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ABSTRACT

This learning module, which is part of a management and supervisor training program for managers and supervisors employed at the Department of Energy's Waste Isolation Division, is designed to enable trainees to identify regulatory organizations and oversight groups and monitor and provide guidance in the implementation of the requirements of applicable codes, orders, and standards. The first section is an overview of the module. The next nine sections describe the origin, structure, function, and regulatory documents of the following regulatory agencies and oversight groups/advisory committees: Department of Energy; Occupational Safety and Health Administration; Environmental Protection Agency; Department of Transportation; Nuclear Regulatory Commission; New Mexico Environment Department; Mine Safety and Health Administration; Environmental Evaluation Group; and Defense Nuclear Facilities Safety Board. Each section also includes enabling objectives and an employee-manager scenario that is designed to illustrate effective management practices and practices to avoid when dealing with a regulatory agency or oversight body. Concluding the module are a list of actions that can be taken to make a section/plant more effective, 20-item reference list, practice test, and test answers. (MN)

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A. INTRODUCTION

Terminal Objective

Upon completion of this module, the trainee will be able to identify regulatory organizations and oversight groups, and monitor and provide guidance in the implementation of the requirements of applicable codes, orders and standards.

Mastery of the terminal objective will be demonstrated by scoring 80 percent or higher on the module examination.

Although the title of this module is *Regulatory Organizations and Their Requirements*, we have included sections on oversight groups involved with the Waste Isolation Pilot Plant (WIPP). These groups, along with regulatory agencies, have an enormous impact on WIPP's success. Functioning effectively as a supervisor or manager at the Waste Isolation Division (WID) requires an understanding of the roles and requirements of these regulatory and oversight organizations.

We will discuss the origin, structure and function of each organization. Then we will describe the organization's role in relationship to WIPP. Finally, we will cover any critical incidents related to the organization.

One of the acronyms you will see throughout this module is *CFR*, which stands for *Code of Federal Regulations*. The CFR is an annually revised codification of the rules published in the *Federal Register* by the executive departments and agencies of the federal government. The *Federal Register* is the medium for notifying the public of official agency actions. The CFR is divided into 50 titles which represent broad areas subject to federal regulation. Each title is subdivided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas. Many rules and regulations affecting WIPP are contained in the CFR, which can be found in WIPP Technical Library.

In light of the changes at WIPP in the past decade, be sure to check the status of DOE order numbers and any other references before you use them.

REGULATORY ORGANIZATIONS

B. DEPARTMENT OF ENERGY

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure, function and regulatory documents of the U. S. Department of Energy.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Department of Energy.
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The U. S. Department of Energy (DOE) was established in 1977 as a result of the Energy Reorganization Act. The act consolidated the major federal energy functions into one cabinet-level department, transferring to DOE all the responsibilities of the following organizations: the Federal Energy Administration, the Energy Research and Development Administration, the Federal Power Commission, and the Alaska, Bonneville, Southeastern, and Southwestern Power administrations, as well as the power-marketing functions of the Department of the Interior's Bureau of Reclamation. Functions of the Interstate Commerce Commission and the departments of Commerce, Housing and Urban Development, and the Navy were also transferred to DOE.

DOE is headed by the Secretary of Energy. The Secretary directs and supervises the administration of DOE, resolves major energy policy and planning issues, and acts as the principal spokesperson for DOE. The Secretary is the principal advisor to the president on energy policies, plans, and programs.

The deputy secretary assists the Secretary in resolving major energy policy and planning issues and in representing DOE before Congress and the public. The deputy secretary also directs day-to-day operations of DOE in the absence of the Secretary. The deputy secretary has primary oversight responsibility for conservation and for renewable, nuclear and fossil energy.

Next in DOE's organizational hierarchy is the undersecretary. The undersecretary has primary responsibility for DOE's defense programs; environmental, safety, and health programs; civilian radioactive waste management; new production reactors; environmental restoration and waste management; nuclear safety; technical recruitment, training and professional staff development; and DOE's field offices.

An assistant secretary directs DOE's office of Environmental Restoration and Waste Management (EM). The EM was established in 1989 to consolidate environmental

cleanup, compliance, and waste management activities. One of EM's objectives is to treat, store and dispose of hazardous, radioactive and mixed waste in an environmentally sound and effective manner. WIPP is one of several DOE facilities under the purview of EM that supports the accomplishment of this activity.

The office of Environment, Safety and Health (EH) has the responsibility for developing DOE environmental policy and conducting independent internal oversight to assure compliance with applicable laws related to environmental protection. DOE Order 5482.1B authorizes the assistant secretary for Environment, Safety and Health (EH-1) to

- (1) conduct management appraisals of line organization EH programs;
- (2) conduct EH functional appraisals of field activities;
- (3) conduct review of facilities and operations;
- (4) participate in selected field organization appraisals of contractor facilities/operations;
- (5) provide advice and interpretation regarding EH appraisals program policy; and
- (6) provide technical assistance, support and guidance.

The Carlsbad Area Office (CAO) is the lead DOE office for the successful management, planning and integration of transuranic (TRU) waste program efforts across the DOE complex. CAO provides overall direction and management for WIPP. The manager of CAO reports programmatically to the assistant secretary of EM for program and policy direction. CAO reports administratively to AL.

