Order, ensure that agreements are established with responsible Secretarial Officers for the purpose of carrying out the requirements of this Order, assess the contractor's capability and performance in carrying out the requirements of this Order, provide technical support as necessary to Facility Representatives in responding to any reportable occurrence, and designate and direct Facility Representatives and Designees to fulfill the responsibilities required by this Order.

- e. <u>Program Managers.</u> For facilities under their cognizance, review activities relating to occurrence reporting to ensure that facility personnel implement a program compatible with this Order and that lessons learned and generic or programmatic implications are identified and elevated to the Secretarial Officer for appropriate action.
- f. <u>Facility Representatives.</u> For facilities under their cognizance, monitor day-to-day operations and performance to ensure that facility personnel implement a program compatible with this Order and that lessons learned and generic or programmatic implications are identified and elevated to the Head of the Field Element for appropriate action.
- g. <u>Facility Manager</u>. For the facility under their cognizance, implement a program for the timely identification, categorization, response, notification, investigation, and reporting of abnormal conditions and events. Ensure that occurrences resulting from activities performed by subcontractors in support of facility operation are reported in accordance with the provisions of this order.
- 6. <u>CONTACT</u>. The contact for this Order is Eugenia Boyle, Office of Nuclear and Facility Safety (EH-3), at Internet address Eugenia.Boyle@EH.DOE.GOV or (301) 903-3393.
- BY ORDER OF THE SECRETARY OF ENERGY:



ARCHER L. DURHAM Assistant Secretary for Human Resources and Administration DOE O 232.1A 07-21-97

#### CONTRACTOR REQUIREMENTS DOCUMENT

Occurrence Reporting and Processing of Operations Information

In accordance with DOE M 232.1-1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, the contractor shall establish an Occurrence Reporting Program. This facility-specific Occurrence Reporting Program shall be developed and implemented for the timely identification, categorization, notification, and reporting of operations information related to DOE-owned and -leased facilities and for the processing of that information to identify the root cause, provide for appropriate corrective actions, and prevent similar occurrences through the identification of good practices and lessons learned.

In support of this requirement, the contractor shall develop or revise implementing procedures for the responsible DOE Secretarial Office approval within 4 months of incorporation of the requirements in the CRD into a new or existing contract. Implementation procedures submitted by the contractor or facility operator shall be considered automatically approved 2 months after submittal, if they are not deliberately approved or rejected by the responsible DOE Secretarial Office.