

ISRP 2002 abstract

Presenter/author	Title	Abstract
Hauthal, W. Köser, H. Ziegler, M.G. <i>Institute of Environmental Protection Technology, Martin-Luther University Halle- Wittenberg, Halle/Saale, Germany</i>	Status Report 2002 of End-of- Service-Life Indicator for Gas Mask Filter: Concepts, Commercial Products and Recent Development Work	<p>The sorption capacity of gas mask filter or cartridges in air-purifying respirators is restricted. Many external factors determine this capacity thereby making it difficult to estimate the time of use or service life beforehand. It would be extremely useful for the wearer of a mask to have a method or indicator to signal the immediate breakthrough of the toxic vapours in question. End-of-service-life indicators (ESLI) or sensors allow the use of air-purifying respirators for toxic contaminants with poor warning properties below their permissible exposure limit where otherwise cumbersome and costly supplied-air respirators would be required.</p> <p>This paper will review the present status of the ESLI for gas and vapour filters. The legal requirements for filter change schedules in Europe, North America and Japan will be compared. An overview of concepts and requirements of ESLI will be given. Sensors with a potential for use as ESLI will be discussed.</p> <p>Toxic gases and vapours with a high ESLI requirement will be identified. Commercially available air-purifying filters and cartridges equipped with an ESLI will be discussed. The status of on-going development work in this area will be reviewed.</p>