# **U.S. Department of Energy Orders Self-Study Program**

# **DOE O 231.1B**

ENVIRONMENT, SAFETY, AND HEALTH REPORTING



# DOE O 231.B ENVIRONMENT, SAFETY, AND HEALTH REPORTING FAMILIAR LEVEL

# **OBJECTIVES**

Given the familiar level of this module and the resources listed below, you will be able to answer the following questions:

- 1. What is the purpose of DOE O 231.1B?
- 2. Who must be provided limited access to OSHA Form No. 300?
- 3. What happens to accident records when the contract between DOE and one of its contractors is terminated?
- 4. Under what conditions must a work-related injury be reported to the Chief Health, Safety and Security Officer?
- 5. What is the purpose of the radiological source registry and tracking database?
- 6. Which DOE position is responsible to report total hours worked by DOE employees each quarter to the computerized accident/incident reporting system?
- 7. What are the five pieces of information that DOE O 231.1B requires must be made available to the public, and submitted to the Chief Health, Safety and Security Officer by October 1 of each year for the preceding calendar year?
- 8. What form is used to record all recordable, work-related employee fatalities, injuries, and illnesses?
- 9. If the revised dose record results in a dose exceeding regulatory dose limits, what is the time limit for reporting that revised dose to the radiation exposure monitoring system repository?
- 10. What is the purpose of the radiological source registry and tracking database?

Note: If you think that you can complete the practice at the end of this level without working through the instructional material and/or the examples, complete the practice now. The course manager will check your work. You will need to complete the practice in this level successfully before taking the criterion test.

#### RESOURCES

- 10 CFR 824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations." January 1, 2011.
- 10 CFR 835, "Occupational Radiation Protection." January 1, 2011.
- 10 CFR 835, Appendix E, "Values for Establishing Sealed Radioactive Source Accountability and Radioactive Material Posting and Labeling Requirements." January 1, 2011.
- 10 CFR 835, Subpart M, "Sealed Radioactive Source Control." January 1, 2011.
- 29 CFR 1904.4 "Recording Criteria." July 1, 2010.
- 29 CFR 1904.5, "Determination of Work-Relatedness." July 1, 2010.
- 29 CFR 1904.39, "Reporting Fatalities and Multiple Hospitalization Incidents to OSHA." July 1, 2010.
- 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters." July 1, 2010.
- 29 CFR 1960.70, "Reporting of Serious Accidents, July 1, 2010.
- DOE O 231.1B, Environment, Safety, and Health Reporting. June 27, 2011.
- DOE O 243.1, Records Management Program. February 3, 2006.

# **INTRODUCTION**

The familiar level of this module is divided into two sections. In the first section, we will discuss the purpose of DOE O 231.1B, the general requirements, and the responsibilities associated with the Order. In the second section, we will discuss the requirements included in the five attachments to the Order. We have provided examples and a practice to help familiarize you with the material. The practice will also help prepare you for the criterion test.

Before continuing, you should obtain a copy of all the resources listed for this module. Copies of the Orders are available at <u>https://www.directives.doe.gov/</u> or through the course manager. Spend some time reviewing the documents so that you are familiar with the sections each contains. You will need to refer to these documents to complete the examples, practice, and criterion test.

#### SECTION 1, DOE O 231.1B, ENVIRONMENT, SAFETY, AND HEALTH REPORTING

#### Purpose

To ensure the DOE receives timely and accurate information about events that have affected or could adversely affect the health, safety, and security of the public or workers, the environment, the operations of DOE facilities, or the credibility of the Department. This will be accomplished through timely collection, reporting, analysis, and dissemination of data pertaining to environment, safety, and health issues as required by law, or regulations, or in support of United States political commitments to the International Atomic Energy Agency (IAEA).