The CAO provides the direction for the following organizations in areas of technical, operational, scientific and engineering support to the WIPP project:

- Westinghouse - management and operating contractor, technical support, including design review, configuration management, safety analysis, operations, environmental, safety and health, and 40 CFR 191 compliance efforts.
- Sandia National Laboratories - overall scientific support with emphasis on the Systems Prioritization Method to demonstrate and develop performance assessment, environmental issues, characterization and experimental programs.

In 1993, DOE issued procedural rules applicable to WIPP regarding nuclear safety activities. Section 820 of 10 CFR defines the procedures for implementation of the Price Anderson Amendments Act of 1988, which is intended to ensure that nuclear facilities are operated in a manner that protects public and worker safety, and the environment. The intent of DOE is to foster a culture within DOE organizations and their contractors to actively attain compliance with DOE nuclear safety requirements and to sustain that performance. The provisions of the act apply to all Westinghouse government-owned, contractor-operated facilities, Westinghouse Electric Corporation (WEC), and Westinghouse subcontractors and suppliers.

As a WID supervisor or manager, it is important to understand the types of directives issued by DOE. There are five major types of DOE directives: (1) Secretary of Energy Notices (SENs), (2) DOE orders, (3) DOE/AL notices, (4) AL orders, and (5) DOE/AL announcements. Directives are written issuances affecting more than one DOE

organization which accomplish one or more of the following:

- Establish or change policies, organization, methods, standards or procedures
- Guide, instruct and inform employees in their work
- Require action or impose workload
- Give information essential to the administration or operation of DOE
- Transmit information when the use of other publications is not practical

DOE directives establish functional responsibilities for designated DOE and contractor organizations and contain procedures for completion of specific tasks. The directives cover a wide range of topics from maintaining a filing system to environmental policies, safety programs, waste management and quality control.

If you are uncertain about DOE requirements, who within DOE has responsibility for a particular function, or where to locate alternative sources on a specific subject, DOE and AL directives can help answer your questions. For example, if you wanted to verify how long DOE requires documents to be retained before they can be destroyed, instructions for retention can be found in DOE Order 1324.5B and AL Order 1324.2. Directives are important to you because they provide guidance for the effective and efficient performance of your job and the completion of the WIPP mission.

DOE Secretary of Energy Notices (SENs) are issuances used to quickly disseminate instructions, guidance, responsibilities, and authorities. SENs are sometimes used in lieu of DOE orders because they can be prepared and issued in less time.

DOE orders are used for permanent or long-lasting directives. They are issued as permanent if they establish a permanent organization, delegate authority, state a permanent policy, contain an approved procedure, prescribe a method, or establish standards of operation. DOE orders are issued by DOE Headquarters.

DOE/AL notices are another type of DOE directive. Notices are issuances used for one-time or short-term (one year or less) instructions on any subject. Notices are also used to disseminate needed information until it can be incorporated into an order. Notices are usually shorter than orders or SENs.

AL also issues orders, known as AL orders. These orders supplement DOE orders, assign local responsibilities and authorities, and prescribe procedures unique to a particular organization. These orders may repeat material covered in DOE orders. They sometimes originate from DOE Headquarters orders that have been interpreted by AL and rewritten to add information.

DOE and AL occasionally issue announcements. DOE or AL announcements are issuances of a particular occurrence of general interest such as a scheduled event or the appointment of an individual to a position. They are not for permanent use or record.

DOE directives are maintained for reference in the WIPP Technical Library. These directives are kept current by periodic updates to ensure that the most recent requirements are available for your use.

DOE often issues draft orders. These can be identified in one of two ways: (1) draft orders often state *DRAFT* in the upper right hand corner of the first page, and (2) draft orders do not contain an issue date beneath DOE order number. Quality and Regulatory Assurance (Q&RA) receives draft orders which are then routed to appropriate WID supervisors and managers for review and comment. If you are asked to look at a draft order, treat it as if it were a draft procedure; review it thoroughly and forward your comments to Q&RA. It is important that you do so promptly. Exceeding the response deadline will prevent your comments from receiving consideration.

Not all DOE orders affect WIPP and WID; Q&RA reviews orders to determine if they apply to WIPP. If an order does apply, Q&RA selects the appropriate organization to review the order. The organization selected has the responsibility to list the impact resulting from the order on a DOE Order Assessment Form.

On rare occasions, DOE orders may conflict with the CFR. If this happens, the CFR takes precedence over DOE order. If you notice such a conflict, notify Q&RA.

DOE orders are the driving force behind how we conduct operations at WIPP. Many WID requirements are based on DOE orders. Questions related to DOE orders should normally be referred to Q&RA since both DOE and AL orders are subject to change.

It is important to remember that DOE is WID's main customer and should be treated as such. As a supervisor or manager, you can affect the quality of service we provide to DOE.

CRITICAL INCIDENT INEFFECTIVE PERFORMANCE

Occurrence: A WID manager did not study DOE orders that affected his department. Auditors discovered that the manager's department was failing to meet DOE requirements specified in the orders.

Impact: (1) Audit findings were issued noting the manager's failure to adhere to DOE orders. (2) Much time and effort had to be expended to bring the department into compliance.

Lessons Learned: (1) Managers and supervisors need to be familiar with and adhere to orders affecting their department. To ensure cognizance of relevant orders, check with (a) your manager, (b) the Technical Library, and (c) Q&RA.

C. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure, function and regulatory documents of the Occupational Safety and Health Administration.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Occupational Safety and Health Administration.
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A new national policy was established in 1970 when President Nixon signed the Occupational Safety and Health Act into law. The act is regarded as landmark legislation because it goes beyond the present workplace and considers the working environment of the future as related to health hazards.

The Occupational Safety and Health Administration (OSHA) came into existence in 1971. This agency was created by the U. S. Department of Labor to discharge the department's responsibilities assigned by the act. The Secretary of Labor delegated to the Assistant Secretary for Occupational Safety and Health the authority and responsibility for safety and health programs and activities.

To assist in carrying out its responsibilities, OSHA has 10 regional offices. Each region is headed by a regional administrator, who supervises, coordinates, evaluates and executes all programs of OSHA in the region. New Mexico is part of Region 6, which has an office in Dallas.

Area offices have been established in each region, headed by an area director. The office for the Carlsbad area is in Albuquerque. If OSHA inspectors visit WIPP, they will probably be sent from the Albuquerque office.

The function of OSHA is to:

- promulgate, modify and revoke safety and health standards
- conduct inspections and investigations and issue citations, including proposed penalties
- require employers to keep records of safety and health data
- petition the courts to restrain imminent danger situations

- approve or reject state plans for programs under the act

OSHA affects how we conduct operations because DOE has chosen to adopt OSHA standards at WIPP. In addition, the WIPP Land Withdrawal Act requires OSHA to certify that it has reviewed DOE's WIPP emergency response training programs and concurs that such programs are in compliance with 29 CFR 1910.120. These standards and regulations are primarily found in the 29 CFR series. Questions related to 29 CFR or OSHA should be directed to the Environment, Safety, Health and Regulatory Compliance Department.

Supervisors and managers at WID must enforce and uphold OSHA regulations because DOE orders mandate compliance at WIPP. OSHA regulations are covered in greater detail in MAS-123, *Industrial Safety*.

D. ENVIRONMENTAL PROTECTION AGENCY

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure, function and regulatory documents of the Environmental Protection Agency.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Environmental Protection Agency.
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The Environmental Protection Agency (EPA) was established in the executive branch as an independent agency in 1970. EPA is headed by an administrator appointed by the president with the consent of the U.S. Senate. The administrator is responsible for providing overall supervision to EPA. A deputy administrator is also appointed by the president with the consent of the Senate. The deputy administrator assists the administrator in the discharge of EPA duties and responsibilities and serves as acting administrator in the absence of the administrator.

For administrative purposes, the country has been divided into 10 regions, each headed by a regional administrator. Regional administrators are responsible for accomplishing within their regions the national program objectives established by EPA. New Mexico is included in Region 6, which has headquarters in Dallas.

The primary goal of EPA is to mitigate the impact of pollution on human health and the environment. It seeks to abate and control pollution systematically, by proper integration of a variety of research, monitoring, standard setting, and enforcement activities. EPA inspects for compliance and may issue citations, fines and criminal penalties. EPA is WIPP's primary regulator.

Regulatory activities conducted by EPA are aimed at enforcing the following legislation:

- Clean Air Act (air quality)
- Clean Water Act (water quality)
- Resource Conservation and Recovery Act (hazardous and mixed waste)
- Safe Drinking Water Act (sources of drinking water)
- Comprehensive Environmental Response, Compensation and Liability Act, also

known as Superfund (clean-up of contaminated sites)

- Noise Control Act (noise)
- Toxic Substances Control Act (PCBs, asbestos)
- Federal Insecticide, Fungicide and Rodenticide Act (pesticides, poisons)

Possibly the most important of these acts for WIPP is the Resource Conservation and Recovery Act (RCRA). RCRA, an amendment to the Solid Waste Disposal Act, was enacted in 1976 to address a problem of enormous magnitude--how to safely dispose of the huge volumes of municipal and industrial solid waste generated nationwide.

By the mid-1970s, it had become clear that action had to be taken to ensure that solid wastes would be managed properly. This realization began the process that resulted in the passage of RCRA. The goals set by RCRA are to:

- Protect human health and the environment
- Reduce and conserve energy and national resources
- Reduce or eliminate the generation of hazardous waste as expeditiously as possibly

To achieve these goals, four distinct, but interrelated, programs exist under RCRA. The first program, under Subtitle D of RCRA, encourages states to develop comprehensive plans to manage primarily nonhazardous solid waste, e.g., household waste. The second program, under Subtitle C of RCRA, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal; in effect, from *cradle to grave*.

The third program, under Subtitle I of RCRA, regulates certain underground storage tanks. It establishes performance standards for new tanks and requires leak detection, prevention, and corrective action at underground tank sites. The newest program to be established is the medical waste program under RCRA Subtitle J. It is a demonstration program to track medical waste from generation to disposal.

Although RCRA creates a framework for the proper management of hazardous and nonhazardous waste, it does not address the problems of hazardous waste encountered at inactive or abandoned sites or those resulting from spills that require emergency response. These problems are addressed by a different act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly called the Superfund.

RCRA allows EPA to delegate its regulatory authority to states with authorized regulatory programs. The state of New Mexico has been authorized accordingly by EPA. The role of the state is discussed further in section G. of this module, entitled, *New Mexico Environment Department*.

