

Shipping and Receiving Operations (Site 38)

Section V – Chapter 7

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V-7 Shipping and Receiving Operations

V-7.1 The Shipping and Receiving Buildings Location on Fermi National Accelerator (Fermilab) Site

Shipping and Receiving is located on the West side of the laboratory. Shipping and Receiving is operated by the Property and Inventory Control Department within the Facility Engineering Services Section (FESS). The map below shows the location on the Fermilab site.





V-7.2 Inventory of Hazards

The following table lists the identified hazards found at the Shipping and Receiving buildings. All hazards with an * have been discussed in Section I Chapters 1-10 of this document and are not covered further in this section.

Radiation Residual component activation Sealed radioactive sources	Kinetic Energy Power tools*
Electrical Energy High voltage exposure*	Potential Energy Compressed gases*
Flammable & Combustible Materials Propane*	Mechanical Energy Motorized vehicles*

V – 7.3 Introduction

Section V, Chapter 7 of the Fermi National Accelerator Laboratory (Fermilab) Safety Assessment Document (SAD) covers the Shipping and Receiving Operations.

V - 7.3.1 Purpose of Shipping and Receiving

The Property and Inventory Control Department provides basic support functions to the entire Laboratory and user community, including property, supplies, and scrap metal recycling.

V - 7.3.2 Description of Shipping and Receiving Operations

The Property and Inventory Control Department is responsible for identification, labeling, tracking, inventory and control of all property items at the Laboratory. This includes processing of new items, disposition of used equipment, establishment of loan agreements, and scrap operations.

The Supply Department operates and administers one stockroom of commonly used items including compressed gases. It directly procures and receives certain common use items that are listed in the Stockroom's online catalog.



V – 7.4 Safety Assessment

The unique hazards at Shipping and Receiving are analyzed in this section.

V – 7.4.1 Radiological Hazards

V-7.4.1.1 Residual Activation

The Shipping and Receiving Operations buildings are not physically connected to the accelerator complex, as a result, there is no residual activation produced. Radioactive materials that are received by and/or shipped from Shipping and Receiving are managed in accordance with the requirements contained in Chapter 4 of the Fermilab Radiological Control Manual (FRCM)¹, and the U.S. Department of Transportation. Radioactive materials that are received at Fermilab are taken to the Shipping and Receiving storage cage for radioactive materials and are labeled appropriately. Sealed radioactive sources are also stored and transported in accordance with the requirements of the FRCM and the Fermilab Sealed Source Control and Accountability Program requirements².

V = 7.4.1.2 Radioactive Waste

Radioactive waste is not handled at the Shipping and Receiving buildings.

V – 7.5 Assessment of Potential Credited Controls

V-7.5.1 Passive Controls

There are no passive credited controls that qualify for inclusion in the Accelerator Safety Envelope (ASE).

V - 7.5.2 Active Controls

There are no active controls that qualify for inclusion in the ASE.

V = 7.5.3 Administrative Controls

The Shipping and Receiving warehouses are locked when personnel are not present. Only Property and Inventory Control Department personnel, have keys to the Shipping and Receiving buildings. There are no administrative controls that qualify for inclusion in the ASE.



V – 7.6 Summary & Conclusion

Specific hazards associated with the Shipping and Receiving operations are identified and assessed in this chapter of the Fermilab Safety Assessment Document. The designs, controls, and procedures to mitigate Shipping and Receiving Operations specific hazards are identified and described. In addition to these specific safety considerations, Shipping and Receiving Operations are subject to the safety requirements, controls and procedures outlined in Section 1 of this Fermilab Safety Assessment Document.

Within the specific and generic considerations of this assessment the Shipping and Receiving Operations can be operated with a level of safety that will protect people and property, and is equal to or exceeding that currently prescribed DOE orders and Fermilab regulations as set forth in Chapter 4 of the FRCM.



V - 7.7 Acronyms

ASE Accelerator Safety Envelope

DOE Department of Energy

FRCM Fermilab Radiological Control Manual

FESS Facilities Engineering Services Section

ITNA Individual Training Needs Assessment

SAD Safety Assessment Document

V-7.8 References

¹ Fermilab Radiological Control Manual. - The current web link is: http://esh.fnal.gov/xms/FRCM

² Fermilab Sealed Source Control and Accountability Program. – The current web link is: https://esh-docdb.fnal.gov:440/cgi-bin/ShowDocument?docid=156

