EMERGENCY PREPAREDNESS INFORMATION FOR MTL

Important Telephone Numbers

Dial 100 from a campus land phone for all Police, Medical, Ambulance, Fire/Explosion, Bomb threats and Major Laboratory Spill Emergencies

Alternatively dial 617 253-1212 for an ambulance or emergency assistance

Dial 617- 253-1500 for the Department of Facilities Operations Center in bldg E19 (this line is covered 24/7 and the dispatcher can summon the MTL ERT members as well as EHS and other on-call personnel)

Dial 857-998-1916 to contact a staff member who can deliver chemicals to the MTL labs

Dial 617-258-9656 in order to use the loudspeaker paging system

Dial 617-452-3477 for routine chemical waste pick up

Dial MIT Medical (in Bldg E23-open 24/7) for a non-emergency medical issue: 617-253-1311

Dial 617-452-3477 for the EHS office

In the event of a fire:

Remain calm

Pull the fire alarm (these are located in bldg 38 & 39 on every floor near each stairwell door).

Exit the bldg via the nearest safe stairwell and congregate in the lobby of bldg 13. (If there is a concomitant emergency occurring in bldg 13, then congregate in the lobby of bldg 34).

If you are wearing a cleanroom garment, do not take the time to remove it before evacuating the building

Call100 using a campus land phone from a safe location

Provide the following info to the dispatcher who answers the phone:

Fire location

What happened

If there are injuries, and the location of same

Your name, location and telephone number.

REMAIN on the phone- DO NOT HANG UP until the dispatcher hangs up.

To summon an ambulance for an emergency medical condition or situation:

Dial 100 for an ambulance from a campus land phone.

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In case of electrocution Do not touch the victim! Each machine has a red EMO (emergency off) button. If this is not accessible, press the red EMO button on the wall. Dial 100 from a campus land phone to summon an ambulance. Alternatively dial 617 253-1212 from any phone (including cell phones) to summon an ambulance.

Chemical Exposure

Note: Do not assume that any odorless, clear, colorless liquid is water. Hydrofluoric acid, which is highly corrosive and can be toxic, is also an odorless, clear, colorless liquid

Emergency eyewashes and safety showers are located near acid hoods, fume hoods, wet benches and chemical pass-throughs.

In case of HF exposure, wash affected area for 5 minutes, apply antidote (calcium gluconate paste, which is located at acid hoods and wet benches) and get to MIT medical immediately.

In case of other acid exposure, wash affected area for 15 minutes and get to MIT medical immediately.

Chemical Spills

In the event of a chemical spill, distinguish between a minor spill and a major spill:

Major spills are defined as:

Larger than 1 gallon

OR

Immediate/unknown hazard (e.g. noxious or fire hazard)

OR

Can spread to public area or the environment

In the event of a major spill, evacuate the lab, pull the fire alarm and dial 100 from a safe location. Stay on the line with the dispatcher in order to provide as much information as possible so as to facilitate the appropriate emergency response.

Minor spills are defined as:

Less than 1 gallon

AND

Chemical identity is known

AND

Chemical is neither flammable nor noxious

In the event of a minor spill, confine spill to a small area using the nearby spill pillows, dikes or dams (which are located in 39-144, 39-228, 39-438, 39-556 in the shared labs, and in any PI lab with chemicals in use in the hood.

Alert others in the area, and dial 3-1500 to summon MTL ERT members who can clean up and neutralize the spill.

Lab Buddy- required at all times

If you are working after hours with a buddy and cannot find him/her, first make sure that your wafers and the machine are in a safe stopping point, look for him/her and if he/she cannot be found, leave the lab. You can use the pager system by dialing 258-9656. This will connect you to the loudspeaker system and you can page the person in question.

MIT Emergency Response Guide



The MIT Environment, Health and Safety Office

Biosafety · Environmental Management · Industrial Hygiene · Radiation Protection · Safety

2-EHSS (2-3477) (617-452-3477) http://web.mit.edu/environment/programs/index.html

MIT Emergency Response Guide

DIAL 100

For all Police, Medical/Ambulance, Fire/Explosion, Bomb Threats, and Laboratory Spill Emergencies

or 617-253-1212

Medical Emergency

Immediate Response

Remain calm!

