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| **Trainer Name:** | **Date:** |
| **Employee/Student Name:** | **PI/Supervisor Name:** |

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| **Competency Requirements** | **Competent Workers must demonstrate specific knowledge, understanding and skills in the following areas:** | **Completed** |  **Comments** |
| **YES** | **NO** | (Add additional info if required) |
| **1. Hazard Assessment** | Understands the hazards associated with cryogenic liquid nitrogen and controls to mitigate the hazards (review hazard assessment)* Asphyxiation (use in well ventilated area; oxygen sensors)
* Cryogenic burns (wear cryo PPE – gloves, lab coat, apron, safety glasses, face shield)
* Formation of liquid oxygen (only use insulated containers and systems)
* High pressure/explosion hazard (do not store in sealed containers)
* Excessive noise exposure (wear PPE - hearing protection – ear plugs and muffs)
 |  |  |   |
| **2. WHMIS training** | * Employee/student has completed online WHMIS training (verify by certificate)
* (M)SDS for LN2 is posted at filling station
 |  |  |  |
| **2. Emergency Response Procedures** | Understands the following:* Emergency procedures (posted at filling station) for LN2 releases, exposures, equipment failure, etc.
* First Aid measures
* Reporting requirements, contact numbers
 |  |  |   |
| **3. Security** | Understands measures to be taken to secure the LN fill station:* Close and lock door prior to leaving the area.
* Do not give access to untrained and unauthorized personnel.
 |  |  |  |
| **4. PPE** | Demonstrates the proper use of personal protective equipment (PPE) – face shield, safety glasses, lab coats, cryo apron, cryo gloves, hearing protection, appropriate clothing |  |  |   |
| **5. Inventory** | Demonstrates the following:* Record name and volume used in LN2 logbook when procedure is complete
 |  |  |  |
| **6. System Maintenance**  | Understands who to contact if there is a malfunction or other problem operating the filling station |  |  |  |
| **7. Waste Disposal** | Understands the following:* LN2 must not be discarded down drains
* LN2 must be allowed to evaporate in a well ventilated area or fume hood
 |  |  |   |
| **8. Resources** | * Copy of Cryogen Safety manual available in lab
* [Risk and Safety Services webpage](http://www.uleth.ca/risk-and-safety-services/content/safety-0)
* [SDS Liquid Nitrogen](http://www.praxair.com/-/media/documents/sds/nitrogen/liquid-nitrogen-medipure-gas-n2-safety-data-sheet-sds-p4630.pdf?la=en)
 |  |  |  |
| **9. Other:** |  |  |  |  |
| **10. Other:** |  |  |  |  |
| **Comments:** |

***All personnel handling liquid nitrogen and other cryogens must have BOTH the online generic and practical training. It is the responsibility of PI or Supervisor to ensure that all staff and students have completed cryogen training BEFORE working with cryogens. All training needs to be documented and documentation retained by the PI or Supervisor.***

**Acknowledgment of training:**

I have read and understand all of the safety requirements and procedures for working safely with liquid nitrogen and other cryogens.  I recognize that it is my responsibility to strictly follow cryogen safe work requirements and procedures.

I understand that I am required to wear all personal protective equipment at all times when handling liquid nitrogen or other cryogens.

**If I am unsure of the potential hazards related to any lab procedures, I will discuss this with my PI or Supervisor prior to undertaking the procedure in question.**

**LABORATORY PERSONNEL:**

|  |  |  |  |  |  |
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| **Name****(print name)** | **Online Cryogen** **Safety** **Training**  **Date** | **Practical Training****Date**  | **Lab-specific Training Date**  |  **Signature** | **Principal Investigator/****Supervisor/Trainer****Initial**  |
| 1. |  |  |  |  |  |
| 2. |  |  |  |  |  |
| 3. |  |  |  |  |  |
| 4. |  |  |  |  |  |
| 5. |  |  |  |  |  |
| 6. |  |  |  |  |  |
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**Retain a copy of completed form to verify training**