Glossary

Respiratory Protection for Pesticide Applicators

**APR. Air-purifying respirator.** Respirator that use 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)](https://www.osha.gov/pls/oshaweb/owalink.query_links?src_doc_type=STANDARDS&src_unique_file=1910_0134&src_anchor_name=1910.134(b))]. Environments that have less than 19.5% oxygen by volume are considered IDLH by OSHA.

**Facepiece, tight-fitting.** A respirator that forms a complete seal with the face. Includes particulate-removing facepieces, half-masks, and full facepiece respirators.

**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 “P100” cartridge used in non-powered air-purifying respirators is equivalent to a HEPA filter.

**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, P, and R for oil degradation; 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 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.

**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, sprays. Particulate matter suspended in air is commonly known as an aerosol.

**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.

**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.

**Supplied-air respirator (SAR) or airline respirator. A**n 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.