#### **Requirements**

Reports that potentially contain classified or controlled unclassified information must be reviewed and marked in accordance with appropriate directives. If a report includes classified information, it must be contained in a separate classified addendum and an unclassified version of the report must be developed and annotated to indicate the existence, identification, and file location of the classified addendum. Reports must be submitted as follows:

- Reporting annual site environmental information (ASER). Annual site environmental information must be reported in accordance with attachment 2, Reporting Annual Site Environmental Information.
- Reporting occupational safety and health information:
  - Injury and illness recordkeeping and reporting:
    - Work-related fatalities, injuries, and illnesses occurring to Federal employees must be recorded, reported and maintained in accordance with the requirements contained in the current version of 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters," and the requirements in attachment 3, Reporting Occupational Safety and Health Information.
    - A work-related incident that involves a fatality or hospitalization of three or more Federal employees must be reported to the Chief Health, Safety and Security Officer according to 29 CFR 1960.70, "Reporting of Serious Accidents," and 29 CFR 1904.39, "Reporting Fatalities and Multiple Hospitalization Incidents to

OSHA." The designated Federal employees occupational safety and health program manager for each headquarters element must report incidents involving their Federal employees and Federal employees of DOE field elements under their cognizance to the Chief Health, Safety and Security Officer.

- Annual submission of fire protection information. Fire protection information must be reported in accordance with attachment 3.
- Reporting ionizing radiation exposure information. Ionizing radiation exposure information must be reported in accordance with attachment 4, Reporting Ionizing Radiation Exposure Information.
- Reporting safety basis information. The status of the safety basis of hazard category 1, 2 and 3 nuclear facilities must be maintained up-to-date in the safety basis information system (SBIS).
- Reporting of radioactive sealed sources information:
  - The radiological source registry and tracking (RSRT) database serves as DOE's centralized repository for inventory and transaction data to provide reports and information on radioactive sealed sources in support of the IAEA code of conduct on the safety and security of radioactive sources and IAEA guidance on the import and export of radioactive sources, and the Nuclear Regulatory Commission (NRC) national source tracking system (NSTS).
  - Transaction data must be reported from the DOE RSRT database to the NRC NSTS for transactions involving IAEA category 1 and 2 radioactive sealed sources between DOE and the commercial sector, and DOE imports and exports of radioactive sealed sources.
  - IAEA category 1 and 2 transaction data must be reconciled annually between the DOE RSRT and the NRC NSTS.
  - Inventory and transaction information for radioactive sealed sources must be reported to the DOE RSRT in accordance with attachment 5, Reporting of Radioactive Sealed Sources Information.

# Responsibilities

Heads of Headquarters Elements

- Identify contracts to which attachment 1, Contractor Requirements Document, should apply and notify the cognizant contracting officers, as applicable.
- Ensure integrated ASERs that characterize environmental management performance for assigned sites are prepared and submitted to the Chief Health, Safety and Security Officer.
- Provide program direction to ensure DOE and its contractors implement the injury and illness recordkeeping and meet reporting requirements of DOE O 231.1B, to include the use of common definitions, consistent recording procedures, and timely reporting.
- Report work-related accidents that involve a fatality or the hospitalization of three or more Federal employees to the Chief Health, Safety and Security Officer.

- Notify the Chief Health, Safety and Security Officer of suspected excess illnesses that may require epidemiologic investigations to determine whether the illnesses are workrelated.
- Submit annual fire protection information to the head of the DOE organization if responsible for maintaining property under the stewardship of DOE, including the Administrator, NNSA.
- Ensure that reports of occupational radiation exposures to individuals are prepared and reported.
- Ensure that new and revised radiation exposure records are reported to the radiation exposure monitoring system (REMS) repository.
- Ensure that the status of the safety basis for hazard category 1, 2 and 3 nuclear facilities is maintained and up-to-date in the SBIS.
- Ensure that programs for radioactive sealed source inventory and transaction reporting and verification and reconciliation of radioactive sealed sources under their cognizance are established, maintained, evaluated and implemented in accordance with DOE O 231.1B, departmental policies, and laws.
- Coordinate with the Office of Nonproliferation and International Security on obtaining and recording authorizations for the import and export of category 1 and 2 radioactive sealed sources.
- Ensure that classified data or information that would divulge a classified program is not reported to RSRT, which will be maintained as an official use only (OUO) information /controlled unclassified information (CUI) system.

