

Appendix I

Glossary

APR. Air-purifying respirator. Respirator that uses filters or sorbents to remove hazardous substances, including pesticides, from air being breathed.

Atmosphere-supplying respirator. Respirator that provides a supply of breathable air from a clean, independent outside source. Includes SCBA and supplied air respirators.

Breakthrough. For air-purifying respirators, the penetration of a gas or vapor through a chemical air-purifying element to inside of the wearer's mask.

Chemical cartridge (or canister). For air purifying respirators, the type of purifying element that removes specific gases or vapors by absorbing or adsorbing them.

Dangerous to life or health, immediately (IDLH). Used to describe an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere. [OSHA 29 CFR 1910.134(b)]. Environments that have less than 19.5% oxygen by volume are considered IDLH by OSHA.

End-Of-Service-Life Indicator (ESLI): A system that warns the respirator user of the approach of the end of adequate respiratory protection; for example, that the sorbent is approaching saturation or is no longer effective.

Facepiece, loose-fitting. A respiratory inlet covering (facepiece) that is designed to form a partial seal with the face. It does not cover the neck and shoulders, and may or may not offer head protection against impact and penetration.

Facepiece, tight-fitting. A respiratory inlet covering (facepiece) that forms a complete seal with the face. Includes filtering facepiece respirators (FFR), half-masks and full facepiece masks.

Filter efficiency. For air purifying respirators, the collection efficiency of an air-purifying filter to resist penetration by particulates. The filters of non-powered APR filters are tested and rated at 95%, 99%, and 99.7% efficiency. The higher the number, the more efficient the filter. PAPR filters are tested and rated as High Efficiency (HE).

Filter, HEPA. High-efficiency particulate air filter. A High Efficiency (HE) filter is used in powered air-purifying respirators. The N100, R100, and P100 filters used in non-powered air-purifying respirators are equivalent to a HEPA filter. HE and P100 filters are identified by a magenta color.

Filter, Particulate. For non-powered air purifying respirators, a purifying element that removes aerosols (solid or liquid particulates) from air being breathed. They are rated N, R, and P for oil degradation of efficiency; and 95, 99, and 100 for filtering efficiency.

Filtering facepiece respirator: A type of non-powered air-purifying respirator where a particulate filter is an integral part of the facepiece, or the entire facepiece is composed of the filtering medium.

Fit factor: A quantitative estimate of the fit of a particular respirator to a specific individual, and typically the estimated ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn during the fit test.

Fit test, qualitative. A method of assessing whether a particular size and brand of respirator adequately fits an individual's face. If the individual can detect inside the mask a test agent that is outside the mask, there is leakage at the seal and the mask does not fit.

Fit test, quantitative. A method of assessing whether a particular size and brand of respirator adequately fits an individual's face using instrumentation to numerically measure leakage into the respirator.

Helmet. A hood that offers head protection against impact and penetration.

Hood. Loose-fitting covering of the nose and mouth that completely covers the head and neck and may cover portions of the shoulders.

NIOSH. The National Institute of Occupational Safety and Health. A federal agency that conducts research on health and safety concerns, tests and certifies respirators, and trains occupational safety and health professionals.

Nuisance dust. Dust with a long history of little adverse effect on the lungs; does not produce significant organic disease or toxic effect when exposures are kept at reasonable levels.

OSHA. Occupational Safety and Health Administration. A federal agency that issues regulations for workplace health and safety.

PAPR. Powered air-purifying respirator. Uses a blower to force contaminants through purifying elements.

Particulate. A particle of solid or liquid matter. **Particulate matter.** A suspension of fine solid or liquid particles in air, such as dust, fog, fume, mist, smoke, spray droplets. Particulate matter suspended in air is commonly known as an aerosol.

Physician or Other Licensed Health Care Professional (PLHCP). An individual whose legally-permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required for medical evaluation to wear a respirator [i.e., OSHA 29 CFR 1910.134 (e)].

Pressure-demand respirator. An atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

Respirator. A safety device that covers at least the mouth and nose that protects the wearer from breathing in hazardous substances, including pesticides.

SCBA. Self-contained breathing apparatus. A type of atmosphere-supplying respirator where the user carries the breathing air supply. A pressure-demand SCBA is required to be used when the environment is IDLH, including when there is less than 19.5% oxygen by volume.

Supplied-air respirator (SAR) or airline respirator. An atmosphere-supplying respirator where the source of breathing air is not designed to be carried by the user. A pressure-demand SAR with an SCBA-escape bottle is required to be used when the environment is IDLH.

User seal check. For tight-fitting respirators, a check by the wearer that the mask has been put on correctly and has been adjusted to fit properly. Must be performed every time these respirators are worn.