

## Facility Entry Safety Procedure

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### Procedure for entering the Cryogenic Facility (EV017)

#### 1. Introduction

##### 1.1. Purpose

The purpose of this document is to familiarize the user with the dangers and safety procedures involved when cryogenic liquid or solid (defined by the NIST as being below 93.15 K) used in an authorized and control manner in a laboratory environment. This document will highlight the dangers involved when entering the Cryogenic Facility (EV017) in the EV Building.

##### 1.2. Scope

The use of cryogenic substances is restricted to advanced staff and students who have been trained in the dangers, use and transportation (See Section 2)

##### 1.3. Responsibility

All Users are expected to have training and follow U of T WHMIS and EH&S practices for laboratory safety and waste disposal BEFORE entering the Cryogenic Facility (EV017).

##### 1.4. Accountability

User/Entry Personnel

##### 1.5. Emergency Contacts

- Emergency Fire/Police/Ambulance:911
- UofT Police:416-978-2222

**Emergency Contact Numbers:** The only following individuals have keyed access to the room

- Lab Phone Number (EV215 only): 416-287-7643
- TRACES Lab Manager: Tony Adamo, Office: 416-287-7239
- Ronald Soong, Office: 416-208-2949
- Andre Simpson, Office: 416 287 7234
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#### 2. Referenced Documents/Courses

- 2.1. [Standard for Inert Cryogenic Liquid Usage in the Laboratory](#) (link)
- 2.2. [Control Program for Liquid Cryogenic Transfer Facilities](#) (link)
- 2.3. [Cryogenic Liquids – Hazards \(CCOHS.ca\)](#) (link)
- 2.4. [Safely work with Cryogenic Liquids \(CCOHS.ca\)](#) (link)
- 2.5. [EHS101 WHMIS and Lab Safety](#) (course)

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### 3. Dangers

#### 3.1. **Cryogen**s

- The Facility contains inert liquid nitrogen in a microbulk storage container (1500L max) and inert liquid nitrogen in portable dewars (230L max).

#### 3.2. **Compressed Gases**

- One of the liquid nitrogen portable dewars is connected to the building's nitrogen gas supply line. This dewar regulates the supply of nitrogen gas throughout the building at pressures between 20-80psi.

### 4. Emergency Entry Procedure:

- 4.1. **Never enter the room if the low-oxygen alarms are activated. In this case there is a CERTAIN risk of suffocation. The immediate area should be evacuated.**
- 4.2. **Never enter the room if the door and surrounding areas are frozen or the area is covered in a layer of ice.**

\*Contact the TRACES Manager for further details.

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**Approver:**  
T. Adamo