Heads of DOE Field Elements

- Identify contracts to which attachment 1 should apply and notify the cognizant contracting officers.
- Ensure integrated ASERs that characterize environmental management performance for assigned sites are prepared and submitted to the Chief Health, Safety and Security Officer.
- Report total hours worked by DOE employees each quarter to the computerized accident/incident reporting system (CAIRS) database.
- Submit annual fire protection information to the head of the DOE organization if responsible for maintaining property under the stewardship of DOE.
- Ensure that reports of occupational radiation exposures to individuals are prepared and reported.
- Ensure that new and revised radiation exposure records are reported to the REMS repository.
- Ensure that the status of the safety basis for hazard category 1, 2 and 3 nuclear facilities is maintained and up-to-date in the SBIS.
- Ensure the inventory and inventory verification of all accountable radioactive sealed sources that meet the criteria that have been identified for disposal but not yet disposed, and radioisotope thermoelectric generators (RTGs), that are under their cognizance are reported to the DOE RSRT in a timely and uniform manner.

- Ensure transaction reporting and reconciliation of IAEA category 1 and 2 radioactive sealed sources identified in appendix A of attachment 5 of DOE O 231.1B under their cognizance are reported to the DOE RSRT in accordance with DOE O 231.1B, including attachment 5.
- Ensure that performance assurance systems are developed, maintained and evaluated to ensure data integrity and quality assurance in accordance with DOE information technology standards.
- Coordinate with the Office of Nonproliferation and International Security on obtaining and recording authorizations for the import and export of category 1 and 2 radioactive sealed sources.
- Ensure that classified data or information that would divulge a classified program is not reported to RSRT, which is maintained as an OUO /CUI system.

Note: You do not have to do example 1 on the following page, but it is a good time to check your skill and knowledge of the information covered. You may do example 1 or go to section 2.

#### **EXAMPLE 1**

Using the familiar level of this module and the resources, answer the following questions.

1. What is the purpose of DOE O 231.1B?

2. What are three types of information that must be reported according to DOE O 231.1B?

3. What DOE position is responsible for reporting the total hours worked by DOE employees to the CAIRS?

Note: When you are finished, compare your answers to those contained in the example 1 self-check. When you are satisfied with your answers, go to section 2.

#### **EXAMPLE 1 SELF-CHECK**

1. What is the purpose of DOE O 231.1?

To ensure the DOE receives timely and accurate information about events that have affected or could adversely affect the health, safety, and security of the public or workers, the environment, the operations of DOE facilities, or the credibility of the Department. This will be accomplished through timely collection, reporting, analysis, and dissemination of data pertaining to environment, safety, and health issues as required by law, or regulations, or in support of United States political commitments to the IAEA.

2. What are three types of information that must be reported according to DOE O 231.1B? **Note**: Any three of the following comprise a complete answer.

Three types of information that must be reported according to DOE O 231.1B are:

- Annual site environmental information
- Occupational safety and health information
- Annual submission of fire protection information
- Safety basis information
- Radioactive sealed sources information
- 3. What DOE position is responsible for reporting the total hours worked by DOE employees to the CAIRS? Head of DOE field element

# **SECTION 2, ATTACHMENTS**

This section will address the attachments contained in DOE O 231.1B. The following five attachments are summarized below:

- Attachment 1—Contractor Requirements Document
- Attachment 2—Reporting Annual Site Environmental Information
- Attachment 3—Reporting Occupational Safety and Health Information
- Attachment 4—Reporting Ionizing Radiation Exposure Information
- Attachment 5—Reporting Radioactive Sealed Source Information

# **Attachment 1, Contractor Requirements Document**

The information is this part only includes requirements in DOE O 231.1B that are unique to the contractor. Requirements in the main body of the Order will not be repeated here, but it should be understood that the contractor is required to comply with all of the requirements in DOE O 231.1B and its five attachments.

Reporting Occupational Safety and Health Information

- Contractors must ensure that work-related fatalities, injuries, and illnesses that occur to their employees and subcontractor employees are recorded and reported accurately. This requirement excludes transient and small employer subcontractors. A transient subcontractor does not maintain an onsite office, does not receive direction/oversight from DOE or a DOE contractor, and their work is limited to transient activities. A small employer subcontractor employs less than 10 employees at a DOE site either directly or through sub-tiered contracts.
- A contractor with an expiring or terminated contract must transfer all occupational safety and health records involving work performed for DOE to the assuming contractor or DOE facilities management. The assuming contractor must accept and maintain these records as part of performing occupational safety and health responsibilities and in accordance with attachment 3 of DOE O 231.1B.
- Contractors must ensure separate recording and reporting of all recordable injuries and illnesses occurring to subcontractor employees for each subcontractor organization unless consolidation of data is approved by the CAIRS point of contact (POC) for the head of the headquarters element or their designated CAIRS POC at the DOE field organization.

