

A photograph of two industrial workers in a refrigeration facility. Both are wearing white hard hats, safety glasses, and blue work jackets. The worker on the left has large black earplugs and a yellow mobile phone clipped to his jacket. The worker on the right has clear safety goggles and a blue earplug. They are standing in front of a large white cylindrical tank with four upward-pointing arrows. The background shows industrial piping and equipment.

+ Safety Air

Victorian respiratory protection requirements for ammonia-based refrigeration users

Businesses with ammonia-based refrigeration should know the answer to four respiratory safety related questions:

- 1) What Respiratory Protection Equipment (RPE) do I need to have on site?
- 2) Where should the RPE be stored?
- 3) Do my staff need to be trained in the use of RPE?
- 4) How often does RPE need to be inspected and serviced?

The “Victorian Code of Practice – Ammonia Refrigeration” (Code of Practice), the WorkSafe Guide to the “Safe operation of cold storage facilities” (WorkSafe Guide), AS/NZS 1715:2009 “Selection, use and maintenance of respiratory protective equipment” (Australian Standard) and manufacturer recommendations provide answers for these questions. Copies of relevant sections of all documents can be provided on request.

In addition, it is our understanding, that any site-specific policies or procedures agreed with entities such as the MFB, are to be considered as being in addition to, and not substitutes for, compliance with these requirements.

What Respiratory Protection Equipment do I need to have on site?

The type of RPE required depends on the quantity of refrigerant involved.

Section 7.1 of the Code of Practice (mirrored in Appendix 6 of the WorkSafe Guide) states – “Respirators or breathing equipment shall be provided as follows:

- a) Where the quantity of a Group B2* (AS/NZS1677.1) **refrigerant does not exceed 225kg, at least one respirator shall be provided**
- b) Where the quantity of a Group B2* **refrigerant exceeds 225kg, at least two respirators shall be provided**
- c) Where the quantity of any **refrigerant exceeds 900kg, at least one self-contained breathing apparatus having an effective life of at least 25 min shall be provided**
- d) Respirators and breathing apparatus shall be of the full-face type and shall comply with AS/NZS1716.1:1991. Any canister used shall be suitable for the refrigerant employed.”

Safety Air can supply RPE that is fully compliant with the above requirements. You are also free to call us at any time if you have questions on your equipment as this is included in the service we provide.

Where should the RPE be stored?

Section 7.3 of the Code of Practice requires – “Personal protective equipment shall be kept in an easily accessible unlocked cabinet outside but near the machine room. The cabinet shall be reserved exclusively for such equipment and shall be clearly marked in accordance with AS 1319.”

Safety Air can supply cabinets that are fully compliant with this requirement.

Do my staff need to be trained in the use of RPE?

Appendix 6 of the WorkSafe Guide provides the following guidance – “Suitable training must be provided to those who may be required to use a BA (Breathing Apparatus) set and emergency drills should be conducted to review and ensure emergency procedures are adequate”

Safety Air can recommend third party organisations that have the necessary skills, resources and accreditation to provide the required training.

How often does RPE need to be inspected and serviced?

RPE needs to be tested/serviced at least **every six months** and inspected monthly to comply with the relevant Australian Standard (AS/NZS 1715:2009), most manufacturer recommendations and WorkSafe Guide guidance.

Included within each Safety Air breathing apparatus service is a 26-point safety check performed by manufacturer trained technicians. In accordance with manufacturer recommendations, these checks include wear assessments, decontamination, inspection of hoses, soft seals and valves and a rigorous function test performed on special purpose test equipment. All work is performed on your site within our fully equipped ‘Mobile Workshops’, ensuring that you are not deprived of your equipment nor will you need expensive back up equipment.

To assist with your compliance obligations, Safety Air will coordinate a regular six-monthly servicing program for your RPE where we will notify you when a service is due, service the equipment, advise you of any issues with your equipment and provide (and retain on file on your behalf) compliance certificates.

Who is Safety Air?

Safety Air is Victoria’s largest independent respiratory and height safety equipment sales and service specialists with a 30-year reputation for providing our customers with market leading

service and advice that saves our customers money and keeps them safe.

Safety Air also performs other services that may be relevant to your business including, testing and certification of airlines, medical oxygen resuscitators, height safety equipment, safety showers and eye washing basins.

If you have any questions, please do not hesitate to contact us on 03 9589 5435.

Erik Lehnacker
General Manager

References:

1. Victorian code of practice, ammonia refrigeration (edition 1) – 2010
2. Safe operation of cold storage facilities, A handbook for workplaces, June 2017 – WorkSafe Victoria
3. AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment – Standards Australia/Standards New Zealand
4. Service Manual FPS7000, 1/10/2010 – Draeger
5. Technical Manual PSS5000, August 2010 – Draeger
6. Operating Manual Ultra Elite Positive Pressure Face Mask – MSA
7. Maintenance Specialist Manual, AirGo – MSA
8. Technical Datasheet, Vision 3 FF Mask – Scott Safety