

ENVIRONMENT, SAFETY, AND HEALTH (ES&H) ORGANIZATION AND RESPONSIBILITIES

INTRODUCTION

This chapter is the Fermilab policy on environment, safety and health responsibilities. The Laboratory Director is ultimately responsible for safety, but each person at Fermilab is responsible for controlling recognized hazards encountered during the performance of their activities. The necessary level of control is established by a combination of common sense and formal training. This combination allows each person to recognize hazards and unsafe situations, and provides the means to control hazards and conditions in a manner intended to maintain continual safety.

It is Fermilab policy that each employee is accountable to a supervisor who is a member of the line management. Each member of line management is accountable to the next higher level of management in their respective division/ section. Ultimately, the Head of each division/ section is accountable to the Director.

This policy statement includes guidance on:

- A. The ES&H responsibilities of individuals.
- B. The tenant/ landlord relationship.
- C. The method for determining the ES&H responsibility for products.
- D. The method for reassigning ES&H responsibilities.

In situations where the responsibilities of individuals or organizations are unclear or ambiguous, the Director or his designee will assign the responsibilities.

ES&H RESPONSIBILITIES OF INDIVIDUALS

1. Each Laboratory employee and experimenter shall:
 - a. Conduct activities safely and in an environmentally sound manner.

- b. Notify the supervisor if he/ she feels unqualified or insufficiently trained to do the task at hand.
- c. Be aware that telephone extension 3131 is to be used for emergency assistance.
- d. Raise concerns, suggestions, and ES&H issues to management, Senior Safety Officer (SSO), ES&H Section, or DOE without fear of reprisal.
- e. Participate in activities described in this section on official time.
- f. Immediately stop any activities that pose an imminent danger to personnel or the environment, and report them to supervision.
- g. Stop activities or conditions of others that pose imminent danger to personnel or the environment and report them to supervision.
- h. Be aware that persistent unsafe activities or safety violations are to be reported to supervision.
- i. Be aware of calibration dates on any ES&H instrumentation and refrain from the use of instrumentation for which the calibration has expired.
- j. Be held accountable to supervision for willful disregard of ES&H procedures.
- k. Report occupationally incurred injuries and illnesses to the Fermilab Medical Department at the first opportunity.
- l. Participate in incident investigations are requested by supervision.
- m. Have access to Fermilab ES&H program documents and Work Smart Set of Standards, DOE S&H publications, the OSHA 300 log, and investigation reports for incidents in which they were involved.
- n. Be trained to safely perform potentially hazardous tasks and to recognize the associated hazards. Develop an awareness of these hazards, and protect others in the area. Bring to the attention of supervision conditions that may develop into unsafe situations.
- o. Refer contacts from representatives of an outside agency to the ES&H Section.

2. The responsibilities assumed by individuals sponsoring special events such as cultural shows and employee morale parties are given on the Facilities Request Form, a copy of which is available from the Directorate or the Accommodations Office.
3. Building Managers have specific responsibilities, a number of which are related to the Environment, Safety and Health program. The specific responsibilities associated with building managers are set forth in [FESHM 2050](#).
4. Supervisors shall:
 - a. Ensure that individuals under their supervision are trained or otherwise qualified to do their assigned activity safely.
 - b. Ensure that individuals under their supervision are trained to recognize hazards they are reasonably expected to encounter in the performance of their duties. This is accomplished by completing an Individual Training Needs Assessment (ITNA) for each employee. An ITNA shall be performed when employee is first assigned to a supervisor or when job assignments change. It shall also be reviewed and revised annually. This can be performed as part of the employees' performance evaluation. See [FESHM 4010](#) for more information.
 - c. Monitor activities for safe operation and take action to enforce safety rules.
 - d. Stop work processes involving imminent hazards to personnel or the environment when discovered and notify upper management.
 - e. Describe the job activities of individuals under their supervision to the Medical Office. This is done by completing a Work Activity Analysis Form (WAAF), which can be found at <http://www-esh.fnal.gov/pls/default/WAAF.html>. The supervisor shall assure that the employee follows the job restrictions provided by the Medical Office.
 - f. Encourage reporting of ES&H concerns and take prompt action to address those concerns.
 - g. Ensure that employees report occupational injuries and illnesses to the Fermilab Medical Department at the earliest opportunity.
 - h. Investigate all accidents and take actions to prevent recurrence.