The WIPP Land Withdrawal Act gives EPA the responsibility for overseeing many of DOE's activities at WIPP throughout the project's operation and decommissioning. The act specifies that no waste can be brought to WIPP without EPA determination that public health and environmental protection requirements have been satisfied. Under the act, EPA is required to issue final radioactive waste disposal standards and develop criteria to certify DOE compliance with those standards. EPA must determine on an ongoing basis whether DOE is complying with all environmental laws, regulations and permit requirements that are applicable to WIPP. The act also requires that DOE submit to EPA an application for certification of the WIPP facility within specific deadlines related to the test phase and receipt of waste.

In addition to enforcing the above acts, EPA has established radiation protection standards for the management and storage of transuranic (TRU) waste at disposal sites. The standards can be found in 40 CFR 191. WIPP must demonstrate compliance with these standards before becoming a disposal facility.

EPA has extensive impact on WIPP, which must meet all applicable EPA regulations. EPA's presence is most influential in four areas:

- Hazardous waste - EPA standards affect how we dispose of hazardous waste generated on site.
- Water discharges - For example, waste water discharged into the Site Evaporation Pond is regulated by EPA guidelines.
- Radiation exposure - EPA sets generally applicable standards to protect the public and the environment from radiation.
- Chemical inventories - EPA requires that we maintain a list of chemicals stored on site and at WIPP storage locations.

An example will help to illustrate the degree of influence EPA has on WIPP. Underground Operations uses a vehicle wash station to rinse oil and grease off vehicles. When tested, the rinse water sometimes reveals trace amounts of cadmium, a toxic metallic element used in protective platings. Sometimes the amount of cadmium in the water exceeds the EPA's regulatory limits. As a result, drums filled with water exceeding the limits have to be handled as a hazardous waste. Failure to test and properly handle this waste water would violate state and federal hazardous waste regulations and cause a health hazard.

It is important to keep abreast of EPA regulations that apply to you and your employees because the regulations frequently change. Participate in the Q&RA and regulatory impact assessment programs. To keep current, attend relevant updates offered by WID. Further information on hazardous waste will be provided in MAS-125, *Environmental Protection*.

CRITICAL INCIDENT

Occurrence: A small amount of gasoline was unaccounted for in WIPP's underground storage tank. Follow-up investigation yielded a small leak.

Impact: EPA (National Response Center) and state and local authorities were notified as required by EPA and state and local regulations. Remediation activities were initiated and the tank and connections were replaced with tank and accessories in accordance with EPA's underground storage tank regulations.

Lessons Learned: Identification, notification and remediation of problems associated with EPA's regulations are best handled expeditiously.

E. DEPARTMENT OF TRANSPORTATION

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure, function and regulatory documents of the Department of Transportation.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Department of Transportation.
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In his State of the Union message of January 12, 1966, President Johnson recommended that the Congress create a new cabinet-level Department of Transportation (DOT). This recommendation reflected the need for better management of transportation programs.

An unexpectedly broad consensus on the need for a DOT emerged in Congress. The legislation was expeditiously passed by the Congress and approved by the president on October 15, 1966.

DOT became operational in April 1967 and was comprised of elements transferred from eight other major departments and agencies. DOT presently consists of the Office of the Secretary and nine operating administrators who report directly to the Secretary. These administrators have highly decentralized authority.

The DOT's management philosophy is that programs are carried out by the operating administrators and are organized generally by mode of transportation (e.g., air, rail, etc.). The Secretary and deputy secretary plan, direct and control departmental activities.

The mission of DOT is to ensure the coordinated, effective administration of the transportation programs of the federal government and to develop national transportation policies and programs conducive to the provision of fast, safe, efficient, convenient and economical transportation.

DOT develops and enforces regulations addressing shippers, vehicles and drivers for transporting hazardous materials, including radioactive materials. The DOT definition of "hazardous material" is found in 49 CFR 171.8. Regulations covering the shipment of hazardous materials are covered in 49 CFR, Parts 100-199. Items classified as hazardous materials include acids, bases, compressed gas cylinders, batteries, aerosol spray paint, fire extinguishers and empty containers which previously contained

hazardous material.

Guidance on transportation and DOT regulations can be obtained by contacting the Hazardous Waste Operations section.

Transportation of non-radioactive hazardous materials will be covered in greater detail in MAS-125, *Environmental Protection*.

CRITICAL INCIDENT INEFFECTIVE PERFORMANCE

Occurrence: A WID employee responding to a request transported government-owned hazardous material from the site to Carlsbad in a private vehicle in violation of DOT regulations.

Impact: The incident subjected the employee, Westinghouse and DOE to potential fines. DOT can impose criminal penalties if a violation is determined to be willful. An occurrence report documented the root cause of the incident. More emphasis has been placed on informing all employees that authorization must be obtained from Hazardous Waste Operations to ship any material from WIPP.

Lesson Learned: Transportation procedures and DOT regulations apply to all WID personnel who ship material. Ignoring these procedures and regulations can be costly to both individuals and the organization.

