ATTACHMENT F

PERSONNEL TRAINING PLAN

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ATTACHMENT F

PERSONNEL TRAINING

Attachment F describes the personnel training program for Los Alamos National Laboratory (LANL) permitted unit workers. The primary objective of the training program is to prepare personnel to operate and maintain safely those areas managing hazardous and/or mixed waste. This training program applies to all employees of the Permittees and any subcontractors who work regularly at LANL permitted units and manage hazardous and/or mixed waste. The degree of training varies with the job duties.

F.1 HAZARDOUS AND MIXED WASTE MANAGEMENT/RESPONSIBILITIES

Waste management activities and responsibilities at specific hazardous and/or mixed waste management units are handled by the appropriate LANL division or group. Waste management personnel within the Environmental Projects Associate Directorate are responsible for most centralized waste management activities at LANL. Hazardous waste compliance personnel are responsible for providing waste management regulatory guidance to all LANL personnel and operations. Other personnel at LANL who may provide assistance in various waste management activities are discussed in the following paragraph and in Attachment D (*Contingency Plan*).

Laboratory-contracted support services provide trained personnel to assist in waste-handling activities. The Permittees shall ensure that radiation protection, health physics, occupational medicine, industrial hygiene and safety, nuclear criticality safety, occurrence reporting, hazardous material response, meteorology and air quality, water quality and hydrology, ecology, and hazardous waste compliance personnel are trained in their respective specialties to provide emergency response support and that LANL security provides workers trained in traffic and site-access control.

The Emergency Operations – Emergency Management Group (EO-EM) provide emergency planning and response at LANL and have the overall responsibility for LANL's Emergency Management Plan (EMP) training. Central training personnel are responsible for the analysis, design, development, and delivery of LANL-wide environment, safety, and health (ES&H) training.

Courses on hazardous and/or mixed waste are designed with substantial input from hazardous waste compliance personnel, hazardous waste operations personnel, and other subject matter experts, as appropriate.

F.2 TRAINING CONTENT, FREQUENCY, AND TECHNIQUES

The training program instituted at the Facility includes a combination of Facility-wide courses, permitted unit-specific training, and on-the-job training (OJT). Facility-wide courses are provided internally or through external vendors and are usually classroom-based. Permitted unit-

specific training may be developed and delivered within a particular permitted unit, and OJT consists of supervised and documented training focused primarily on procedures performed by individual workers. Each of these types of training is described in Sections F.2.1 through F.2.3.

The Permittees shall ensure that all Facility employees and contract and support personnel who handle hazardous and/or mixed waste at permitted units receive the appropriate level of training within six months of their date of hire or transfer for work at a permitted unit. The Permittees shall not allow personnel to work in unsupervised waste handling positions at permitted units until they have successfully completed the appropriate level of training for their positions and responsibilities.

The Permittees shall ensure that records of Facility-wide training currently sponsored or administered by central training personnel are entered by that group into UTrain, the official Facility training database, and that these records document that the required training has been successfully completed by the worker. The Permittees shall retain training records of former workers in accordance with Permit Section 2.12.2.

The Permittees shall ensure that the Facility-wide training program depicted in Table F-1 is carried out by the Permittees' central training personnel. Table F-1 includes a listing of the relevant training courses, a summary of topics, and a designation of the relevant courses for each job category. Categories of workers presented in Table F-1 include permitted unit hazardous/mixed waste workers, managers and supervisors of permitted unit hazardous/mixed waste workers, emergency responders, and uncontrolled area potential release site workers. Table F-2 summarizes the components of permitted unit specific training and OJT that workers receive, as applicable.

Permitted unit hazardous/mixed waste workers are responsible for handling hazardous/mixed wastes at a permitted unit. In addition, they are responsible for assisting in permitted unit spill and emergency response activities, as required.

Managers and supervisors of permitted unit hazardous/mixed waste workers are directly responsible for day-to-day operations related to permitted unit waste management activities. They are also responsible for assuring that personnel safety and training requirements are met.

Emergency Responders are trained emergency response personnel who respond to emergencies involving hazardous and/or mixed wastes. Emergency Responders also provide support for emergency response activities.

Uncontrolled Area Potential Release Site Workers conduct investigations and remedial activities at potential release sites. They are also responsible for proper waste management from generation to disposal, including waste characterization, treatment, and storage.

The Permittees shall review course content at least annually and shall update it as required to keep materials current with hazardous waste management regulations. The Permittees shall maintain training materials of Facility-wide training courses on file in the ES&H Training Center

and make them available for review by all hazardous/mixed waste management and handling personnel, and emergency response personnel. The Permittees shall maintain files listing the requisite skills, education, and training for workers who handle hazardous and/or mixed waste at each permitted unit, and the duties and responsibilities for each job description, as well as the name of each worker filling a job description, are maintained in accordance with Permit Section 2.12.2.