Ambulance / Emergency Assistance – Dial 617-253-1212 *PROVIDE* the following information:

- · What happened,
- Injured person's location, and
- Your name, location and telephone number
- **DO NOT HANG UP** Remain on the line until the dispatcher disconnects.

Chemical Contamination

If the victim or clothes are chemically contaminated, don appropriate personal protective equipment and remove victim's contaminated clothing, *ONLY IF TRAINED* and: Using a chemical shower, eyewash, or sink in a safe area, *FLOOD* contaminated body part(s) with COPIOUS AMOUNTS of water for 15 MINUTES.

Life Saving Measures

Initiate life saving measures if: required, you are trained in first aid or CPR, and you will not be placed at risk of exposure, material contact, or injury.

Victim Movement

Do not move the injured person unless there is danger of additional harm, e.g., fire, explosion, further contamination.

Comfort

Keep injured person warm and continually reassured.

MSDS

As time permits and if you will not be placed at risk, attempt to identify the chemicals involved and obtain MSDS' or other relevant information. Provide the MSDS to the ambulance crew.

Addition Information

See, "Personal Injury" below, for additional guidance.

Medical Emergency

Personal Injury - Skin Contact with Radiological, Chemicals or Biological Materials

ACTION	RADIOLOGICAL	CHEMICAL	BIOLOGICAL
REMOVE	contaminated clothing.	\checkmark	\checkmark
WATER	RINSE exposed area thoroughly with water.	FLOOD exposed area with copious amounts of running water from emergency/deluge shower, faucet, eyewash, or hose for at least 15 min.	VIGOROUSLY wash exposed area with soap and water for several min.
OBTAIN	medical attention immediately.*	✓	\checkmark
REPORT	the incident to your supervisor, your EHS Coordinator, and Contact the EHS Office, 2-EHSS (2-3477).	✓	✓

Hazardous Material in EYES

IMMEDIATELY rinse eye and inner surface of eyelid continuously for at least 15 minutes with copious amounts of water.

Remove contacts lenses first!

LIFT eyelid to ensure effective rinsing behind the eyelids.

OBTAIN medical attention after any chemical contact with the eye.*

REPORT the incident to your supervisor and the EHS Coordinator.

Minor Cuts and Puncture Wounds

VIGOROUSLY wash injury with soap and water for several minutes.

OBTAIN medical attention, immediately, as appropriate.* **REPORT** the incident to your supervisor.

*DIAL 100 FOR AN AMBULANCE.

Non-emergency report to MIT Medical Department, E23. Open 24 hours per day / 7 days per week. **Phone 617-253-1311.**

Personal Injury

Critical Laboratory Incidents

Immediate Action

ALERT others in the area that an incident has occurred. EVACUATE or request assistance. **NOTIFY** Dial 100 for Emergency Assistance. (Off campus, dial 617-253-1212.) **ACT** Take the following actions:

Fire/Explosions

ACTIVATE fire alarm.

DIAL 100 or 617-253-1212 from a safe location.

General Response Action for Radiation, Chemical or Biological Spills

NOTIFY Environmental Health and Safety – during work hours (9AM – 5PM), 2-EHSS (2-3477), off hours DIAL 100. Report incident to your supervisor.

ASSIST injured or contaminated people and remove them from exposure if you will not be placed at risk of exposure or material contact. If any potential for injury obtain medical attention.*

DON appropriate personal protective equipment ONLY IF TRAINED.

CONFINE the spill. Close doors to contain the spread of smoke, vapors, contamination.

ASSIST Have person familiar with laboratory or incident meet and assist emergency personnel.

MSDS If possible and if you will not be placed at risk of contact or exposure, attempt to identify the chemicals or biologics involved and obtain the MSDS or other relevant information.

For EMERGENCY chemical waste pickup, contact the Environment, Health and Safety Office, 2-EHSS (2-3477), off hours DIAL 100.

*DIAL 100 FOR AN AMBULANCE.

Non-emergency report to MIT Medical Department, E23. Open 24 hours per day / 7 days per week. Phone 617-253-1311.