5. The spokesperson for each experiment is accountable to the host division/ section head for the safe operation of the experiment. Details of this accountability are spelled out in the Fermilab Procedures for Experimenters. Highlights of these requirements are as follows:
 - a. Ensure individuals associated with each experiment receive ES&H training specified by Fermilab.
 - b. Monitor experimental activities for performance in accordance with ES&H requirements.
 - c. Request resources from the host division/ section head to maintain a safe work environment which is in compliance with Fermilab ES&H standards.

6. Each division/ section head is accountable to the Director for carrying out their ES&H responsibilities and shall:
 - a. Implement the requirements of this manual.
 - b. Establish and maintain ES&H programs to deal with applicable aspects of environmental protection, industrial safety, industrial hygiene, radiation safety, emergency preparedness, fire protection, waste management and transportation of hazardous materials.
 - c. Advise the Directorate on implementation of Laboratory ES&H policies.
 - d. Establish a self-assessment program in accordance with [FESHM 1040.1](#).
 - e. Establish internal procedures for assuring the safety of division/ section activities.
 - f. Establish committees that consider ES&H problems and recommend solutions to the line management.
 - g. Ensure full compliance with Fermilab ES&H policies and procedures and the Laboratory's Work Smart standards unless a variance or exception is obtained ([FESHM 1010](#)).
 - g. Maintain, repair and calibrate division/ section owned instrumentation and equipment.
 - h. Ensure that the division/ section ES&H programs contain provisions for:

- (1) Identification and correction of potential safety and environmental hazards.
 - (2) Procedures for correction of hazards found on inspection or from lessons learned from the investigation of incidents or accidents, and for following up on those corrections.
 - (3) Identification of plans to deal with emergencies.
 - (4) ES&H review and hazard analysis of new & existing operations.
 - (5) Training of personnel in ES&H procedures.
- i. Ensure that personnel within the division/ section shall:
- (1) Assign sufficient resources to assure the implementation and maintenance of ES&H programs.
 - (2) Comply with the provisions of the Fermilab Self-Assessment Program ([FESHM 1040.1](#)).
 - (3) Provide sufficient resources to carry out landlord/ tenant responsibilities.
 - (4) Ensure all operational procedures are consistent with Fermilab ES&H policies.
 - (5) Ensure dissemination of ES&H directives and information to all personnel.
- j. For experiments for which it is the "host" division, assure that each user group carries out experiments in compliance with Procedures for Experimenters (PFX)
7. The Division/ Section Senior Safety Officer (SSO) shall:
- a. Have the authority to stop activities that pose an imminent danger to employees, the public, or the environment, in accordance with the technical appendix to this chapter.
 - b. Advise the division/ section head on restarting an activity that has been stopped.
 - c. On items of imminent danger take immediate corrective action then, report directly to the division/ section head and the ES&H Director.
 - d. Advise the division/ section management on ES&H matters.
8. The Division/ Section Environmental Protection Officer (EPO) shall:
- a. Represent their assigned Division/ Section on the Environmental Protection Subcommittee.

- b. Assist D/ S personnel in determining significant aspects for projects originating from within the D/ S.
 - c. Disseminate information regarding the Environmental Management System to their organization.
 - d. Participate as Chairman for specific Environmental Management Program *ad hoc* panels.
 - e. Collect relevant information from their organization for consideration by the Subcommittee or panels.
8. The ES&H Director has the following responsibilities:
- a. Represents the Director in all matters of environment, safety and health, serving as the Senior ES&H Officer for the Laboratory.
 - b. Has the authority to stop activities that pose an imminent danger to employees, the public, or the environment, in accordance with the technical appendix to this chapter.
 - c. Reports directly to the Director on items of imminent environment, safety, or health danger, and any serious violation of the Laboratory ES&H programs.
 - d. Advises members of the Directorate, division/ section heads and division/ section safety officers on ES&H matters.
 - e. Is the primary consultant for division/ section heads regarding recruiting, interviewing, and appointing SSOs
 - f. Develops ES&H programs together with line organizations to comply with the Laboratory's Work Smart set of standards and to otherwise promote responsible ES&H practices.
 - g. Serves as Emergency Coordinator for all incidents involving activation of the Emergency Operations Center.
 - h. Develops, budgets, and administers the Fermilab ES&H Award Program. Specifically:
 - (1) ES&H awards may recognize individual or group achievement.
 - (2) The plan should include flexibility to accommodate recognition of deserving unique events and rare milestones.

