FESHM 10150: ONSITE HAZARDOUS MATERIAL TRANSPORTATION

**Revision History**

|  |  |  |
| --- | --- | --- |
| **Author** | **Description of Change** | **Revision Date** |
| Michael Pfaff | * Changed references of ‘Transportation Services’ to ‘Distribution Services’ as well as updated references of all sections to divisions and division names. * Updated Service Now links. * Updated ‘Requestor’ definition to include transporting goods out of the property management system. * Updated ‘Note’ in section 4.5.2 regarding package acceptability. * Updated 4.1 to clarify prohibition of personal vehicle use for hazardous materials transport. * Updated definitions to include radioactive and mixed waste. * Updated 3.1 for MMR minimum retention period. | October 2022 |
| Brian Niesman | * Added a statement about the applicability of this chapter to SURF operations. * Added the Consumer Commodity Exception for hazardous materials. * Replaced Technical Appendix with a link to the Fermilab Service Desk (Service Now). * Revised chapter format to match current requirements. | January 2018 |
| Brian Niesman | * Added a definition of Requestor. * Minor editorial changes. | March 2016 |
|  |  |  |

**TABLE OF CONTENTS**

[1.0 INTRODUCTION AND SCOPE 3](#_Toc117505005)

[2.0 DEFINITIONS 3](#_Toc117505006)

[3.0 RESPONSIBILITIES 4](#_Toc117505007)

[3.1 Infrastructure Services Division (ISD), Distribution Services 4](#_Toc117505011)

[3.2 Environment, Safety and Health Division (ES&H) 4](#_Toc117505012)

[3.3 Division/Project (D/P) Heads 4](#_Toc117505013)

[4.0 PROGRAM DESCRIPTION 4](#_Toc117505014)

[4.1 Policy 4](#_Toc117505016)

[4.2 Training 4](#_Toc117505017)

[4.3 Procedures for Radioactive and Hazardous Material Transportation 4](#_Toc117505018)

[4.3.1. Hazardous Materials 5](#_Toc117505019)

[4.3.2. Radioactive Materials 5](#_Toc117505020)

[4.3.3. Hazardous Waste 5](#_Toc117505021)

[4.3.4. Radioactive Waste 5](#_Toc117505022)

[4.3.5. Mixed Waste 5](#_Toc117505023)

[4.4 Reporting Hazardous Material Transportation Incidents 5](#_Toc117505024)

[4.5 Packaging 5](#_Toc117505025)

[4.5.1. Onsite Transportation 5](#_Toc117505026)

[4.5.2. Single Packaging 5](#_Toc117505027)

[4.5.3. Combination Packaging 6](#_Toc117505028)

[4.6 Separation & Segregation of Hazardous Materials 6](#_Toc117505029)

[4.7 Driver Requirements 6](#_Toc117505030)

[4.7.1. Commercial Driver's License (CDL) 6](#_Toc117505031)

[4.7.2. Prolonged Periods of Driving 6](#_Toc117505032)

[4.7.3. Drug & Alcohol Testing 6](#_Toc117505033)

[4.7.4. Training Requirements 6](#_Toc117505034)

[5.0 Material Move Request 7](#_Toc117505035)

# 1.0 INTRODUCTION AND SCOPE

Fermilab is a restricted-access site so transportation of hazardous materials on Fermilab roads is exempt from State/Federal Department of Transportation (DOT) regulations. This chapter describes Fermilab's hazardous material packaging and transportation policies and procedures for onsite transfers only at Fermilab in Batavia, IL. It includes all hazardous material transfers conducted via:

* Motorized vehicles,
* Trailers towed by motorized vehicles,
* Portable tanks towed by motorized vehicles, or
* Cargo tanks towed by motorized vehicles.