Critical Laboratory Incidents

Chemical Spill

ACTION		MINOR SPILL	MAJOR SPILL
ALERT	others in area of the spill.	\checkmark	\checkmark
ASSIST	injured or contaminated people in area, if it can be done safely. If any potential for injury obtain medical attention.*		✓
FLAMMABLE	If material is flammable, turn off ignition and heat sources if it can be done safely.	✓	✓
REPORT	emergency DIAL 100 or (3-1212). Report incident to your supervisor.		√
CLOSE	doors to the affected area.		\checkmark
OBTAIN	MSDS's if the chemicals are known and you will not be placed at risk of exposure or chemical contact. Provide MSDS's to emergency response personnel.		✓
DON	appropriate PPE (trained personnel only).	√	
AVOID	inhaling fumes.	√	√
ASSIST EMERGENCY PERSONNEL	Have knowledgeable laboratory personnel or those who witnessed the incident standby to assist emergency response personnel.		√
OBTAIN APPROPRIATE SPILL KIT	(acid, caustic, solvent, etc.) to confine, neutralize, and absorb the chemical.	✓	
CONFINE	spill to small area using materials contained in spill kit.	\checkmark	
COLLECT	residue using non-sparking tools, place in container, and label with red tag as chemical waste.	✓	
PLACE	spill materials into an appropriate container, affix a hazardous waste tag, and request a hazardous waste pickup.	✓	
CONTACT	http://web.mit.edu/environment/wastepickup/index.html or call the Environment, Health and Safety Office at 2-EHSS (2-3477) for a chemical waste pickup.	√	

*DIAL 100 FOR AN AMBULANCE.

Non-emergency report to MIT Medical Department, E23. Open 24 hours per day / 7 days per week. **Phone 617-253-1311.**

Chemical Spills

Fire

EAP Review

Review the Department's Emergency Action Plan (EAP) at least once annually. (See EAP section.) Contact the Department's EAP Coordinator for assistance.

Fighting Fires

MIT's policy states that no one is required to fight a fire, but everyone is required to evacuate and report the fire. If you are trained in fire extinguisher use and have the appropriate extinguisher, then you may fight a small (incipient stage, e.g., smoldering) fire. However, prepare to evacuate if you cannot control the fire WITH A SINGLE EXTINGUISHER. Never enter a room that is smoke filled or pass through a door that is warm or hot to the touch (top down).

Never Place Yourself Between the Fire and an Exit!

Reporting a Fire

REMAIN CALM!

PULL THE FIRE ALARM and Dial 100, done from a safe location.

PROVIDE the following information:

- · Fire Location,
- What happened,
- If there are injuries and the location, and
- Your name, location, and telephone number.

REMAIN ON THE PHONE - DO NOT HANG UP until the dispatcher hangs up.

Clothing on Fire

STOP, DROP, AND ROLL to extinguish flames.

WITNESS If you witness a person on fire, stop them from running. Drop and roll the victim to extinguish flames or smother them with a fire blanket if immediately available. **DRENCH** affected body parts with cool water from emergency shower, eyewash hose, or at sink.

OBTAIN medical attention, immediately, as appropriate.* **IMMEDIATELY** report the incident to supervisor.

Emergency Action

- A ALERT others that there is a fire. Request help if someone needs assistance and it can be done without placing yourself or others in danger.
- C CONFINE the fire by closing hood sash, doors, windows, or other openings if time permits and it can be done without placing yourself or others in danger.
- E EVACUATE the area and wait in the Department's designated Waiting and Meeting Area following the Department Emergency Action Plan (EAP).
- **S**SUMMON ASSISTANCE On your way to an exit, activate the fire alarm pull station. From a safe location, DIAL 100 to report the fire. Wait for emergency personnel to provide any useful information.

*DIAL 100 FOR AN AMBULANCE.

Non-emergency report to MIT Medical Department, E23. Open 24 hours per day / 7 days per week. **Phone 617-253-1311**.

Hazardous Waste Management

BACKGROUND

Federal and Massachusetts hazardous waste regulations specify how hazardous waste must be labeled, stored, and disposed and the training requirements for personnel who handle hazardous waste. MIT's Environment, Health and Safety Office [2-EHSS (2-3477)] is available to assist the departments manage their hazardous waste program and ensure compliance with Federal and State regulations. The EHS Office provides training to enable MIT students, faculty, and staff develop the knowledge and experience necessary to safely manage hazardous waste and maintain compliance with regulatory requirements.

LABELING

LABEL all HW containers using Red HW tags

WRITE container contents in English. (No abbreviations, trade names, or formulae.)

STORAGE

STORE HW containers in designated Satellite Accumulation Area (SAA) or

Main Accumulation Area (90-Day storage area).

CLOSE all HW containers. They must remain tightly closed at all times except when adding waste.

