

**Forest Service Manual
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Washington, DC**

**Forest Service Manual 2100 – Environmental Management
Chapter 2160 - Hazardous Materials Management**

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Digest: Following is an explanation of the changes throughout the directive by section.

2160.1 - 2162.7: Incorporates direction to FSM 2160.1 to 2160.5 formerly in interim directive 2160-94-2 and adds additional parent text direction on the management of hazardous materials, including requisite environmental and safety and health programs.

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This chapter is intended as a framework for the Forest Service Hazardous Materials Management Program to provide managers with an overall program description, set forth Forest Service policy, and supply a central location for hazardous materials management direction and cross-references to detailed direction located elsewhere in the Forest Service directive system.

2160.1 - Authority

For a summary of hazardous materials terms and authorities, see exhibit 01.

1. The Occupational Safety and Health Act (OSHA; Title 29, United States Code, section 651 et seq.; 29 U.S.C. 651 et seq.) ensures safe and healthful working conditions by encouraging efforts to reduce hazards, setting mandatory standards, requiring training programs, and requiring medical surveillance programs for hazardous materials. Implementing regulations are in: 29 CFR 1960, Basic Program Elements for Federal Employee OSHA Programs; 29 CFR 1910, General Industry; and 29 CFR 1926, Construction.

2. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning and Community Right-To-Know Act (EPCRA), and the Community Environmental Response Facilitation Act (CERFA; Title 42, United States Code, section 9601 et seq.; 42 U.S.C. 9601 et seq.) and as otherwise amended.

a. Mandates development of a National Contingency Plan to establish procedures and standards for responding to releases of hazardous substances (the Environmental Protection Agency is responsible for development of this plan).

b. Requires development of a ranking system to prioritize waste sites for evaluation and cleanup; priority waste sites are listed on the National Priorities List (the Environmental Protection Agency is responsible for the development of this list).

c. Requires regulations be promulgated to assess damages for injury to natural resources (promulgation of these regulations is the responsibility of the Department of Interior and the National Oceanic and Atmospheric Administration).

d. Requires establishment of State Emergency Response Commissions (SERC) and emergency planning districts; development of local emergency response plans; notification of hazardous chemical releases; reporting of hazardous chemical inventories; and completion of toxic chemical release reports.

e. Requires Federal agencies to provide information and certain warranties to purchasers of Federal lands concerning the presence of hazardous materials.

3. Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (CWA; Title 33, United States Code, section 1251 et seq.; 33 U.S.C. 1251 et seq.), provides for the restoration and maintenance of the chemical, physical, and biological integrity of the waters

of the United States. Federal agencies must manage all discharges into the waters of the United States in accordance with this law.

4. The Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA), the Federal Facilities Compliance Act (FFCA; Title 42, United States Code, section 6901 et seq.; 42 U.S.C. 6901 et seq.), promotes conservation of valuable material and energy resources; provides for promulgation of guidelines for solid waste management; establishes a regulatory system to track hazardous wastes from the time of generation to disposal; regulates use of underground storage tanks; phases out land disposal of hazardous waste; and waives sovereign immunity for the United States making Federal facilities subject to civil penalties and fines from the Environmental Protection Agency, State and local environmental agencies.

5. The Toxic Substances Control Act (TSCA; Title 15, United States Code, section 2601 et seq.; 15 U.S.C. 2601 et seq.) ensures protection of human health and the environment from unreasonable risks associated with chemicals, whether imported, produced domestically, or exported.

6. The Clean Air Act (CAA; Title 42, United States Code, section 7401 et seq.; 42 U.S.C. 7401 et seq.) protects and enhances the quality of the Nation's air resources; encourages and enforces prevention and control of air pollution; and requires conformity analysis for Federal actions.

7. The Safe Drinking Water Act (SDWA; Title 42, United States Code, section 300f et seq.; 42 U.S.C. 300f et seq.) establishes standards for public drinking water systems and well-head protection.

8. The Pollution Prevention Act (PPA; Title 42, United States Code, section 13101 et seq.; 42 U.S.C. 13101 et seq.) establishes a national policy that pollution should be prevented or reduced at the source whenever possible; that pollution that cannot be prevented should be recycled; and that pollution that cannot be prevented or recycled should be treated. Disposal or other release into the environment should be a last resort.

9. Executive Order 12088 (E.O. 12088), Federal Compliance With Pollution Control Standards, issued October 13, 1978, as amended by Executive Order 12850 (FSM 2160.1, para. 15), requires Federal agencies to comply with applicable Federal, State, and local pollution control requirements and requires that Federal agencies submit annual pollution abatement and prevention project plans to the Office of Management and Budget (OMB) through the Environmental Protection Agency. The Forest Service carries out these requirements through the Federal Facilities Compliance Program (FSM 2160.41c).

10. Office of Management and Budget Circular No. A-106 provides procedures for Federal agencies to follow in carrying out the provisions of E.O. 12088 related to submission of the annual Federal agency pollution abatement and prevention project plan.

