

LOS ANGELES COMMUNITY COLLEGES
OFFICE OF THE CHANCELLOR
ADMINISTRATIVE REGULATIONS

INDEX NUMBER B-5

REFERENCE: Calif. Admin. Code Title 8, Section 5144	TOPIC: Proper Use of Disposable and/or Non-Disposable Respirators
ISSUE DATE: June 12, 1984	INITIATED BY: Business Services
CHANGES:	DATE OF CHANGES:

1. **PURPOSE:**

The purpose of this regulation is to acquaint the District employees with the proper use of disposable and/or non-disposable respirators that will be used to protect the employees from harmful dusts, mists, chemicals, pesticides, etc., as required by CAL/OSHA.

2. **GENERAL**

- a. In their course of employment with the District, some employees may be exposed to harmful dusts, mists, chemicals, pesticides, etc., which, if inhaled, could jeopardize their health and safety.
- b. In order to protect the employees from the exposure, the employees will be required to wear protective respirators or face masks when working in hazardous or a potentially hazardous environment.

Note: Bears or heavy facial hair will prohibit the proper fitting of a face mask; therefore, bears should not be worn by employees in order to receive maximum protection while wearing a face mask.

- c. The type of mask or respirator will be determined by the possible exposure and length of exposure.
- d. All the employees who may be required to wear masks or respirators will be trained to determine the type of mask or respirator to wear, the proper fitting of the unit, the limitations of the particular unit, and the possible dangers if improperly fitted or improperly used. This training will be conducted annually or more often if needed.
- e. After the cartridge, canister or self-contained breathing mask is properly fitted, all employees shall be given the option as required by CAL/OSHA Title 8, Section 5144 (c) to:

- 1) Wear the mask in normal air for an adequate familiarity period (2 hours is considered adequate);
 - 2) Wear the mask in a test atmosphere (such as generated smoke by smoke tubes or isoamyl acetate). Note: These items are now available in the District Safety Office and may be checked out for use by qualified personnel.
- f. The training can be conducted by:
- 1) Campus personnel
 - 2) Safety personnel
 - 3) Manufacturing representatives
- g. The selection of the proper mask and/or respirator desired is made by using the guidance of the American Standard Practices for Respiratory Protection (Z88.2 1969). There is a standardized color coding of all canisters and cartridges. See Table I.

3. **TRAINING:**

- a. A log must be kept of all training. This log must contain the following information and will be made available to any CAL/OSHA inspector upon request:
- 1) Date of training
 - 2) Name of person attending (printed and written)
 - 3) Specific subject covered at that session
 - 4) Name and title of the instructor
- b. All training will be coordinated by the Center of Professional Development. Training sites and times will be selected by each college.

4. **APPLICATION:**

- a. When each employee is issued a mask and the mask is turned into a central unit for cleaning, sterilization, etc., then that mask should be marked, so the same employee will draw the same mask each time of issue. The following should be noted:

- 1) The date of issuance shall be recorded.
 - 2) The mark of identification shall be so placed as not to interfere with the proper wearing of the mask.
- b. The mask shall be washed in a mild warm water soapy solution, dried, sterilized (using ultra-violet light or alcohol) after each use or at the end of each workday.
- c. The College shall be responsible to provide, repair and/or replace the disposable or non-disposable masks as may be required due to normal wear or deterioration.
- d. When not in use, the mask must be stored in an area to prevent damage against harmful dusts, sunlight, extreme temperatures, excessive moisture, or damaging chemicals.
- e. Emergency respirators must be inspected and sanitized after each use. They must be inspected at least monthly and a record of the inspection be kept with the unit or in its storage box. The record shall have the following information:
- 1) Date of inspection
 - 2) Name of inspector
 - 3) The date the canister was placed into services
- f. Inspections will be conducted by qualified personnel with a knowledge of the unit to be inspected. The inspectors may be:
- 1) Campus employee (so trained and designated)
 - 2) Tool crib attendant
 - 3) Safety personnel
- g. Self-contained breathing apparatus must contain at least a Grade D oxygen in the air cylinders as described in the Compressed Gas Commodity Specifications G-71 (ANSI Z88.1 1973).
- h. The gas cylinders shall be kept full and ready for use at all times.

- i. The breathing air shall be free of all dusts, mists, vapors or gases. (Free of all contaminants that could damage the lungs).

CAUTION: ONLY SELF-CONTAINED BREATHING APPARATUS
CAN BE USED IN AN OXYGEN DEFICIENT
ATMOSPHERE (19.5% OXYGEN OR BELOW.

The disposable and non-disposable masks are designed to be used only in an atmosphere of between 19.5% and 21% oxygen. This is sufficient oxygen to sustain life.

TABLE I

<u>Atmospheric Contaminants</u>	<u>Color Assigned</u>
1. Acid Gases	White
2. Hydrocyanic Acid Gases	White with 1/2 inch green stripe around canister near the bottom.
3. Chlorine Gas	White with 1/2 inch yellow stripe around canister near the bottom.
4. Organic Vapors	Black
5. Ammonia Gas	Green
6. Acid Gas - Ammonia Gas	Green with 1/2 inch white stripe around canister.
7. Carbon Monoxide	Blue
8. Acid Gas - Organic Vapors	Yellow
9. Hydrocyanic Gas - Chloropicrin Vapor	Yellow with 1/2 inch yellow stripe around canister
10. Acid Gases - Organic Vapors Ammonia Gas	Brown

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| 11. Radioactive Materials except
Tritium-Nobles Gases | Purple
(Magenta) |
| 12. Particulate - (dusts, fumes,
mists, fogs, smoke)
- in combination with
any of the above | Canister is
the color
for the
contaminant
with a 1/2
gray stripe. |
| 13. All of the above atmospheric
contaminants | Ted with a 1/2
inch gray
stripe around
the top of the
canister. |

NOTE: Gray shall be used as the main color for a canister design to remove acid or vapors. Orange shall be used as a complete body or stripe color to represent gases not included in this table. Refer to the canister label to determine the degree of protection the canister will afford.

PROPER APPLICATION OF THE TYPE 9900 DISPOSABLE FACE MASK

Use the following steps for proper strap attachment and for proper fitting of this mask.

- Steps:
1. Cup the respirator in one hand with the nose piece facing the fingertips. (End with the metal plate).
 2. Allow the straps to hang down.
 3. Cup the respirator under your chin and slide it up over your nose.
 4. Pull the top band over your head and position the strap on the top of your head.
 5. Pull the bottom strap over your head and position this strap around your head just below your ears.
 6. Pull each strap snugly to make a tight fit.

7. Using both hands, shape the metal strap over your nose. This metal strap must conform to the shape of your nose comfortably.
8. Gently cover the respirator with your hand, and exhale sharply into mask.
9. If the mask is air tight a positive pressure will be felt in the mask against your face. If any air leaks out around the sides of the mask, then reposition the mask, refit the nose piece and repeat step 8 until no air escapes through the sides.
10. The mask will now do the job it is designed to do.
11. When breathing becomes difficult or the mask becomes visibly dirty, then the mask has to be replaced with a new clean one.
12. Always leave the contaminated area before changing the mask.

CAUTION: THIS MASK IS ONLY TO BE USED IN AN
ATMOSPHERE THAT WILL SUSTAIN LIFE. DO
NOT USE IN AN ATMOSPHERE AT 19.5%
OXYGEN OR BELOW.

PROPER APPLICATION OF THE NON-DISPOSABLE SINGLE/DOUBLE
CANISTER OF CARTRIDGE MASK

Use the following steps for proper straps attachment
and the proper fitting of this mask:

Steps:

1. Select the proper cartridge or canister for the protection against the atmosphere where the mask is to be used. As example, use Table I for the selection and read the label thoroughly before using the proper canister or cartridge.
2. Fit the respirator to your face with the nose piece (narrow end) over your nose.
3. Connect the upper head band and place over the top of your head.

4. Connect the lower band and place around your head just below the ears.
5. To test for proper fit:
 - a. Place the palm of your hand or thumb over the exhaust valve.
 - b. Exhale sharply into the mask.
 - c. You should feel a positive pressure in the mask with no air leaks around the mask.
 - d. If air leaks out or no positive pressure is felt, then repeat steps 2 thru 4 and repeat the test until there are no air leaks and a positive pressure is felt on your face.
6. Change the filters on this mask when:
 - a. Breathing becomes difficult.
 - b. You can smell or taste the chemical in the atmosphere.
 - c. The filters or cartridges look dirty or the canister indicator gauge changes color as per the manufacturer's instructions.
7. Always leave the contaminated area before changing the filters or cartridges.
8. On the full face mask with a canister, close off the exhaust valve and the hose connecting the canister when checking for positive pressure.

CAUTION:

NEITHER THE SINGLE NOR DOUBLE CARTRIDGE MASK NOR THE CANISTER MASK IS TO BE USED IN AN ATMOSPHERE THAT CANNOT SUSTAIN LIFE. THE OXYGEN LEVEL MUST NOT BE BELOW 19.5% FOR THIS MASK TO FUNCTION.