Reporting of Radioactive Sealed Sources Information

- Contractors who own, possess, use, or maintain in custody those radioactive sealed sources that meet the criteria of 10 CFR 835, "Occupational Radiation Protection," that have been identified for disposal but not yet disposed and radioisotope thermoelectric generators are responsible for complying with the inventory reporting requirements in attachment 5 of DOE O 231.1B.
- A violation of the provisions of attachment 1 relating to the safeguarding or security of restricted data or other classified information may result in a civil penalty pursuant to the Atomic Energy Act of 1954. The procedures for the assessment of civil penalties are set

forth in 10 CFR 824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations."

# Attachment 2, Reporting Annual Site Environmental Information

The following information must be made available to the public, and submitted to the Chief Health, Safety and Security Officer by October 1 of each year for the preceding calendar year, developed in accordance with the most recent applicable guidance provided by the Chief, Health Safety and Security Officer and as directed by the head of headquarters element or head of DOE field element, and support partial or full preparation of the ASER:

- Site environmental management performance
- Environmental occurrences and responses
- Environmental compliance
- Significant programs and efforts
- Property clearance activities

# Attachment 3, Reporting Occupational Safety and Health Information

Injury and Illness Recordkeeping and Reporting

Occupational safety and health reports must be complete and readily available for authorized dissemination outside the cleared community.

All recordable, work-related employee fatalities, injuries, and illnesses must be recorded on Occupational Safety and Health Administration (OSHA) Form No. 300, Log of Work-Related Injuries and Illnesses.

An annual summary of the information contained on OSHA Form No. 300 must be compiled, certified, posted and updated using OSHA Form No. 300A, Summary of Work-Related Injuries and Illnesses.

Injury and illness incident reports must also be submitted electronically using the CAIRS individual accident/incident report format. New reports must be submitted for receipt on or before the 15th and the last working day of the month. Initial reports must include the actual number of days away, restricted or transferred (DART) as of the date of the report. Updates to the number of DART or other information previously reported for each case must be submitted quarterly until the case is closed or until the number of DART exceeds 180 days. Quarterly revisions to DART or revisions to other previously-reported information must be submitted for receipt by the 10th of the month following the end of the calendar quarter.

DOE Form 5484.4, Tabulation of Work Hours, must be used to report total work-hours for all employees. Total work-hours must be submitted electronically on a quarterly basis to CAIRS by the 10th of the month following the end of each quarter.

Documented quality checks of injury and illness information reported to DOE through CAIRS must be conducted at least quarterly to ensure information is thorough, accurate, and consistent with information contained in local records.

Occupational injury and illness information must be analyzed to identify adverse trends and lessons learned and develop corrective actions that prevent recurrence.

Discrepancies identified by DOE during periodic assessments or by other reviews of work-related injury and illness records must be corrected as directed by the DOE reviewing organization.

Individuals assigned occupational injury and illness recording and reporting responsibilities must be trained to accomplish assigned recording and reporting responsibilities.

Clarifications of DOE occupational injury and illness recordkeeping and reporting requirements must be issued only by the Office of Environmental Protection, Sustainability Support and Corporate Safety Analysis.

Injury and Illness Records Retention and Accessibility Injury and illness records must be retained pursuant to DOE O 243.1, *Records Management Program*, and DOE Administrative Records Schedule 1: Personnel Records, September 2010, Occupational Injury and Illness Files, N1-434-98-4, item 34.

Access to personal injury/illness records is subject to the Privacy Act and the Freedom of Information Act requirements and restrictions. Access to information on any OSHA Form No. 300 must be restricted to information that does not constitute an unwarranted invasion of personal privacy. An employee whose name does not appear on a OSHA Form No. 300 must be limited to accessing information that does not identify any injured or ill employees, and must not be provided access to the names of the injured or ill employees.

