Carnegie Mellon

Hazardous Materials Protection and Contingency Plan for Carnegie Mellon University Doha Campus

Appendix A

January 2, 2014

Sec. 1. Purpose and implementation

The purpose of this protection plan is to provide for effective action to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous materials to air, soil, or surface water. This plan will address Carnegie Mellon University's Doha Campus laboratories were storage of hazardous materials occurs.

Sec. 2. Contents

a. **Storage**. Chemical storage of hazardous material is limited to laboratories. Chemicals are segregated by hazard class and monitored periodically for container integrity. Each hazard class of chemical is stored in an appropriate location that is under the supervision of the teaching and/or research faculty.

b. **Contingency plan**. A contingency plan has been developed for problems that might arise in areas where hazardous material is stored. These plans are outlined in this document. Many of the responses described in this document are congruent with topics addressed in the Carnegie Mellon University Emergency Operations Plan document. These two documents should be used together in hazardous materials release and response actions. The plans describe the actions of CMU-Q's emergency response coordinator will take to comply with Sections. 1 and 6 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous materials to air, soil, or surface water at the university.

c. **Spill response.** CMU-Q's laboratory personnel will respond to minor spills as long as the spill does not exceed the capacity of available spill kits located at our laboratory storage areas and if airborne contaminant levels are clearly within a safe level The Qatar Foundation provides emergency response when larger spills occur or respiratory protection is required.

d. **Injuries.** Persons injured in a hazardous material release will be treated by Hamad.

e. **Emergency coordinators.** A list of names, addresses, and phone numbers (office and home) of all persons qualified who will act as hazardous materials emergency coordinators for CMU-Q is listed below. The first name is the primary emergency coordinator and the others assume responsibility as alternates.

Emergency Coordinators	**WORK**	**24Hour Phone**
John Seawright (Primary) Director of Safety and Security	974.4484.84348	974.3371.2591
Terrance Murphy		
Annette S. Vincent		
Maria Navarro		
Maya Kemaldean		

f. **Emergency equipment. All hazardous materials storage** areas contain the following emergency equipment:
   - The fire protection systems, including alarms, are tested for audibility annually.
   - Spill control equipment located in each laboratory.
   - (Typical spill response equipment is listed below:
     - Acid Sorbent and/or Neutralizer
     - Caustic Sorbent and/or neutralizer
     - Fuel Solidifier and/or solvent sorbent
     - Vapor barrier sorbent pads
     - General sorbent pads and/or pillows
     - General loose sorbent
     - Tyvek suits
     - Chemical resistant gloves
     - Waste materials bags
     - Miscellaneous tools such as tongs, scoops, dust pan, etc., for pick up of sorbents
     - Chemical splash goggles
   - A telephone with emergency numbers posted on it. Additional contact numbers are present on the laboratory door signs.
   - Fire extinguisher: The Qatar Foundation inspects fire extinguishers annually. Damaged or discharged extinguishers are immediately replaced.

Sec. 3. Copies of contingency plan

Copies will be kept in the Faculties Management and the Director of Safety and Security's Office.

Sec. 4. Amendments

The contingency plan will be reviewed, and amended whenever:

a. Applicable regulations are revised;
b. The plan fails in an emergency;
c. Carnegie Mellon Qatar changes the design, construction, or operation, in a way that materially increases the potential for fires, explosions, or releases of hazardous material, or changes the response necessary in an emergency;
d. The list of emergency coordinators changes; or
e. The list of emergency equipment changes.

Sec. 5. Emergency coordinator

At least one of the **CMU-Q's emergency response coordinators** is either on the campus or on call 24 hours a day. The on call coordinator will be available to respond to an emergency by reaching the university within a short period of time. Each emergency coordinator will have the training and the ability to coordinate all emergency response measures. Each emergency coordinator is thoroughly familiar with all aspects of the university's contingency plan, all operations and activities of the teaching and research laboratories, the location and characteristics of hazardous materials stored and handled, the location of all records in **ChemTracker**. In addition, they have the authority to commit the resources needed to carry out the contingency plan.

a. **Notification.** Whenever there a release more than a deminemus amount, and there is an imminent or actual emergency situation, the emergency coordinator (or their designee when the emergency coordinator is on call) will immediately:

(1) Activate internal facility alarms or communication systems to evacuate the area, where applicable, to notify all personnel; and
(2) Notify appropriate stakeholder with designated response roles if their help is needed.

b. **Assessment.** Concurrently, the emergency coordinator will assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment will consider both direct and indirect effects of the release, fire, or explosion. Examples would be; the effects of any toxic, irritating, or asphyxiating gases that are generated or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions.

c. **Evacuation.** If the emergency coordinator determines that the chemical storage area has had a release, fire, or explosion which could threaten human health, or the environment outside the facility, he or she will report their findings as follows:

(1) If his or her assessment indicates that evacuation of local areas may be advisable, he or she will immediately notify the appropriate local authorities. He or she will be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He or she will immediately notify the Qatar Foundation's Ministry of Environment, Radiation and Chemicals Protection Department and Civil Defense. The report will include:

i. Name and telephone number of reporter;
ii. Name and address of the university;
iii. Time and type of incident (e.g., release, fire);
iv. Name and quantity of material(s) involved, to the extent known;
v. The extent of injuries, if any; and
vi. The possible hazards to human health, or the environment, outside the facility.

a. **Containment coordination.** During an emergency, the emergency coordinator will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread. These measures will include, where applicable, stopping any processes or operations, collecting and containing released hazardous materials, and removing or isolating containers.

b. **Monitor.** If there is a fire, explosion or hazardous release, the emergency coordinator will monitor for leaks from the laboratory storage area.

c. **Disposal.** Immediately after a hazardous material release, the Qatar Foundation's Ministry of Environment, Radiation and Chemicals Protection Department will collect, for disposal the recovered hazardous material, contaminated soil or surface water, or any other material that resulted from the release, fire or explosion that occurred at the university.

d. **Affected Areas.** The emergency coordinator will ensure that, in the affected area(s) of CMU-P:

(1) The contaminated laboratory areas will not be used until cleanup procedures are completed; and

The Carnegie Mellon will notify the Qatar Foundation's Ministry of Environment, Radiation and Chemicals Protection Department that the campus is in compliance with paragraph (g) of this section before operations are resumed in the affected area.

i. **Record keeping.** Emergency Coordinator will note and record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he or she will submit a written report on the incident to the following:

1. The Qatar Foundation's Ministry of Environment, Radiation and Chemicals Protection Department.
2. Dean of Carnegie Mellon Qatar Campus.
3. Environmental Health and Safety CMU Pittsburgh campus.

k. **Report** The report will include:

1. Name, address, and telephone number of the owner or operator;
2. Date, time, and type of incident (e.g., fire, explosion);
3. Name and quantity of material(s) involved;
4. The extent of injuries, if any;
5. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
6. Estimated quantity and disposition of recovered material that resulted from the incident.

Distribution:

Carnegie Mellon EHS-P Compliance File

Hamad Medical and Research Center

The Qatar Foundation's Ministry of Environment, Radiation and Chemicals Protection Department