The Sheffield Biorepository

# Standard Operating Procedure: Oxygen Depletion Monitor Activation

| | |
|---|---|
| *Document History* | |
| *Document Number* | *BIO:SOP:10* |
| *Created By* | *Kevin Corke* |
| *SUPERSEDED* | *Steven Haynes* |
| *Version* | *1.2* |
| *Date* | *03/10/2018* |
| *Review Date* | *03/10/2019* |
| *Approved by* | *Franco di Giovine* |

Sheffield Teaching Hospitals NHS
NHS Foundation Trust

The University Of Sheffield.

## 1. Background

Within medical research inert gases such as carbon dioxide and nitrogen are utilised for many applications. Some examples include supplementing carbon dioxide levels in incubators to 5% and the use of Carbon Dioxide as back up for -80°C freezers. One hazard associated with the use of these gases is the potential for asphyxiation if there was to be a serious leak. As they are odourless and colourless, anyone entering a room may not be aware of the danger until it is too late. Therefore any room where these gases are utilised should have an oxygen depletion alarm fitted. However, once an alarm sounds it is important that the issue is dealt with quickly and in a manner that is safe to all personnel involved.

## 2. Procedure

- On the alarm sounding, evacuate the room IMMEDIATELY. Ensure that no one enters the room.
- Contact the member of staff named on the alarm panel outside the room.
- Sue Smith and Steve Parkin (M floor, 0114 215 9568) have an independent portable sensor that can used by the above person to check if it is safe to enter the room.
- If the oxygen level has been reduced to below 18% prevent access to the facility until it is above this level and the alarm no longer sounds.
- If it is a false alarm get the oxygen sensor checked and replaced (if necessary) as soon as possible. Again, contact Sue Smith or Steve Parkin.

Only allow access to the room once it is safe to do so.

## 3. Quality Assurance/control

- All sensors should be maintained on a 6 monthly basis for rooms where gas cylinders are located, liquid nitrogen stores are kept or gases are generated for other purposes.

All gas equipment should be inspected on a regular basis and replaced/serviced every 5 years.

## 4. Associated Documents

| | Document | Document Reference |
|---|---|---|
| 1 | CO2 Hazard sheet | BIO:COSHH: Procedure5 |
| 2 | Incident Report | BIO:FORM:05 |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |