

# **RESPIRATORY PROTECTION**

## **WRITTEN PLAN**

### **Intermediate School District 917**

**July 2023**

This Respiratory Protection Plan specifies standard operating procedures to protect all employees from respiratory hazards, according to the requirements of 29 CFR 1910.134. At Intermediate School District 917, respirators are not required but can be used by employees on a voluntary basis. Employees who voluntarily determine that they wish to use a respirator shall be responsible for the storage, maintenance, and cleanliness of the respirator. Procurement, consumables, and replacement parts shall be funded by the District.

#### **Administrative Duties**

At Intermediate School District 917 our Respiratory Protection Program Administrator is Linda Berg, the Health and Safety Coordinator. This person is solely responsible for all facets of the plan and has full authority to make necessary decisions to ensure success of this plan.

Employees may review a copy of this Respiratory Protection Plan. It is located in the District Office. We review this plan periodically to ensure its effectiveness.

#### **Respiratory Hazards**

A review of potential respiratory hazards indicates that employees may be exposed to mold, soot, solvents, welding fumes and dust. These exposures are below the permissible exposure limit. However, for comfort, employees may choose to wear a respirator.

#### **Respirator Selection**

Respirators are selected on the basis of respiratory hazards to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

Our district's selection procedures include:

##### *Selection Procedure Checklist*

When selecting any respirator in general:

- Select and provide respirators based on respiratory hazard(s) to which a worker is exposed and workplace and user factors that affect respirator performance and reliability.
- Select a NIOSH-certified respirator. (NIOSH stands for the National Institute for Occupational Safety and Health)

- Select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and fits the user.

When selecting respirators for atmospheres that are not IDLH (Immediately Dangerous to Life or Health):

- Provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.
- Select respirators appropriate for the chemical state and physical form of the contaminant.

For protection against gases and vapors, provide:

- An atmosphere-supplying respirator, or
- An air-purifying respirator, provided that: (1) The respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or (2) If there is no ESLI appropriate for conditions in our workplace, implement a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. Describe in the respirator program the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data.

For protection against particulates, provide:

- An atmosphere-supplying respirator; or
- An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR 84; or
- For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

### *Respirator Types and Uses*

- Half-mask canister respirator for boiler cleaning, removing mold, welding, painting, dust, and solvents
- A 2 strap paper dust mask for dust or mold

The following types of respirators are in use in this facility for the following uses:

Only NIOSH-certified respirators are selected and used. The respirators will be assigned to individual workers for their exclusive and voluntary use.

### **Medical Evaluations**

A medical evaluation for respirator use is not provided to employees by Intermediate School District 917 since the employees are wearing the respirator on a voluntary basis. However, a medical evaluation to determine whether an employee is able to use a given respirator is an important element and recommended to prevent injuries, illnesses, and even, in rare cases, death from the physiological burden imposed by respirator use. A medical evaluation will determine if an employee is physically able to perform the work and use the respirator. Please see 29 CFR 1910.134 for information regarding the recommended medical evaluation. Respirator medical evaluations will be the employee's responsibility and at the employee's expense.

### **Fit Testing Procedures**

Fit testing is not provided since this is a voluntary respirator program.

### **Proper Use Procedures**

Once the respirator has been properly selected and fitted, its protection efficiency must be maintained by proper use in accordance with 29 CFR 1910.134(g).

Our district uses the following recommendations for employees who wear respirators:

#### *Face piece Seal Protection*

Do not permit respirators with tight-fitting face pieces to be worn by employees who have:

- Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-face piece seal or valve function.

If an employee wears corrective glasses or goggles or other personal protective equipment, ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face of the user.

For all tight-fitting respirators, ensure that employees perform a user seal check each time they put on the respirator using the procedures in 29 CFR 1910.134 Appendix B-1 (User Seal Check Procedures) or procedures recommended by the respirator manufacturer that you could demonstrate are as effective as those in Appendix B-1.

### **Maintenance and Care Procedures**

In order to ensure continuing protection from respiratory protective devices, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not

deliver the assumed protection unless they are kept in good working order.

### *Cleaning & disinfecting*

Our district provides each respirator user with a respirator that is clean, sanitary, and in good working order. Respirator users are responsible to ensure that respirators are cleaned and disinfected using the procedures below:

- In Appendix B-2 of 29 CFR 1910.134.
- Recommended by the respirator manufacturer.

The respirators are cleaned and disinfected at the following intervals:

<b>Respirator type:</b>	<b>Are cleaned and disinfected at the following interval:</b>
Issued for the exclusive use of an employee	As often as necessary to be maintained in a sanitary condition

### *Storage*

Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. Respirator users are responsible for ensuring that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals to prevent deformation of the face piece and exhalation valve.

### *Inspection*

In order to assure the continued reliability of respirator equipment, it must be inspected by the user on a regular basis. The frequency of inspection is related to the frequency of use. Frequencies for inspection:

<b>Respirator type:</b>	<b>Inspected at the following frequencies:</b>
All types used in routine situations	Before each use and during cleaning

Respirator inspections include a check:

- For respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
- Of elastomeric parts for pliability and signs of deterioration.

### *Repairs*

Respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted by the district in accordance with the following procedures:

- Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and only with the respirator manufacturer's NIOSH-approved parts designed for the respirator;
- Repairs must be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and
- Reducing and admission valves, regulators, and alarms must be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

### *Discarding of respirators*

Respirators that fail an inspection or are otherwise not fit for use and cannot be repaired must be discarded and will be replaced by the District.

### **Air Quality Procedure**

#### *Filters, Cartridges, and Canisters:*

Ensure that all filters, cartridges and canisters used in the workplace are labeled and color-coded with the NIOSH approval label and that the label is not removed and remains legible.

### **Training**

No training is required since this is a voluntary respirator program. Employees are provided with a copy of Appendix D of the standard. Employees are also periodically informed regarding:

- Respiratory hazards to which our employees are potentially exposed during routine and emergency situations, and
- Proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance.
- Providing the employee with a copy of Appendix D to 1910.134:

#### *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:

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- 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.
- 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.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.

### **Questions**

If an employee has questions or concerns regarding respirator use they are to contact Linda Berg, Health and Safety Coordinator at 651-423-8214.

## **Appendix B-1 to § 1910.134: User Seal Check Procedures (Mandatory)**

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.

## **Appendix B-2 to § 1910.134: Respirator Cleaning Procedures (Mandatory)**

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B- 2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

### *I. Procedures for Cleaning Respirators*

- A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
- B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
  - 1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
  - 2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
  - 3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- F. Components should be hand-dried with a clean lint-free cloth or air-dried.
- G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
- H. Test the respirator to ensure that all components work properly.



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

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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.