

# COMPRESSED AIR ISOLATION - MAINTENANCE - CHW

## PROCEDURE<sup>®</sup>

### DOCUMENT SUMMARY/KEY POINTS

- This procedure aims to provide protection from the possibility of exposure to high explosion relating compressed air.
- All staff & contractors are strictly prohibited from working on, or instructing any person to work on compressed air installations.
- All work is to be managed by the CHW Engineer and isolation includes mandatory tagging whilst compressed air system is isolated.
- All contractors engaged to work on compressed air installations must be inducted through Rapid Induct prior to coming on to site.
- Managers and supervisors are responsible to ensure that all staff, contractors are aware and comply with the provisions of this procedure.
- Medical Gases (Medical Air, Oxygen, Nitrous Oxide, Carbon Dioxide, Nitrogen and Surgical Tool Air) are managed by the Biomedical Engineering Department, isolation of these gases can only be authorised by the Biomedical Engineer or the Head of Department of Biomedical Engineering.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

<b>Approved by:</b>	SCHN Policy, Procedure and Guideline Committee	
<b>Date Effective:</b>	1 <sup>st</sup> November 2022	<b>Review Period:</b> 3 years
<b>Team Leader:</b>	Mechanical Engineer	<b>Area/Dept:</b> Maintenance CHW

## CHANGE SUMMARY

- Document due for mandatory review
- Recommend to read the entire document.

## READ ACKNOWLEDGEMENT

- All staff within the Maintenance & Engineering Department & Biomedical Engineering are to read this document.
- All maintenance staff and contractors should be aware of the contents of this document.
- However, any staff or contractors who request information regarding Compressed Air Isolation – CHW, are to given a copy of this document.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

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## 1 Purpose

To establish a standard procedure for the emergency repairs to compressed air lines (range 0 to 900 kPa) or associated equipment connected to the lines.

## 2 Objective

To put in place a procedure that ensures workerrade-staff/contractor safety at all times, whenever repairs are to be carried out on compressed air lines and equipment.

## 3 Procedure

- Notify all departments that are affected by the intended shutdown, as to the extent of the works to be carried out and the impact it will have on their service. Tag out isolation valve, using the "Equipment (Non-Clinical) Safety Isolation" Policy & Procedure" to prevent accidental starting during maintenance and repair work on compressed air systems and lines.
- Workers and authorised contractors must be competent and familiar with the correct procedures before working on compressed air systems or lines.
- Carry out the isolation up stream of the area to be repaired or modified, ensuring that no compressed air remains in the line/equipment for repair.
- Exposed, non-current carrying, metal parts of compressor should be effectively grounded.
- Low flash point lubricants should not be used on compressors because of its high operating temperatures that could cause a fire or explosion.
- Compressed air lines should be inspected frequently for defects, and any defective equipment repaired or replaced immediately.
- The compressed air systems should be completely purged after each cleaning.
- Carry out the required repair works in the minimum time to disruption of services.
- When repair work is complete, remove isolation tag, pressurize the line gradually back to the pressure set point. Notify affected areas/departments that the works are completed, noting the time of resumption of normal supply.
- Good housekeeping practices must be adhered to following any maintenance or repair work on compressed air systems or lines in the workplace.
- When maintenance or repair work is completed the person completing work must notify the Hospital Engineer responsible that all repair work is complete.