Respirator Cartridge Change Guidelines

All air-purifying respirators used for protection against gases and vapors must have an end-of-service-life indicator (ESLI) or have a cartridge change schedule that is based on objective information or data to ensure that canisters or cartridges are changed before the end of their service life. The following change schedule is determined based on OSHA standards and manufacturer’s recommendations.

|  |  |
| --- | --- |
| **CONTAMINANT** | **CHANGE OF SCHEDULE** |
| Acrylonitrile | End of shift |
| Ammonia | Maximum 8 hours use total (up to 125 ppm) |
| Benzene | Beginning of shift |
| Butadiene | every 1, 2, or 4 hours dependent on concentration (according to 29CFR1910.1051Table 1) , and at beginning of each shift |
| Formaldehyde | 3 hours or end of shift (whichever comes first) |
| HCl, SO2, Chlorine | Maximum one shift |
| Methylene Chloride | No approved cartridges or canisters - must use supplied air |
| Nitric Acid | No approved cartridges or canisters - must usesupplied air |
| Organic Vapors | Maximum 8 hours use total (up to 200 ppm) |
| Vinyl chloride | End of shift |
| All Cartridges forEmergency Use | Discard after use |
| HEPA filters | Restricted breathing or visibly dirty, wet, or compromised |
| Filtering dust masks | Visibly dirty/contaminated |

For more information, see the EH&S Respiratory Protection Program. If you have questions please contact EH&S office at (252) 328-6166.