Respirator Selection Guide

Unsure about what respirator type you need? Please answer the following questions to determine what may be your best selection.

Click to Begin

Office of Environmental Health & Safety
(252) 328-6166
Warning:

Users of respirator must be medically cleared by the Office of Prospective Health, trained and fit tested by EH&S before using a respirator. Prior to purchase and use of ANY respirator, please contact the EH&S office to be formally enrolled in the University’s Respiratory Protection Program.
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Do you plan to use the respirator for firefighting operations?

[Image of a firefighter wearing a respirator]

[Green button] YES  [Red button] NO
The best selection is:

NIOSH approved, full face, Self Contained Breathing Apparatus (SCBA)

Meets NFPA requirement for firefighting operations and other emergency services
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Do you plan to use the respirator in an oxygen-deficient environment (less than 19.5% oxygen)?

Confined spaces such as manholes, sewers, boilers, storage bins, silos, utility vaults, pipes, tanks etc. are examples of oxygen-deficient environment.
The best selection is:

NIOSH approved Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirator with auxiliary Self-Contained Air Supply

Full Facepiece Pressure Demand SCBA must have a minimum service life of 30 minutes.

Auxiliary SCBA used with SAR must be of sufficient duration to permit escape to safety in the event that the air supply is interrupted.
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Do you plan to use the respirator for entry into unknown or Immediately Dangerous to Life and Health (IDLH) atmosphere?

[YES] [NO]

IDLH is any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape (an emergency situation).

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The best selection is:

NIOSH approved, full facepiece pressure demand Self Contained Breathing Apparatus (SCBA) or combination full facepiece pressure demand Supplied Air Respirator (SAR) with auxiliary Self-Contained Air Supply

Full Facepiece Pressure Demand SCBA must have a minimum service life of 30 minutes
Do you plan to use the respirator to protect against contaminants with exposure concentration less than the OSHA Permissible Exposure Limit (PEL) or other regulatory exposure limits?

See OSHA Annotated Tables: Table Z-1, Table Z-2 and Table Z-3 for occupational exposure limits (OEL) of various substances or chemicals. Contact EH&S if not found.
A respirator is not required, usage may be optional or voluntary

See the EH&S Respiratory Protection Program for Voluntary Use of Respirator
Is the contaminant an eye irritant or such that can damage the eye?

- YES
- NO
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The best selection is:

NIOSH approved respirator equipped with a full facepiece, helmet or hood
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Select the physical state of the contaminant?

Solid

Liquid

Gas
The best selection is:

NIOSH approved half facepiece respirator with filters or disposable respirator

Filter series N, R, or P is used with the half facepiece respirator, and filter selection depends on the presence of oil particles of not.

**Use**

N: when no oil is present in the air.

R: when oil is present, but only for ONLY a single shift of 8 hours of continuous or intermittent use.

P: when oil is present, but with manufacturer’s instructions.

Contact EH&S office to approve any selection
The best selection is:
NIOSH approved half or full facepiece respirator with air-purifying chemical cartridge/canister

Type of cartridge will depend on properties of contaminants. The correct cartridge must be selected for adequate protection. Failure to use the right cartridge may lead to severe illness or harm.

Contact EH&S office for guidance in the selection of cartridges