

HWMA/RCRA STORAGE and TREATMENT PERMIT
for the
MATERIALS AND FUELS COMPLEX (MFC)

ATTACHMENT 5

Section H – Training Plan

Section H Attachments

EFFECTIVE DATE: OCTOBER 1, 2015

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1 **H. PERSONNEL TRAINING [IDAPA 58.01.05.008 and 58.01.05.012; 40 CFR**
2 **264.16(a)(1) and 270.14(b)(12)]**

3 In accordance with the requirements of Idaho Administrative Procedures Act
4 (IDAPA) 58.01.05.008 and 58.01.05.012, and 40 Code of Federal Regulations
5 (CFR) 264.16(a)(1) and 270.14(b)(12), this section of the Materials and Fuels
6 Complex (MFC) Hazardous Waste Management Act (HWMA)/Resource
7 Conservation and Recovery Act (RCRA) Permit Application describes the
8 introductory and continuing training programs for operations and support
9 personnel performing work assignments in MFC HWMA units. Implementation
10 and application of these training programs will ensure HWMA unit personnel are
11 trained to operate/maintain the HWMA units in a safe manner.

12 The information provided in this section is organized by subsection as follows:

- 13 • Subsection H-1, Training Director
- 14 • Subsection H-2, Training Program Design
- 15 • Subsection H-3, Training Program Content
- 16 • Subsection H-4, Training Program Implementation
- 17 • Subsection H-5, Training Records Management.

18 **H-1 Training Director [IDAPA 58.01.05.008; 40 CFR 264.16(a)(2)]**

19 The MFC Training Manager, in cooperation with the HWMA unit manager,
20 functions as the Training Director for the HWMA units. In this position, the
21 Training Manager and HWMA unit manager direct and maintain the HWMA unit
22 training programs, which include the analysis, design, development,
23 implementation, and evaluation of training. In addition, they have knowledge of
24 the applicable sections of the following:

- 25 • HWMA unit design, systems, operation, and maintenance
- 26 • DOE/Idaho National Laboratory (INL) policies and requirements
- 27 • DOE Orders
- 28 • HW/MW facility operations
- 29 • American National Standards Institute (ANSI)/American Nuclear
30 Society (ANS) Standards

- 1 • CFRs
- 2 • Laboratory organization, administration, and management practices
- 3 • Performance-based training methods
- 4 • Backgrounds that include experience in development of training and
- 5 qualification materials for nuclear facility operators, HWMA unit facility
- 6 operators, presentation of training classes, preparation of training program
- 7 accreditation plans, and development of training materials and programs.

8 **H-2 Training Program Design [IDAPA 58.01.05.008; 40 CFR 264.16(a)(3)]**

9 HWMA unit training programs are designed to ensure that personnel, through
10 classroom and/or on-the-job training, can perform their operations in a way that
11 ensures the HWMA unit will be operated in accordance with all applicable
12 IDAPA 58.01.05.008 and 40 CFR 264 requirements. In addition, the training
13 ensures they will be able to respond effectively to emergencies at the HWMA
14 units by familiarizing them with the following emergency procedures, equipment,
15 and systems (as applicable):

- 16 • Procedures for using, inspecting, repairing, and/or replacing facility
17 emergency and monitoring equipment
- 18 • Key parameters for automatic waste feed cut-off systems
- 19 • Communications or alarm systems
- 20 • Response to fire or explosions
- 21 • Response to groundwater contamination incidents
- 22 • Shutdown of operations.

23 The training applicable to the HWMA unit facility operations and support
24 personnel is summarized in the table provided in Attachment H-1. In addition to
25 HWMA unit personnel, INL firefighters, providing On-Scene-Commander and
26 hazardous material (HAZMAT) response services, receive appropriate training
27 regarding this information as part of the INL Fire/Rescue Department's training
28 program, which includes instruction regarding hazardous waste (HW)/mixed
29 waste (MW) properties, potential dangers, preventive and remedial measures, and
30 worker exposure first aid.