Employees, former employees, and/or their representatives must be provided limited access to the OSHA Form No. 300 or a copy of the individual accident incident report that contains the employee's name.

Records listed in 29 CFR 1904.4 "Recording Criteria," and 29 CFR 1904.5 "Determination of Work-Relatedness," must be made available for inspection and copying by any DOE representative for the purpose of conducting oversight assessments or for statistical compilation.

#### Annual Fire Protection Summary Information

A summary of fire protection information for the preceding year must be submitted to the fire protection database by April 30 in accordance with the annual fire protection summary information reporting guide.

#### **Attachment 4, Reporting Ionizing Radiation Exposure Information**

Annual Individual Radiation Exposure Records

Annual radiation exposure records for the preceding monitoring year must be reported to the REMS repository by March 31. The records must include exposure records for special individuals.

Revisions to radiation exposure records for monitoring periods beginning on or after January 1, 1989, must be reported to the REMS repository. Revised records for prior monitoring years must be submitted annually by March 31. However, if the revised dose record results in a dose exceeding regulatory dose limits, revised records must be submitted within 30 days of the revision to the dose record. Revised records must be submitted to the REMS repository in a separate file in the same format as annual records. The transmittal documentation must identify the enclosed records as revised records.

#### Radiation Exposure Records for Special Individuals

Radiation exposure data pertaining to special individuals, which includes individuals employed by DOE headquarters, a contractor supporting DOE headquarters or field office activities, a Defense Nuclear Facilities Safety Board employee or contractor, or an IAEA inspector who visits a DOE or DOE contractor site or facility to conduct Department-related business, must be reported to the REMS repository simultaneous with dispatch of reports to individuals, within 30 days after the assessment of the radiation exposure.

Each employee or special individual who is acting in an official capacity at a non-DOE facility and is monitored for occupational radiation exposure must provide the monitoring results to their employer within 30 days of receipt. Employers must instruct individuals of this responsibility prior to directing individuals to conduct such activities at a non-DOE facility.

Procedures to effectively support the collection of dosimetry records in support of this requirement must be verified on a regular basis.

#### **Report Format**

All occupational radiation exposure reports of records collected and sent to the REMS repository must be prepared in accordance with the REMS reporting guide and submitted in electronic format in accordance with the current policy for submitting personally annual individual radiation exposure records.

#### **Attachment 5, Reporting Radioactive Sealed Source Information**

#### Planning and Administration

DOE will maintain a centralized reporting capability, the RSRT database, which serves as DOE's centralized repository for inventory and transaction data on radioactive sealed sources and is used by DOE to provide appropriate data on IAEA category 1 and 2 radioactive sealed sources to the NRC NSTS.

Accountable radioactive sealed sources that meet the criteria of 10 CFR 835, subpart M, "Sealed

Radioactive Source Control," and appendix E, "Values for Establishing Sealed Radioactive Source Accountability and Radioactive Material Posting and Labeling Requirements," including sources that meet the criteria of 10 CFR 835, appendix E that have been identified for disposal but not yet disposed and RTGs, must be reported as inventory to the DOE RSRT database per the requirements of this directive.

In addition, radioactive sealed sources that meet the criteria of IAEA category 1 or 2 radioactive sealed sources must be reported as transactions to the RSRT.

All site/facility operators using or storing radioactive sealed sources must perform the following:

- Maintain radioactive materials programs that ensure the accountability of radioactive sealed sources identified in DOE O 231.1B.
- Ensure that site and facility radioactive sealed source accounting systems are established to provide accurate radioactive sealed source transaction information relating to the manufacture, transfer, receipt, inventory, disassembly, and disposal of category 1 and 2 radioactive sealed sources.
- Ensure that aggregation of individual radioactive sealed sources is taken into account in the protection during transfer.
- Ensure that classified data or information that would divulge a classified program is not reported to DOE RSRT, which is maintained as OUO/CUI.

#### **General Requirements**

Information regarding specific radioactive sealed sources will remain on the active DOE RSRT inventory until transferred, disassembled, or disposed of from the DOE site.

