INCIDENT ALERT

LOCATION:	**CEMENT**	**ALERT STATUS:**	**Normal**
ACTIVITY:	**OCCUPATIONAL HEALTH**	**DATE ISSUED:**	**23/05/2019 16:23:12**
SUB ACTIVITY:	**AIR AND DUST**	**INCIDENT No:**	**01484**

TITLE

Contractors exposed to particulates by using the wrong filters for their dust masks

COUNTRY OF ORIGIN

United Kingdom

ACCIDENT / INCIDENT DETAILS

During a meeting at a cement plant on dust levels and RPE, samples of the dust masks worn by the employees and contractors were requested.

A contractor brought in the half face and full face masks that were being used on the site in a very high dust level area. On examination, it was found that the replaceable filters being used were ‘gas’ filters that gave protection against certain gases but absolutely no protection against particulates.

ACCIDENT / INCIDENT IMAGES

Click image to enlarge

Click image to enlarge

LEARNING POINTS / ACTIONS TAKEN

- Employees and contractors using face masks should understand the protection provided by different types of filters
- Please ensure that filters used in dusk masks are appropriate for the level of protection required
- To ensure that any mask (and filter) is working effectively all wearer’s should undergo face fit testing.
- It should be noted that face fit testing may not be conducted if there is any hair growth between the skin and the facepiece sealing surface such as stubble, beard, mustache, sideburns or low hairline which cross the respirator sealing surface.
- Contact your local SHE Advisor or appropriate safety advisor if unsure or needing assistance

Information on filter coding

All filter cartridges have ID information printed on them that that allows you to identify the filter and the protection they offer. Filters use letters, numbers and colour coding to define the protection they offer. Dust mask filters for protection against particulates are marked with a ‘P’ and are colour coded ‘WHITE’. They also have a number representing the protection they offer (1 for low efficiency, 2 for medium efficiency, 3 for high efficiency). This number refers to the Assigned Protect Factor (APF), with:

P1 offering an APF of 4,

P2 offering an APF of 10

P3 offering an APF of 20.

The APF indicates how much protection that particular filter is capable of providing. Eg. A filter with an APF of 10 will reduce the wearer’s exposure by at least a factor of 10 if used properly (ie The wearer will only breathe in one-tenth or less of the amount of substance present in the air).

Please note that full face masks and air flow masks are available that offer an APF of 40.

The table below shows the colour, letter and number coding for each type of filter.

LEARNING POINTS / ACTIONS IMAGES

Click image to enlarge

Click image to enlarge

Filter types				
Colour code	**Type**	**For use against**	**Class**	**Other information**
White	P	Particles	1 2 3	European standard: EN 143
Brown	A	Organic gases and vapours, boiling point above 65 °C	1 2 3	European standard: EN 14387
Grey	B	Inorganic gases and vapours	1 2 3	European standard: EN 14387 Do not use against carbon monoxide
Yellow	E	SO_2 and other acid gases	1 2 3	European standard: EN 14387
Green	K	Ammonia and its organic derivatives	1 2 3	European standard: EN 14387
Red & white	Hg P3	Mercury	–	European standard: EN 14387 Includes P3 particle filter Maximum use time 50 hours No class number
Blue & white	NO P3	Oxides of nitrogen	–	European standard: EN 14387 Includes P3 particle filter Single use only No class number
Brown	AX	Organic gases and vapours, boiling point at or below 65 °C	–	European standard: EN 14387 Single use only No class number
Violet	SX	Substance as specified by the manufacturer	–	European standard: EN 14387