

# DIRECTIVES CONTROL FORM - ORO FINAL DIRECTIVE

---

## PART A (To be completed by the Division of Primary Interest (DPI))

1. **NUMBER AND TITLE OF DIRECTIVE:** ORO O 220, Chapter X, Change 1, ACCIDENT INVESTIGATIONS
2. **PURPOSE OF TRANSMITTAL:**  New Directive  Revised Directive
3. **THIS DOCUMENT MAY AFFECT THE WORK PERFORMED BY THE FOLLOWING CONTRACTORS:** (Check appropriate boxes)
- No (all contractors)
- Yes If yes, whom?  Bechtel Jacobs Co.  BWXT Y-12  ORAU  UT-Battelle  SURA
- Other contractors (list by type)

*Many ORO contractors have approved S/RIDs or WSS sets that may affect applicability of contractor requirements from this directive. Applicability of contractor requirements must take into account the approved standards set for each particular contract.*

4. **SIGNIFICANT PROVISIONS:** Are there any significant changes or impact?
- No  Yes If yes, describe: This ORO chapter is part of the ORO sunset review process. Changes to this chapter include revisions to (1) update name of Technical Support Division to Assessment and Emergency Management Division, and (2) add paragraph 4c(6) and delete paragraph 4g(1).
5. **CONTACT POINT:** Jenny Mullins Assessment & Emergency Management Division, SE-32 576-0386  
Name Organization Telephone

---

## PART B (To be completed by the Directives Management Group (DMG)):

6. **FILING INSTRUCTIONS:**
- | <u>Remove</u>                               | <u>Dated</u> | <u>Insert</u>                                       | <u>Dated</u> |
|---|--------------|---|--------------|
| ORO Control Form                            | 07/06/2000   | ORO Control Form                                    | 11/04/2002   |
| ORO O 220, Chapter X,<br>Pages X-1 thru X-7 | 07/06/2000   | ORO O 220, Chapter X,<br>Chg. 1, Pages X-1 thru X-6 | 11/04/2002   |

*ORO Directives are available on the ORO Directives Management Home Page at [http://www.ornl.gov/doe\\_oro\\_dmg/oro\\_dir.htm](http://www.ornl.gov/doe_oro_dmg/oro_dir.htm). The ORO Directives will no longer be mailed in printed copy unless you do not have Internet capabilities.*

7. **APPROVED FOR DISTRIBUTION IN ACCORDANCE WITH THE OFFICIAL DIRECTIVES DISTRIBUTION LIST:**

*Original Signed By*  
Wayne H. Albaugh 11/04/2002  
Signature: DMG Team Leader, AD-440 Date

---

**INSTRUCTIONS TO ADDRESSEES: THIS FORM IS TO BE FILED WITH THE DIRECTIVE AND RETAINED**

Rev. 01/30/2002

# U.S. Department of Energy

Oak Ridge Operations

ORO O 220  
Chapter X  
Change 1

**Date: 11/04/2002**

## **SUBJECT: ACCIDENT INVESTIGATIONS**

---

1. PURPOSE. This chapter correlates to DOE O 225.1A, ACCIDENT INVESTIGATIONS, dated November 26, 1997, by assigning responsibility and accountability and providing administrative guidance to the Oak Ridge Operations Office (ORO) and its contractors. Nothing in this issuance changes any requirements contained in any Department of Energy (DOE) directive.
2. CANCELLATION. This chapter cancels and replaces ORO O 220, Chapter X, ACCIDENT INVESTIGATIONS, dated July 6, 2000.
3. APPLICABILITY. The provisions of this chapter apply to ORO Principal Staff. Although the Contractor Requirements Document (CRD) attached to DOE O 225.1A is applicable to contractors to the extent set forth in their contract, no additional contractor requirements are imposed in this chapter.
4. RESPONSIBILITIES. Many ORO contractors have developed Standards/Requirements Identification Documents (S/RIDs) or Work Smart Standards (WSS) sets that may not include requirements referenced or included in DOE O 225.1A or this chapter. Interpretation and performance of Federal responsibilities outlined below must take into account the approved standards set for each particular contract and must not be deemed to add any requirements to the approved set.
  - a. Manager:
    - (1) Categorizes incidents to determine if the occurrence meets Type A or B requirements, as outlined in DOE O 225.1A, and notifies the Assistant Secretary for Environment, Safety and Health.
    - (2) Provides Accident Investigation Board members (including trained investigators and trained Board Chairperson) for formal accident investigations locally or for investigations at other Operations Offices as requested by DOE Headquarters (HQ).
    - (3) Determines the level of investigation for those accidents/incidents which do not meet Type A or B requirements per DOE O 225.1A.
    - (4) Requests concurrence from DOE HQ when waivers to Type A or B investigations are deemed appropriate.