1 **H-3 Training Program Content [IDAPA 58.01.05.008 40 CFR 264.16 (d)(3)]**

2 All HWMA unit personnel receive training appropriate to their job classifications,
3 as required by the regulatory requirements described above. A schedule of the
4 MFC HWMA unit training programs is provided in Attachment H-1.

5 **H-3(a) Classroom/Computer-Based Instruction**

6 Training is performed and documented through the INL Training Records and
7 Information Network (TRAIN) computer-based training program and/or
8 classroom instruction. Student attendance is verified and documented through the
9 computer-based training program or by signature on attendance sheets. A training
10 file for each student is maintained electronically in the INL TRAIN system.

11 **H-3(b) On-the-Job Training**

12 On-the-job training (OJT) is conducted by qualified individuals, instructing from
13 approved lesson plans or procedures, and documented on qualification cards.
14 Should any item be performed unsatisfactorily, the individual will receive
15 additional instruction and then repeat the task until the instructor is satisfied that
16 the student can perform the task properly. All tasks will be listed on a
17 qualification card for the training level being pursued by the student.

18 **H-4 Training Program Implementation**

19 **H-4(a) Job Titles/Job Descriptions [IDAPA 58.01.05.008 40 CFR 264.16(d)(1)
20 and (2)]**

21 HWMA unit facility operations and support personnel job classifications and job
22 titles for all positions at the HWMA units have been identified. For the purposes
23 of training, personnel filling these jobs have been grouped into one of two
24 classifications (based on the type of work they perform in the units) as defined in
25 Table H-1.

1 Table H-1. MFC HWMA Units Job Titles.

Personnel Classification	Frequency of Work	Job Titles
HWMA Unit Workers	Performs direct work with the waste in the HWMA units. Reasonable possibility of exposure.	<ul style="list-style-type: none"> • Operations Personnel • Emergency Responders-Fire Fighters • Equipment Operator • Inspector and Backshift Worker/Maintenance Personnel • Health Physics Technician
HWMA Unit Support Personnel	Performs periodic work assignments at the HWMA units that do not involve opening a container or transferring contents of a tank, and/or coordinates emergency response duties. Exposure is extremely unlikely.	<ul style="list-style-type: none"> • Life Safety System (LSS)/Maintenance Personnel • Emergency Action Manager

2 Brief job descriptions for the above-identified job titles are provided in
 3 Attachment H-2. Detailed job descriptions (i.e., MFC HWMA unit personnel
 4 position descriptions) that include the requisite skill, education, or other
 5 qualifications, and duties of personnel assigned to the positions will be kept on
 6 file in the Human Resources Department.

7 **H-4(b) Required Training and Relevance to Job Positions [IDAPA 58.01.05.008; 40**
 8 **CFR 264.16(a)(2) and (d)(3)]**

9 All HWMA unit operations and support personnel (as identified in Attachment H-
 10 1) are provided training that is relevant to the positions in which they are
 11 assigned, as summarized in Attachment H-2. Training requirements, frequency,
 12 and applicability to HWMA unit personnel classification and job title are detailed
 13 in Attachment H-1.

14 **H-4(c) Completion of Required Training [IDAPA 58.01.05.008; 40 CFR 264.16(b)**
 15 **and (c)]**

16 All HWMA unit operations and support personnel are required to successfully
 17 complete the training requirements defined in Attachment H-1. These personnel
 18 must satisfactorily complete initial training requirements within six months after
 19 the date of their initial employment or assignment to the HWMA unit(s). Until
 20 affected personnel have successfully completed required training, they are directly

1 supervised during the performance of job assignments at the HWMA units by
2 qualified HWMA unit operations or support personnel. In addition, all other MFC
3 personnel and visitors requiring access to HWMA units are escorted by qualified
4 HWMA unit operations and support personnel.

