

PERMIT ATTACHMENT F PERSONNEL TRAINING PLAN

F.1 INTRODUCTION

This Permit Attachment (F) describes training requirements for employees and any contractors who work at the Permitted Units, including the Corrective Action Management Unit (CAMU) (*See* 40 CFR § 264.16). The primary objective of the training is to prepare those personnel to safely manage hazardous and mixed waste. The degree of training varies with the job duties.

F.2 HAZARDOUS WASTE MANAGEMENT RESPONSIBILITIES

This program provides employees with training relevant to their positions. Personnel shall be given, at a minimum, a basic understanding of the Resource Conservation and Recovery Act (RCRA) regulatory requirements for waste management, emergency procedures, and operating procedures. Some employees shall receive additional classroom and on-the-job training designed for specific duties. In accordance with 40 CFR § 264.16(b) employees who have not received training or are unable to provide relevant and appropriate training documentation shall receive the required training within six months of assignment to hazardous and mixed waste management activities and prior to managing those wastes without supervision.

F.3 TRAINING CONTENT, FREQUENCY, AND TECHNIQUES

Personnel who are directly involved in hazardous and mixed waste handling shall be informed of the potential hazards, procedures for safe handling of wastes, and emergency procedures. Individuals in supervisory or decision-making positions shall receive a comprehensive overview of all aspects of waste management relevant to the Permitted Unit. Personnel with specific or short-term assignments, such as visitors or temporary contractors not directly involved in waste management, may receive a site-specific safety briefing with emergency response information necessary for their duties as an alternative to the training specified in this Permit Attachment. The training program shall include a combination of classroom or online instruction, reviews of written documents, and on-the-job training exercises as appropriate for the position. Training course content and frequency shall be as shown in Table F-1 of this Permit Attachment. As regulatory compliance requirements change training courses shall be evaluated and modified, as necessary.

F.4 JOB TITLE/JOB DESCRIPTION AND TRAINING RECORDS

Job titles and descriptions of hazardous and mixed waste management personnel are provided in Tables F-4 through F-14 of this Permit Attachment. The job descriptions include requisite skills, education, and/or other qualifications as well as hazardous and mixed waste management job duties. The required training for each job title is listed in Tables F-1 and F-2 of this Permit Attachment. Additional required training for each job title for workers at the TTU are listed in Table F-3 of this Attachment.

In accordance with 40 CFR §264.16(d)(1) and (d)(2), a file of all Permitted Unit personnel, including their job titles and job descriptions shall be maintained at each Permitted Unit. For each job title, the file shall contain requisite qualifications, and training records.

In accordance with 40 CFR § 264.16(d) (4), training records shall be kept to document the type and amount of training received by employees at each Permitted Unit. Contents of these records shall include at a minimum, the following:

1. Job title for each position related to hazardous or mixed waste management;
2. The name of the employee assigned to each job title;
3. Written job description;
4. Written training requirements for each job title;
5. Records that document training received, such as attendance or signature lists, certificates, memoranda of training, or reports from computerized databases of training completion status.

Current-year training records shall be kept at the Unit to which employees are or were assigned and training records for previous years shall be maintained in electronic or physical form in the Facility Operating Record.

For MSB personnel, all training records to be maintained at the Unit shall be maintained at the RMWMU.

For former employees, training records shall be maintained in the Facility Operating Record for a minimum of three years from the date the employee last worked at a Permitted Unit in accordance with 40 CFR § 264.16(e).

F.5 TRAINING DIRECTOR

The Unit-specific Department Manager or designee shall function as the Training Director. The Manager shall maintain responsibility for ensuring that all Unit-specific required training is administered to all employees. The Training Director shall be knowledgeable about the hazardous waste management regulations, this Permit and specific hazardous or mixed waste management operations employed at the Permitted Unit. The Training Director shall ensure that the training required for individual employees is administered in accordance with the requirements of this Permit.

The Training Director may perform or delegate training to qualified trainers. Trainers shall be qualified on the basis of attainment of one or more of the following:

1. Certification in the subject matter addressed by the training;
2. Demonstration of knowledge and competence in the training subject; or,
3. Previous on-the-job or classroom training in the topics covered.

TABLE F-1
Training Content and Frequency

A. RCRA Regulation Training

Duration: Variable (1-4 hours)

Frequency: Initial/Periodic Refresher (at least annually)

Method: Classroom or online instruction, on-the-job training, document review.

Minimum content may include (as applicable to the specific Permitted Unit to which an employee is assigned):

1. Identification of hazardous waste
2. Treatment, storage, and disposal requirements
3. Generator and transporter requirements

B. RCRA Contingency Plan and Emergency Procedures

Duration: Variable (1-4 hours)

Frequency: Initial/Annual Refresher

Method: Classroom or online instruction, document review, classroom and hands-on exercises

Minimum content must include (as applicable to the specific Permitted Unit to which an employee is assigned):

1. Emergency notification procedures;
2. Response to emergencies
3. Evacuation route and procedures
4. Emergency equipment and personal protective equipment
5. Emergency Coordinator responsibilities
6. Post-emergency actions
7. Contingency Plan
8. Shutdown procedures (if any)

TABLE F-1 (Continued)

C. Technical Work Documents and Refresher

Duration: As appropriate

Frequency: Initial/Periodic Refresher

Method: Document review, on-the-job training

Minimum Content: This training is function-specific and may be divided into sections or modules. Each employee must participate in the sections that apply to his or her specific job function. Sections include, but are not limited to, the following as needed:

1. Waste Analysis Plan
2. Unit-specific safety practices
3. Unit-specific operational procedures (e.g., loading and unloading)
4. Unit security, entry, and control
5. Operation, maintenance, and inspection of equipment
6. Prevention of the ignition/reaction of ignitable/reactive wastes
7. Permit conditions
8. Emergency response
9. Unit tour

D. Hazardous Waste Operations and Emergency Response

Duration: Variable (24 hours or more with an 8-hour refresher)

Frequency: Initial/Refresher (at least annually)

Method: Classroom instruction, hands-on exercises

Minimum Content:

1. Hazardous and mixed waste management and regulations
2. Sources of information
3. Compatibility of hazardous and mixed wastes
4. Personnel protection
5. Principles of safety
6. Emergency procedures

TABLE F-2
Training for Each Job Title

Required Training (See Table F-1)	JOB TITLES										
	Training Director	RCRA Project Leader	Emergency Coordinator	Chemist	Field Technician (Waste Handler)	Special Projects Staff	Inspector	Transportation Manager	Unit Operations Support Staff	CAMU Leader/Coordinator	CAMU Field Technician
Resource Conservation and Recovery Act (RCRA) Regulations	X	X	X	X	X	X	X	X		X	X
Contingency Plan and Emergency Procedures	X	X	X	X	X	X	X	X	X	X	X
Technical Work Documents		X		X	X	X	X			X	X
Hazardous Waste Operations and Emergency Response (24- or 40-hour course)	X	X	X	X	X	X	X	X		X	X
Hazardous Waste Operations and Emergency Response (8-hour course)	X	X	X	X	X	X	X	X		X	X

TABLE F-3
Thermal Treatment Unit Personnel Training Content

A. Explosives Personnel Safety Course

Duration: Variable (at least 16 hours)

Frequency: Initial

Method: Classroom or online instruction

Minimum content may include:

1. Basic explosives definitions
2. Overview of explosives and explosive device categories and characteristics
3. Initiation stimuli and safety guidelines for avoiding accidental ignition
4. Standards for explosives operations, including compatibility, storage, and standard operating procedures

B. Operating Procedures of the Thermal Treatment Unit

Duration: Variable (1 to 4 hours)

