UNDERSTANDING RESPIRATORY PROTECTION STANDARDS

ASNZS/1715 SELECTION, USE AND MAINTENANCE OF RESPIRATORY PROTECTIVE EQUIPMENT

Sets out principals of respiratory protection, requirements and recommendations for the selection, use and maintenance of personal protective equipment (RPE) in the workplace. To comply with AS/NZS 1715:2009 you require a respiratory programme in place covering the following:

1. APPOINTING A PROGRAMME ADMINISTRATOR – S2: (2.2)

It is mandatory to appoint a programme administrator. The administrator is responsible for completing the requirements stipulated in the guidelines.

2. SELECTION OF RPE – S2: (2.3)

RPE needs to be worn whenever the person is exposed to excessive levels of contaminant. Factors for selection include:

- Contaminant
- Task
- Operator
- Equipment limitations
- Special response HAZMAT incidents

When selecting RPE it is important to ensure that only RPE complying to AS/NZS 1716:2012 is used.

3. MEDICAL SCREENING OF END USERS – S2: (2.3)

All RPE users should have an initial medical assessment prior to use, including: Physiological considerations: Effort is required to breathe through some respirators, so people of cardiac or respiratory disorders should be assessed. Other factors to consider include heavy work, prolonged use, and physical features such as facial hair (that could break the seal on a mask). Psychological considerations: Enclosed RPE like hoods, helmets or full face masks may give rise to feelings of claustrophobia, isolation and anxiety in some people.

4. TRAINING – S2: (2.4)

Training needs to be provided by a competent person, and should include:

- Identification of the hazard/s
- Reasons for the RPE
- RPE selection
- Use and proper fitting of RPE
- Wear time
- Limitations of RPE
- Maintenance and storage
- Summary of the respiratory protection programme in the workplace

5. ISSUE OF RPE – S2: (2.5)

Where practicable, RPE should be issued for a wearers exclusive use. Records documenting the issue, provision of consumables and maintenance need to be established. Filters need to be marked with the date of issue and users ID. Non-personal RPE must be cleaned prior to reuse.

6 & 7. FITTING AND TESTING OF EQUIPMENT – S2: (2.6 & 8.5)

All RPE that requires a close fitting facepiece has to be properly fitted and sized to the wearer. Users require an annual fit test in accordance with the standards.
There are two types of facial fit test:

- **Qualitative:** is subjective, as may be influenced by the wearer,
- **Quantitative:** is not subjective, suited to all mask types, and requires a trained operator. Full face respirators have to be tested with this method to obtain the full protection factor

8. WEARING OF RPE – S2: (2.7)

The respiratory programme is there to ensure that RPE is worn correctly, fits correctly and is used when and where required.

9. MAINTENANCE OF RPE – S4: (2.8)

Maintenance of RPE needs to be carried out to the manufacturer's instructions and should include:

- Cleaning and disinfection
- Inspection checking equipment is in working order
- Repair and replacement of components (including filters)
- Correct storage
- Disposal of worn/expired masks and components

10. RECORD KEEPING – S4: (2.9)

Records for a respiratory programme should include details of: Issue of RPE: Date, identifying mark

- User records: Training, fit test, medical screening
- Filter replacement schedule,
- RPE maintenance schedule
- Programme records: Procedures, audits and evaluations, atmospheric monitoring records, health surveillance

11. PROGRAMME EVALUATION

The respiratory protection programme needs to be audited at least annually with adjustments made as appropriate to reflect the evaluation results.

RESPIRATOR FIT TESTING & TRAINING
HELPS YOU STAY SAFE

A RESPIRATOR FIT TEST IS REQUIRED TO MEET AS/NZS STANDARDS
The AS/NZS 1715 S2(2.6) requires that a suitable fit test is to be carried out for all users of Respiratory Protection Equipment (RPE) with a close fitting facepiece at least once a year.

WHAT IS FIT TESTING?
Respirator fit testing uses a 'PortaCount' machine to quantitatively (objectively) measure the leakage of a respirator when worn by an individual, thereby assessing whether the respirator is providing an adequate face seal and the required protection.

QUANTITATIVE VS QUALITATIVE
A PortaCount quantitative fit test eliminates any subjectivity associated with qualitative fit test methods. Rather than depending on a person's chemical sensitivity or cooperation during a qualitative fit test, a quantitative fit test measures actual fit and that an adequate face seal is achieved.

A PortaCount fit test measures fit while the user simultaneously performs a series of moving, breathing and talking exercises designed to simulate the same movements made in the workplace.

A quantitative respirator fit test guarantees clients precise evidence and documentation of results for each individual employee – in compliance with the record keeping requirements of the standard.

REASONS FOR A FAILED QUANTITATIVE FIT TEST RESULT.
1. **Size** – Incorrect size mask for the wearer
2. **Age** – Masks will deteriorate over time and require periodic replacement
3. **Condition** – Poor storage, incorrect donning/doffing technique and lack of maintenance may lead to premature aging
4. **Strap tension** – Uneven strap tension or over-tightening may cause racking/slippage of the mask on the wearer
5. **Facial features of the wearer** – Bone structure or facial hair can cause leakage around the seal

THE PROTECTION FACTOR OF OUR RESPIRATOR CANNOT BE RELIED UPON UNLESS YOUR MASK HAS BEEN FIT TESTED

DO YOU HAVE A DOCUMENTED FILTER REPLACEMENT SCHEDULE?
AS/NZS 1715:2009 requires a reported filter replacement schedule to be in place for each work task based on manufacturers guidelines.

Replacement time will vary significantly by
- Concentration levels of a contaminant in the atmosphere
- Lung Capacity and breathing rate of the worker
- Humidity
- Length of time filter is being used for

DATE YOUR CARTRIDGES ON OPENING
- You can easily identify the replacement time/date based on your replacement schedule
- Easy for supervisors/managers to see when replacement is coming up

AS/NZS 1715:2009 – even if not in active use cartridges should not exceed 6 months from when sealed package is opened

BOOK YOUR TRAINING AND FIT TESTING SERVICE THROUGH YOUR NEAREST MOLDEX DISTRIBUTOR