

## FESHM 6015: HIGHLY PROTECTED RISK INSPECTION

### Revision History

<b>Author</b>	<b>Description of Change</b>	<b>Revision Date</b>
J. Niehoff	Rewrote introduction paragraph; Added Fire Inspections conducted by Fire Department; removed reference to iTrack and added reference to ESH&Q Procedure; removed Appendix Material	April 2018
J. Niehoff & J. Priest	Applied the FESHM Chapter formatting; Removed color photos within the chapter.	April 2013
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## 1.0 INTRODUCTION

The tone of the stated objectives of Department of Energy (DOE) is to provide a level of safety protection consistent with the highly protected risk class of industrial risks. Such measures often promote fire prevention (loss prevention) and mitigation to a greater degree than building and fire codes. This program forms the foundation of a comprehensive fire loss prevention at Fermilab and Fermilab leased spaces.

## 2.0 DEFINITIONS

- **Facility File** – The master historical/living document reflecting changes to a given facility.
- **Finding** - A violation of or non-conformance with a published standard. Published standards are FESHM chapters, the work smart standard set, and applicable DOE and executive orders.
- **Fire Inspection** – An act of inspecting a location’s hazards, risk of having a fire, and its safety features to allow safe evacuation of the occupants in an emergency.
- **Highly Protected Risk (HPR)** – a facility that is characterized by a level of fire protection of the best protected class of industrial risks.
- **Inspection Report** – A report of the items identified during the HPR or fire inspection. The report provides synopsis to the Division/Section (D/S) Building Manager of the HPR or fire inspection and requiring action on the part of the D/S.

## 3.0 RESPONSIBILITIES

These responsibilities are supplement to the FESHM Chapter 6010, Section 4.0.

### 3.1 The Division/Section (D/S) Heads

- Responsible for assuring that findings identified through the HPR Inspection process are addressed in a timely manner.

### 3.2 Division Safety Officers (DSO)

- Facilitating the conduct of HPR inspections
- Assist in addressing the issues found during a HPR or fire inspection.
- Only when required, updating the contents of the facility file and returning the report to ESH&Q within the allocated time period.

### 3.3 The Building Manager

- Responsible for carrying out the responsibilities assigned to him or her in FESHM Chapter 2050 as they may be required in the HPR inspection process.

### 3.4 The ESH&Q Fire Protection Engineer (ESH&Q-FPE)

- Developing and issuing a yearly schedule of buildings requiring an HPR inspection. Specific dates and times will be individually coordinated with the Division Safety Officer.
- During the course of the inspection providing possible solutions to findings for the D/S to consider, as appropriate.

- Authoring HPR Inspection report and providing to the Facility D/S Building Manager, DSO, and ESH&Q representative of the issues identified during the inspection.
- Enter the issues identified and send report.

### **3.5 Fermilab Fire Department (FFD)**

- Performs fire inspections of facilities at the Fermilab site in Batavia, Illinois.
- Frequency will vary from one to another, depending on location, type of construction, and occupancy type. FFD will track and document frequency on fire inspections.
- Enter the issues identified and send report.

## **4.0 PROGRAM**

The HPR program encompasses all aspects of fire protection at the Laboratory. The program includes inspection of fire prevention practices and procedures, quality construction, fire detection and suppression systems, verification of testing and maintenance of fire protection systems and equipment, and general review of processes and activities occurring within the building including basic housekeeping.

### **4.1 Highly Protected Risk (HPR) Inspection**

- Fermilab maintains facilities that are characterized as a “best protected” class of industrial risk (Highly Protected Risk), equipped with an appropriate level of fire protection. The frequency of inspection depends on the mission criticality of the facility to the Laboratory. The loss of those facilities that would have an adverse impact on the Laboratory would have a higher frequency of inspection. The inspection schedule ranges from annually to once every 5 years. The ESH&Q-FPE oversees the inspection process and maintains the inspection schedule.

### **4.2 Scheduling of HRP Inspections**

- Prior to the beginning of the new calendar year, the ESH&Q-FPE will identify all building schedule for inspection during the upcoming year. This list will include the date of the last inspection to be used as a benchmark for scheduling purposes. Coordination with the D/S DSO will occur arranging the specific date and time of inspection for a facility

### **4.3 Conduct of Inspection**

- On the date and time specified, the HPR inspectors will meet the D/S representatives. It is recommended that someone familiar with the building and its operation accompany the D/S representatives and the inspectors. If there is a previous HPR inspection on file, the document will be used by the inspectors to spot check previous findings and to record new items.
- During the inspection the HPR Inspectors will be accompanied by a D/S representative with or without a building representative. DOE-FSO may elect to accompany the inspectors for select buildings.
- Violation of life, health, safety orders, codes, or acceptable practices will be recorded by the inspection team. If the violation can be immediately corrected, then a comment on the correction will be annotated next to the finding.
- The HPR inspectors will use the previous HPR inspection report to spot-check earlier findings and their status.

- At the conclusion of the inspection, the HPR Inspector will debrief all parties as to items found during the inspection which will require attention.
- Fire inspections will be conducted on a regular basis and will submit reports to D/S representations and DSOs.

#### **4.4 Reporting**

- The ESH&Q-FPE will include the addition of the findings and recommendations of the recent inspection to the Facilities File. Items will be annotated with procedure ESHQS-SA1.

#### **4.5 Processing of the Inspection Report**

- Within 48 hours of the date of the inspection, an Inspection Report will be electronically transmitted to the division/section Building Manager for action.
- This report will identify only the current finding, recommendations and if there are any open findings from the last inspection.
- D/S will be informed that the findings will be placed into application as referenced in ESHQ procedure and assigned to building manager. The DSO or D/S designee will receive copies of open issues.

### **5.0 REFERENCES**

- Fermilab Environmental Safety & Health Manual (FESHM) Chapter 1010, Laboratory Environment, Safety, and Health Management System and its Implementation
- FESHM Chapter 6010, Fire Protection Program
- International Building Code (IBC), 2015 Edition
- International Fire Code (IFC), 2015 Edition
- National Fire Protection Association (NFPA) 1, Fire Code, 2015 Edition
- NFPA 101, Life Safety Code, 2015 Edition
- Fire Protection Handbook, Twentieth Edition
- Fermilab's Facilities Engineering Services Section's Design Guides
- ESH&Q Procedure ESHQS-SA1 titled Predictive Solutions
- Highly Protected Risk, A Best Practice – Developed by EFCOG Fire Protection Task Group, October 24, 2017