F. NUCLEAR REGULATORY COMMISSION

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure, function and regulatory documents of the Nuclear Regulatory Commission.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Nuclear Regulatory Commission.
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The Nuclear Regulatory Commission (NRC) was established as an independent regulatory agency under the provisions of the Energy Reorganization Act of 1974 and Executive Order 11834. All licensing and related regulatory functions formerly assigned to the Atomic Energy Commission were transferred to NRC.

NRC is headed by five commissioners appointed by the president and confirmed by the Senate for five-year terms. One commissioner is designated by the president as chair. The NRC's major program components are the Office of Nuclear Reactor Regulation, the Office of Nuclear Material Safety and Safeguards, and the Office of Nuclear Regulatory Research. Headquarters offices are located in a Maryland suburb of Washington, D.C., and there are five regional offices. New Mexico is part of Region 4, which is based in Arlington, Texas.

The NRC's basic mission is to ensure that non-military uses of nuclear materials in the United States--as in the operation of nuclear power plants or in medical, industrial or research applications--are carried out with proper regard for the protection of public health and safety, of the environment, and of the national security.

With regard to WIPP, Public Law 96-164, authorizing the construction and development of WIPP, specifically excludes the WIPP site from NRC oversight. However, NRC does

have responsibility for certifying the TRUPACT-II shipping containers used for transporting TRU waste. This was part of DOE's *Amended Stipulated Agreement with the State of New Mexico* (as amended, August 1987):

The transportation of radioactive waste to WIPP shall comply with applicable regulations of the U.S. Department of Transportation and any applicable corresponding regulations of the U.S. Nuclear Regulatory Commission. All waste shipped to WIPP will be shipped in packages which the Nuclear Regulatory Commission has certified for use.

NRC requirements for *Packaging and Transportation of Radioactive Materials* are contained in 10 CFR Part 71, which also references applicable DOT regulations. Package approval standards are set forth in 10 CFR Part 71, Subpart E. Quality assurance requirements applicable to packaging are described in Subpart H.

NRC certification of the TRUPACT-II was based on both the design of the packaging and an evaluation of the contents--the actual waste payload. The design was evaluated through a combination of analysis and testing, while the payload requirements were based on the WIPP Waste Acceptance Criteria. Both the design and the payload requirements are specified in the Safety Analysis Report for Packaging (SARP). The section of SARP dealing with payload is referred to as the TRAMPAC--TRUPACT Authorized Methods for Payload Control. SARP formed the basis for the NRC's issuance of the Certificate of Compliance No. 9218 for the TRUPACT-II design.

If WIPP fails to abide by the requirements of the certificate of compliance, NRC can revoke it. The container must be manufactured in strict accordance with the approved the SARP design, and the payload must conform to the requirements of the TRAMPAC. Other packaging may be used to transport TRU waste; that packaging will also be certified by NRC.

Questions about NRC requirements or standards as they pertain to the TRUPACT-II should be directed to TRU Waste Programs.

G. NEW MEXICO ENVIRONMENT DEPARTMENT

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure and function of the New Mexico Environment Department.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the New Mexico Environment Department.
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In 1971, the New Mexico State Legislature passed the New Mexico Environmental Improvement Act to establish New Mexico's first agency to address environmental issues. This agency was named the Environmental Improvement Division (EID). In March 1991, the EID was elevated to cabinet level, headed by the Secretary of the New Mexico Environment Department (NMED).

NMED is comprised of 14 bureaus, each responsible for a different area of environmental protection or administrative support at the statewide level. All NMED personnel at WIPP are from NMED's DOE Oversight Bureau, also known as the Agreement in Principle (AIP) Bureau. This group will conduct a vigorous program of independent monitoring and oversight to assure the citizens of New Mexico that public health, safety and the environment are protected.

Another NMED bureau that is important to WIPP is the Occupational Health and Safety Bureau (OHSB). OHSB is headed by a bureau chief who is responsible for enforcing state safety and health regulations that are at least as stringent as federal OSHA standards. These regulations are enforced through the following:

- Inspections - OHSB conducts workplace inspections.
- Regulations - OHSB proposes occupational health and safety regulations applicable to places of employment in New Mexico.
- Coordination - OHSB coordinates with other agencies and organizations to provide health and safety protection for employees in New Mexico.

In addition to its service bureaus, NMED maintains four district and 17 field offices throughout the state. These offices operate with a central office in Santa Fe to

implement environmental programs at the community level. WIPP is part of District 4, which is headquartered in Roswell.

EPA has granted the state of New Mexico authority to implement RCRA regulations. Furthermore, the WIPP Land Withdrawal Act requires DOE to provide the state of New Mexico with documentation of DOE's continued compliance with the provisions, corresponding regulations, and permit requirements of the Solid Waste Disposal Act. The state must then determine whether DOE is in compliance. NMED is responsible for evaluating and approving or denying RCRA permits submitted by WIPP. NMED also establishes the conditions under which WIPP can operate as a disposal facility.

In accordance with the NMED/DOE agreement in principle, October 22, 1990, NMED environmental personnel have offices at the WIPP site, and these persons are authorized to interact with WIPP personnel on an informal basis. Other NMED personnel may come to WIPP to conduct inspections and audits. The *NMED Site Specific Protocol for the WIPP (NMED/WIPP 992-1)*, dated October 26, 1992, established protocols for interacting with NMED personnel. The Q&RA section of WID and Sandia are the points-of-contact for NMED information.

