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| **Safety Task Card** |
| **POR 03** | **Handling Liquid nitrogen** |
| **Workplace Safety Hazards** |
| What are the hazards? | How might they be harmed? |
| Manual handlingAccidental spillage of liquid nitrogenInhalation of cold vapour | Cold burns and frostbiteRespiratory tract damageBack and muscle strainSlips and falls |
| **Safe System of Work** |
| * Liquid nitrogen only to be handled by trained staff following manufacturer’s instructions, where these are available.
* Eye protection, non-absorbent footwear and thermal protective gloves with close fitting ribbed cuffs, specifically designed for cryogenic use, must be worn to prevent liquid nitrogen running inside the glove.
* Trousers should cover the tops of footwear to prevent liquid nitrogen filling them in the event of spillage. Long sleeved clothing to be worn to protect the arms against spillage
* Bulk storage vessels only to be filled by the supplier
* Dispensing must only take place where there is good ventilation. In a gas store, the door must be opened before decanting begins. Where appropriate, an audible alarm should be fitted in the dispensing area to warn of low oxygen levels below 20%.
* Inhalation of liquid nitrogen vapour to be avoided.
* Only containers and fittings that are designed for use with liquid nitrogen must be used
* When filling flasks or dewars, insert pipes and funnels slowly and ensure space is left to replace lids. The receiving flask should be positioned beneath the outlet and, where a tilting storage vessel is used, it must be tilted slowly and carefully so as to avoid spillage
* The flask or Dewar must be visually inspected each time they are refilled, and any defects must be reported.
* Staff must not travel in any lift when transporting liquid nitrogen. Such containers should be put into an unoccupied lift, supported so that they cannot fall over and spill, a barrier erected in the lift with appropriate warning sign displayed: “Danger – Liquid Nitrogen, Do Not Enter” to prevent the use of the lift. The container should be removed promptly from the lift at the destination floor.
* In the event of skin or eye contact, immediately flush with water for 15 minutes and seek medical help
* When moving empty/full dewar due to weight must be moved by two porters or using mechanical aid. As social distancing cannot be maintained during movement, the team should be colleagues who work together on regular basis. Where possible the dewer to be moved using side handles and porters facing forward.
* If the operators have concerns regarding the ability to social distance or movement to discuss with line manager prior to any movement.
* Ensure clear visibility around the drum by holding the main steering handle to prevent collision with other users in area.
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| **Site Specific Actions**List any actions required in addition to the above safe system of work |
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| The above control measures are implemented within my unit. All relevant staff are aware of these control measures and this is recorded in the training record for this safety task card. |
| Unit Manager Name | Signed | Date |

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| **Safety Card Training Record** |
| **POR 03** | **Handling Liquid nitrogen** |
| I confirm that I fully understand the risks and control measures associated with the taskand that I will follow the Safe System of Work at all times.  |
| Operative Name | Signature | Date |
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