Frequency: Annually

Method: Classroom or online instruction, on-the-job training, and/or document review

Minimum content may include:

1. Overview of written operating procedures
2. Overview of the Waste Analysis Plan
3. Safety practices
4. Security, site entry, and site control
5. Unit operations
6. Unit equipment and structures
7. Procedures to prevent the reaction of reactive waste
8. Permit requirements for the Thermal Treatment Unit

F.6 EMERGENCY TRAINING

Permitted Unit employees shall participate in Unit-specific emergency response training to assure effective response to emergencies. Emergency response training consists of classroom or online instruction, document reviews, and classroom or hands-on exercises. The content shall be reviewed at least annually and revised as necessary to incorporate changes in regulatory compliance requirements. Topics covered shall include at a minimum:

1. Emergency notification procedures;
2. Response to emergencies, including fires, explosions, and releases of hazardous and mixed wastes;
3. Procedures for using, inspecting, maintaining, and replacing emergency equipment and personal protective equipment;
4. Procedures for the shutdown of operations;
5. Procedures for evacuation (i.e., communications/alarms);
6. Responsibilities of the Emergency Coordinator;
7. Post-emergency reports and actions; and
8. Contingency Plan (See Permit Attachment D).

F.7 IMPLEMENTATION OF TRAINING PROGRAMS

The training program shall be implemented to assure that Unit personnel receive appropriate training in a timely manner.

Table F-4
Job Title, Description, and Qualifications:
RCRA Training Director

Job Title: Training Director

Job Description:

The Training Director shall ensure that all personnel meet the training requirements of this Permit. Examples of duties are:

- Identify and coordinate training required by RCRA regulations, this Permit, and Facility waste management worker-training requirements;
- Ensure maintenance of training records required by RCRA regulations and this Permit and demonstrate compliance with Facility waste management worker training requirements for all personnel; and
- Inform personnel when specific training is required.

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for the Training Director are:

- Bachelor's degree from an accredited post-secondary institution; or,
- Three years' experience with RCRA hazardous or mixed waste management regulations.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-5
Job Title, Description, and Qualifications:
RCRA Project Leader

Job Title: RCRA Project Leader

Job Description:

A RCRA Project Leader oversees, supervises, and coordinates collection, storage, and shipment of hazardous waste at a Permitted Unit. Examples of duties are:

- Ensure operation of the Permitted Unit in compliance with applicable RCRA regulations and this Permit;
- Identify and coordinate training required by RCRA regulations and this Permit;
- Determine training and reading requirements specific to positions, tasks or Unit activities;
- Coordinate activities related to management of hazardous or mixed waste at a Permitted Unit;
- Ensure maintenance of records required by RCRA regulations and this Permit, such as training records, inspection records, waste analysis records, and Contingency Plan;
- Ensure maintenance of additional records required for the Unit Operating Record;
- Prepare, review, and submit documents on waste management activities;
- Ensure compliance with RCRA regulations and this Permit for hazardous or mixed waste shipments; and
- Coordinate activities pertaining to hazardous or mixed waste audits.

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for a RCRA Project Leader are:

- Bachelor's degree from an accredited post-secondary institution; or,
- Three years' experience in managing hazardous or mixed waste.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-6
Job Title, Description, and Qualifications:
Emergency Coordinator

Job Title: Emergency Coordinator

Job Description:

An Emergency Coordinator evaluates, coordinates, and implements emergency actions in accordance with the Contingency Plan during an emergency (as defined in the Contingency Plan, Permit Attachment D). As defined in the Contingency Plan, Emergency Coordinator duties during and after an emergency include, but are not limited to:

