

Respirators for asbestos removal. A method to evaluate their performance.

S. Chazelet, E. Silvente

INRS

1, rue du Morvan

54519 Vandœuvre

eric.silvente@inrs.fr

(33)383508529

ISRP Prague International conference, 21st-25th September 2014.

Summary

In order to increase the protection towards the asbestos exposition of the operators working in asbestos removal sector, the labour ministry in France makes the regulations evolving. The aim is to take into account the new results concerning asbestos toxicity, evaluation technics and protection solutions. Then in July 2015 the occupational exposure limit will decrease from 100 f/L to 10 f/L and all the expositions will be evaluated using the Analytical Transmission Electron Microscopy (ATEM). These evolutions in regulations must go with a new evaluation of Respiratory Protective Device (RPD).

This study is focused on the evaluation of assigned protection factors of the RPD used in asbestos removal which will be determined by ATEM method.

A first study was carried out in collaboration with RPD manufacturers to design a modified mask including a sampling of asbestos fibers according to XP X 43-269. This modified mask was certified by APAVE in France according to the european directive EPI 89/686/CEE.

A first workplace study was realized in May 2014 to validate the protocole of asbestos sampling on 3 asbestos removal operators carrying a supplied air respirator (RAS SCOTT).