MAINTAIN

No more than **one** HW container for each waste stream in each SAA.

REMOVE

- a. filled HW containers from SAA within three days after container is filled and/or tag is dated.
- b. full or dated HW containers from the campus within 90 days.

STORE

Incompatible waste materials separately so that they cannot mix or commingle.

INSPECT

- a. Each SAA at least once per week. Lab personnel must perform this inspection.
- b. Each 90-Day area at least once per week. The EHS Office is responsible for this inspection.

DISPOSAL

- a. Laboratory HW disposal is provided by the EHS Office.
- b. Disposal of other hazardous wastes i.e.: lecture bottles, explosives, excess chemicals, lab cleanouts, etc. incurs additional cost that will be charged to the lab.

PICK-UP

REQUEST HW PICK UP ONLINE AT: http://web.mit.edu/environment/wastepickup/index.html

TRAINING

All people that generate, handle, or manage HW must be trained initially and annually. Hazardous waste training is available online at: http://web.mit.edu/environment/training or upon request to the EHS Office.

Follow these training guidelines:

- New personnel (students, staff, faculty) may not work in unsupervised positions until they have successfully completed a HW training program.
- Personnel must successfully complete HW training within six months of an assignment to a position requiring HW training.
- Personnel must receive annual HW refresher training.

Hazardous Waste Management

Special Procedures Include or reference here, any special procedures that are specific for this Lab. If by reference, where can one find them quickly? **Special Procedures** DIAL 100 OR 617-253-1212 for EMERGENCY ASSISTANCE

Special Procedures

Emergency Action Plan (EAP)

See your Department EAP Coordinator:

Name: Vicky Diadiuk | Patricia Burkhart

Extension: 3-0731 | 3-8567

Your complete EAP is located in room #

Insert a floor plan/map (or refer to location where it is posted) for **YOUR** escape routes, outside waiting and meeting areas. Also recommended is identifying on the floor plan the location of emergency equipment and supplies such as:

- emergency showers
- · eyewash stations
- antidote kits
- spill kits
- protective equipment, e.g., chemical safety goggles, gloves, and long sleeve lab coat, etc,
- · fire extinguishers, and
- fire blankets.

In the event of an evacuation alarm, proceed via the nearest stairwell to the lobby of Building 13. If Building 13 is also undergoing an emergency, then proceed to the lobby of Building 34.



Contacts

LAB		ROOM #	EXTENSION #
DLC EHS COORDINATOR	Pat Burkhart, burkhart@mtl.mit.edu	39-313	253-8567
CHEMICAL HYGIENE OFFICER	Vicky Diadiuk, diadiuk@mtl.mit.edu	39-219	253-0731
LABORATORY SAFETY REPRESENTATIVE	see individual lab		
EMERGENCY ACTION PLAN COORDINATOR	Pat Burkhart, burkhart@mtl.mit.edu Vicky Diaduk, diadiuk@mtl.mit.edu	39-313 39-219	253-8567 253-0731
PRINCIPLE INVESTIGATOR	see individual lab		
DEPARTMENT HEAD	Vladimir Bulović, bulovic@mit.edu	13-3138	253-7012
DEPARTMENT ADMINISTRATIVE OFFICER	Samuel Crooks, crooks@mtl.mit.edu	39-321a	253-3978
OTHERS			
FACILITIES Request services at http://web.mit.edu/sapw	reb/PS1/facilities_home.shtml		3-1500
REPAIR & MAINTENANCE SUPERVISOR	Gary Saffie, gsaffie@plant.mit.edu	E19-146	617-438-4197
BIOSAFETY PROGRAM	Carolyn Stahl; N52-461, csstahl@mit.edu	N52-496	253-5564
ENVIRONMENTAL MANAGEMENT PROGRAM	Bret Dyer, bretdyer@mit.edu	N52-496	258-5644
INDUSTRIAL HYGIENE PROGRAM	Andy Kalil; N52-461, akalil@mit.edu	N52-496	258-5636
RADIATION PROTECTION PROGRAM	Hans Richter; N52-461, hrichter@mit.edu	N52-496	258-5640
SAFETY PROGRAM	Katie Blass; N52-461, kblass@mit.edu	N52-496	253-9495
LEAD CONTACT	Bret Dyer, bretdyer@mit.edu	N52-496	258-5644

Contacts