We have now discussed the regulatory organizations that affect WIPP. Beginning with the next section, we will cover the various oversight and advisory organizations that affect WIPP.

OVERSIGHT GROUPS AND ADVISORY COMMITTEES

H. MINE SAFETY AND HEALTH ADMINISTRATION

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure and function of the Mine Safety and Health Administration.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Mine Safety and Health Administration.
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Federal efforts to improve working conditions in the nation's mines began with the creation of the Bureau of Mines in 1910. Progressively stronger mine safety laws were passed every decade starting in the 1940s. This trend culminated in passage of the Federal Mine Safety and Health Act of 1977 (Mine Act). This law strengthened an earlier coal mine safety law and brought metal and nonmetal miners under the same general protection as coal miners. The Mine Act also created the Mine Safety and Health Administration (MSHA).

MSHA is headed by an Assistant Secretary of Labor for Mine Safety and Health who is appointed by the president with the advice and consent of the U. S. Senate. From its Arlington, Virginia, headquarters, MSHA administers the law and offers services through a network of field offices in 38 states and Puerto Rico, including an office in Carlsbad.

The function of MSHA is to carry out the provisions of the Mine Act. Under a memorandum of understanding (MOU) between DOE and the Department of Labor, MSHA conducts periodic health and safety compliance assistance inspections of WIPP mining operations. The WIPP Land Withdrawal Act requires MSHA to inspect WIPP not less than four times each year and provide inspection results to DOE.

Also, the Act requires the Bureau of Mines of the Department of Interior to review and determine the adequacy of DOE's plan for ensuring safety and stability of the mined rooms in the underground repository at WIPP.

Although WIPP uses MSHA regulations, MSHA does not have regulatory jurisdiction over WIPP; it advises DOE of appropriate actions to be taken to ensure the timely correction of any deficiencies noted during these inspections. WID's practice is to correct any deficiencies as soon as possible. As a result, most deficiencies are corrected before MSHA inspectors leave the WIPP site. MSHA also may participate in investigations of mine-related accidents at the WIPP site.

MSHA regulations that apply to WIPP are 30 CFR Parts 31, 32, 36, 48, 49 and 57. Questions about MSHA regulations should be referred to WID's Environment, Safety, Health and Regulatory Compliance Department.

CRITICAL INCIDENT EFFECTIVE PERFORMANCE

Occurrence: In the past, as many as 52 violations were issued by MSHA inspectors during a single mine safety and health inspection at WIPP. Through concerted efforts by WID and DOE personnel, performance on inspections has improved dramatically. For the inspections conducted from 1992 to 1995, only 11 total observations were recorded. For 10 of those quarterly evaluations, the inspector recorded zero violations. Inspectors gave very positive comments on the safety improvements and termed WIPP an excellent facility.

Impact: (1) The WIPP's mining and other underground operations are now among the safest in the mining industry. (2) The high level of safety with which WIPP mining operations are conducted has contributed to a positive public perception of WIPP. (3) The improved performance on inspections has boosted morale and increased pride and ownership among WID's underground personnel.

Lessons Learned: (1) Performance on inspections can be significantly improved through concerted effort. (2) Safe work conditions can be achieved without diminishing productivity--safety and productivity work together.

I. ENVIRONMENTAL EVALUATION GROUP

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure and function of the Environmental Evaluation Group.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Environmental Evaluation Group.
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The Environmental Evaluation Group (EEG) was established in 1978 to provide an independent technical appraisal of WIPP. Comprised of scientists, engineers and supporting staff, EEG conducts analyses of the potential environmental and public health impacts of WIPP.

Since 1988, DOE has funded EEG through a contract with the New Mexico Institute of Mining and Technology (NMIMT). The director of EEG reports directly to the president of NMIMT.

To accomplish oversight of WIPP, EEG evaluates and comments on relevant documentation published by DOE and its contractors. EEG also performs independent research, including an environmental monitoring program for background radioactivity in air, water and soil. The results of the analyses and measurements of EEG are provided to appropriate federal, state and local government entities and to interested citizens.

The WIPP Land Withdrawal Act requires the following of DOE in dealing with EEG:

1. DOE will provide the state of New Mexico, the National Academy of Sciences, and EEG with free and timely access to data relating to health, safety or environmental issues at WIPP.
2. DOE will consult and cooperate with EEG in performance of its responsibility to conduct an independent technical review and evaluation of the WIPP project.

EEG is not involved with permitting and has no regulatory authority at WIPP. This is not to say, however, that EEG is not an influential group. EEG's range of action is broad; its reviews and evaluations may focus on technical, scientific or procedural areas. Much information that the public receives about WIPP is through EEG; it has

established itself as a source that the news media can consult for information. EEG has considerable political clout, and many congressional inquiries about WIPP originate with EEG.

DOE and WID expend considerable effort responding to inquiries and concerns of EEG. EEG personnel are knowledgeable about applicable laws and regulations. As a result, it is important that WID supervisors and managers respond appropriately to the EEG's inquiries and concerns. Answer requests for information about your area of responsibility promptly, thoroughly, clearly and accurately.

