Respirator Selection

Selecting Respirators

Respiratory protection must be worn whenever you are working in a hazardous atmosphere. The appropriate respirator will depend on the contaminant(s) to which you are exposed and the protection factor (PF) required. Required respirators must be NIOSH-approved, and medical evaluation and training must be provided before use.

These general guidelines are to be used by the NU Safety Professional and user in selecting an appropriate respirator for the hazard. Types of respirators include:

- **Air-purifying respirators**, which remove contaminants (particulate or gas/vapor) from an otherwise-breathable atmosphere, and
- **Supplied-atmosphere systems**, which supply breathable air.

Assigned Protection Factors (APFs) are the level of protection a properly functioning respirator would be expected to provide to a population of properly fitted and trained users (e.g., an APF of 10 means a user could expect to inhale no more than one tenth of the airborne contaminant present). NU Safety Professionals must use the APFs listed in the Respirator Selection Table to select a respirator that meets or exceeds the required level of employee protection. When using a combination respirator (e.g., airline respirators with an air-purifying filter), NU Safety Professionals must ensure the APF is appropriate to the mode of operation in which the respirator is being used.

Questions?
Contact Environmental Health and Safety at ehs@northwestern.edu