5 **H-5 Training Records Management [IDAPA 58.01.05.008 40 CFR 264.16(d)(4)**
6 **and (e)]**

7 Records that document successful completion of required training for HWMA
8 unit personnel are maintained at the facility. Training records for each affected
9 individual are updated upon successful completion of required training. For
10 current HWMA unit operations and support personnel, individual training records
11 will be maintained for the operational life of the facility. For HWMA unit
12 operations and support personnel who terminate employment or are reassigned to
13 another job classification at MFC, individual training records will be maintained
14 for at least 3 years following the date of termination/reclassification.

15

Attachment H-1

MFC HWMA Unit Training Requirements and Frequency

MFC HWMA Unit Training Requirements								
Training Requirements		HWMA Unit Workers ^a					HWMA Unit Support Personnel	
		Operations Personnel	Emergency Responders-Fire Fighters	Equip. Operator	Inspector and Backshift Worker/Maint. Personnel	Health Physics Technician	LSS/Maint. Personnel	Emergency Action Manager
General Employee Training	Biennial	X	X	X	X	X	X	X
HWMA Facility-Specific Training	Biennial	X	X	X	X	X	X	X
Radiation Worker Training	Biennial	X	X	X	X	X	X	X
Respirator Training	Annual	X	X	—	—	X	—	—
Job-Specific Training	Variable	X	X	X	X	X	X	X
HAZWOPER Training^b	Annual	X	X	X	X	X	—	—

a. Annual RCRA training is provided through job specific training to ensure personnel perform their duties as required by 40 CFR § 264.16.

b. Performs direct work with the waste and/or job function involves a possibility of exposure (e.g., accidental spill). May perform movement or inspection of hazardous waste containers, surveying of hazardous waste or open hazardous waste containers, and maintaining permitting waste treatment/storage tank systems.

Attachment H-2

MFC HWMA Unit Position Descriptions

- **HWMA Unit Workers**
 - Operations Personnel
 - Supervisor
 - Technician
 - Emergency Responder-Fire Fighter
 - Equipment Operator
 - Health Physics Technician
 - Inspector and Backshift Worker/Maintenance Personnel
- **HWMA Unit Support Personnel**
 - LSS/Maintenance Personnel
 - Emergency Action Manager

HWMA Unit Job Descriptions	
Job Title/Description	Primary Activities
Operations Supervisor	Directs the activities of HWMA unit facility operators/technicians in the operations of the facility during all modes of operation and within applicable operating and maintenance instructions.
	<p>Directs day-to-day activities of HWMA unit facility personnel in all modes of operation.</p> <p>Follows up work assignments to ensure they are completed in accordance with written and oral instructions. Provides assistance in troubleshooting and correcting routine operational problems.</p> <p>Maintains cognizance of all work going on in the facility and monitors all work for safety and procedural considerations.</p> <p>Makes periodic tours of all systems to verify system parameters are normal and equipment is operating properly. Reviews data sheets and logs to ensure their completeness and checks system performance.</p> <p>Assists in training facility personnel and ensures that technicians/operators remain current in their review of changes to operating and maintenance instructions, administrative procedures, and plant equipment.</p> <p>Maintains the unit operating record logbook.</p> <p>Responds immediately to any deficiencies identified on inspection logs and documents corrective action(s).</p>
Operations Technician	Operates the HWMA unit safely and efficiently under normal and off-normal conditions. Maintains level of facility knowledge by compliance with an approved training program. Helps in the OJT of lower grade personnel.
	<p>Operates and monitors facility systems. Maintains accurate records of facility operation, maintenance activities, and equipment performance.</p> <p>Assists trainees by giving oral checkouts on general qualification topics; supervises operator trainees on training watches and during performance of practical factors.</p> <p>Reviews and comments on proposed revisions to operating instructions, emergency procedures, and training documents.</p> <p>Provides feedback to facility supervisor on system malfunctions, abnormalities, or unusual trends in system performance.</p> <p>Provides recommendations on troubleshooting plant problems.</p> <p>Performs RCRA tank system/container storage area inspections.</p>

