

WE PROVIDE A NUMBER OF DIFFERENT SERVICES TO ASSIST OUR CLIENTS THAT INCLUDE:

- EHS Risk Assessments
- Occupational Hygiene Surveys
- Ergonomics Surveys
- EHS Management System development and implementation
- Environmental Monitoring
- Identification of EHS Legal Requirements and Compliance Audits
- Internal Auditor Training
- General EHS Training



HW592A1000508



OH0049



DoL Approved Inspection Authority (OH0049-CI-09)

Newsletter compiled by
Lee Rands

RESPIRATORS

A respirator is a device designed to protect the wearer from inhaling harmful dusts, fumes, vapours or gases. Respirators range from cheaper, single-use, disposable face-pieces to reusable models with replaceable cartridges.



Two Main Categories of Respirators



Air Purifying (APR)	Air Supplied (ASR)
Forces contaminated air through a filtering element e.g. particulate respirators (filter out airborne particles) and gas face-pieces (filter out chemicals and gases).	Supplies clean respirable air from another source e.g. airline respirators (use compressed air from a remote source) and self-contained breathing apparatus/SCBA (include their own air supply).

When Should Respirators Be Used?

Workers should use respirators for protection from contaminants in the air only if other hazard control methods are not practical or possible under the circumstances. **Respirators should not be the first choice for respiratory protection in workplaces.** They should only be used:

- when following the "hierarchy of control" is not possible (elimination, substitution, engineering or administrative controls)
- while engineering controls are being installed or repaired
- when emergencies or other temporary situations arise (e.g. maintenance operations)

How Do You Select the Correct Respirator?

Experienced Safety

Professionals or Occupational Hygienists, who are familiar with the actual workplace environment, should select the appropriate respirator, once all the relevant factors have been evaluated. This includes considering the limitations of each class of respirator. Before the proper respirator is selected, the following needs to be done:

- identify the respiratory hazard
- Evaluate the hazard
- Consider feasibility of engineering controls

Each type of respirator can come in several varieties, each with its own set of cautions, limitations and restrictions of use. All respirators require training to be properly used.

Staff Profile



Yvette Westran
Laboratory Technician
(Southern Region)

How long have you been working for Safetech?

I was employed on a permanent basis in March 2016.

What are your passions and interests?

I love the outdoors (the sea, mountains, wildlife) and taking photos of it. I also love a good cup of coffee! I'm passionate about my faith in God, my family and orphan children. I live life to the fullest every day!

staff training



PORT ELIZABETH

5 Jul
6 Jul
19 Jul

Fire Prevention
Hazardous Chemical Substances
Introduction to OHS Act

AUGUST

10 Aug
17th – 18th
24th – 25th
29th – 31st

Introduction to Environmental Legislation
Incident Investigation **
HIRA *
SHE for Supervisors **

* HWSETA Accredited
** Unit Standard Aligned

Safetrain cc t/a Safetech is a SANAS Accredited Inspection Body, Nr. OH 0049. Refer to www.sanas.co.za for Directory Accredited Facilities, Inspection Bodies for schedule of accreditation.

Refer to
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Combustible Dust

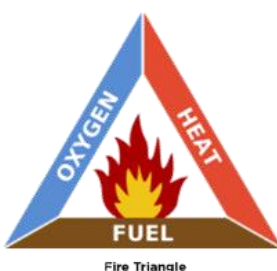
Essentially, a combustible dust is any fine material that has the ability to catch fire and explode when mixed with air. Some of these materials are not "normally" combustible, but they can burn or explode if the particles are the right size and in the right concentration.

When the dust is disturbed and under certain circumstances, there is the potential for a serious explosion to occur.

The build-up of even a very small amount of dust can cause serious damage.

Some Examples Of Materials That Can Become Combustible Under Specific Situations:

♦ agricultural products e.g. powdered milk, cornstarch, sugar, flour, grain ♦ metals e.g. aluminum, bronze, magnesium, zinc ♦ chemical dusts e.g. coal, sulphur ♦ rubber ♦ pharmaceuticals ♦ pesticides ♦ wood ♦ textiles ♦ plastics



Any **fire** needs three elements. These elements are known as the **FIRE TRIANGLE**:

1. Fuel to burn
2. Oxygen
3. Ignition source (heat, spark, etc.)

A **dust explosion** needs two additional elements, known as the **DUST PENTAGON**

4. Dispersion of dust particles in the right concentration
5. Confinement of the dust cloud

How Do You Identify A Combustible Dust Hazard?

Conduct a risk assessment and look specifically for dust explosion possibilities. Some points to consider:

Processes

Do you manufacture /use any materials (including their by-products) that could become dust?

Do you use processes that create dust e.g. abrasive blasting, cutting, grinding, sieving, polishing, cleaning?

Research/Information

Have you researched if the dust present is combustible?

Are there documented cases reported in literature about the materials in your workplace being associated with a combustible dust explosion?

Ignition Sources

Do you have ignition sources e.g. sparks, fire/flames, stoves, kilns or welding flames?

Can dust enter or accumulate on electrical enclosures or equipment?

Does your workplace have a no-smoking policy? Are there measures to isolate smoking and ignition sources away from production areas?

Housekeeping

Do you know if there are open areas and overhead structures where dusts may accumulate?

Have you looked for "hidden" areas where dust may accumulate e.g. behind false ceilings, inside ventilation or conveyor equipment, in ducts, on support beams, etc?

Do you have a housekeeping program to regularly remove dust?

Do you have a dust collection system in place?

Education and training

Are employees aware of combustible dust and its hazards?

Have employees been trained and educated on safe methods for cleaning?

Do employees follow housekeeping rules and take steps to reduce dust and remove ignition sources?



https://ccohs.ca/oshanswers/chemicals/combustible_dust.html