Radioisotope decay will be taken into account in the transaction reporting of category 1 and 2 radioactive sealed sources.

For category 1 and 2 radioactive sealed sources, any missed transaction or errors found in previously filed inventory or transaction reports will be corrected or a new report will be filed within five business days of the discovery of the error or missed transaction.

Serialization of IAEA Category 1 and 2 Radioactive Sealed Sources A unique alpha-numeric serial number must be assigned to each category 1 or 2 radioactive sealed source upon manufacture.

If a unique serial number is not available for existing category 1 or 2 sealed sources, other information to uniquely identify the source must be used.

Baseline Inventory of Accountable Radioactive Sealed Sources

Each DOE site/facility operator that possesses accountable radioactive sealed sources that meet the criteria of 10 CFR 835, subpart M and appendix E, including sources that meet the criteria of 10 CFR 835 appendix E that have been identified for disposal but not yet disposed and RTGs, must report its initial inventory, if initial inventory was not already reported with baseline inventory in

2008, or verify previously reported inventory to the RSRT.

The information may be submitted by using any of the methods identified in DOE O 231.1B.

If multiple isotopes are in an individual source, a record for each isotope must be submitted.

The baseline inventory must include the data fields as identified in DOE O 231.1B, attachment 5, appendix B.

Verification of Book Inventory Records

The book inventory of radioactive sealed sources must be verified annually against the site/facility operator's listing in the RSRT.

The book inventory verification may be satisfied at each DOE site in conjunction with existing inventory requirements under 10 CFR 835.

Transaction Reporting to the RSRT of IAEA Category 1 and 2 Radioactive Sealed Sources A sealed source transaction report must be completed and submitted to the RSRT database for IAEA categories 1 and 2 solid radioactive sealed sources for each of the following types of transactions:

- Manufacture
- Transfer
- Receipt
- Disassembly
- Disposal

For shipments, disassembly and disposal, it is assumed that the baseline information for the sources has already been reported to the RSRT database.

For each DOE site/facility operator that manufactures ships, receives, disassembles, or disposes of a category 1 or 2 radioactive sealed sources, the transaction report must include the data fields as specified in DOE O 231.1B, attachment 5, appendix B.

The transaction reports must be submitted to the RSRT within five business days after the transaction.

The reports must be submitted to the RSRT by using one of the following modes, in accordance with site and DOE data transmission requirements for the protection of the information:

- The on-line system at such time as established and available to the DOE sites
- Electronic format, pre-defined, computer-readable format
- Facsimile or e-mail using a pre-defined format

Annual Reconciliation of Category 1 and 2 Radioactive Sealed Source Information Each DOE site/facility operator must reconcile and verify categories 1 and 2 radioactive sealed source physical inventories annually against the site/facility operator's data in the DOE RSRT.

Modifications made to the RSRT inventory must be submitted as transactions via the reports or as inventory correction as defined below:

- Inventory corrections for category 1 or 2 radioactive sealed sources will be made within five business days of the discovery of the error or missed inventory.
- Reconciliation and verification must be based on December 31 inventories and submitted to the RSRT within 3 weeks after the end of the calendar year.

Verification of Authorities for Receipt of Accountable Radioactive Sealed Sources Accountable radioactive sealed sources must not be transferred from a DOE organization or from a DOE contractor except as authorized.

An accountable radioactive sealed source may be transferred

- to another authorized DOE organization or DOE contractor;
- to the agency in any NRC agreement state, which regulates radioactive material pursuant to an agreement under the Atomic Energy Act of 1954;
- to any person authorized to receive such radioactive material under terms of a specific license or a general license or their equivalents issued by the NRC or an agreement state;
- to a person abroad pursuant to an export license issued under departmental requirements or NRC regulations as applicable; or
- as otherwise authorized by the Department in writing.

Before transferring an accountable radioactive sealed source to a DOE organization or contractor, a specific licensee of the NRC or an agreement state, or a general licensee who is required to register with the NRC or with an agreement state prior to receipt of the material, the transferor of the material will obtain written verification that the transferee's DOE approved radiation protection program or license encompasses or authorizes the receipt of the type, form, and quantity of material to be transferred. Verification methods include the following:

- Current copy of the transferee's specific license or registration certificate, or DOE authorization.
- The transferor may obtain other sources of information compiled by a reporting service from official records of the NRC, the licensing agency of an agreement state, or the Department.