- (5) Appoints, within three calendar days of the categorization of the incident, the local Type B Accident Investigation Board following guidelines outlined in DOE O 225.1A and issues an appointment letter defining the scope of the investigation, including limitations. Briefs all Board members to ensure they clearly understand their roles and responsibilities (if impractical to brief entire Board, then Chairperson will be briefed and he will convey the information to Board members). Recommends Board members to the Assistant Secretary for Environment, Safety and Health, DOE HQ, for incidents that meet Type A requirements. DOE HQ will formally appoint the Type A Board.
  - (6) Resolves any concerns/issues raised by a Type A or B Accident Investigation Board Chairperson.
  - (7) Reviews the draft Type A or B Accident Investigation Report and ensures all parties have reviewed that report for factual accuracy.
  - (8) Accepts, by signature, the Type B Investigation Board report and transmits as outlined in DOE O 225.1A. Type A Investigation Board reports are reviewed for accuracy and forwarded to DOE HQ Appointing Official for signature acceptance.
  - (9) Develops lessons learned from the accident investigation and disseminates DOE-wide.
  - (10) Provides DOE HQ with a corrective action plan on investigation judgments of need and notifies DOE HQ when it is reported and verified by the Contracting Officer's Representative (COR) that all corrective actions have been completed.
- b. Assistant Manager for Environment, Safety, Health and Emergency Management (AMESH):
- (1) Advises the Manager on occurrences requiring a Type A or B investigation and assists in determining the level of investigation on other accidents/incidents not meeting the criteria for a Type A or B investigation as defined in DOE O 225.1A.
  - (2) Advises the Manager when waivers to Type A or B investigation requirements are appropriate.
  - (3) Recommends nominees to the Manager to serve as Board Chairperson, trained investigator, and members of the Board.
  - (4) Ensures that an Accident Investigation Point-of-Contact and Alternate are appointed to coordinate all aspects of the Accident Investigation Program.
  - (5) Ensures that Investigation Boards receive the necessary logistical and administrative support.
  - (6) Ensures that an adequate number of AMESH technical staff are trained in accident investigation and analytical techniques to support requests for Board members.
  - (7) Ensures that appropriate staff reviews the draft accident investigation report and applicable comments are resolved with the Board Chairperson.

- (8) Ensures that the accident/incident requirements of DOE O 225.1A are implemented for both the contractor and Federal organizations.

c. Director, Assessment and Emergency Management Division (AEMD):

- (1) Coordinates the accident investigation process to provide continuity within ORO.
  - (a) Prepares correspondence for the Manager appointing Type B investigation boards delineating the level and scope of the investigation to the members of the board and the affected contractor.
  - (b) Prepares correspondence to DOE HQ requesting concurrence when waivers to Type A or B investigation requirements are deemed appropriate by ORO.
  - (c) Prepares correspondence for the Manager's signature to the appropriate contractor transmitting the Type B Board's findings and requesting a corrective action plan within sixty (60) days.
  - (d) Prepares correspondence for the Manager's signature transmitting the Type B report to DOE HQ, providing copies to all offices designated in DOE O 225.1A. Ensures that a statement is included in the transmittal which indicates that ORO evaluated the report and resolved comments with the Board. Disseminates the report as lessons learned to other Operations Offices, ORO contractors, and others as applicable.
  - (e) Prepares correspondence for the Manager's signature to DOE HQ Secretarial Officers= for approval of the corrective action plan when received from the COR.
  - (f) Prepares correspondence to DOE HQ requesting closure of the investigation report when the COR advises that all actions have been verified complete.
- (2) Performs those tasks identified in DOE O 225.1A, paragraph 5c(2), (9) and (11).
- (3) Maintains an accident investigation kit for use by the Board. The kit will contain flow charts, procedures, manuals and other appropriate investigative tools as recommended by DOE HQ.
- (4) Appoints the Accident Investigation Point-of-Contact and Alternate to coordinate the Program and maintain interface with DOE HQ.
- (5) Assists the Manager, AMESH, and COR in determining the appropriate level of investigation.
- (6) Maintains a list of all DOE-trained accident investigators.
- (7) Attends briefing presented to Manager concerning the investigation board's findings.
- (8) Maintains official files on accident investigation.