- (3) It is expected that specific ES&H awards will change periodically, particularly initially, to determine what works best to motivate Fermilab personnel to prevent accidents and avoid injury.
- (4) Expenditures for ES&H awards will have full backup documentation and be subject to audit. The Business Services Section will be consulted concerning documentation and audit readiness.

- i. Is assigned specific line responsibilities which are set forth in the technical appendix to this chapter.
- j. Is the head of the ES&H Section, and as such, requests from the Director sufficient resources such that the ES&H Section is able to:

- (1) Perform ES&H audits in accordance with the ES&H Assurance Program.
- (2) Provide assistance to division/ section personnel, upon request, for support of special surveys and measurements.
- (3) Perform specific line responsibilities that are included in the technical appendix to this chapter.

9. The Director shall:

- a. Be ultimately responsible for establishing a workplace that reflect an integrated approach to environment, safety, and health which is in compliance with applicable federal/ state laws and regulations, and the Work Smart Standards contained in the Fermilab Research Alliance, LLC (FRA) contract with DOE.
- b. Approve Laboratory ES&H policies. Review and, if appropriate, approve of exceptions to Fermilab ES&H policies.
- c. Be the final arbiter for interpreting policies set forth in this chapter.
- d. Appoint the Laboratory Safety Committee (LSC) whose charge and membership are included in a technical appendix to this chapter. This committee shall:
 - (1) Be led by the Chief Operating Officer.
 - (2) Advise the Director regarding all elements of the Laboratory ES&H program.
 - (3) Meet on a monthly basis.
 - (4) Make itself available for consultation regarding all ES&H policies, procedures, and standards and regulations.

- (5) Operate, in part, through a number of subcommittees whose charges and memberships are included in a technical appendix to this chapter.
- e. At his/ her discretion, appoint members of the Directorate who shall:
 - (1) Assign responsibilities for activities to divisions/ sections.
 - (2) Assign landlord responsibilities for all spaces to divisions/ sections.
 - (3) Formally designate landlords and tenants.
 - (4) Review Laboratory ES&H policies periodically.
 - (5) Provide sufficient resources to assure the maintenance of appropriate ES&H programs.
 - (6) Support ES&H self-assessment activities.
 - f. Review and approve variance requests before submitting them to the appropriate regulatory authority.

LANDLORD/TENANT RELATIONSHIP

This section defines the landlord/ tenant relationship.

1. The Director, or designee, shall assign each space at Fermilab to a designated division/ section as landlord. The landlord is responsible for:
 - a. The maintenance and safe operation of the space.
 - b. Appointing a building manager or managers for each assigned space. Building managers shall have the responsibility for:
 - (1) Inspecting their areas.
 - (2) Requesting resources to bring their areas into compliance and to maintain compliance with Fermilab ES&H standards.
 - (3) Ensuring that hazards associated with their areas are posted.
 - c. Arranging documented periodic ES&H inspections of the space in accordance with the division/ section Self-Assessment Plan and correcting deficiencies found on those inspections or inspections performed by other agencies. Deficiencies that cannot be immediately corrected shall have interim abatement action taken. Corrective actions shall be tracked through ESHTRK.
 - d. Assuring access to assigned areas by emergency personnel.

2. If personnel from a division/ section are assigned to a building or area where another division/ section is designated as landlord, the Directorate may formally designate the second division/ section as tenant. The tenant shall:
 - a. Comply with ES&H policies of the landlord division/ section or have a signed memorandum of understanding with the landlord division/ section agreeing to reassign to the tenant the ES&H responsibilities for the space.
 - b. Appoint a building or area liaison, preferably resident in the building, to act as building contact person with the landlord's building manager.
 - c. Cooperate with the building ES&H inspections and correct any problems found which are caused by the tenant's personnel or equipment.
 - d. Identify unusual technical equipment to the landlord so that potential ES&H problems can be addressed.
3. The Director or designee shall review all landlord/ tenant assignments at least annually.
4. Users and visitors residing in on-site housing are tenants. These tenants are subject to all applicable Laboratory regulations and policies. The Housing Office is designated as the landlord.
5. Fermilab employees working off-site are required to comply with the ES&H policies of the organization responsible for managing the work site. See [FESHM 1011](#) for additional guidance regarding travel to host laboratories within the continental United States and foreign countries.