- Identify the character, exact source, amount, and extent of released material or hazardous or mixed waste by observation, records reviews, or chemical analysis;
- Assess possible hazards to human health or the environment considering both direct and indirect effects;
- Take all reasonable measures necessary to ensure fires, explosions, and releases do not occur, recur, or spread to other hazardous or mixed waste at the Unit including stopping processes and operations, collecting and containing released waste, and removing or isolating containers;
- Monitor for leaks, pressure buildup, gas generation, and ruptures in valves, pipes, or other equipment if the Unit stops operations prior to restoration of normal operations;
- Provide for properly treating, storing, or disposing of recovered material, waste, contaminated soil or surface water, or any other media or material;
- Ensure that no waste that may be incompatible with the released waste is treated, stored, or disposed of until cleanup procedures are completed; and
- Ensure that all equipment listed in the Contingency Plan and site-specific contingency plan for any affected Unit is cleaned and fit for its intended use before resuming operations.

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for an Emergency Coordinator are:

- High school diploma or equivalent;
- Three years' experience working with hazardous or mixed waste.

Training:

Initial and refresher training will be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-7
Job Title, Description, and Qualifications:
Chemist

Job Title: Chemist

Job Description:

A Chemist conducts supporting characterization of hazardous and mixed waste managed at the Facility. Examples of duties are:

- Evaluate data provided by the initial generator of a solid waste, and obtain additional information as needed for hazardous waste determination;
- Determine whether solid wastes are hazardous or mixed wastes as defined in 40 CFR Part 261;
- Assign appropriate hazardous waste codes to hazardous and mixed wastes;
- Identify treatment options and treatment standards for hazardous and mixed wastes to be treated on site;
- Evaluate data or information for treated wastes and treatment residues to characterize the residues, assign appropriate hazardous waste codes, and determine land disposal restrictions; and,
- Segregate hazardous and mixed waste.

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for a Chemist are:

- Bachelor's degree in chemistry or related field, and
- Two years' experience working with hazardous or mixed waste.

Training:

Initial and refresher training will be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-8
Job Title, Description, and Qualifications:
Field Technician

Job Title: Field Technician (Waste Handler)

Job Description:

A Waste Handler conducts hazardous and mixed waste handling, segregating, and storing operations at a Permitted Unit. Examples of duties are:

- Transport and handle hazardous and mixed waste;
- Conduct daily inspections of Permitted Units where hazardous and mixed waste loading, unloading, or treatment operations occur;
- Perform basic maintenance and housekeeping activities;
- Segregate hazardous and mixed waste
- Sort, package, mark, label, store, treat, and segregate hazardous and mixed waste; and
- Compile information for the Facility or Unit Operating Record.

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for a Waste Handler are:

- High school diploma or equivalent; or
- Two years' experience in handling hazardous or mixed waste.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-9
Job Title, Description, and Qualifications:
Special Project Staff

Job Title: Special Projects Staff

Job Description:

A Special Projects Staff member performs duties associated with non-routine and special projects at a Permitted Unit. Examples of duties are:

1. Handle hazardous and mixed waste during a special project;
- Perform special project related maintenance and housekeeping activities;
 - Operate hazardous and mixed waste treatment equipment associated with a special project;
 - Store, label, and segregate hazardous and mixed waste associated with a special project;
 - Identify and schedule special project activities involving hazardous waste or mixed waste;
 - Monitor hazardous or mixed waste special project activities for safety and procedural compliance; and
 - Compile special project information for the Facility or Unit Operating Record.

Required Skill, Education, or Other Qualifications:

At a minimum, the qualifications for a Special Projects Staff member are:

- High school diploma or equivalent; or
- Two years' experience in handling hazardous or mixed waste.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-10
Job Title, Description, and Qualifications:
Inspector

Job Title: Inspector

Job Description: An Inspector conducts inspections of both hazardous or mixed waste and a Permitted Unit. Examples of duties are:

- Inspect at least daily areas subject to spills of hazardous or mixed waste when these areas are in use;
- Inspect at least weekly containers holding hazardous or mixed waste, container equipment, and secondary containment;
- Inspect at least monthly emergency equipment, security devices, and structural equipment at a Permitted Unit; and
- Record inspection date, time, name, observations, and repairs in an inspection log (in the form of an inspection checklist).