11. Oil Pollution Act of 1990 (OPA; Title 33, United States Code, section 2701 et seq.; 33 U.S.C. 2701 et seq.) establishes a fund, and concomitant liability, for the removal of discharged oil and for the assessment and restoration of natural resource injuries caused by discharges of oil into ocean and inland waters.
12. Department of Transportation regulations (Title 49, Code of Federal Regulations, Parts 100-199; 49 CFR 100-199) encompass the requirements for transporting hazardous materials.
13. Executive Order 12856 (E.O. 12856), Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, issued August 3, 1993, requires Federal agencies to comply with the Emergency Planning and Community Right-to-Know Act and the Pollution Prevention Act.
14. Executive Order 12873 (E.O. 12873), Federal Acquisition, Recycling, and Waste Prevention, issued October 20, 1993, requires Federal agencies to establish affirmative procurement programs emphasizing the purchase of recycled and environmentally preferable products.
15. Executive Order 12580 (E.O. 12580), Superfund Implementation, issued January 23, 1987, delegates to the Forest Service the authority to conduct all investigations and take the necessary response actions (excluding emergency response) relating to releases of hazardous substances on National Forest System lands and lands leased by the Forest Service.
16. Agriculture Property Management Regulations, chapter 104, part 42 (FSH 6409.31 - AGPMR 104-42), provides Departmental direction on the utilization and disposal of hazardous substances.
17. Title 40, Code of Federal Regulations, Part 300 (40 CFR Part 300), National Oil and Hazardous Substances Pollution Contingency Plan, promulgated by the Environmental Protection Agency, outlines the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances. The National Contingency Plan also specifies that all response actions must comply with the provisions for worker safety and health in the regulations of the Occupational Safety and Health Act (29 U.S.C. 651 et seq.).
18. Title 36, Code of Federal Regulations, Part 228 (36 CFR Part 228), Minerals, promulgated by the Forest Service, outlines the requirements to minimize the adverse hazardous material management impacts from mining activities on National Forest System lands.
19. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA; 7 U.S.C. 136 et seq.) sets requirements related to hazardous materials in pesticide management (FSM 2150.1).
20. Executive Order 12898 (E.O. 12898), Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, issued February 11, 1994, requires each Federal agency to take action to achieve environmental justice as part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

21. The Federal Tort Claims Act, as amended in 1988 (Title 28, United States Code, section 2679; 28 U.S.C. 2679), protects Federal employees from suit for alleged torts committed within the scope of their duties.

22. Title 43, Code of Federal Regulations, Part 11 (43 CFR 11), Natural Resource Damage Assessments, sets forth standard procedures that may be used by natural resource trustees to establish damages for injuries to natural resources.

23. Title 36, Code of Federal Regulations, Section 228.8 (36 CFR 228.8), Requirements for Environmental Protection, requires removal or control of wastes from activities undertaken pursuant to the U.S. Mining Law (Public Domain Lands) Act of May 10, 1872 (Title 30, United States Code, sections 22, 28, 28b; 30 U.S.C. 22, 28, 28b).

24. Title 7, Code of Federal Regulations, Section 2.60 (7 CFR 2.60), Chief, Forest Service, delegates from the Assistant Secretary for Natural Resources and Environment to the Chief of the Forest Service authority for conducting several environmental programs.

25. Departmental Manual 5600-1 (DM 5600-1), Environmental Pollution Prevention, Control, and Abatement, outlines the objectives, policy, responsibilities, and technical standards and requirements to manage the various environmental programs.

2160.1 - Exhibit 01

SUMMARY OF HAZARDOUS MATERIALS NOMENCLATURE AND AUTHORITIES

TERM	AUTHORITY*	FSM REFERENCE
<u>Hazardous Material</u> ** - Umbrella term that includes OSHA hazardous chemicals, RCRA hazardous wastes, CERCLA hazardous substances and oil.		
<u>Hazardous Chemical</u> ** - New, usable, to-be-used chemicals that pose a health or physical hazard.	OSHA	2160.43b 2162 2165.12 2165.13
<u>Hazardous Waste</u> ** - Unusable, discarded, to-be-disposed or recycled wastes that pose a threat to human health or the environment. Excludes from Federal regulation, wastes from the extraction, beneficiation, and processing of ores and minerals.	RCRA	2160.43c 2163 2165.11
<u>Hazardous Substance</u> ** - Includes RCRA hazardous wastes, as well as, substances designated as hazardous under Sections 307 and 311 of CWA, Section 102 of CERCLA, Section 112 of CAA, and Section 7 of TSCA. Excludes oil.	CERCLA	2160.43e 2164
<u>Oil</u> - Includes oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, and oil refuse.	OPA	2160.43b 2165.12

*Acronyms for Authorities and Cross-References to Direction in FSM 2160.1:

CAA - Clean Air Act (CAA) (Title 42, United States Code, Section 7401 et seq.; 42 U.S.C. 7401 et seq.); FSM 2160.1, para. 6.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Community Environmental Response Facilitation Act (42 U.S.C. 9601 et seq.); FSM 2160.1, para. 2.

CWA - Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.); FSM 2160.1, para. 3.

OPA - Oil Pollution Act of 1990 (OPA; Title 33, United States Code, section 2701 et seq.; 33 U.S.C. 2701 et seq.); FSM 2160.1, para. 11.

OSHA - Occupational Safety and Health Act (Title 29, United States Code, Section 651 et seq.); FSM 2160.1, para. 1.

RCRA - Resource Conservation and Recovery Act as amended by the Hazardous and Solid Waste Amendments (HSWA), and other laws (Title 42, United States Code, Section 6901 et seq.); FSM 2160.1, para. 4.

TSCA - Toxic Substances Control Act (TSCA) (Title 15, United States Code, Section 2601 et seq.); FSM 2160.1, para. 5.

** See FSM 2160.5 for detailed definition of this term.

2160.2 - Objectives

The major objectives of the Forest Service hazardous materials management program are to protect the safety and health of the public and Forest Service employees from hazardous materials; to minimize future agency and personal liabilities related to hazardous materials; and to protect and/or restore, from the impact of hazardous materials, the natural resources and the environment on:

1. National Forest System lands;
2. Lands outside the National Forest System that are affected by actions authorized on National Forest System lands; and
3. Lands leased by the Forest Service.

2160.3 - Policy

1. Provide the appropriate level of training to employees on the potential safety and health risks from hazardous materials in accordance with the employee's duties.
2. Incorporate pollution prevention in all aspects of hazardous materials management. Emphasize source reduction as the primary means of maintaining compliance with applicable Federal, State, and local environmental regulations.
3. Ensure proper handling, storage, transportation, and disposal of hazardous materials in all activities. Prior to disposal of any material, consider reuse and recycling of that material.
4. Consider need, employee risk of exposure, effectiveness, environmental impacts, economic efficiency, and availability of less hazardous alternatives when deciding whether and which hazardous materials to use.
5. Ensure appropriate and timely response to releases or threats of releases of hazardous materials.

