EMERGENCY RECOVERY

INTRODUCTION

Damage caused by an emergency event, such as a fire or a large spill, can be limited if the recovery effort begins promptly. This procedure will give general guidance to any PPD individual that may be named Recovery Manager or who might aid the Recovery Manager after the Fermilab Fire Department has determined the scene is under control and recovery can begin.

REFERENCES

Fermilab Emergency Response Plan (FERP), Revision 5, July 2000
Fermilab Environment, Safety, and Health Manual (FESHM) Chapter 2040 - Emergency Preparedness, January 1999
FESHM Chapter 2050 - Building Manager Program, May 1999
FESHM Chapter 8030 - Spills and Releases, January 1999
CERN Safety Note 10, February 1994

DEFINITIONS

FIRUS - Fermilab Incident Reporting and Utility System - lab-wide system that monitors building fire alarm systems and provides alarms at the Communications Center in Wilson Hall.

Hazard (FERP, p.67) - A process, condition, or asset, which has the potential to adversely impact the health and safety or personnel, the public, the environment. Hazards are divided into three classes:

Low:	Hazards which represent minor on site and negligible off site impacts.
Moderate:	Hazards which represent considerable potential on site impacts and only minor off site impacts.
High:	Hazards with the potential for on site and off site impacts to large numbers of people or the environment.

Hazardous Substances (FESHM 8030, p.1) **-** The list of **Hazardous Substances** and **Reportable quantities** found in 40CFR 302.4 is used for all reporting under CERCLA, SARA Title III, RCRA, and DOT.

Recovery (FERP, p.68) - Actions taken after facility conditions have been stabilized or shutdown to allow a return to normal operations.

Release - (FESHM 8030, p.1) Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. Releases must be reported to local, state, and federal authorities when they are released from a facility in *reportable quantities.*

Reportable Quantity (FESHM 8030, p.1) - A designated amount of a hazardous material, which if released or spilled into the environment requires immediate notification to the National Response Center. EPA has established reportable quantity lists that facility owners and operators must use when defining what types of release to report. This list is found in 40CFR 302.4

RESPONSIBILITIES

Building Manager (FESHM 2050, p.1) - Designated employee for each building on site that will serve as the contact point for all activities that will affect that building as a result of daily operations or services requested from both internal and external sources.

Emergency Warden - An individual who will identify the emergency signal, react accordingly and move personnel to a safe location. In cases requiring building evacuation, the warden will upon the arrival of the Fire Department provide the Incident Commander a "negative accountability" report and whatever information is known about the cause of the alarm.

Emergency Director (FERP, p.18) - The Laboratory Director or his designee (normally an Associate Director) functions as the Emergency Director and assumes command and control upon activation of the Emergency Operations Center.

Emergency Coordinator - (FERP, p.17) The ES&H Section head (or designee) functions as the Emergency Coordinator and is responsible for the response functions associated with an emergency.

Incident Commander - (FERP, p.17) The senior ranking Fire Department individual arriving at the scene.

Recovery Manager (FESHM 2040, p.2) **-** Appointed by the Emergency Director and will be given the responsibility and authority to affect appropriate repairs in the stricken area.

DESCRIPTION

Incident phase:
The initial call for assistance is generated through the activation of a local sensor (smoke detector, water flow, etc.) or through someone placing a telephone call to the Communications Center at ext. 3131. Once informed of the situation, the Communications Center will dispatch fire and security personnel to the scene. If the notification was through the FIRUS system, the Communications Center will also make additional notifications as listed in the FIRUS message. Locally, the division/section emergency wardens take steps to clear the structure, consolidate personnel in an assembly area, and await the arrival of the Fire Department.

The senior Fire Department representative, upon arrival at the incident site, assumes the role of Incident Commander (IC) in all non-security and non-vehicular incidents. Information is exchanged between the Emergency Warden and the IC as to the status of personnel, and the nature of the emergency. Accountability is achieved through the warden verifying, to the best of their knowledge, that the area has been swept and personnel do not remain inside the facility or are not at risk.

If the incident exceeds what is considered a "standard incident"; the IC will direct the Communications Center to place a conference call to the ES&H Section Head. The IC will inform the ES&H Section Head of the situation. During this conversation the ES&H Section Head will, if the situation warrants, make the decision to categorize and classify the event. The ES&H Section Head serves as the Emergency Coordinator and is in charge of the response functions associated with an emergency.

Recovery phase:
Once the Incident Commander terminates the field incident, recovery efforts will commence under the direction of a Recovery Manager. The Recovery Manager will be appointed by the Emergency Director and will be given the responsibility and authority to affect appropriate repairs in the stricken area. The recovery effort will differ depending on the type of emergency. Examples of the more "common" type of emergencies and appropriate steps to take to respond are listed on the next page.

Emergency: *Contamination of the environment, such as a chemical spill or a cooling system leak.*

Response: After the initial response and containment of a hazardous material spill, the Recovery Manager may require the services of a local remediation contractor with additional resources and/or OHSA trained personnel to assist in the completion of the cleanup. The ES&H Section maintains a file that includes the name, address, telephone number, and a contact person for qualified contractors. This list is available under "Resources" from the ES&H Section homepage at: http://www-esh.fnal.gov:8001/RemConMemo/Rem_Con.htm

Emergency: *Flood*

Response: Reduce humidity by removing free liquids from the space. Check for electrical hazards before entering standing water or energizing electrical equipment. Although in some cases it is acceptable to discharge water through a sump pit to recover from an emergency, hazards in the area may have contaminated the water. The Environmental Protection Officer or Senior Safety Officer, along with guidance from the ES&H Section, will help to determine the best course of action for disposal of free liquid after an emergency. Turn on dehumidifiers & fans in the area and wipe down or mop up any additional water left behind by the flood. It's important to remember that if the water was contaminated by hazards in the area, the items used while cleaning up may also need to be disposed of as hazardous or special waste.

Emergency: *Fire*

Response: Certain plastics, particularly PVC, used in cable manufacturing give off hydrochloric acid when they burn or are thermally decomposed. This acid will condense on cold areas affected by the smoke and will attack most metals and also structural concrete. Although hydrochloric acid will have to be removed from equipment, the rate of corrosive attack can be reduced to negligible proportions if the relative humidity of the atmosphere in the area affected is reduced below 40%. Measures that reduce the humidity, the spread of hydrochloric acid, and the severity of the incident include:

1) Removing any fire fighting water used to extinguish a fire. Again, it may be appropriate to discharge it out through a sump pit, but that decision should only be made once it is understood whether or not the water has been contaminated by a hazard in the area. Check for electrical hazards before entering standing water or energizing electrical equipment.

2) Turn on dehumidifiers, fans and if possible, the AC.

3) All dry powder from extinguishers or loose soot particles should be removed from all surfaces by dry method.

4) Isolating rooms unaffected by the smoke damage to minimize the spread of acid.

5) Burnt cables must be removed as quickly as possible from the affected area.

Recovery from an emergency such as a spill or a fire can take several hours or several weeks depending on the nature and severity of the emergency. The important thing is to be prepared. Know the hazards in the area, know the equipment most delicate and most important and begin the clean up there. Contact a professional service promptly to aid in the recovery effort. Taking a few quick steps after an emergency, no matter what type of emergency it is, can greatly reduce the damage it causes.