Note: You do not have to do example 2 on the following page, but it is a good time to check your skill and knowledge of the information covered. You may do the example 2 or go directly to the practice.

# **EXAMPLE 2**

1. What is the document that must be completed to record occupational and work-related injuries and illnesses?

2. What is the criterion that determines a small employer subcontractor?

3. When must a summary of fire protection information be submitted to the fire protection database?

Note: When you are finished, compare your answers to those contained in the example 3 selfcheck. When you are satisfied with your answers, go on to the practice.

#### **EXAMPLE 2 SELF-CHECK**

- What is the document that must be completed to record occupational and work-related injuries and illnesses?
  Occupational illnesses and injuries are reported on the Log and Summary of Occupation Injuries and Illnesses, OSHA Form 300.
- 2. What is the criterion that determines a small employer subcontractor? A small employer subcontractor employs less than 10 employees at a DOE site either directly or through sub-tiered contracts.
- 3. When must a summary of fire protection information be submitted to the fire protection database?

A summary of fire protection information for the preceding year must be submitted to the fire protection database by April 30.

#### PRACTICE

This practice is required if your proficiency is to be verified at the familiar level. The practice will prepare you for the criterion test. You will need to refer to the resources to answer the questions in the practice correctly. The practice and criterion test will also challenge additional analytical skills that you have acquired in other formal and on-the-job training.

1. What is the purpose of DOE O 231.1B?

2. Who must be provided limited access to OSHA Form No. 300?

3. What happens to safety and health records when the contract between DOE and one of its contractors is terminated?

4. Under what conditions must a work-related injury be reported to the Chief Health, Safety and Security Officer?

5. What is the purpose of the radiological source registry and tracking database?

6. Which DOE position is responsible to report total hours worked by DOE employees each quarter to the computerized accident/incident reporting system?

7. What are the five pieces of information that DOE O 231.1B requires must be made available to the public, and submitted to the Chief Health, Safety and Security Officer by October 1 of each year for the preceding calendar year?

8. What form is used to record all recordable, work-related employee fatalities, injuries, and illnesses?

9. If the revised dose record results in a dose exceeding regulatory dose limits, what is the time limit for reporting that revised dose to the radiation exposure monitoring system repository?

10. What is the purpose of the radiological source registry and tracking database?

Note: The course manager will check your practice and verify your success at the familiar level. When you have successfully completed this practice, go to the general level module.

# DOE O 231.1B ENVIRONMENT, SAFETY, AND HEALTH REPORTING GENERAL LEVEL

# **OBJECTIVES**

Given the familiar level of this module, a scenario, and an analysis, you will be able to answer the following questions.

- 1. What actions you would expect DOE and/or the contractor to take in the situation described in the scenario?
- 2. Which requirements included in the resources apply to the situation described in the scenario?

Note: If you think that you can complete the practice at the end of this level without working through the instructional material and/or the examples, complete the practice now. The course manager will check your work. You will need to complete the practice in this level successfully before taking the criterion test.

#### RESOURCES

DOE Orders Self Study Program, DOE O231.B, familiar level. July 2011.

- 10 CFR 824, "Procedural Rules for the Assessment of Civil Penalties for Classified Information Security Violations." January 1, 2011.
- 10 CFR 835, "Occupational Radiation Protection." January 1, 2011.
- 10 CFR 835, Appendix E, "Values for Establishing Sealed Radioactive Source Accountability and Radioactive Material Posting and Labeling Requirements." January 1, 2011.
- 10 CFR 835, Subpart M, "Sealed Radioactive Source Control." January 1, 2011.
- 29 CFR 1904.4, "Recording Criteria." July 1, 2010.
- 29 CFR 1904.5, "Determination of Work-Relatedness." July 1, 2010.
- 29 CFR 1904.7, "General Recording Criteria." July 1, 2010.
- 29 CFR 1904.39, "Reporting Fatalities and Multiple Hospitalization Incidents to OSHA." July 1, 2010.
- 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters." July 1, 2010.
- 29 CFR 1960.70, "Reporting of Serious Accidents, July 1, 2010.
- DOE O 231.1B, Environment, Safety, and Health Reporting. June 27, 2011.