2160.4 - Responsibility

2160.41 - Washington Office

2160.41a - Deputy Chief for Research

The Deputy Chief for Research has overall responsibility for hazardous materials management at Research facilities.

2160.41b - Deputy Chief for National Forest System

The Deputy Chief for National Forest System has overall responsibility for hazardous materials management on National Forest System lands and lands leased by the Forest Service.

2160.41c - Director of Engineering

The Director of Engineering has the following responsibilities:

1. Overall program leadership and coordination for the National Federal Facilities Compliance Program (FFCP; E.O. 12088; FSM 2160.1, para. 9) including development and maintenance of a data base for compliance with OMB Circular A-106 (FSM 2160.1, para. 10).
2. Overall program leadership and coordination with affected staffs for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) programs, including direct responsibility for coordinating budget development and maintenance with affected staffs and for providing guidance on:
 - a. CERCLA removal and remedial actions;
 - b. CERCLA cost recovery;
 - c. CERCLA natural resource damage actions;
 - d. RCRA Underground Storage Tank Program; and
 - e. Management of hazardous waste generated by Forest Service operations (generation, minimization, storage, transportation, and disposal).
3. Guidance on compliance with Executive Order 12856 (FSM 2160.1, para. 13) including compliance with the Emergency Response and Community-Right-To-Know Act (40 CFR 355, 370, and 372).
4. Development of the agency pollution prevention strategy and policy statement as required by Executive Order 12856.
5. Guidance on compliance with that portion of Executive Order 12873 (FSM 2160.1, para. 14) concerning the elimination or reduction in the acquisition and use of hazardous chemicals.
6. Guidance on compliance with the Safe Drinking Water Act.
7. Guidance on compliance with those portions of the Toxic Substance Control Act involving polychlorinated biphenyls (FSH 7309.11, sec. 42.23) and asbestos mitigation (FSM 2167.23).
8. Guidance on compliance with the Oil Pollution Act, including natural resource damage assessments.
9. Guidance on compliance with those portions of the Clean Air Act Program involving radon mitigation (FSM 2167.14a) in facilities.

2160.41d - Director of Minerals and Geology Management

The Director of Minerals and Geology Management has overall leadership and coordination responsibility for:

1. Management of hazardous materials used in or generated by the exploration, development, production, and abandonment of locatable and leasable (includes geothermal) minerals and mineral materials (FSM 2840).
2. Management of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program involving locatable, leasable, or mineral material activity sites (excluding cost recovery and natural resource damage CERCLA issues) (FSM 2840).
3. Determination of priority among minerals-related CERCLA projects that incorporate appropriate legal requirements in the decision process.
4. Guidance on compliance with the Clean Water Act Storm Water Discharge Rule (40 CFR 122, subpart B) for inactive and abandoned mines on National Forest System lands.

2160.41e - Director of Watershed and Air Management

The Director of Watershed and Air Management has responsibility for providing guidance on compliance with the Clean Air Act (excluding radon mitigation in facilities) and Clean Water Act with regard to hazardous materials management.

2160.41f - Director of Personnel Management

The Director of Personnel Management has responsibility for providing guidance on:

1. Compliance with the requirements on Hazard Communication Standard (29 CFR 1910.1200; FSM 2162.5).
2. Compliance with the requirements on Occupational Exposure to Hazardous Chemicals in Laboratories (29 CFR 1910.1450; FSM 2162.6).
3. Employee safety and health training (FSM 2161.4), identification and use of personal protective equipment (FSM 2161.5), and medical surveillance plans (FSM 2160.43, 2162.5, 2167.17, and 2167.21).
4. Proper use, storage, and handling of hazardous chemicals (FSM 2161.4, 2162, 2165, and 2167).

2160.41g - Director of Procurement and Property

The Director of Procurement and Property has the responsibility for:

1. Ensuring that contracts contain provisions requiring contractors to provide Material Safety Data Sheets informing the Forest Service of all hazardous chemicals to be used in performing services on National Forest System lands and lands leased by the Forest Service and in research facilities.
2. Ensuring that contracts contain provisions informing contractors of the hazards they may encounter while performing services on National Forest System lands and lands leased by the Forest Service and in research facilities.
3. Ensuring that contracts contain provisions that indemnify and hold harmless the Forest Service in the event of damages from hazardous materials resulting from a contractor's breach of contract; negligent or willful act or omission; or violation of any Federal, State, or local law or regulation.
4. Ensuring that the life-cycle cost is considered in the procurement of a hazardous chemical and that consideration has been given to less hazardous alternatives.
5. Providing guidance on the use of procedures, other than competitive procedures, to procure the services of experts for use in CERCLA civil or criminal actions (42 U.S.C. 9606(e)).

2160.41h - Director of Forest Pest Management

The Director of Forest Pest Management has responsibility for providing guidance on:

1. Transportation, storage, application, and disposal of pesticides.
2. Compliance with Toxic Substance Control Act requirements regarding the development of new pesticides.

2160.41i - Director of Lands

The Director of Lands has responsibility for providing guidance on:

1. Property transfer disclosure.
2. Active permitted sanitary landfills.
3. Proper closure of permitted sanitary landfills (excluding CERCLA responses).
4. Terms and conditions to be included in special use permits to ensure that the permittee develops and maintains an adequate hazardous materials management program.

2160.41j - Director of Forest Insect and Disease Research

The Director of Forest Insect and Disease Research has direct responsibility for:

1. Hazardous materials management in research facilities.
2. Good laboratory practices.

2160.41k - Director of Recreation, Heritage, and Wilderness Resources

The Director of Recreation, Heritage, and Wilderness Resources has responsibility for ensuring that provisions requiring the proper management of hazardous materials are incorporated into the conditions of all recreation special use permits (Form FS-2700-4; FSM 2340) and concessionaire contracts.

2160.41l - Director of Fiscal and Accounting Services

The Director of Fiscal and Accounting Services has the responsibility for providing guidance on cost-recovery documentation and use of appropriations for Forest Service hazardous materials response actions (FSH 6509.11g, sec. 95).

