



SAFETY UNLIMITED, INC.

# Safety Tip of the Week

## Respirator Change Schedules

Respirators are among the most important pieces of safety equipment available. With chemical cartridges, they can be used to filter out and protect workers from many different hazards

OSHA states, “If there is no ESLI [end-of-service-life indicator] appropriate for conditions in the employer’s workplace, the employer implements a change schedule for canisters and cartridges based on objective information or data that will ensure the canisters are changed before the end of their service life.”



The ESLI is an area on the cartridge that changes color when it’s time to replace the cartridge.

If the cartridge does not have this indicator, employers must develop and enforce a change schedule based on reliable information. Currently, there are very few cartridges equipped with these NIOSH approved ESLIs.

The National Institute for Occupational Safety and Health (NIOSH) stipulates changing out the cartridge when it reaches at or below the ninety-percent adsorption rate mark (with a ten percent window of service life). This safety approach deters exceeding the respirator service life in an emergency where overexposure to multiple organic vapors begins to penetrate through the dirty filter.

### **Remember:**

In the event that a user experiences breakthrough, the cartridge or filter becomes soiled, or breathing becomes difficult prior to the scheduled change out interval, the employee should change the cartridge/filter immediately and notify his or her employer so that use conditions can be re-evaluated and adjustments made to the change schedule.

**Personal protective equipment is self-defense!!**