- (9) Retires board backup files when provided by the Board Chairperson.
  - (10) Maintains computer log of all accident investigations.
  - (11) Responds to Freedom of Information Act requests regarding contractor and/or Federal accident experience when requested by the Office of Chief Counsel.
  - (12) Ensures lessons learned from board investigations are developed and transmitted to ORO personnel, contractors, other Operations Offices, and DOE HQ as appropriate.
- d. Director, Procurement and Contracts Division, ensures that DOE O 225.1A is incorporated into contracts in accordance with DOE O 225.1A, paragraph 5c(2).
- e. Contracting Officer=s Representatives (COR):
- (1) Perform that task identified in DOE O 225.1A, 5c(1).
  - (2) Ensure that the contractors under their jurisdiction are informed of and fully comply with the provisions of DOE O 225.1A and this chapter to the extent set forth in their contract.
  - (3) Notify the Manager of any occurrence that meets accident investigation requirements and assists in determining the level of investigation for accidents/incidents not specifically covered in DOE O 225.1A.
  - (4) Ensure that the contractor takes immediate corrective action, if necessary, to ensure worker safety and health after an incident.
  - (5) Advise the Manager on nominees to serve as Board Chairperson, trained investigator, and members of the Board.
  - (6) Ensure that the contractor, except for necessary emergency actions, preserves the scene of any occurrence requiring or possibly requiring a DOE HQ or ORO board investigation. Normal operations would resume after the investigation board concurrence.
  - (7) Ensure that the contractor establish and maintain accident investigation readiness capability (to include training employees as outlined in DOE O 225.1A).
  - (8) Ensure that the investigation board is provided onsite assistance (logistical and administrative) as needed and request the contractor provide a point-of-contact to act as liaison.
  - (9) Ensure that appropriate staff review the draft accident investigation report and resolve applicable comments with the Board Chairperson.
  - (10) Attend briefings presented to the Manager concerning results of the Board's investigation.
  - (11) Ensure a system is in place to track closure of all corrective actions from Type A and B accident investigation reports. Approve and transmit corrective action plans to the AEMD for transmittal to DOE HQ. Biannual status reports of investigation corrective

actions must be submitted to AEMD by January 15 and July 15 each year for consolidation and transmittal to DOE HQ.

- (12) Follow corrective action status until all actions are verified as being completed, providing copies to the AEMD of all correspondence generated.
  - (13) Ensure that an adequate number of staff are trained accident investigators to support requests for Board members and/or act as liaison for investigations at their respective facility.
- f. The Office of Chief Counsel
- (1) Provides a legal point of contact to serve as liaison and advisor on accident investigation boards.
  - (2) Reviews, comments on, and concurs on draft accident investigation board reports.
- g. Team Leader, Training and Development Group:
- (1) Ensures that appropriate training is requested so as to maintain a high level of trained accident investigators for the ORO.
  - (2) Disseminates notice of training availability to Federal and contractor points of contact. Coordinates nominees for proposed training.
- h. Information Resources Management Division, provides assistance, such as technical editing, reproduction, binding, etc., to accident investigation boards as requested.
- i. Director, Public Affairs Office, directs the preparation and release of public statements concerning the investigation of occurrences, where deemed appropriate. Also determines when congressional distribution of reports is appropriate.
- j. Board Chairperson (Type A or B Accident Investigations):
- (1) Conducts the investigation and prepares the report per guidelines established in DOE O 225.1A.
  - (2) Reports to the Manager (or other appointing official), throughout the investigation, any problems encountered during the conduct of the investigation.
  - (3) Obtains an accident investigation kit from AEMD, if deemed necessary. This kit contains pertinent accident investigation charts and materials as recommended by DOE HQ.
  - (4) Requests technical expertise to aid in the investigation if that expertise is not available on the Board.
  - (5) Notifies AEMD if assistance in obtaining necessary clerical support (this includes technical editing and report binding) is needed.

- (6) Ensures that the report receives a classification review before the draft report is issued.
- (7) Obtains a DOE/ORO technical document number through AEMD.
- (8) Provides a draft copy of the investigation board report to the Manager, AEMD, COR, and others as appropriate for technical review. Briefs ORO management concerning the draft investigation report and conducts additional investigative activities if deemed necessary by the Manager. The Board Chairperson should ensure that the Manager signs the acceptance sheet for the report if no further investigative actions are required.
- (9) Prepares correspondence to the ORO Manager transmitting the final report (ensuring that AEMD is provided at least 30 copies and an electronic version of the report).
- (10) Organizes and boxes the Board's backup files and sends them to the AEMD for retirement.
- (11) Provides to the AEMD any applicable lessons learned from the conduct of the investigation as well as a copy of the final report for appropriate lessons learned dissemination.

5. REQUIREMENTS AND PROCEDURES.

Type A and B Accident Investigation Process

(1) Guidelines

Accident investigations are conducted with the primary purpose of preventing future similar occurrences and discovering any other potential hazards. The intent is not to place blame but to determine through a systematic methodology how responsibilities may be clarified and supported, and errors reduced. The emphasis of DOE accident investigations is discovering all cause-effect relationships from which practical corrective actions can be derived. To provide continuity within the ORO, the AEMD has been delegated overall responsibility for coordination of this program.

(2) Accident Investigation Sequence

For specific information concerning the Oak Ridge accident investigation process, contact the ORO AEMD at (865) 576-0836.

6. REFERENCES. None.
7. DEFINITIONS. None.
8. CONTRACTOR REQUIREMENTS DOCUMENT. None.
9. ATTACHMENTS. None