F.2.1 Facility-Wide Courses

The Permittees shall require certain hazardous waste management courses for permitted unit personnel, including Waste Generation Overview Live Training, Resource Conservation and Recovery Act (RCRA) Personnel Training, and RCRA Refresher Training.

The RCRA Personnel Training course shall provide an overview of state and federal hazardous waste management regulations, emphasizing compliance with the RCRA requirements that apply to job-related activities, such as the safe handling of hazardous and mixed waste. Instructors shall be trained in hazardous and mixed waste management programs and procedures and in RCRA. Central training personnel, with guidance from hazardous waste compliance personnel, shall provide an annual refresher of applicable hazardous waste management requirements. Permitted unit personnel who handle hazardous and/or mixed waste and/or clean up spills or releases of hazardous and/or mixed waste at permitted units, and the managers and supervisors of these workers, shall receive instruction on the topics listed in Table F-1. Personnel responsible for shipping or transporting hazardous and/or mixed waste shall receive supplementary training, as appropriate.

The Permittees shall ensure that training concerning the use of waste characterization documentation is included in the Waste Generation Overview Live course. This training shall be provided to appropriate personnel and provide detailed instructions on how to complete forms for characterizing wastes.

F.2.2 Unit-Specific Training

Waste-handling personnel shall participate in permitted unit-specific training at their particular work locations. Table F-2 addresses program requirements that ensure that hazardous and mixed waste management and handling personnel know the specific requirements for their particular facilities and are able to respond effectively to emergencies. The Permittees shall ensure that personnel become familiar with emergency procedures, equipment, and systems at their particular facility, including emergency and monitoring equipment use, inspection, repair, and replacement, as appropriate. The Permittees shall ensure that they also receive instruction on contingency plan contents and implementation (as they apply to their particular facility) including, but not limited to, communications or alarm systems, response to fires and explosions at their facility, key parameters for automatic waste-feed cutoff systems, shutdown of facility operations, and response to groundwater contamination incidents.

F.2.3 On-the-Job Training

The Permittees shall provide supervised and documented OJT, if developed, delivered by supervisors or other subject matter experts who are able to evaluate worker proficiency and determine appropriate training for the procedures required of each function-specific position. OJT topics may include implementation of permitted unit-specific procedures, maintenance of operating records, reporting requirements, and permitted unit-specific inspection requirements. Permitted unit emergency response personnel receive permitted unit-specific training regarding emergency response and shutdown procedures at the permitted unit to which they are assigned.

Only properly trained personnel may operate radiography equipment or conduct visual examinations (VE) of waste contents. Radiography and VE procedure operators shall receive on-the-job training in project requirements, system operations and standards, safe operating practices, application techniques, specific waste-generating practices, packaging configurations, parameter estimation, and identification of prohibited items. The Permittees shall train and test operators before they are qualified for radiography operation and VE, and shall requalify operators at least every two years.

F.2.4 Training Coordinator

The Central Training Division shall direct the Facility-wide ES&H training program and that the Division Leader (or designee) serves as the Training Coordinator for Facility-wide waste management training. The Training Coordinator shall be trained in the operation of hazardous and mixed waste management facilities, waste management practices, and emergency procedures and is responsible for coordinating training courses.

F.3 EMERGENCY TRAINING

If called upon by the EM&R Office, additional non-LANL emergency response personnel may assist the Facility Incident Commander at the scene of a hazardous or mixed waste emergency. These workers shall be trained in their specialties (*e.g.*, heavy equipment operation, hazardous material cleanups, traffic control, and security).

Permitted unit personnel involved in waste handling and emergency response shall be knowledgeable about appropriate building and operating area emergency procedures to ensure maximum protection of life and property and to mitigate the consequences of an emergency situation. These workers shall receive training in permitted unit-specific emergency procedures or participate in the Facility-wide emergency training program. Group leaders and immediate supervisors shall be responsible for ensuring that education and training in permitted unit-specific emergency procedures are provided to all personnel under their supervision. Training in permitted unit-specific emergency procedures is given by the operating group.

Immediate supervisors shall ensure that each new or transferred worker is informed on the general and specific emergency procedures related to the work area and that each worker is advised of any changes to emergency procedures and that each worker is provided with an annual refresher of these procedures.

Specialized training shall be given to personnel assigned special functions or specific emergency duties. For example, emergency response personnel are required to attend training on the implementation of Attachment D (*Contingency Plan*), spill response, and Occupational Safety and Health Administration emergency response provisions. The EM&R Office shall provide training related to implementing LANL's EMP. In addition, permitted unit waste management and handling personnel shall participate in a training program in which they are instructed in emergency procedures pertinent to their work areas. The operating group is responsible for providing this site-specific instruction, which shall also include walk-throughs of the areas covered by the Contingency Plan.