2160.42 - Regional Foresters and Station Directors

Regional Foresters and Station Directors have overall responsibility for the hazardous materials management programs in the Regions and Stations including:

1. Ensuring designation of unit coordinators as described in this chapter.
2. Ensuring that the requirements of applicable State and local environmental laws and regulations are incorporated into Regional and Station supplements.
3. Ensuring that all employees receive the appropriate safety and health training.
4. Ensuring implementation of the hazardous materials programs outlined in this chapter.

2160.43 - Hazardous Materials Management Coordinators

FSM 2160.43a to 2160.43e contain the responsibilities for the required and recommended unit coordinators for various hazardous materials management activities. The individuals in these positions are expected to be the primary Region/Station point of contact for the Washington Office for the responsibilities assigned to a particular coordinator position. However, these duties may be further delegated to other individuals or several coordinator positions may be assigned to a single person in a unit.

2160.43a - Federal Facilities Compliance Coordinators

Federal Facilities Compliance Coordinators have responsibility for:

1. Coordinating the implementation of an Interstaff Federal Facilities Compliance Program (FFCP) Action Plan. The plan should identify the current major issues in the unit's FFCP and outline actions to address those issues.
2. Developing and maintaining the FFCP budgets and records.
3. Coordinating and preparing the Federal Agency Pollution Abatement and Prevention Project Plan. This plan is the annual A-106 budget report (FSM 2160.1, para. 10) prepared for the Office of Management and Budget (OMB) and submitted to the OMB through the Environmental Protection Agency.
4. Coordinating and preparing other environmental status reports required by the Environmental Protection Agency and the U.S. Department of Agriculture.
5. Maintaining documentation on the status of environmental permits obtained from Federal, State, or local environmental agencies for hazardous materials activities. Note that treatment, storage, and disposal of hazardous waste on National Forest System lands or lands leased by the Forest Service is prohibited (FSM 2163.03, para. 5).

Required: Washington Office, Regional Offices, Stations.

Recommended: Forests, Laboratories.

2160.43b - Safety and Health Coordinators

Safety and Health Coordinators have responsibility for:

1. Complying with the Hazard Communication Standard (29 CFR 1910.1200) at units that handle hazardous chemicals in greater than consumer-use quantities as described in FSM 2160.5, FSM 2161.42, and FSM 2162.5.
2. Coordinating training for safe transportation of hazardous materials (49 CFR 172; FSM 2161.44).
3. Complying with those portions of the the hazardous waste operations and emergency response regulations (29 CFR 1910.120) for training, personal protective equipment, and medical surveillance.
4. Coordinating the medical surveillance program and the environmental monitoring program outlined in FSH 6709.12 and 29 CFR 1926.62.

5. Maintaining documentation of all safety and health training required by 29 CFR 1910.120, 1910.1200, and 1910.1450 and 49 CFR 172, and ensuring refresher training is accomplished, as required in these regulations.

6. Complying with Occupational Safety and Health Administration (OSHA) regulations on occupational exposure to hazardous chemicals in laboratories (29 CFR 1910.1450; FSM 2161.43; FSM 2162.6).

7. Working with managers of units handling hazardous chemicals and oil to prepare a written site-specific contingency plan where required (FSM 2165.12).

8. Ensuring hazardous materials management inspections (FSM 2161.3) are conducted on a routine basis.

Required: Washington Office, Regional Offices, Stations, Forests, and Laboratories

Recommended: Field units handling hazardous chemicals in greater than consumer use quantities (FSM 2160.5).

2160.43c - Pollution Prevention Coordinators

Pollution Prevention Coordinators have responsibility for:

1. Working with project managers to ensure that chemicals procured are the least hazardous of those available to accomplish the task and that excess quantities of hazardous chemicals are not procured.

2. Working with procurement personnel to ensure the life-cycle costs of chemicals are being considered in the procurement process.

3. Developing a written pollution prevention plan establishing goals for reduction or elimination of hazardous materials in conjunction with the Forest Service agency-wide pollution prevention strategy prepared in response to Executive Order 12856.

4. Working with the Emergency Response Coordinator to prepare site-specific contingency plans for all assigned areas on National Forest System lands and lands leased by the Forest Service that temporarily store hazardous waste as outlined in FSM 2165.11.

5. Managing the unit's hazardous waste program including maintaining, at the point of generation, documentation of hazardous waste generation, accumulation, transportation, and disposal as required in 40 CFR 262.

6. Ensuring that hazardous waste management inspections (FSM 2161.3) are conducted on a routine basis.

Required: Washington Office, Regional Offices, Stations, Forests, Laboratories, Hazardous Waste Generating Units.

Recommended: Field units handling greater than consumer use quantities (FSM 2160.5) of hazardous chemicals.

2160.43d - Emergency Response Coordinators

Emergency Response Coordinators have responsibility for:

1. Developing and maintaining the unit's contingency and emergency response plan (FSM 2165.2) for hazardous materials on National Forest System lands and lands leased by the Forest Service. This includes copies of the site-specific contingency plans developed in conjunction with the Safety and Health Coordinator and the Pollution Prevention Coordinator.
2. When required, serving as the point of contact with the Local Emergency Planning Committee (LEPC) or the State Emergency Response Commission (SERC), if no LEPC is established.
3. Collecting and providing the information specified in FSM 2165.15 concerning the use and release of hazardous materials to the appropriate State and local authorities.
4. Coordinating response activities required under the Clean Water Act and Oil Pollution Act for oil spills; under Occupational Safety and Health Administration (OSHA) regulations for releases of hazardous chemicals from Forest Service facilities; and under the Resource Conservation and Recovery Act (RCRA) for hazardous waste releases. Response actions taken at uncontrolled hazardous materials sites (FSM 2160.5) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority are the responsibility of the CERCLA Coordinator.
5. Providing assistance to field units on reportable quantity release reporting.

