**Respiratory Protection Program Template for Nursing Home-Type Facilities with Ventilator Equipment**

Prepared for:

**The Fund for Public Health in New York City, Inc.**

**TRC Engineers, Inc.**

1430 Broadway 10th Floor

New York, NY 10018

Version 1.2 - September 15, 2023

**Limitations**

Use of this Respiratory Protection Plan (RPP) is intended to ensure that Nursing Home facilities with greater potential health risks (i.e., patient populations with a higher potential risk of airborne disease transmission) are compliant with the Occupational Safety & Health (OSHA) Respiratory Protection Standard (29 CFR 1910.134). Although this is the case, it must be recognized that this document serves as only one component of a more comprehensive program intended to protect facility employees.

Adapted from: Occupational Safety and Health Administration. “Respiratory Protection Guidance for the Employers of Those Working in Nursing Homes, Assisted Living, and Other Long-Term Care Facilities During the COVID-19 Pandemic” Washington: OSHA publication DOL-OSHA-OOC-2020-103.

Adapted from: National Institute of Occupational Safety & Health. "Hospital Respiratory Protection Program Toolkit." Washington: NIOSH publication DHHS (NIOSH) Publication Number 2015-117 (Revised April 2022).

**Respiratory Protection Program**

For Nursing Home Facilities Utilizing

Ventilator Equipment

Version 1.2 – September 15, 2023

**Contents**

1. Purpose and Applicability ............................................................................................................................................... 5

2. Responsibilities ............................................................................................................................................................. 5

3. Respirator Selection ...................................................................................................................................................... 6

4. Medical Evaluation ........................................................................................................................................................ 7

5. Fit Testing .................................................................................................................................................................... 8

6. Training........................................................................................................................................................................ 9

7. Respirator Use .............................................................................................................................................................. 9

8. Storage, Reuse, Maintenance, and Care of Respirators .................................................................................................... 9

9. Program Evaluation ..................................................................................................................................................... 10

10. Recordkeeping .......................................................................................................................................................... 11

**Appendices**

Appendix A: Respirator Assignments by Task or Location

Appendix B: Medical Clearance Questionnaires

Appendix C: Qualitative Fit Test Protocol

Appendix D: User Seal Check Procedures

Appendix E: Manufacturers’ Instructions for User Seal Checks

Appendix F: Pandemic Response

Appendix G: Voluntary Respiratory Use (OSHA Appendix D)

Appendix H: Needs Assessment Report

**1. Purpose and Applicability**

This document is written specifically for nursing home facilities utilizing ventilator equipment. The Nursing Home sector is already unique in that the types of residents include the frail elderly with chronic disabilities, children with multiple impairments and young adults suffering from traumatic brain injury (or other physical disabilities) and those individuals with short-term rehabilitation or sub-acute treatment needs. This facility-specific Respiratory Protection Program also takes into account that these already sensitive populations may be further compromised as the result of a contagious and/or pandemic-type event where ventilator equipment may be administered. Special circumstances involving this resident population that need to be incorporated into the RPP therefore include:

* Ensuring that all (i.e., 100%) facility staff receive proper medical evaluations, training and fit testing services as defined in this document.
* Frequent and continual review of this RPP is required to reflect potentially rapidly changing guidance/requirements as needed to adequately protect this sensitive resident population.
* Understanding that a selection of respirators as presented in this RPP should be reviewed prior to assigning the best staff protection per task given the wide variety of potential exposure scenarios. All options should be considered.
* Ensuring that this RPP integrates seamlessly with other related programs, all of which are designed to work together to protect both residents and working staff and meet the overall goal of infection control and disease prevention.

It is the policy of **(Enter Facility Name Here)** to protect the health and safety of its employees by (1) eliminating hazardous exposures where feasible; (2) using engineering and administrative controls to minimize hazardous exposures that cannot be eliminated; and (3) using respiratory protection and other personal protective equipment when the frequency and duration of exposures cannot be substantially reduced or eliminated.

The specific purpose of this respiratory protection program (RPP) is to maximize the protection afforded by respirators when they must be used. It establishes procedures necessary to meet the regulatory requirements described in OSHA’s Respiratory Protection standard (29 CFR 1910.134).

This program applies to all employees and contractors who are required to wear respiratory protection due to the nature of their work at **(Enter Facility Name Here)** during normal work operations and during non-routine or emergency situations. It applies to the use of air-purifying and air-supplying respirators, including filtering facepiece respirators. The current program is limited to the use of disposable particulate respirators (N95), however language has been included in this RPP to expand to other types of respirators as the need may arise.

