

Making ESLI part of the Respiratory Protective Device system: A manufacturer's perspective

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Use of filtering respiratory protective devices (RPD) requires effective management of expendable gas cartridges. Ideally, as required by some standards (e.g. OSHA 1910.134), an end of service life indicator (ESLI) capable of indicating less than 10% capacity remaining should be used. Commercial options are limited to colorimetric indicators and the majority of cartridges sold on the market do not include an end of service life indicator thereby requiring end users to manage change out. While alternative active solutions are being explored, ultimately effective acceptance of ESLI will require tight integration with existing standards and effective engagement of end users. Proposed ESLI technologies will be evaluated against requirements for different types of filtering respiratory protective devices (RPD). Perceived challenges to adoption of ESLI will be examined along with a view of how active ESLI will integrate with a managed RPD program.