Required: Washington Office, Regional Offices, Stations, Forests, Laboratories.

Recommended: Field units handling greater than consumer-use quantities (FSM 2160.5) of hazardous chemicals.

2160.43e - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Coordinators

The CERCLA Coordinators have responsibility for:

1. Maintaining the Region/Station Federal Agency Hazardous Waste Compliance Docket (42 U.S.C. 9620(c)) and ensuring that only sites that meet the criteria specified in 42 U.S.C. 9620(c) are included.
2. Ensuring that preliminary assessments and, if warranted, site inspections are completed for all sites listed on the Docket.
3. Coordinating CERCLA removal and remedial actions, including cost documentation.

4. Coordinating CERCLA natural resource damage assessment activities, including cost documentation.

5. Working with the appropriate Office of General Counsel and the Region or Station fiscal staff in pursuing cost recovery.

6. Complying with the hazardous waste operations and emergency response regulations (29 CFR 1910.120; FSM 2161.41-42), except those portions of the regulations for training, personal protective equipment, and medical surveillance.

7. Consulting with the appropriate Office of General Counsel on matters relating to the application of hazardous materials laws.

Required: Regional Offices, Stations.

Recommended: Units that have uncontrolled hazardous materials site activities.

2160.5 - Definitions

Consumer-Use Quantities. Hazardous material used in the workplace in such quantities that the employer can demonstrate it is used in the same manner as normal consumer use, and the use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers (29 CFR 1910.1200(b)(6)(vii)).

Extremely Hazardous Substances. Those chemicals listed in 40 CFR 355.

Hazardous Chemicals. New, usable, and to-be-used chemicals that present health and physical hazards. Health hazards include chemicals that are irritants, corrosives, sensitizers, carcinogens, toxins, and agents that damage the lungs, skin, eyes, or mucous membranes. Physical hazards include chemicals that are combustible liquids, compressed gases, explosive, flammable, organic peroxides, oxidizers, pyrophorics, unstable or water-reactive (29 CFR 1910.1200).

Hazardous Material. Any hazardous substance, hazardous waste, hazardous chemical substance, toxic substance, pollutant or contaminant, imminently hazardous chemical substance or mixture, and oil.

Hazardous Substance. This term does not include petroleum (crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under the following paragraphs 1 through 6). Hazardous substance also does not include natural gas or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; 42 U.S.C. 9601(14)) defines hazardous substance as:

1. Any substance designated pursuant to section 311(b)(2)(A) of the Water Pollution Control Act.

2. Any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA.

3. Any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) but not including any waste for which regulation under the Solid Waste Disposal Act has been suspended by act of Congress.

4. Any toxic pollutant listed under section 307(a) of the Water Pollution Control Act.

5. Any hazardous air pollutant listed under section 112 of the Clean Air Act.

6. Any imminently hazardous chemical substance or mixture with respect to which the administrator has taken action pursuant to section 7 of the Toxic Substance Control Act.

Hazardous Waste. The Resource Conservation and Recovery Act (RCRA; 42 U.S.C. 1004) defines this term as a solid waste that because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

1. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

2. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

See 42 U.S.C. 6903 and 40 CFR 260.3 for a detailed definition of hazardous waste. Note that to be considered a hazardous waste, the waste must first meet the definition of a solid waste. See definition of solid waste in this section.

Solid Waste. Garbage; refuse; sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations. Note that solid waste from the extraction, beneficiation, and processing of ores and minerals (40 CFR 261.2(b)(7)) and mining overburden returned to the mine site (40 CFR 261.2(b)(3)) are exempt from the definition of solid waste. See 42 U.S.C. 6903 and 40 CFR 261.2 for a detailed definition and exemptions.

Toxic Chemicals. Those chemicals listed in 40 CFR 372.65.

Uncontrolled Hazardous Materials Site. An area identified by Federal, State, or local government agencies where an accumulation of hazardous materials creates a threat to the health and safety of individuals or the environment. Note that the Occupational Safety and Health Administration (OSHA) uses this same definition to describe uncontrolled hazardous waste sites (29 CFR 1910.120(a)(3)) in the OSHA regulations for Hazardous Waste Operations and Emergency Response.

2160.6 - References

The Environmental Engineering Laws and Issues (EELI) Library is an electronic data base that contains policy guidance, model statements of work, form letters, examples of investigation reports, inspection checklists, and so forth, for environmental activities. The EELI Library is accessible electronically through the Forest Service Information Center Services. To set up access capability, contact the unit Public Information Manager or an equivalent employee at each access site.

2161 - Program Administration

This section outlines administrative components of the hazardous materials program organization, coordination, chemical handling, and training.

2161.02 - Objective

To establish and maintain a safe, effective, and coordinated hazardous materials management program at each organizational level of the agency.

2161.03 - Policy

1. Administer activities involving hazardous materials commensurate with the Forest Service's degree of responsibility. Recognize that the Forest Service role varies, depending on whether an activity involves only the Forest Service or some combination of Forest Service and outside parties.

2. Establish management controls related to hazardous materials, as set forth in FSM 2161.1.

2161.04 - Responsibility

2161.04a - Regional Foresters and Station Directors

It is the responsibility of the Regional Foresters and Station Directors to carry out the administrative aspects of the hazardous materials management program as outlined in this section and to:

1. Ensure hazardous materials interstaff teams are established.
2. Ensure hazardous material management inspections are conducted.
3. Ensure Forest Service personnel involved in hazardous material activities are operating within the scope of their official duties as described in their individual position descriptions (FSM 2161.6).

2161.04b - Interstaff Team Members and Hazardous Materials Management Coordinators

(FSM 2160.43; FSM 2161.21). It is the responsibility of Interstaff Team Members and Hazardous Materials Management Coordinators to ensure external coordination and reporting to Federal departments and agencies, State or local governments, and/or the public (FSM 2161.22).