ES&H RESPONSIBILITY FOR PRODUCTS

This section defines the method for determining the ES&H responsibility for products. In this context, the term "product" is to be taken in a very broad sense and is meant to include equipment, services and software.

1. The division or section accepting the product into its area for installation or use is responsible for:
 - a. Determining the specifications to be met by the product consistent with Laboratory ES&H policies and standards.

- b. Reviewing compliance with manufacturer's standards and product use information.
 - c. Assuring that the product is operated within the safe operating limits.
 - d. Providing a decommissioning plan, for the product, where appropriate. This plan shall comply with ES&H standards.
2. The organization (division, section, experiment, user, subcontractor, vendor) or individual producing the product is responsible for:
- a. Assuring that the product is designed and built to meet the stated applicable ES&H standards.
 - b. Assisting in start-up activities and initial performance testing and operational training.
 - c. Providing documentation in support of item (a).
 - d. Vendor and subcontractor responsibilities are delineated in Fermilab's standard terms and conditions.
- 3 The division/ section which is shipping, receiving or storing equipment is responsible for specifying ES&H requirements insofar as necessary to ship, receive and store the equipment in compliance with Laboratory ES&H policies. It is the responsibility of the division/ section that requests the equipment to provide the resources to meet the requirements.

SCIENTIFIC DEMONSTRATIONS/SHOWS BY EMPLOYEES

Scientific demonstrations / shows under the auspices of any division or section require an evaluation by a safety professional from the ES&H Section. This evaluation is only necessary in those cases where Fermilab equipment is used, a Fermilab employee participates in the show in his official capacity or the show or demonstration is within the confines of Fermilab property. In these cases, the demonstration or show can proceed only after the activities are reviewed by the ES&H Section and a review letter issued. The review letter will remain in effect as long as there are no changes in the specifications, methodology, equipment and manner in which the demonstration is conducted.

This requirement does not apply to demonstrations or shows where an employee uses equipment other than Fermilab owned and the employee acts in his capacity as a private citizen and outside the confines of Fermilab property.

NON-ENGLISH SPEAKING INDIVIDUALS

Supervisors and experiment spokespersons are responsible for assuring that all of the people for whom they are responsible comprehend the ES&H hazards to which they are exposed and the protective measures available. Familiarization with ES&H hazards may assume a wide variety of forms. These include, but are not limited to, standardized training or informal explanations through a translator, oral or written instructions, or demonstrations of procedures. Since each case involving a foreign-speaking employee, user, or sub-contractor is in some way unique, a highly prescriptive method for approaching this responsibility would not be useful and no attempt is made to develop one here.

TECHNICAL APPENDIX TO ES&H ORGANIZATION AND RESPONSIBILITIES

PROCEDURE FOR STOPPING AND RESTARTING ACTIVITIES

1. Any person who discovers an activity that they believe poses an imminent danger to the safety and health of individuals or to the quality of the environment shall immediately request termination of that activity. This shall be accomplished verbally with the individuals engaged in the activity or through the managers of the activity.
2. Individuals who have been asked to terminate an activity because it appears to pose an imminent danger shall immediately comply with the request. The activity may resume after the hazard has been abated.
3. Disagreements shall be rapidly escalated up through management chains.
4. In the case of subcontract work, the Fermilab employee responsible for managing the contract shall be notified as soon as possible following termination of the activity. Where formal notification is required to terminate subcontract work, use the SUBCONTRACTOR ES&H STOP WORK ORDER included in the technical appendix to FESHM 7010 (http://www-esh.fnal.gov/FESHM/7000/7010TA_Form5.pdf). The activity may resume after the hazard has been abated.
5. Requests to stop an imminent danger activity by any safety or environmental professional from the ESH Section shall be obeyed immediately regardless of disagreements. Discussions to resolve disagreements or differences of opinion can occur only after the activity is stopped and people are removed from the hazard.
6. The Director of ES&H is available to counsel participants and to facilitate implementation of these procedures.