HWMA Unit Job Descriptions	
Job Title/Description	Primary Activities
Emergency Responder - Fire Fighter	Performs direct work with the waste during emergency response actions.
<p>Fire Department or fire fighters are a group of designated personnel prepared to respond, in a specific capacity, to any time-urgent or emergency event, regardless of time, location, or complexity.</p> <p>Fire fighters provide hands-on response to fire and explosions involving all MFC facilities, including the TSD facilities, as well as providing response to significant releases of hazardous material.</p>	
Equipment Operator	Performs driving assignments to transport materials and equipment on and offsite. Operates mobile and fixed equipment and performs rigging assignments to move, place, build, and/or dismantle material, equipment, and fixtures, and excavate, backfill, and grade for underground utility installation removal or repair.
<p>Loads and secures shipping casks containing radioactive material and hazardous materials containers on transport vehicles, and operates vehicles to deliver shipments to MFC and other INL locations.</p> <p>Operates various types of material handling equipment (such as mobile cranes, bridge cranes, forklifts, and manual and powered hoisting equipment) to lift, move, and place items as required.</p> <p>Operates various types of earth moving equipment (such as road graders, backhoes, end loaders, and dozers) to excavate, backfill, grade, and move earth and snow as required.</p> <p>Inspects objects to determine weight, center of gravity, rigging method, and route of movement. Selects and attaches rigging tackle to minimize the likelihood of damage to objects or injury to personnel. Inspects and load tests rigging tackle and hoisting equipment and attaches certification tags.</p>	

HWMA Unit Job Descriptions	
Job Title/Description	Primary Activities
Health Physics Technician	Provides radiological protection of personnel, facilities, and equipment. Provides radiological assistance for site or personnel emergencies, including first aid.
	<p>Completes and evaluates routine radiation safety surveillance of HWMA units. Maintains accurate records of daily health physics activities. Ensures proper operation of radiation/contamination monitoring equipment.</p> <p>Maintains cognizance of HWMA unit work procedures to ensure radiological control and to ensure that HWMA units conform with sound ALARA principles.</p> <p>Evaluates radiological impacts of operational facility systems. Provides radiological evaluation and monitoring of facility handling of radioactive material.</p> <p>Maintains health physics training and qualifications required by DOE and MFC requirements.</p> <p>Involved in surveying hazardous waste or open hazardous waste containers.</p> <p>Provides assistance for MFC unit inspections of the RSWF, as applicable.</p> <p>Trains lower grade and lesser qualified HPTs.</p>
Inspector and Backshift Worker/Maintenance Personnel	Performs RCRA Inspections or performs maintenance, repairs, and modifications to HWMA unit systems and components.
	<p>Performs routine preventive maintenance activities and specific maintenance to support HWMA unit operations.</p> <p>Performs daily inspections of permitted tanks/tank areas in SCMS.</p> <p>Performs RCRA container/miscellaneous unit area inspections.</p>

HWMA Unit Job Descriptions	
Job Title/Description	Primary Activities
LSS/Maintenance Personnel	<p>Performs maintenance, repairs, and modifications to plant electrical, mechanical, or fire protection systems and components.</p> <p>Troubleshoots and repairs malfunctioning mechanical and electrical equipment.</p> <p>Performs preparation, installation, inspection, and checkout work for changes to electrical, mechanical, or fire protection systems.</p> <p>Trains lower grade and lesser qualified personnel.</p>
Emergency Action Manager	<p>Coordinates emergency response duties for all imminent or actual emergency situations at MFC HWMA units.</p> <p>Coordinates all MFC HWMA unit emergency response measures to safely and effectively mitigate the situation/emergency and commits the resources needed to carry out contingency plans.</p> <p>Performs necessary follow-up activities, such as making notifications, completing and submitting required reports, and ensuring designated emergency response equipment is returned to service in a clean and operable condition.</p> <p>Maintains knowledge of all aspects of MFC contingency plans, and MFC operations and activities.</p>