Pursuant to DOE's contract with EEG, all technical correspondence concerning WIPP is exchanged directly between the CAO manager and the director of EEG. For this reason, WID receives EEG inquiries from DOE. All associated responses should be provided to DOE for review and transmittal to EEG. Q&RA administers the WID response to EEG inquiries; consequently, all assignments to WIPP personnel and associated responses are routed through Q&RA. See Procedure WP 15-059, *Consultation and Cooperation Correspondence Procedure*, for further guidance concerning responses to EEG inquiries.

CRITICAL INCIDENT INEFFECTIVE PERFORMANCE

Occurrence: EEG inquired about a safety issue it had noticed on-site. The responsible manager did not provide an answer to the concern in a timely manner. Due to the untimely response, EEG went to the news media with the concern before DOE was able to respond. When an answer was provided, it was convoluted and focused on peripheral issues.

Impact: (1) Unfavorable, inaccurate information about WIPP was publicized.
(2) Considerable time and effort was expended refuting the inaccurate information.

Lessons learned: (1) Do not unnecessarily delay responses to EEG or allow its inquiries to go unanswered. If a comprehensive investigation and response is called for, make this clear to EEG through Q&RA and give an estimated response date. (2) Stay focused on the main issue relevant to the concern and answer it. (3) Keep whoever is responsible for managing the response well informed. If all regulatory requirements are being met and the concern lacks a legitimate basis, convey this information to Q&RA.

J. DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Enabling Objectives

Upon completion of this section, the trainee will be able to perform the following:

1. Identify the origin, structure and function of the Defense Nuclear Facilities Safety Board.
 2. Given an employee-manager scenario, evaluate the manager's effectiveness in dealing with the Defense Nuclear Facilities Safety Board.
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The Defense Nuclear Facilities Safety Board (DNFSB) was created by Congress in 1988 to provide advice and recommendations to the president and the Secretary of Energy regarding public health and safety issues at DOE defense nuclear facilities. By statute, DNFSB is required to review and evaluate the content and implementation of health and safety standards, as well as other requirements relating to the design, construction, operation, and decommissioning of DOE defense nuclear facilities. DNFSB must then recommend to the Secretary of Energy any specific measures that DNFSB believes should be adopted to ensure that the public health and safety are adequately protected. DNFSB is also required to review the design of all new defense nuclear facilities before construction begins and recommend modifications necessary to protect health and safety. DNFSB review and advisory responsibilities continue throughout the construction, testing and operation of new facilities.

More broadly, DNFSB reviews operations, practices and occurrences at DOE defense nuclear facilities and makes appropriate recommendations to protect health and safety. In the event that any aspect of operations, practices, or occurrences reviewed by DNFSB is determined to present an imminent or severe threat to public health or safety, DNFSB transmits its recommendations directly to the president of the United States.

All supporting functions of DNFSB and its staff are related to the accomplishment of the DNFSB's primary function, which is to assist in identifying and correcting health and safety problems at defense nuclear facilities. DNFSB may conduct investigations, hold public hearings, conduct studies, establish reporting requirements for DOE, and take other actions to facilitate its review of health and safety issues at defense nuclear facilities. The Secretary of Energy and contractors such as WID are required to cooperate fully with DNFSB.

DNFSB is comprised of five members appointed from civilian life by the president, with the advice and consent of the Senate. Board members are respected experts in the field of nuclear safety with demonstrated competence and knowledge relevant to the independent investigative and oversight functions of DNFSB. Not more than three members of DNFSB may belong to the same political party.

The president designates a chair and vice chair of DNFSB from among the five members. The chair is the chief executive officer of DNFSB and, subject to policies DNFSB establishes, exercises the functions of DNFSB with respect to the:

- Appointment and supervision of employees of DNFSB
- Organization of any administrative units established by DNFSB
- Use and expenditure of funds

DNFSB is one of the most important oversight groups affecting WIPP. The external Operational Readiness Review conducted by DOE during 1991 was a result of a recommendation from DNFSB. Other WIPP-related activities of DNFSB will include:

- Following up on Recommendation 90-2. This recommendation calls for DOE to identify the specific standards applicable to the design, construction, operation and decommissioning of various defense nuclear facilities of DOE, including WIPP
- Tracking of overall progress of WIPP development
- Issuing of additional recommendations concerning WIPP design, construction, operation, and decommissioning
- Monitoring of future activities involving WIPP operations and/or decommissioning

It is important for WID supervisors and managers to be familiar with DNFSB because this organization will continue to influence our operations at WIPP. Additional information about DNFSB is available in the WIPP Technical Library or from Q&RA.

K. SMART MOVES--WHAT YOU CAN DO NOW

Here are some actions you can take now to make your section/department more effective:

- Identify the regulatory documents for the following agencies:
 - Department of Energy (page 5)
 - Occupational Safety and Health Administration (page 10)
 - Environmental Protection Agency (page 12)
 - Department of Transportation (page 16)
 - Nuclear Regulatory Commission (page 18)
- Inform your employees that valuable regulatory reference documents are located in the WIPP Technical Library (page 3).
- Advise your employees that Q&RA is the WIPP source for information about DOE orders that are applicable to WIPP (page 8).
- Ensure that new employees understand that DOE orders are the driving force behind WIPP conduct of operations. DOE is Westinghouse's primary customer at WIPP (page 8).
- Know why OSHA regulations apply to us at WIPP. This is because DOE has chosen to adapt OSHA standards at WIPP (page 11).
- Learn the titles and purpose for each of the key EPA laws affecting WIPP operations (page 12).
- Ensure your employees understand that EPA has delegated its regulatory authority to states with authorized programs. In New Mexico this is the Environment Department for WIPP (page 13).
- Know that NRC has the responsibility for certifying the TRUPACT-II shipping containers for transporting TRU waste (page 19).
- Communicate to your employees that Q&RA and Sandia National Laboratories are the points-of-contact for NMED information at WIPP (page 2.).
- Be aware that a memorandum of understanding between DOE and the Department of Labor authorizes MSHA to conduct periodic health and safety compliance inspections of WIPP mining operations (page 23).
- Ensure your employees know that the CAO manager is the WIPP contact for exchange of information with the director of EEG (page 26).

