Voluntary Use of Air-Purifying Respirators

I. PURPOSE

This procedure is intended to comply with Occupational Safety and Health Administration (OSHA) regulations stipulated in 29 CFR 1910.134(c)(2)(ii). The purpose of this program is to ensure worker safety when voluntarily using a respirator.

II. SCOPE AND APPLICABILITY

This program applies to all CSN employees who voluntarily wear respirators for job tasks where Environmental Health & Safety has determined through an evaluation of the hazards, that respirator use is not required. In these situations, employees may ask to use respiratory protection for comfort or for additional protection. Whether supplied by CSN or by the employee, respirators used on a voluntary basis must not create a health hazard. Environmental Health & Safety’s Program Administrator – the knowledgeable person who manages the requirements of our respiratory protection program – will authorize employees to use respirators voluntarily on a case-by-case basis, depending on workplace conditions and, if necessary, the results of a medical evaluation. Any employee who wants to wear a respirator – other than a dust mask – on a voluntary basis is subject to the medical evaluation requirement. All voluntary users are subject to the cleaning, maintenance, and storage elements of this procedure.

III. DEFINITIONS

- **Air-purifying respirator** - A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
- **Elastomeric half mask respirator (EHMR)** - A type of tight-fitting air-purifying respirator that is reusable with exchangeable filter elements (cartridges, canisters, or filters).
- **Filtering facepiece respirator (dust mask)** - A particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. This includes N95 and NIOSH approved respirators. This does not include surgical masks.
- **PLHCP** - Physician or other licensed health care professional is an individual legally permitted by scope of practice (i.e., license, registration, or certification) that allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by this program.
- **Powered air-purifying respirator (PAPR)** - An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.
- **User seal check** - an action conducted by the respirator user to determine if the respirator is properly seated to the face.
- **Voluntary use** – Choice to wear respiratory protection when use is not required.

IV. PROCEDURE

A. Responsibilities

1. **Environmental Health & Safety (EHS)**
   a. Provide the Program Administrator for the Voluntary Use Respirator Program (typically the Occupational Health Program Manager).
b. Ensure administration of this procedure; conduct periodic reviews and updates.
c. Ensure compliance with environmental and safety regulations through the implementation of this procedure.
d. Assist departments as needed, to perform workplace assessments and respiratory protection evaluations. Assist departments as needed to evaluate engineering and administrative controls.
e. Provide access to medical evaluation for employees who request to voluntarily wear air-purifying respirators (other than filtering facepieces).
f. Provide training and assist employees who voluntarily wear air-purifying respirators (filtering facepiece, elastomeric, and powered air-purifying respirators).
g. Retain a copy of the original signed copy of the Employee Voluntary Use Acknowledgement Form. See Appendix A of this program.

2. Managers and Supervisors
   a. Request assistance from EHS to perform workplace assessments and respiratory protection evaluations, as needed.
   b. Refer employees who request to wear air-purifying respirators to the EHS Occupational Health Program Manager.

3. Employees
   a. Contact EHS Occupational Health Program Manager to request approval prior to wearing a respirator.
   b. Complete required medical evaluation with EHS for the voluntary use of air-purifying respirators (other than filtering facepieces).
   d. Retain an original signed copy of the Employee’s Voluntary Use Acknowledgement Form at your work location. See Appendix A of this program.
   e. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator’s limitations.
   f. For tight-fitting respirators, remain clean-shaven around the area where the respirator should seal prior to respirator use.

B. Medical Evaluation

1. Medical evaluations are required for employees who voluntarily use air-purifying respirators other than filtering facepieces.

2. Employees must contact the EHS Occupational Health Program Manager to initiate the medical evaluation process.

3. The designated health care provider (PLHCP) is provided through the vendor RespSafety.

4. The PLHCP will perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire (information required is contained in 1910.134 Appendix C).

5. This evaluation will be administered confidentially, at no cost to the employee, during the employee’s normal working hours or at a time and place convenient to the employee, and in a manner the employee understands. The employee will have an opportunity to discuss the questionnaire and examination results with the healthcare provider (PLHCP).

6. The EHS Occupational Health Program Manager will provide the health care provider with the following supplemental information as needed:
   a. The type and weight of the respirator to be used by the employee.
   b. The duration and frequency of respirator use (including use for rescue and escape).
c. The expected physical work effort.
d. Additional protective clothing and equipment to be worn.
e. Temperature and humidity extremes that may be encountered.
f. A copy of this written voluntary respiratory protection program.
g. A copy of the respiratory protection standard (29 CFR 1910.34).

