



Policy

Saskatoon & Area - Occupational Health & Safety

Number: 55-005

Title: Other Hazards: Ethylene Oxide Sterilizers

Saskatchewan Employment Act:

OHS Regulation: 31-13

Date: January 1, 2017

Date Revised/Reaffirmed: December 2, 2021

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Purpose

To ensure that ethylene oxide sterilizers are operated and maintained in accordance with the CSA installation standard

Definition

- **“CSA installation standard”** means the Canadian Standards Association standard CAN/CSA-Z314.9-M89 Installation and Ventilation of Ethylene Oxide Sterilizers in Health Care Facilities

Roles and Responsibilities

Employer must ensure:

- That to the extent that is practicable that all ethylene oxide sterilizers are operated and maintained according with the CSA standard
- That they work with the OHC committee to develop safe work procedures and policies
- That the work with OHC to prepare an emergency response program
- That any ethylene oxide sterilizers purchased after these regulations came into force:
 - Is constructed in accordance with the CSA standard CAN/CSA-Z314.1-M91
 - Is installed and meets the ventilation requirements of the CSA standard
 - Where reasonably practicable, is a sterilizer with in-chamber aeration that allows sterilization and aeration to take place without manually transferring the items that are being sterilized and aerated from one piece of equipment to another.
- An employer shall ensure that portable ethylene oxide sterilizers are operated in a fume cabinet or placed in a self-contained room that is unoccupied during the sterilization process and is ventilated clear of the place of employment at a minimum rate of 10 air changes per hour to prevent the accumulation of the gas in the room.

Manager/Supervisor must ensure:

- That roles and responsibilities of all workers are being met, as well as applicable legislation and/or standards
- Implement the safe work practices and policies
- All workers who operate ethylene oxide sterilizers or may come in contact with ethylene oxide are trained in accordance with CSA standards
- That where ethylene oxide is used or stored is clearly marked with legible signs that state “ETHYLENE OXIDE AREA, POTENTIAL CANCER AND REPRODUCTIVE HAZARD, AUTHORIZED PERSONNEL ONLY”

- That all records pertaining to equipment maintenance and accidental leaks of ethylene oxide are kept in a log book for 5 years

Worker must ensure:

- They are trained in and follow the safe work procedures
- They are trained in and use any PPE required (selection, use, care and handling)
- They report to their supervisor and the Safety Alert System/Incident Report Line any incidents or near misses

Orientation & Training

- In all safe work procedures and policies regarding ethylene oxide
- In the handling, storage, use and emergency response regarding ethylene oxide or sterilization machines

Materials

- Appropriate PPE if required
- Log books to record accidental spills and maintenance records

Non-Compliance/Breach:

Non-compliance with this policy will result in a review of the incident. A review for non-compliance may result in disciplinary action, up to and including termination of employment or privileges; fines and /or prosecution of individuals under the Saskatchewan Employment Act and OHS Regulations.

References

- CSA Standards for Ethylene Oxide Sterilizers

Review Dates:

January 1, 2017

June 4, 2018

December 2, 2021