RESPIRATORY PROTECTION

Purpose:
This Safety Gram outlines basic respiratory protection program requirements, establishes our policy regarding the use of respiratory protection and serves as guidance regarding the use of voluntary respirators (dust masks). Contractors are responsible for providing their own respiratory protection programs and equipment. Please note that the content of this document does not serve as a substitute to our governing Respiratory Protection Program, Instructions (OPNAVINST 5100.23 Series, Ch. 15 and COMNAVREGSWINST 5100.11Series, Ch 15), nor is it a substitute for 29 CFR 1910.134.

Scope and Applicability:
Certainly there were other factors associated with this mishap; however, the focus of this Safety Gram is on respiratory protection. The provisions of this document shall apply to NSAM/NPS supervisors and employees required to wear respiratory protection due to the nature of their work as determined by the Command Respiratory Protection Program Manager (RPPM) in conjunction with our BUMED Industrial Hygienist.

Background
A mishap report was recently filed that describes an accident where one of our employees was overcome by chemical vapors associated with using a relatively common household cleaning type product. The resultant accident investigation revealed numerous issues. Chiefly, two primary areas of concern were noted:

A. The employee typically used a half-face air purifying respirator with organic vapor chemical cartridges when using the product; however, on this particular day, he chose not to wear the respirator. Issue(s): The employee was neither medically qualified, properly trained, nor fit-tested to wear such a respirator - a potential health risk to the individual as well as a violation of numerous regulatory requirements.

B. An appropriate hazard assessment of the cleaning process involving a hazardous material had not been conducted. Issue(s): The preferred method of risk/hazard elimination and/or reduction is through the application of engineering controls or preferably substitution of less hazardous processes or materials. The next preferred method is the use of administrative controls, possibly in conjunction with personal protective equipment (PPE) (such as respirators). Total reliance on PPE is acceptable only when all other methods are proven to be technically and/or economically infeasible. In this particular case, a respirator was the first choice of protection. In fact, the Material Safety Data Sheet (MSDS) did not mention the need for respiratory protection when utilizing this product.
Policy:

The respiratory protection policy of this installation is as follows: The use respirators to protect employees against inhalation hazards shall be authorized under the following conditions:

1) A hazard assessment of the process/material posing as a respiratory risk is thoroughly conducted by the Industrial Hygienist, Respiratory Protection Program Manager, and/or Safety Officer, and it was determined that alternative methods of hazard control such as substitution or implementation of engineering controls were not feasible.

2) The RPPM has approved the use of respiratory protection based upon a satisfactory medical evaluation of the employee; completion of respiratory protection training by the employee, as well as the employee successfully completing a respiratory Fit Test.

3) Voluntary use respiratory protection (dust masks) shall not be authorized by anyone other than the RPPM.

Respiratory Protection Program Manager(s): Ms. Michele Marnach (NAVFAC-PWD), X2475, michele.marnach@navy.mil & Mr. Martin Catanese (NSAM / NPS), x3317, mcatanese@nps.edu serves as the certified and designated Respiratory Protection Program Manager(s). Because of the complexity of respiratory protection, our RPPM’s have received extensive professional training from a variety of sources with emphasis on: respiratory hazards, federal standards applicable to respirators, respirator types, selection, certification and limitations, respiratory cleaning, maintenance, and inspection, qualitative and quantitative fit testing of respirators, breathing air quality and medical considerations. The RPPM’s have responsibility for determining the type of respirator to be worn based on the following factors:

- Current hazard assessment as noted above.
- Chemical, physical, and toxicological properties of the contaminant.
- Concentration of the contaminant in the atmosphere.
- Occupational exposure limits for the contaminants.
- Whether an oxygen-deficient or oxygen-rich atmosphere exists, or may be created.
- The nature, extent, and frequency of the duties personnel will be performing in the work area.
- Sorbent efficiency and service life of the cartridge/canister.
- The assigned protection factor or degree of protection provided.

Respirator Fit Testing: The RPPM shall fit test each individual required to use a respirator with a tight-fitting face piece at the time of initial fitting and annually thereafter. All tight-fitting positive and negative pressure respirators shall be either qualitatively or quantitatively fit-tested initially and annually as determined by the RPPM. The RPPM has responsibility for maintain fit-testing records.

Medical Evaluations: Personnel shall not be fit-tested or permitted to work in or enter areas requiring respiratory protection unless they have been medically evaluated IAW all relevant standards and certified
by an M.D. to be medically qualified to wear a respirator. Supervisors of personnel that wear or need to wear respiratory protection are responsible for scheduling medical appointments through the Occupational Health Nurse at the Presidio of Monterey Army Health Clinic.

**Respiratory Protection Training**: Personnel required to wear respiratory protection shall receive respiratory protection training from the RPPM at the time of fit testing and shall emphasize the following areas:

- The nature and degree of respiratory hazards.
- Respirator selection based on specific hazards.
- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
- The limitations and capabilities of the respirator.
- How to effectively use the respirator in emergency situations.
- How to inspect, put on and remove, use and check the seals of the respirator.
- Procedures for maintenance and storage of the respirator.
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
- Knowing when to change chemical cartridges/canisters according to the established change out schedule.
- The general requirements of the respiratory standards.

**Employee Responsibilities**: Employees shall inspect, use, and maintain respirators per the instructions and training received and as a minimum:

- Inspect respirators before and after each use and appropriately store the respirator.
- Perform user seal checks per the manufacturer’s instructions prior to use and if a successful seal check cannot be performed, the employee shall not wear the respirator.
- Report any malfunction of the respirator to their immediate supervisor.
- Guard against damage to or loss of respiratory protection equipment.
- Change respirator cartridges/canisters according to established change out schedule.

**Voluntary Respirator use: (Dust Masks)**: Voluntary respirator use is when an employee chooses to wear a respirator, even though the use of a respirator is not required by the activity or by any OSHA standard. The use of Voluntary Respirators (dust masks) requires approval from the RPPM. NIOSH approved filtering face pieces (dust masks) may be used without medical screening and fit testing. Employees must ensure that their dust masks remain clean and that their use does not interfere with their ability to work safely. Personnel may not supply their own respirators. Voluntary use respirator users shall review, on an annual basis, the information contained within 29 CFR 1910.134, App. D