2161.04c - Line Officers

It is the responsibility of line officers to:

1. Ensure that the following training is provided, if appropriate, and that a permanent record of all employee safety and health training is maintained (FSM 2161.4):
 - a. Emergency Response (FSM 2161.41).
 - b. Hazardous Waste Operations (FSM 2161.42).
 - c. Hazard Communication Standard - Employee Right-To-Know (FSM 2161.43).
 - d. Occupational Exposure to Hazardous Chemicals in Laboratories (FSM 2161.44).
 - e. Transportation of Hazardous Materials (FSM 2161.45).
 - f. Respiratory Protection (FSM 2161.46).
2. Ensure that employees' activities relating to hazardous materials are within the scope of the employees' duties (FSM 2161.6).
3. Review and, if necessary, rewrite job descriptions to reflect employee involvement with hazardous materials (FSM 2161.6).
4. Ensure that the appropriate reports are made to the National Response Center and the Local Emergency Planning Committee or State Emergency Response Commission (FSM 2165.3, FSM 2165.31, FSM 2165.32).

2161.05 - Definitions

Emergency Response. Response efforts by employees from outside the immediate release area or by other designated responders (that is, mutual-aid groups, local fire departments, and so forth) to an occurrence that results, or is likely to result, in an uncontrolled release of hazardous materials (29 CFR 1910.120(a)(3)).

Response to Incidental Releases. Response to releases of hazardous materials that can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area or by maintenance personnel (29 CFR 1910.120(a)(3)).

2161.1 - Administrative Activities

2161.11 - Forest Service as Sole Responsible Party

1. Establish management controls for pollution prevention in the acquisition, use, storage, treatment, transportation, and disposal of hazardous materials for which the Forest Service is the user of the hazardous material or the generator of the hazardous waste.

2. Establish management controls for the cleanup of historic, inactive hazardous waste sites, such as pentachlorophenol wood treatment sites, for which the Forest Service was the sole generator of the hazardous waste.

2161.12 - Holders of Written Authorizations To Use or Occupy National Forest System Lands

Ensure that holders of authorizations provide information on their hazardous materials management procedures and that management of their hazardous materials is a required part of the review and approval process for all plans of operation, contracts, permits, and other written authorizations for use or occupancy of National Forest System lands (FSM 2700; FSH 2709.11).

2161.13 - Incidental Users of National Forest System Lands and Common Use Areas

1. Review activities involving incidental users of National Forest System lands and common use areas, such as campgrounds and off-road vehicle play areas, and assess whether hazardous materials may be involved.

2. If hazardous materials are present, take control actions where needed to ensure compliance with the requirements of this chapter.

2161.14 - Other Forest Service Administrative Activities

Ensure that a review of hazardous materials management is included in the administration of other Forest Service management activities, such as:

1. Lands actions (exchanges, purchases, donations, reversions, and transfers) (FSM 2166).
2. Administration of outstanding mineral rights (FSM 2840).

2161.15 - Forest Service Response to Non-Forest Service Activities on or Affecting National Forest System Lands

1. Forest Service emergency response to spills of hazardous or unknown materials on or affecting National Forest System lands and lands leased by the Forest Service resulting from activities by third parties should be limited to notification of the appropriate emergency response authorities (FSM 2165.14). Note that although the Forest Service was delegated authority to conduct time critical removal actions and non-time-critical removal actions (FSM 2164.05), the Forest Service was not delegated emergency response authority in Executive Order 12580

(FSM 2160.1, para. 15). The Environmental Protection Agency and States have the authority and responsibility for emergency response.

2. Forest Service response to non-Forest Service activities that impact the natural resources on National Forest System lands for which the Forest Service has trustee responsibility should include assessment of the injuries as described in FSM 2164.

3. Forest Service response at uncontrolled hazardous materials sites (FSM 2160.5) on National Forest System lands can range from oversight if a viable responsible party has undertaken the cleanup action to actual "hands-on" cleanup if the Forest Service takes the lead (FSM 2164). The level of a Forest Service employee's involvement in the response shall not exceed the level of training that employee has completed (FSM 2161.42).

2161.2 - Program Coordination

2161.21 - Hazardous Materials Interstaff Teams

Each Regional Forester and Station Director shall establish an interstaff team for the purpose of providing coordination and leadership for all hazardous materials activities within that unit (FSM 2161.04a). Team leadership and team members shall be representative of the specific hazardous materials activities of the Region or Station. Team members should include the unit's Federal Facility Compliance Program Coordinator, possibly one or more of the other hazardous materials coordinators, and representatives of various disciplines, such as Watershed and Air Management, Minerals and Geology Management, Engineering, Safety and Health, Lands, Administration, Recreation, Forest Pest Management, Property and Procurement, and, as necessary, the appropriate Office of General Counsel.

Similar teams should be established at Forests, Laboratories, and any other unit with significant hazardous materials activities and projects.

2161.22 - External Coordination

Coordinate hazardous materials projects, programs, and activities with other Federal departments and agencies, State or local governments, and the public (FSM 2161.04b, FSM 2164.04b para. 1f, and FSM 2165.15).

2161.3 - Hazardous Materials Management Inspections

Conduct annual inspections at facilities that routinely handle more than consumer use quantities (FSM 2160.5) of hazardous materials. It is recommended that a hazardous material management inspection be conducted annually by personnel outside of the facility being inspected. The personnel conducting these inspections should be familiar with the requirements of the Resource Conservation and Recovery Act (RCRA) and the Occupational Safety and Health Administration (OSHA). Facility personnel should conduct internal compliance inspections more frequently. Hazardous materials and hazardous wastes checklists, which may be used in conducting these

inspections, are available in the Environmental Engineering Laws and Issues Library (FSM 2160.6).

2161.4 - Training

Line officers shall ensure that training outlined in this section is provided (FSM 2161.04c). A permanent record of all employee safety and health training must be maintained.

2161.41 - Hazardous Waste Operations and Emergency Response Training

(29 CFR 1910.120). The line officer shall ensure that Forest Service employees (including seasonal and volunteer workers, involved in any of the following activities) are trained in accordance with the Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations:

1. Uncontrolled hazardous materials site discovery, investigation, oversight, or cleanup (FSM 2161.41b);
2. Leaking underground storage tank site discovery, investigation, oversight, or cleanup (FSM 2161.41b); or
3. Any activity where employees may discover a release of hazardous materials (FSM 2161.41a).

Although titled Hazardous Waste Operations and Emergency Response, these regulations apply to hazardous substance and oil operations and responses, as well as hazardous waste.

2161.41a - Emergency Response Training

(29 CFR 1910.120(q)(6)). The training requirements outlined in this section pertain to emergency response to:

1. Hazardous material releases by third parties on National Forest System lands and lands leased by the Forest Service; and
2. Releases from Forest Service facilities or operations that are beyond the ability of the employees in the immediate work area to clean up.

Forest Service response in these cases should be limited to collecting as much information as possible from a safe distance and to notifying the appropriate Environmental Protection Agency, State, and local emergency response authorities. To comply with the Occupational Safety and Health Act (OSHA) training requirements for this level of involvement in the response, the line officer shall ensure that all employees, including seasonal workers and volunteers who are likely to discover a hazardous material release, receive Emergency Response Awareness Level training. There is no minimum number of hours required for this training.

2161.41b - Hazardous Waste Operations Training

(29 CFR 1910.120(e)). The training requirements outlined in this section pertain to cleanup operations at uncontrolled hazardous materials sites (Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) activities) and cleanup actions at sites covered by the Resource Conservation and Recovery Act (RCRA; such as the leaking of underground storage tanks). To comply with Occupational Safety and Health Act (OSHA) and RCRA training requirements, line officers shall, at a minimum, ensure that:

1. Remedial Project Managers (RPM) and On Scene Coordinators (OSC) of uncontrolled hazardous materials sites and managers of cleanups of leaking underground storage tanks under RCRA receive the training specified in 29 CFR 1910.120(e)(4). This includes 40 hours of classroom training, 3 days of supervised field work, and a minimum of 8 hours of specialized training specific to the current work assignment. An 8-hour annual refresher course is required (29 CFR 1910.120(e)(8)).

2. General site workers at uncontrolled hazardous materials sites and other activities that expose them to hazardous materials receive the training specified in 29 CFR 1910.120(e)(3). This includes 40 hours of classroom training, and 3 days of supervised field work. An 8-hour annual refresher course is required (29 CFR 1910.120(e)(8)). General site workers include equipment operators, laborers, and so forth at uncontrolled hazardous materials sites and at leaking underground storage tanks and employees performing on-site CERCLA preliminary assessments, site inspections, and remedial investigations and feasibility studies.

3. Forest Service employees who are occasionally on an uncontrolled hazardous materials site (for example, contracting officer representatives and land line survey crews), or employees who are regularly on a uncontrolled hazardous materials site but in nonhazardous areas of the site, receive 24 hours of classroom training and 1 day of supervised field work. An 8-hour annual refresher course is required (29 CFR 1910.120(e)(3)).

4. Forest Service employees at large quantity hazardous waste generator facilities receive the training specified in 40 CFR 265.16. This training is not required for small quantity generators or conditionally exempt small quantity generators.

2161.42 - Hazard Communication Standard - Employee Right-To-Know Training

(29 CFR 1910.1200(h)(2)). Line officers shall ensure that all employees, including volunteers and seasonal employees, who work with hazardous chemicals or may be exposed to hazardous chemicals receive OSHA Hazard Communication Standard training. Note that the Hazard Communication Standard requires training on response to incidental releases (FSM 2161.05) in the work place. There is no minimum number of training hours required. Additional training is required any time a new hazard is introduced into the workplace.

2161.43 - Occupational Exposure to Hazardous Chemicals in Laboratories Training

(29 CFR 1910.1450). Line officers shall ensure that each laboratory employee is provided with information and training on the hazards of chemicals in their work area. This training must be provided at the time of initial assignment and prior to a new assignment involving different exposure situations.

2161.44 - Transportation of Hazardous Materials Training

(49 CFR 172). Line officers shall ensure that employees who load, unload, or handle hazardous materials; who prepare hazardous materials for transportation; or who operate vehicles used to transport hazardous materials receive the training specified in Department of Transportation (DOT) regulations 49 CFR Part 172, Subpart H. Training must be completed within 90 days of employment. Recurrent training must be provided every 2 years. Department of Transportation training requirements are divided into four categories: general awareness/familiarization; function specific; safety; and driver.

Drivers who are trained in accordance with FSM 5714.2, FSH 5709.11, and 5709.12 for transportation by aircraft, and FSH 7109.19, chapter 60, for transportation by motor vehicle; will satisfy the DOT driver training requirements.

2161.45 - Respiratory Protection Training

(29 CFR 1910.134; FSM 6721.2).

2161.5 - Personal Protective Equipment and Clothing

(FSM 6720, FSM 6721.2, FSH 6709.11, and FSH 6709.12).

2161.6 - Personal Liability

(FSM 2160.1, para. 4 and para. 21). Federal employees may be found personally liable for criminal actions related to hazardous materials and may be subject to criminal sanctions including fines and imprisonment. For example, Forest Service employees who knowingly fail to report a release from a Forest Service facility or operation of a reportable quantity of a hazardous substance (FSM 2165.31), who fail to obtain a proper hazardous waste permit (40 CFR 270), or who violate a disposal regulation could be subject to substantial personal criminal liability. No employee shall be personally liable for any civil penalty under any Federal, State, interstate, or local solid or hazardous waste law with respect to any act or omission within the scope of their official duties. The Federal Tort Claims Act provides that the United States is substituted as the sole defendant if employees acts within the scope of their duties in civil matters.

All employees required to perform duties involving hazardous materials shall have those duties included in their job descriptions (FSM 2161.04a).

2162 - Hazardous Chemical Management

2162.01 - Authority

Occupational Safety and Health Act (OSHA; FSM 2160.1, para. 1).