It does not apply to the following items or situations:

* Items eligible for the Consumer Commodity Exception to the Hazard Materials Regulations,
* Movements of hazardous materials within a division that do not require Distribution Services assistance,
* Compressed Gas cylinders moved by Distribution Services,
* Hazardous materials distribution by Distribution Services from outside vendors, or
* Fermilab leased spaces.

# 2.0 DEFINITIONS

**Combination Packaging**: An outer packaging containing one or more inner packaging. For example: a fiberboard box containing a 2-gallon bottle of Isopropyl Alcohol.

**Hazardous Material**: Any material listed on the "Hazardous Materials Table" in 49 CFR 172.101. *(NOTE: use this table only to determine if the material to be transported is hazardous for transportation -- DO NOT attempt to track the references to other parts of the CFR as contained in the table. Only reference other parts of the CFR when specifically required by this chapter.)*

**Hazardous Waste**: Any hazardous material that is being transported for disposal purposes. It includes any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR 262. *(Note: if a Hazardous Waste Manifest is not required -- follow the transportation requirements contained in this chapter.)*

**Radioactive Waste**: Any radioactive material that is being transported for disposal purposes. Radioactive waste is a type of hazardous waste that includes any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR 262. *(Note: if a Hazardous Waste Manifest is not required -- follow the transportation requirements contained in this chapter.)*

**Mixed Waste**: Waste containing both radioactive and hazardous components as defined by the Atomic Energy Act of 1954 and the Resources Conservation and Recovery Act, respectively that is being transported for disposal purposes. It includes any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR 262. *(Note: if a Hazardous Waste Manifest is not required -- follow the transportation requirements contained in this chapter.)*

**Requestor:** Person requesting the transportation of goods from one location to another location. Person requesting such transportation of goods that are hazardous, going off-site, or going into or out of the property management system (storage, excess, scrap, etc.) must complete a material move request.

**Single Packaging**: One container that does NOT contain any inner or outer packaging. For example: a 5-gallon can of gasoline.

# 3.0 RESPONSIBILITIES



## Infrastructure Services Division (ISD), Distribution Services

* Transporting incoming hazardous material from the receiving dock to its end-user, and
* Operation and inspection of Distribution Services' vehicles used for onsite transfers of hazardous material and maintaining them in a safe operating condition.
* Moving hazardous materials onsite as requested by other divisions and sections, and
* Maintaining Material Move Request (MMR) forms for a minimum of two (2) years in accordance with Administrative Records Schedule 9, Travel and Transportation Records, Section 4.

## Environment, Safety and Health (ESH) Division

The ESH Division is responsible for programmatic oversight of onsite transportation of radioactive and regulated hazardous wastes. These responsibilities are carried out by the Hazard Control Technology Team (HCTT).

## Division/Project (D/P) Heads

Documenting D/P procedures for hazardous material transported by their personnel when those procedures are more stringent than the requirements of this chapter. If transportation involves more than one D/P, the movement shall be performed according to the requirements of the D/P physically transporting the material.

# 4.0 PROGRAM DESCRIPTION



## Policy

It is Fermilab's policy to ensure that all hazardous material and waste is packaged, identified, loaded, unloaded, and transported in a manner to assure the safety and health of Fermilab employees, subcontractors, the general public, and the environment are protected. Transportation of all hazardous material shall be carried out utilizing a government vehicle. Personnel vehicles are prohibited for use in transport of hazardous materials.

## Training

Each employee involved in hazardous material transportation covered by this section shall receive Hazard Communication and either DOT Hazardous Materials Regulations for Transportation Personnel or Hazardous Materials/Waste Transportation training prior to performing such work. This includes those who:

* + load, unload, or handle hazardous material,
  + test, recondition, repair, modify, mark, or otherwise represent containers, drums, or packaging as qualified for use in the transportation of hazardous material,
  + prepare hazardous material for transportation, or
  + operate a vehicle used to transport hazardous material.

## Procedures for Radioactive and Hazardous Material Transportation

Each division is responsible for ensuring that hazardous material is transported in accordance with this chapter. The Infrastructure Services Division, Distribution Services Department is available for division assistance.