SPECIFIC LINE RESPONSIBILITIES OF THE ES&H DIRECTOR

The specific responsibilities assigned are:

1. Function as the editor and distributor of the Fermilab ES&H Manual ([FESHM 1050](#)).

2. Appoint, with the concurrence of the Laboratory Director, senior personnel as designees to represent the officer in all matters concerning ES&H at times when the ES&H Director is unavailable.
3. Uses the Fermilab ES&H Assurance Program to determine the degree of compliance by divisions/ sections with their own ES&H programs and with the Laboratory ES&H program.
4. Reviews all requests from division/ section heads to operate in a fashion that is not in compliance with established Fermilab safety procedures or policies and make recommendations to the Laboratory Director.
5. Maintain liaison with the DOE on Laboratory ES&H.
6. Maintain appropriate ES&H records as required by regulations.
7. Keep abreast of proposals and changes in ES&H regulations that may affect Laboratory operations.
8. Study the ES&H aspects of all Laboratory activities and consider suggestions for improving performance.

SPECIFIC LINE RESPONSIBILITIES OF THE ES&H SECTION

The ES&H Section shall carry out these specific line responsibilities:

1. Procurement, distribution, maintenance and calibration of radiation monitoring equipment.
2. Procurement, distribution, maintenance and calibration of industrial hygiene monitoring equipment stored within the ESH Section.
3. Maintenance, repair and calibration of personal oxygen monitors.
4. Maintenance of the personnel dosimetry program.
5. Procurement and maintenance of radioactive sources for loan to Fermilab personnel and to visiting experimenters.
6. Supervision of shipments of radioactive material coming to or from the Fermilab site.

7. Storage and disposal of radioactive waste.
8. Maintenance of active programs for the development and refinement of radiation detectors, equipment dosimetry systems, measurements of shielding characteristics, etc., and for the development of methods of calculating shielding, radio activation and radiation doses.
9. Coordination and interactions with external governmental agencies regarding ES&H compliance.
10. Storage of hazardous wastes held longer than 90 days and disposal of all hazardous wastes and regulated chemical (State of Illinois) special wastes.
11. Environmental monitoring and preparation of the annual Environmental Report to the Director.
12. Industrial hygiene sampling, upon request or oversight of industrial hygiene sampling by other ES&H professionals.
13. Management of all asbestos removal projects at the Laboratory.
14. Administration of the prescription safety eyewear and safety toe protective footwear program.
15. Maintenance of an inventory of safety signs.
16. Maintenance of appropriate safety records as required by applicable regulations and as assigned by the Directorate.
17. Provision of ES&H assistance to division/ sections as requested.
18. Provision of Lab-wide ES&H training, maintenance of appropriate database, and related consultative services.
19. Administration of the respiratory protection program.
20. Administration of Fermilab's Occupational Medicine and Workers' Compensation program.
21. Administration of Environmental Permits.

CHARTERS

[LABORATORY SAFETY COMMITTEE \(LSC\) CHARTER](#)

[CRYOGENIC SAFETY SUBCOMMITTEE CHARTER](#)

[ELECTRICAL SAFETY SUBCOMMITTEE CHARTER](#)

[EMERGENCY PREPAREDNESS SUBCOMMITTEE CHARTER](#)

[ENVIRONMENTAL PROTECTION SUBCOMMITTEE CHARTER](#)

[ERGONOMICS SUBCOMMITTEE CHARTER](#)

[FIRE SAFETY SUBCOMMITTEE CHARTER](#)

[INDUSTRIAL HYGIENE SUBCOMMITTEE CHARTER](#)

[INJURY/ILLNESS PREVENTION SUBCOMMITTEE CHARTER](#)

[MECHANICAL SAFETY SUBCOMMITTEE \(MSS\) CHARTER](#)

[RADIATION SAFETY SUBCOMMITTEE CHARTER](#)

[SUBCONTRACTOR SAFETY SUBCOMMITTEE CHARTER](#)

[TRAFFIC SAFETY SUBCOMMITTEE CHARTER](#)

ES&H REVIEW PANELS

For ES&H concerns of a limited duration or scope, ES&H review panels may be created on an "ad hoc" basis at the discretion of the division/ section head. For operations where continuing review efforts will be needed (e.g., activities expected to continue for more than one year), membership of such panels is to be appointed by the division/ section head with concurrence of the Chief Operating Officer. The Chair of such a review panel shall then be appointed to the relevant Laboratory Safety Committee (LSC) subcommittee. The efforts of such a panel shall be summarized in the LSC subcommittee's quarterly report as well as by any other means specified by the appointing division/ section head. Charters of such review panels are to be documented.

SENIOR SAFETY OFFICERS (SSO) CHARTER

To view the Committee/ Subcommittee Membership please go to:

<http://www-esh.fnal.gov/pls/default/committees.html>