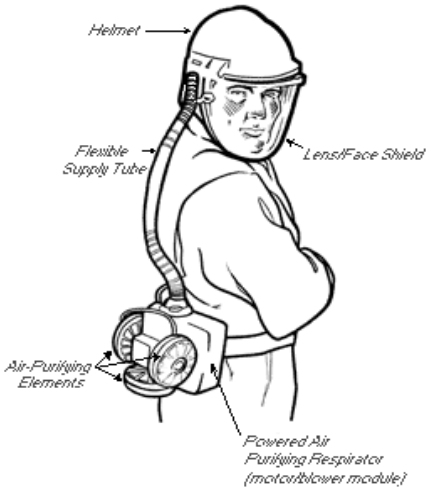
Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill

Use of a Helmet/Hood Powered Air Purifying Respirator for Respiratory Protection

Title	Work Task	Hazards	Controls
Inspecting the Helmet/Hood Powered Air Purifying Respirator Prior to Use	1. Inspect Powered Air Purifying Respirator Prior to Use **(See below illustration for PAPR components).**  Loose-Fitting Facepiece	1a. Improper use of Powered Air Purifying Respirator which could result in airborne exposure to contaminants.	1a. Follow all manufacture Safety Instructions for the use of the PAPR. Inspect all components of the PAPR including: blower motor, chemical cartridges and filters, breathing tube, respirator hood , lens or face shield, helmet, for damaged parts, tears, dirt or debris. 1b. Ensure PAPR blower-motor battery pack is fully charged before using. 1c. Perform airflow test with PAPR blower motor prior to using unit. Verify airflow indicator ball exceeds 6 CFM (170 liters/Minute) before using **Note:** Notice the illustration above with the PAPR and cylinder device with two red caps. The cylinder device is the airflow indicator which attaches to the blower motor to check the airflow.

	Work Task	Hazards	Controls
Using the Powered Air Purifying Respirator	2. Assembling, Using, Cleaning, Storing PAPR Unit. **Note:** in the below illustration the PAPR blower motors are stored in a clean sanitary area when not in use. (PAPR hoods are to be stored in a clean area and in a bag (e.g. such as in a sealed plastic bag). Position hood face piece so the lens does not get damaged. 	2a. Airborne exposure as a result of improper use of Powered Air Purifying Respirator.	2a. Ensure PAPR blower-motor battery pack is fully charged before using. 2b. Ensure breathing tube is positioned into the PAPR hood and employee uses according to manufacture instructions. Don unit in uncontaminated clean work area only. 2c. Perform airflow test with PAPR blower motor prior to using unit and entering contaminated area: Verify airflow indicator ball exceeds 6 Cubic feet per minute (170 liters/Minute) for a loose fitting PAPR hood before using! 2d. Ensure blower motor is turned on and air is delivered into the PAPR hood prior to donning the PAPR hood. 2e. Ensure buddy system is implemented (2-man rule) to verify safety conditions before commencing work. 2f. Do not enter the contaminated work area until the PAPR is properly donned. 2g. During work if you notice a reduction in airflow get out of the contaminated work area and recheck the PAPR. Re-perform an airflow test to check to see if the battery is fully charged. 2h. Upon completion of work clean respirator with a disinfectant wipe and/or according to manufacture instructions and store in a sanitary area (see illustration to the left hand side).

Training	Respirator Training (Online Course # 6210) and must review and understand the specific respirator manufacture safety instructions prior to use. Employee must also be medically certified to be able to use the respirator.	
Created	JSA Created by: Daniel R. Gilleski 2009	
Referenced Material	29 CFR 1910.134, OSHA General Industry Respiratory Standard, UNC-CH - Environment, Health, and Safety Manual, Chapter 4- Respiratory Protection Program Powered Air Purifying Respirator Manufacture Instructions	
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