### Hazardous Materials

All on-site movement of hazardous materials transported by the Distribution Services department, except radioactive waste, hazardous waste, and items being received from offsite, shall be initiated using the MMR form. A link to the MMR form in Service Now can be found in Section 5 of this Chapter.

### Radioactive Materials

All on-site movement of radioactive materials transported by the Distribution Services department other than radioactive waste, and items being received from offsite, shall be initiated using the MMR form in accordance with [Article 423](https://esh-docdbcert.fnal.gov/cgi-bin/cert/ShowDocument?docid=446) of the Fermilab Radiological Control Manual. A link to the MMR form in Service Now can be found in Section 5 of this Chapter.

### Hazardous Waste

All on site movement of hazardous waste is the responsibility of the HCTT. You must contact a member of the HCTT to initiate the transportation of hazardous waste.

### Radioactive Waste

All on site movement of radioactive waste is the responsibility of the HCTT. You must contact a member of the HCTT to initiate the transportation of radioactive waste.

### Mixed Waste

All on site movement of mixed waste is the responsibility of the HCTT. You must contact a member of the HCTT to initiate the transportation of mixed waste.

## Reporting Hazardous Material Transportation Incidents

Incident reporting and emergency response for hazardous material and transportation incidents shall be done by immediately calling the Communication Center at x3131.

## Packaging

### Onsite Transportation

Packaging of hazardous material for vehicular transportation within the Fermilab site boundaries shall be conducted in accordance with the procedures provided below.

### Single Packaging

All single packaging shall:

* + be identified,
  + be chemically compatible with their contents, and
  + not be used for transportation if damaged; damage includes rust, holes, dents, creases, crushed or compacted areas, wet spots or stains, improper closures, general corrosion, and any other condition that could pose a hazard during transportation. *NOTE: Each division shall be responsible for determining if a package is prepared for transportation. The Distribution services team member performing the transportation will determine if the package is in fact suitable for transportation.*

### Combination Packaging

The following types of containers may only be used as inner receptacles:

* + glass or earthenware receptacles, and
  + glass ampoules

All inner receptacles must:

* + be packed so that closures are positioned upright,
  + be secured and surrounded by cushioning materials,
  + be packed within an outer packaging that does not contain sharp objects such as nails or staples protruding into the interior of the outer packaging,
  + be chemically compatible with their contents,
  + contain only mixed contents that are compatible,
  + be identified.

## Separation & Segregation of Hazardous Materials

During storage in preparation of transportation, and during transportation, hazardous material shall be separated/segregated as prescribed by 49 CFR - 177.848 (Segregation Table For Hazardous Material).

## Driver Requirements

### Commercial Driver's License (CDL)

Employees shall possess a valid CDL if their job duties require driving a vehicle transporting hazardous material in quantities > 1,000 lbs., including the weight of the packaging. This requirement applies only to Infrastructure Services Division personnel. All other employees are prohibited from transporting hazardous material in quantities greater than 1000 lbs.

### Prolonged Periods of Driving

Employees transporting hazardous material shall follow DOT prescribed hours of work rules.

### Drug & Alcohol Testing

Employees possessing a CDL as required by this chapter shall receive drug & alcohol testing as prescribed in the Fermilab Drug & Alcohol Program as administered by the Occupational Medical Office (Wilson Hall, GF-West).

### Training Requirements

In addition to Hazard Communication, employees shall receive any additional training identified through the Individual Training Needs Assessment (ITNA) process.

# 5.0 Material Move Request

The Material Move Request (MMR) is an electronic form which can be found on-line at [Service Now](https://fermi.servicenowservices.com/nav_to.do?uri=%2Fcom.glideapp.servicecatalog_cat_item_view.do%3Fsysparm_id%3D6a223f2c31e7c140f9e6279cd360d450), the Fermilab Service Desk.