F.4 IMPLEMENTATION OF TRAINING PROGRAMS

Waste Generation Overview Live is an introductory course that provides an overview of federal and state waste management regulations and Facility policies and procedures for waste management operations. The training addresses the information needed to identify and properly manage wastes that are subject to hazardous waste regulations in 40 CFR Parts 261, 264, and 268. Course topics include waste characterization and classification including identification of RCRA waste types and their determination, the information needed to characterize the wastes, and the documentation requirements for proper management of the wastes.

In addition, all permitted unit workers who handle hazardous and/or mixed waste are required to complete RCRA Personnel Training and annual RCRA refresher courses. These refresher courses update personnel on LANL procedures and changes in hazardous waste regulations and provide them with an overview of their introductory training. Line managers and group leaders shall be responsible for ensuring that personnel participate in the appropriate introductory and annual training courses.

TABLE F-1

Facility-Wide Training Program Outline

Courses[a]	Permitted Unit[b] Hazardous/ Mixed Waste Worker	Manager/ Supervisor of permitted unit Hazardous/Mixed Waste Workers	Emergency Responder	Uncontrolled Area Potential Release Site Worker
HAZWOPER[c]: First Responder (Operations Level) (provides an overview of hazardous materials emergency response, including recognition and identification of hazardous materials and associated risks, required actions, and relationships with other emergency responders)			X[d]	
HAZWOPER: General Site Worker (40 hours) (provides general information on hazardous waste operations and emergency response for general site workers engaged in corrective action, remediation, or decontamination and decommissioning activities)				X
HAZWOPER: Refresher (provides general information on hazardous waste operations)			X	X
RCRA[e] Personnel Training (includes an overview of 40 CFR Parts 260-265, 268; the New Mexico Administrative Code, Title 20, Chapter 4, Part 1; Department of Transportation shipping regulations; internal and external protocol for facility	X	X	*[f]	*

Courses[a]	Permitted Unit[b] Hazardous/ Mixed Waste Worker	Manager/ Supervisor of permitted unit Hazardous/Mixed Waste Workers	Emergency Responder	Uncontrolled Area Potential Release Site Worker
inspections; operating equipment, communication systems, security systems; contingency plan; and emergency equipment use, inspection, and repair)				
RCRA Refresher Training (includes regulatory and legislative updates, occurrence reports and lessons learned, audit findings, modification/review of the contingency plan; provides required retraining)	X	X	*	*
Waste Generation Overview Live (includes waste management regulations and policies, definition of hazardous waste, wastes characterization and documentation, waste minimization, cycle of waste management at Los Alamos National Laboratory, storage and disposal)	X	X	X	X
Respirators: Air-Purifying (provides required annual retraining for operation and inspection of device, changing filters, donning and doffing)	*	*	X	*

Courses[a]	Permitted Unit[b] Hazardous/ Mixed Waste Worker	Manager/ Supervisor of permitted unit Hazardous/Mixed Waste Workers	Emergency Responder	Uncontrolled Area Potential Release Site Worker
Respirators: Self-Contained Breathing Apparatus (provides required annual retraining for operation and inspection, changing compressed air bottles, donning and doffing, safety features, care and cleaning, fitting)	*	*	X	*

[a] Additional training courses (not listed in this attachment) may also be taken by personnel depending on the types of hazards (*e.g.*, chemical) associated with a particular job description.

[b] TSF = Treatment and storage facility

[c] HAZWOPER = Hazardous Waste Operations and Emergency Response

[d] X indicates a required course.

[e] RCRA = Resource Conservation and Recovery Act

[f] * indicates that a course may be required for specific job tasks and/or work areas.

TABLE F-2

OUTLINE OF PERMITTED UNIT-SPECIFIC AND ON-THE-JOB TRAINING FOR TREATMENT AND STORAGE FACILITY OPERATIONS

Permitted unit-specific and/or on-the-job training (OJT) is provided to permitted unit workers to ensure that operations are performed in a safe manner and that actual job tasks are conducted in accordance with safe operating procedures.

Permitted unit-specific training will include, as applicable, the following topics:

- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Key parameters for automatic waste feed cut-off systems
- Communications or alarm systems
- Response to fires or explosions
- Response to groundwater contamination incidents
- Shutdown of operations.

OJT will include the following topics, as applicable:

- Implementation of facility-specific procedures
- Maintenance of operating records
- Reporting requirements
- Permitted unit-specific inspection requirements
- Operation of radiograph equipment
- Visual examination (VE) of waste contents.

OJT and facility-specific training must be documented by the sponsoring organization and training records must be maintained for a minimum of three years from the date that the trainee last worked at the permitted unit.