Skill, Education, and Other Qualifications:

At a minimum, the qualifications for an Inspector are:

- High school diploma or equivalent; or
- Two years' experience working with hazardous or mixed waste.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 in this Permit Attachment.

Table F-11
Job Title, Description, and Qualifications:
Transportation Manager

Job Title: Transportation Manager

Job Description:

A Transportation Manager coordinates the shipment of hazardous or mixed waste from a Permitted Unit. Examples of duties are:

- Prepare documentation and paperwork for off-site shipments of hazardous or mixed waste;
- Ensure proper packaging, labeling, marking, and placarding are in place for off-site shipments of hazardous and mixed waste; and
- Coordinate the loading of hazardous and mixed waste for off-site shipment.

Required Skill, Education, or Other Qualifications:

At a minimum, the qualifications for a Transportation Manager are:

- High school diploma or equivalent; or
- Two years' experience coordinating shipments of hazardous or mixed waste.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 in this Permit Attachment.

Table F-12
Job Title, Description, and Qualifications:
Unit Operations Support Staff

Job Title: Unit Operations Support Staff

Job Description:

A Unit Operations Support Staff member has unescorted access to the Permitted Units but performs no activities that require contact with hazardous or mixed waste or waste containers. Unit Operations Support Staff include, but are not limited to:

- Administrative personnel;
- Information systems (database) personnel;
- Generator interface personnel, and
- Radiation support personnel. Note that the duties of radiation support personnel involve collecting radiological data; this requires contact with hazardous and mixed wastes and waste containers but is not consistent with the duties of a field technician in Table F-8.

Skill, Education, and Other Qualifications:

The Training Supervisor determines the requisite level of experience for each position.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-13
Job Title, Description, and Qualifications:
CAMU Project Leader/Operations Coordinator

Job Title: **Corrective Action Management Unit (CAMU) Project
Leader/Operations Coordinator**

Job Description:

To provide ongoing oversight, supervision, and coordination at the CAMU during the post-closure care period for vadose zone monitoring and inspection and maintenance of the containment cell and Vadose Zone Monitoring System (VZMS) in compliance with this Permit. Examples of duties are:

- Coordinate and implement VZMS monitoring activities;
- Compile and archive VZMS monitoring data into the Operating Record;
- Produce annual monitoring results reports and other reports;
- Maintain/revise sampling and analysis plans for VZMS monitoring, as required;
- Coordinate and implement leachate removal and management activities;
- Ensure necessary inspections and required maintenance are properly conducted;
- Assure the maintenance of records, such as training records, inspection and maintenance records, and data reports, as specified in this Permit;
- Supervise the inventory, maintenance, and repair of all tools, supplies, equipment, and vehicles (i.e., ensure that they are in good working order) used for monitoring and maintenance operations; and
- Provide oversight of CAMU Field Technicians.

Required Education, Skill, and/or Experience:

- Bachelors' degree in chemistry, biology, physical science, engineering, environmental science; or
- Minimum of 5 years' experience in waste management operations and/or environmental restoration; and
- Project management experience.

Training:

- Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.

Table F-14
Job Title, Description, and Qualifications:
CAMU Field Technician

Job Title: Corrective Action Management Unit (CAMU) Field Technician

Job Description:

Perform post-closure monitoring, inspection, and maintenance activities as instructed by the CAMU Project Leader/Operations Coordinator. Examples of duties are:

- Perform VZMS monitoring activities;
- Perform inspection and maintenance activities; and
- Assist CAMU Project Leader/Operations Coordinator with leachate removal and management activities.

Required Education, Skill, and/or Experience:

The Training Supervisor determines the requisite level of experience for each position.

Training:

Initial and refresher training shall be as required in Table F-1 and Table F-2 of this Permit Attachment.