L. MODULE REFERENCES

The United States Government Manual 1990/91

Albuquerque Operations Office Information Digest, United States Department of Energy, 1990

Directives: Are DOE/AL Directives Puzzling To You????

Accident Prevention Manual for Industrial Operations: Administration and Programs, 1988

Occupational Health & Safety Bureau Information Pamphlet

RCRA Orientation Manual, 1990 Edition

FY-1991 EPA Research Program Guide

The Nuclear Regulatory Commission Fact Sheet, 1990

Regulating the Disposal of Low-Level Radioactive Waste: A Guide to The Nuclear Regulatory Commission's 10 CFR Part 61, 1989

Amended Stipulated Agreement with the State of New Mexico, 1987

NMED White Paper, 1991

Environmental Oversight & Monitoring Agreement Between the United States Department of Energy and the State of New Mexico

Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Department of Labor, 1987

Notes on MSHA by Bruce Lilly, 1991

Environmental Impact Statement Final Supplement, Section 10, Waste Isolation Pilot Plant, 1990

Information Brochure, EH, DOE

Environmental Evaluation Fact Sheet, EEG

Consultation and Cooperation Action Item Tracking Procedure, WP 15-059, WID

Public Law 100-456 (National Defense Authorization Act), 1988

DNFSB's Annual Report to Congress, 1991

M. PRACTICE TEST

1. Many federal rules and regulations affecting WIPP are contained in the
 - a. Westinghouse Management Directives
 - b. Code of Federal Regulations
 - c. NMIMT Charter
 - d. NMED Site-Specific Protocol

(B.1)

2. A manager says, "SENs are used by the Secretary of Energy to quickly distribute instructions, authorities, guidance and responsibilities. They are sometimes used in place of DOE Orders." Is the manager's statement correct? If not, why not?
 - a. YES
 - b. NO - The manager was describing DOE/AL Notices
 - c. NO - SENs cannot take the place of DOE Orders

(B.1)

3. An employee asks you, "Which office consolidates DOE's environmental cleanup, compliance and waste management activities?" Which of the following is a correct response?
 - a. EM
 - b. ONS
 - c. AL
 - d. CAO

(B.1)

4. To whom has EPA granted the authority to implement RCRA regulations?
 - a. MSHA
 - b. NRC
 - c. The state of New Mexico

(D.1)

5. An employee states that MSHA has regulatory jurisdiction over WIPP mining operations. Is this an accurate statement? If not, why not?
- a. YES
 - b. NO - NRC has regulatory jurisdiction over WIPP mine safety and health
 - c. NO - OSHA has regulatory jurisdiction over WIPP mine safety and health
 - d. NO - MSHA advises DOE on underground safety and health issues; it does not have regulatory jurisdiction

(H.1)

6. Which of the following organizations is chartered to provide the Secretary of Energy with advice on safety of DOE's nuclear defense facilities?
- a. EPA
 - b. NRC
 - c. OSHA
 - d. DNFSB

(J.1)

7. In the course of EEG/WIPP interfaces, all technical correspondence concerning WIPP is exchanged directly between the director of EEG and the
- a. WID General Manager.
 - b. CAO Manager.
 - c. WID Environment, Safety, and Health and Regulatory Compliance Department.
 - d. WID Operations Assistant General Manager.

(I.1)

8. While visiting a DOE facility, DNFSB discovers a condition that represents an imminent threat to public safety. In this instance, DNFSB could transmit its recommendation to correct the condition directly to the
- a. U.S. Congress.
 - b. Environmental Evaluation Group.
 - c. Department of Defense.
 - d. President of the United States.

(J.1)

9. Which of the following documents contains the primary OSHA standards affecting WIPP?
- a. 29 CFR Series
 - b. 40 CFR Series
 - c. 49 CFR Series
 - d. SENs

(C.1)

10. Which of the following organizations enforces regulations concerning the transport of hazardous materials?
- a. EPA
 - b. OSHA
 - c. NRC
 - d. DOT

(E.1)

N. ANSWERS AND FEEDBACK FOR PRACTICE TEST

1. b. Code of Federal Regulations
2. a. YES
3. a. The EM
4. c. The state of New Mexico
5. d. NO - MSHA advises DOE on underground safety and health issues; it does not have regulatory jurisdiction
6. d. DNFSB
7. b. CAO manager.
8. d. President of the United States
9. a. 29 CFR Series
10. d. DOT

If you scored 80 percent or higher on the practice test, you are ready to take the module examination; please proceed to Training.

If you scored less than 80 percent on the practice test, please re-read the module and take the practice test again. If you still have questions, contact the MAST Coordinator.