

Title: Transporting Hazardous Materials in ESCB during an Elevator Disruption	Procedure #: EV002	Page #: 1	
Function: Elevator Transport Protocols	Implemented Date: 6/17/2019	Revision #: 1	
Author: Scott Ballantyne Sig. _____ Date _____	Approved By: Sig. _____ Date _____		
Approved By: Sig. _____ Date _____	Approved By: Sig. _____ Date _____		

**1. PURPOSE**

- 1.1. Provide direction regarding the transportation of hazardous materials within the ESCB when one of the ESCB elevators (Elevator #23 or #24) is out of service for an extended period of time.

**2. OBJECTIVE**

- 2.1. Identify the times when hazardous materials can be transported during an elevator disruption
- 2.2. Identify important procedures that need to be implemented when transporting hazardous materials in an elevator.
- 2.3. Identify who to contact in the event that hazardous materials are accidentally released in an elevator.

**3. DEFINITIONS:**

- 3.1. Normal Business Hours – Monday to Friday 8:30 am to 5:30 pm
- 3.2. Secondary Means of Containment - a means of packaging one or more primary storage containers in a vessel large enough to either:
  - 3.2.1. Collect any hazardous material spillage in the event that one of the primary containers breaks
  - 3.2.2. Prevent individuals from coming into contact with the material being transported
- 3.3. TDG Classifications – Hazardous Materials are classified into separate categories based on their hazard groups and classes to prevent incompatible materials from potentially coming into contact.
- 3.4. Hazardous Material - Any item or agent that has the potential to cause harm to a human, animal or the environment, either by itself or through interaction with other factors.
- 3.5. PPE – Personal Protective Equipment
- 3.6. Chemical Compatibility -
- 3.7. Biological Materials - materials that comprise a whole or a part of a living structure.
- 3.8. Cryogenic liquid - a liquid with a normal boiling point below –130°F (–90°C)

**4. ASSOCIATED DOCUMENTS/ REFERENCES**

- 4.1. EV001 - ESCB Elevator Disruption Procedures
- 4.2. Government of Canada's TDG Regulations
- 4.3. University of Toronto's Standard for Inert Cryogenic liquid use in the laboratory
- 4.4. University of Toronto's Compressed gas safety standard

**5. MATERIALS/ EQUIPMENT**

- 5.1. Elevators #23 and #24
- 5.2. Elevator sign chains (available from Chemical Stores)

Title: Transporting Hazardous Materials in ESCB during an Elevator Disruption	Procedure #: EV002	Page #: 2	
Function: Elevator Transport Protocols	Implemented Date: 6/17/2019	Revision #: 1	
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## 6. SAFETY:

- 6.1. When handling/transporting hazardous materials it is always important to wear personal protective equipment specific to the material(s) being transported.
- 6.2. During the transportation window, PPE can be worn outside of the lab, however it is important to not touch anything, including door handles, while wearing gloves.

## 7. PROCEDURE

- 7.1. In the event that one of the elevators is out of service during normal business hours, the transportation of hazardous material(s) in the functioning elevator should be restricted to between the hours of 11:00 am and 1:00 pm.
- 7.2. All containers of hazardous liquids and solids must be sealed and transported in a “suitable secondary means of containment”.
  - 7.2.1. If transporting multiple hazard types, ensure that the materials are packed and separated according to both [TDG regulations](#) and according to [chemical compatibility](#).
  - 7.2.2. Questions regarding TDG Classifications, chemical compatibility, or if you need assistance selecting or obtaining an appropriate means of secondary containment please contact Chemical Stores Staff (ext. 7645)
- 7.3. Prior to transport of any hazardous material, retrieve the elevator chains from Chemical Stores.
- 7.4. Install the chains to inside of the elevator using the handrail as a warning to individuals not to enter the elevator.
  - 7.4.1. For additional instructions regarding transporting materials with specific hazards (e.g. Hazardous waste, Biologicals, Cryogenics, etc.) please refer to section 7.5 of this procedure).
  - 7.4.2. If any chemical is spilled or accidentally released inside the elevator, evacuate the elevator immediately and contact Campus Police (**416-978-2222**). Once the elevator is taken out of service, decide if you can safely handle the spill. If so, locate the nearest chemical spill kit and clean up the spill following standard procedures. If not, inform Campus Police.
- 7.5. Please note the following restrictions and special cases which will require additional precautions:
  - 7.5.1. Hazardous Waste should not be transported during the disruption – it should be safely stored in the originating lab until normal operations have resumed.
    - 7.5.1.1. If the elevator outage is expected to last more than 5 business days, please contact Chemical Stores to arrange for a waste pick-up.
  - 7.5.2. For the transport of [biological materials](#) or materials that may be contaminated with biological materials (e.g. glassware):
    - 7.5.2.1. All materials should be transported in a suitable sealed means of secondary containment.

Title: Transporting Hazardous Materials in ESCB during an Elevator Disruption	Procedure #: EV002	Page #: 3	
Function: Elevator Transport Protocols	Implemented Date: 6/17/2019	Revision #: 1	
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7.5.2.2. When transporting glassware to the autoclave, glassware that has been potentially exposed to [Risk Group 2](#) materials should be first disinfected with the appropriate [chemical disinfectant](#) and dried prior to removal from the containment area.

7.5.3. For the transportation of cryogen liquids, please refer to the transport procedures provided in the University’s [Standard for Inert Cryogenic Liquid Use in the Laboratory](#)

7.5.4. For the transportation of compressed gas cylinders, please refer to the general transport procedures provided in the University’s [Compressed gas safety standard](#)

7.5.4.1. When transporting toxic gasses, do NOT ride in the elevator with the cylinder.

7.5.4.2. Once the cylinder cart is secured to the railing inside the elevator, use a 2-person system to ship and receive the cylinder.

7.5.4.2.1. Please note that the elevator doors tend to close quickly so one person should ensure the doors remain open while the other person is securing the gas cylinder.

**7.6. If there is an urgent need to transport hazardous materials outside of the designated transport times (11:00 to 1:00 pm Monday to Friday), Chemical Stores Staff must be consulted before proceeding.**

**8. TRAINING/ COMMUNICATION**

8.1. This document will be made available to all department personnel working in the Environmental Science and Chemistry Building and will be used for training purposes for new personnel.