2162.02 - Objectives

1. To protect Forest Service employees from injury or mishap when using hazardous chemicals while performing their official duties.
2. To minimize the acquisition and use of hazardous chemicals.
3. To safely store, transport, and handle hazardous chemicals in the workplace.
4. To ensure that Forest Service employees are properly trained in the identification and safe use of hazardous chemicals.
5. To ensure that Forest Service employees are provided with protective clothing and equipment required to interface with hazardous chemicals.

2162.03 - Policy

Manage the use of hazardous chemicals to:

1. Minimize accumulation of hazardous chemicals (FSM 2162.2).
2. Ensure hazardous chemicals are handled in accordance with the Hazard Communication Standard (FSM 2162.5), Chemical Hygiene Plans in laboratories (FSM 2162.6), and Emergency Planning and Community Right-To-Know regulations (FSM 2165.15).
3. Ensure hazardous chemicals are stored according to applicable codes and standards (FSM 2162.3).
4. Ensure hazardous chemicals are transported according to applicable regulations (FSM 2162.4).

2162.04 - Responsibility

(FSM 2160.42, FSM 2160.43b-d, and FSM 2161.04c).

2162.05 - Definitions

Material Safety Data Sheet (MSDS). A document describing the physical and chemical properties of products, their physical and health hazards, and precautions for safe handling and use.

2162.06 - Reference

United States Department of Agriculture. August 1987. Hazard Communication - A Program Guide for Federal Agencies. (Available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

2162.1 - Identification of Hazardous Chemicals

Identify all hazardous chemicals used in the workplace. Note that common consumer products, such as bleach and typing correction fluid, may be excluded from the identification process provided they are used in the same manner and with the same frequency and duration as their consumer applications (FSM 2160.5). To help identify hazardous chemicals, obtain a Material Safety Data Sheet (MSDS) from the manufacturer, supplier, or distributor when purchasing chemicals. Furnish a copy to the appropriate Safety and Health Coordinator (FSM 2760.43b). If the MSDS does not accompany the shipment of a chemical, request one from the manufacturer. All chemical manufacturers must provide these information sheets on request.

2162.2 - Hazardous Chemical Pollution Prevention

Comply with guidelines established in the unit's pollution prevention plan (FSM 2160.43c, para. 3). Acquire and maintain only the minimum stock level of hazardous chemicals. Consider the total cost and method of disposal prior to acquiring hazardous chemicals. A less hazardous substitute for a hazardous chemical may have a higher initial cost but lower disposal cost. A less hazardous substitute may eliminate the need for personal protective clothing and equipment or medical monitoring, which can greatly reduce the ultimate cost of the chemical.

2162.3 - Storage

See the following for storage requirements:

1. 29 CFR Part 1910, Subpart H, and FSH 6709.11, ch. 9, for hazardous chemicals.
2. FSH 2109.14 for pesticides.
3. FSM 2167.11 for explosives.

2162.4 - Transportation

Transport hazardous materials in accordance with applicable regulations and agency direction (FSM 5714.2; FSH 6709.11, ch. 9-4; FSH 5709.11, and 5709.12 for transportation by aircraft; FSH 7109.19, ch. 60, for transportation by motor vehicles).

2162.5 - Hazard Communication Standard - Employee Right-To-Know

To comply with the Hazard Communication Standard (29 CFR 1910.1200), each unit should:

1. Prepare a written hazard communication plan (29 CFR 1910.1200(e)).
2. Identify and evaluate the chemical hazards in the workplace.
3. Prepare a hazardous chemical inventory.
4. Develop a file of Material Safety Data Sheets (MSDS's).
5. Provide employees with access to MSDS's.
6. Ensure that incoming products have proper labels.
7. Develop a system for within-facility labeling where necessary.
8. Develop a training program and document and maintain training records.
9. Identify and train employees who could be potentially exposed to hazardous chemicals.
10. Evaluate the program and improve and update it where necessary.
11. Develop a system to identify when a new hazard has been introduced into the workplace and ensure that appropriate employees receive the required training.
12. Establish a method to inform employees of the hazards of nonroutine tasks and the hazards associated with chemicals contained in unlabeled pipes in their area.

This standard does not apply where it is documented that hazardous chemicals are used in the workplace in the same manner as normal consumer use, and such use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers (FSM 2160.5). For additional information, refer to Hazard Communication - A Program Guide for Federal Agencies (FSM 2162.06).

2162.6 - Occupational Exposure to Hazardous Chemicals in Laboratories

To comply with the requirements of 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemicals in Laboratories, each Forest Service laboratory should:

1. Develop and implement a written chemical hygiene plan for each laboratory where hazardous chemicals are used. The plan must set forth procedures, equipment, personal protective equipment, and work practices that are capable of protecting employees from the health hazards presented by hazardous chemicals. Specific elements required to ensure

laboratory employee protection are outlined in 29 CFR 1910.1450(e) and must be addressed in the plan.

2. Appoint a Chemical Hygiene Officer who is qualified by training or experience to provide technical guidance in the development and implementation of the chemical hygiene plan.

3. Provide laboratory employees with necessary safety equipment and personal protective equipment needed for the job at no cost to the employees.

4. Provide laboratory employees with training and information (Job Hazard Analysis and Material Safety Data Sheets (MSDS's)) on proper use of personal protective equipment and other safety equipment, such as fume hoods, eye washes, and emergency showers.

5. Provide laboratory employees an opportunity to receive medical attention under the following circumstances:

- a. The employee shows signs or symptoms associated with a hazardous chemical to which the employee may have been exposed.
- b. Exposure monitoring reveals levels routinely above the action level for an Occupational Safety and Health Administration (OSHA) regulated substance.
- c. Whenever a spill, leak, explosion, or other occurrence, results in the likelihood of a hazardous exposure.

6. Ensure that laboratory employees receive proper hazard warnings in the form of labels, MSDS's, and warning signs.

2162.7 - Hazardous Chemicals Contingency Planning

(FSM 2160.43b, FSM 2165).