DOE O 231.1B General Level August 2011

#### **INTRODUCTION**

The familiar level of this module introduced DOE O 231.1B. Several requirements from the resources were discussed. In the general level of this module, students are asked to apply the information contained in the resources to a scenario. The example scenario includes a situation, the actions taken to remedy the situation, and the requirements related to the situation. Students will be asked to review the actions taken and decide if they are correct. Students will also be asked to decide if the correct requirements were cited. Please refer to the resources to make your analysis and answer the questions. You are not required to complete the example. However, doing so will help prepare you for the criterion test.

Note: You do not have to do the example on the following page, but it is a good time to check your skill and knowledge of the information covered. You may do the example or go on to the practice.

#### EXAMPLE SCENARIO

Please review the following scenario, and then answer these questions:

- 1. Is the injury recordable?
- 2. Were the correct DOE documents or requirements cited?

#### Scenario

An employee is copying documents when the copier jams. Upon removing papers from the machine's internal workings, the employee's ring finger contacts the hot drum resulting in a burn. First aid is immediately administered at the site and the injury is classed as a first-aid case because only redness is present at the time of treatment. The following day, the finger is re-examined and no changes to the wound's appearance are detected. However, on the third day a blister has formed where the burn occurred, and medical treatment is given.

#### **Actions Taken**

In this case, the contractor did not take any action because only first aid was applied, and the contractor decided that the incident was not recordable.

#### **Requirements that apply**

#### 29 CFR 1904.7

Burns will be treated just as other types of injury are (i.e., minor burn injuries will not be recordable), while more serious burns will be recorded because they will involve medical treatment. For example, a small second degree burn to the forearm that is treated with nothing more than a bandage is not recordable. A larger or more severe second degree burn that is treated with prescription creams or antibiotics, or results in restricted work, job transfer, or days away from work is recordable. The vast majority of first degree burns and minor second degree burns will not be recorded because they will not meet the recording criteria, including medical treatment. However, more serious first and second degree burns that receive medical treatment will be recorded, and third degree burns should always be recorded because they require medical treatment.

Take some time to review the example scenario and the actions the contractor took or didn't take to correct the situation. Then decide if the contractor's actions were complete and correct. Finally, determine if the requirement cited is correct. Write your answer below and then compare your answer to the one contained in the example self-check.

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# **EXAMPLE SELF-CHECK**

Your answer does not have to match the following exactly. You may have added more corrective actions or cited other requirements from the resources that apply. To be considered correct, you answer must include, at least the following.

The injury is not recordable as it only involves first aid.

The requirement stated is correct.

# PRACTICE

This practice is required if your proficiency is to be verified at the general level. The practice will prepare you for the criterion test. You will need to refer to the resources to answer the questions in the practice correctly. The practice and criterion test will also challenge additional analytical skills that you have acquired in other formal and on-the-job training.

Please review the following scenario and answer the following questions.

- 1. Was the situation handled correctly? If not, what should have been done?
- 2. Was the list of requirements relevant to the resources in this module complete and correct? If not, state the correct or omitted requirements.

#### Scenario

Employees were working to collect scrap metal from various facilities for disposal on May 5, 2011. During this activity a four-wheeled dolly being used to move one assembly became stuck in a small depression in the path of movement. An operator was injured while trying to pry the cart of scrap metal loose with a pick axe. The pick axe handle broke and the employee fell, injuring his left wrist and shoulder. The employee reported the injury on May 11, 2011. On May 12, 2011, health services reported the employee sustained a left wrist fracture and a mild left shoulder strain.

The employer did not consider the injury reportable under OSHA because the employee did not report the injury for six days and did not lose work.

Requirements in DOE O 231.1B do not apply to this scenario as the injury was not reportable. No corrective actions were implemented.

Write your answers to questions 1 and 2 and then bring the completed practice to the course manager for review.

Note: The course manager will check your practice and verify your success at the general level. When you have successfully completed this practice, the course manager will give you the criterion test.