

Environmental Health and Safety

Title: Use and Maintenance of half and full-face respirators

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Version #: 01

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I. Purpose

The purpose of this document is to provide uniform procedures for use and maintenance of half and full-face respirators, ensure half and full-face respirators use are in line with best practices that promote a safe work environment, and ensure compliance with applicable regulatory requirements.

II. Scope

This standard operating procedure applies to all employees located on any University of North Texas Health location, that utilize a half and full-face respirators for respiratory protection.

III. Responsibility

- **Principal Investigator/Supervisor:**

- Ensure that all employees that will be using a half or full-face respirator are enrolled in the Occupational Health Program, are medically cleared and trained.
- Ensure that all employees have completed training in half or full-face respirators use and maintenance prior to use.
- Ensure that all staff complete annual medical clearance and fit testing prior to the expiration date.
- Get EHS approval for the model and type of half or full-face respirator to be purchased.
- Notify EHS when planning new procedures that will require the use of a half or full-face respirators.
- Know and comply with the respiratory protection requirements for hazardous materials used in their labs.
- Perform required maintenance and inspections of the half or full-face respirators.
- Maintain use, inspection and maintenance records

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- **Staff**
 - Operate half or full-face respirator in compliance with this SOP.
 - Perform inspections, maintenance, and decontamination of half or full-face respirator.
 - Ensure that all annual medical clearance and training are completed prior to the expiration date.
 - Know and comply with the respiratory protection requirements for hazardous materials used in their work areas.
- **EHS Sr Director** is responsible to ensure that all the procedures are appropriate and reviewed yearly.
- **EHS Staff** are responsible for maintaining this SOP. EHS Staff are responsible for verifying medical clearance are completed yearly. EHS staff are responsible for training employees on proper use of respiratory protection, initially and annual refreshers.

IV. Procedure

Not all half or full-face respirators are the same. Be sure to read the manufacturers literature for the specific half or full-face respirators that you are using. When in doubt, DO NOT USE the respirator. Contact a supervisor and EHS to ensure it is operating properly. DO NOT wear a respirator if you are not up to date on your medical clearance, and training

a. Before each use, perform a thorough inspection of half or full-face respirators.

- i. Verify that the straps and head cover (full-face) are in good condition without visible damage.
- ii. Ensure that the visor on the full-face is undamaged.
- iii. Ensure that the filtrating cartridges are within dates and appropriate for the hazard needing mitigation.
 1. Contact EHS if unsure about the type of cartridge needed.

b. Donning respirator

- i) Don the respirator outside of the lab or in the anteroom
- ii) Don the lab coat or gown per the lab protocol SOP
- iii) Complete the positive and negative seal check per manufacture recommendations.
- iv) Complete the usage logs - Form-Half, Full-face respirator
- v) Enter the laboratory.

c. Doffing half and full-face respirators

- i) While still in the laboratory, surface decontaminate the half or full-face respirators either with a mist of appropriate decontamination solution or using an approved wipe/soaked paper towel.

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- ii) Doff the rest of the PPE.
- iii) Leave the lab and doff the respirator
- iv) Thoroughly clean the outside of the respirator with the appropriate decontaminating solution.
- v) Clean the inside of the respirator with 70% alcohol.
- vi) Complete applicable usage logs –Form- half and full-face respirators

d. Inspections and Maintenance

- i) Visual Inspections shall be performed upon receipt, monthly and on the day of use before and after operation.
- ii) Filters for the respirators units used in the BSL2 enhance should be changed every 6 months.
- iii) Filters for the respirators units used in the BSL2 should be changed every 12 months.

e. Decontamination

- i) Following each use thoroughly clean the outside of the respirators with an appropriate decontamination solution.
- ii) Wipe the inside of the face piece with an alcohol wipe or soaked paper towel with alcohol.

f. Storage

- i) Store clean, and dry respirator in a dry, well-ventilated area out of direct sunlight and away from indoor lights sources.
- ii) For long-term storage, respirators should be stored in a closed plastic container.

g. Emergency response - respirator Failure

- i) Close all samples and immediately leave the laboratory.
 - a. Filter unit comes undone.
 - b. If the respirator is damaged
- ii) Report the incident to EHS and PI to conduct a risk assessment.

V. References

- Occupational Safety Manual
- Form-half, full-face respirator usage Log
- Manufacture user manual

VI. Version revisions

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