7. An additional medical evaluation may be necessary as determined by the health care provider.

8. The EHS Occupational Health Program Manager will receive and keep on file the health care provider’s written opinion on the employee’s ability to use the respirator.

C. Voluntary Respirator Use

1. Filtering Facepiece Respirators (N95, dust masks)
   a. Prior to wear, inspect the straps and facepiece to make sure they are intact. Do not use the respirator if damaged.
   b. During wear, perform positive and negative pressure user seal checks prior to work.
   c. Facial hair should not cross under the respirator sealing surface.
   d. Filtering Facepiece Respirators are single use only and cannot be cleaned.
   e. Filtering Facepiece Respirators cannot be repaired and should not be stored after use.
   f. Follow all instructions provided by the manufacturer on use and heed warnings regarding the respirator’s limitations.

2. Elastomeric Respirators (half face and full face) and Powered Air-Purifying Respirators
   a. Prior to wear, inspect the straps, facepiece, valve fittings, connections, and canisters/cartridges/filter.
   b. Inspect the respirator for worn or damaged parts. Do not wear the respirator if damaged.
   c. For tight-fitting respirators, perform positive and negative pressure user seal checks according to the manufacturer’s recommendations or those found in Appendix B-1 of the OSHA Respiratory Standard 29 CFR 1910.134 (See Appendix B of this program).
   d. Clean and disinfect the respirator according to the manufacturer’s recommendations or those found in Appendix B-2 of the OSHA Respiratory Standard 29 CFR 1910.134.
   e. Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, damaging chemicals, and they shall be stored to prevent deformation of the facepiece and exhalation valve.
   f. Follow all instructions provided by the manufacturer on use and heed warnings regarding the respirator’s limitations.

3. Respirator Storage and Replacement
   a. After inspection and cleaning, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, and damaging chemicals.
   b. Respirators must be stored in a plastic bag or other suitable containers in designated areas.
   c. Respirators should not be stored in such places as vehicles or toolboxes unless they are in a carrying case or carton.
   d. Respirators should be packed or stored so that the face piece and exhalation valve will rest in a normal position and function will not be impaired by the rubber setting in an abnormal position.
   e. Defective or broken respirators should be repaired/replaced.

4. Respirator Use Issues
   a. Medical signs and symptoms that may limit or prevent the effective use of a respirator include shortness of breath, coughing, wheezing, chest pain, or any other symptoms related to lung problems, and cardiovascular symptoms.
   b. Signs that a respirator may not be functioning properly include decreased airflow, leaks, difficulty breathing, detecting odors/taste, and respiratory irritation.
   c. In the event of respiratory difficulties, get to fresh air immediately and remove the respirator.
   d. If equipment malfunction is suspected, check the respirator for cracks and tears. Ensure
filters/cartridges are in good condition and not past service life, replace if necessary.

e. If health issues related to respirator use are suspected, cease respirator operations, and
contact the EHS Occupational Health Program Manager.

V. TRAINING

A. Training will be provided to employees using a respirator in the workplace. The training shall
ensure that each employee can demonstrate knowledge of at least the following:
1. How to inspect, put on and remove, use, and check the seals of the respirator;
2. What the procedures are for maintenance and storage of the respirator;
3. How to recognize medical signs and symptoms that may limit or prevent the effective use of
respirators; and
4. The general requirements of this program.

B. The EHS Occupational Health Program Manager will provide a copy of, and employees are to
read and acknowledge, Appendix D of the OSHA Respiratory Standard 29 CFR 1910.134 (See
Appendix A of this program).

VI. RECORD KEEPING

Environmental Health & Safety will retain written information regarding medical evaluations and the
respirator program. This information will facilitate employee involvement in the voluntary respirator
program, assist CSN in auditing the adequacy of the program, and provide a record for compliance
determinations by OSHA.

VII. AUTHORITY AND CROSS REFERENCE LINKS

Appendix D to Sec. 29 CFR 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else’s respirator.

I understand and certify that my use of an air-purifying respirator for work conducted during my employment at the College of Southern Nevada is solely at my discretion and is voluntary.

I have read and understand the above information contained in Appendix D of Title 29 Code of Federal Regulations, Section 1910.134, “(Mandatory) Information for Employees Using Respirators When Not Required Under the Standard”.

Employee Name (Print):

Employee Signature: _______________________________ Date: _________________

CSN EHS Representative: _______________________________ Date: _________________
Appendix B – User Seal Check Procedures
(OSHA Appendix B-1 to § 1910.134)

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. Facepiece Positive and/or Negative Pressure Checks

A. Positive pressure check.
   Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

B. Negative pressure check.
   Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

II. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.