The types of work activities which require employees to wear disposable N95 respirators include when:

1. Staff are providing bedside care (clinical or non-clinical) or performing certain aerosol generating procedures (BiPaP, CPAP, etc.) to individuals with a known or strongly suspected airborne transmissible respiratory disease, and program conditions will require N95 respirator use.
2. Situations that will require N95 respirator use will be defined in an individual’s work/medical designation, or as directed by the Respiratory Program Administrator (RPA), Infection Control Nurse (ICN) or designee.

This program applies to all employees and contractors who are required to wear respiratory protection due to the nature of their work at **(Enter Facility Name Here).** It applies to the use of air-purifying and air-supplying respirators, including filtering facepiece respirators (for example, N95s). Due to the inherent respiratory risk with associated with Nursing Home facilities as described above, it is understood that *all* facility staff (i.e., administrative/office, facility maintenance as well as medical care providers) and visiting contractors are required to be fit tested as part of facility policy. Requirements to don a respirator per this RPP are a function of overall respiratory risk per community disease transmissions rates with corresponding protective procedures as collectively defined and implemented by the Centers for Disease Control and Prevention (CDC), New York State Department of Health (NYS DOH), and New York City Department of Health & Mental Hygiene (NYC DOHMH). The only exception is during an Emergency Response Situation here the worst-case exposure scenario (greatest likelihood of airborne exposure to and/or between staff) may be assumed due to a lack of information. Accordingly, all contractors performing work within the building must also maintain and implement an auditable RPP with training records at least as stringent as the one maintained by **(Enter Facility Name Here)** with required paperwork as defined herein to be completed and submitted for review and approval prior to being allowed in the building.

As indicated, this document serves as only one component of a more comprehensive program intended to protect facility employees. Per OSHA and accepted Industrial Hygiene practice, the use of respirators, and primary reliance on engineering and administrative controls for controlling exposure is to be implemented per OSHA’s traditional adherence to a “hierarchy of controls.” Under this hierarchy, engineering and administrative controls are preferred to personal protective equipment (PPE). Understanding this, following engineering and related personal protective equipment (PPE) controls are therefore regarded as critical elements to be considered and addressed with the goal of preventing an over-reliance on respirators:

1. Providing sufficient outside air. For nursing home-type facilities, the minimum value may range from 20% to 40% (i.e., Centers for Medicare and Medicaid Services or CMS) and related to a specific number of air changes per hour (ACH).
2. Ensuring adequate HVAC maintenance, including filter type (i.e., MERV 13 or greater) with responsible change-out practices.
3. Other protective ventilation design elements as may be protective to the specific resident population such as use of UV lighting, portable (HEPA) filter systems to enhance vapor/mist/particle capture and air quality monitoring (i.e., CO2) technologies, together with good room/total airflow. For the latter, isolation practices/quarantine areas intended to limit/prevent the movement of air from between resident and non-resident areas are anticipated to serve as effective tools.
4. Use of additional negative pressure controls as may be appropriate enhance quarantine-type environments.
5. Ensuring that Infection Control-Risk Assessment (ICRA) tools are in place to minimize/control construction-related dust(s) from migrating to (immune-compromised) resident areas.
6. Ensuring that other facility equipment (i.e., cooling towers, etc.) with the potential to cause disease are responsibly maintained per New York State, New York City as well as manufacturer requirements.
7. Choose eye and face protection (i.e., safety glasses/face shields) that can be worn safely together with the type of respirator being used, meaning that care must be taken to ensure that the eye or face protection will not interfere with the seal of the respirator.
8. Ensure that administrative controls (i.e., hand washing, physical distancing, cleaning/disinfection of surfaces) are implemented together with required/recommended and below-listed disease prevention practices.

As already stated, this RPP and related programs with the overall goal of disease prevention are considered dynamic documents, and are anticipated to change based on current needs. This RPP is therefore required to be reviewed and updated as needed, and no less than annually, to maintain alignment with relevant Federal, New York State and New York City resources regarding nursing home, long term care, congregated housing, and similar facilities. These requirements are listed below together with initial RPP Facility Needs Assessment findings:

Federal

* OSHA Coronavirus Disease (COVID-19) Information Page: This resource provides relevant updates related to the healthcare industry, professional guidance as well as other useful tools and resources (<https://www.osha.gov/coronavirus>).
* Centers for Disease Control & Prevention (CDC) Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings: This document describes a core set of practices required in all healthcare settings, regardless of the type of healthcare provided (<https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html>).
* CDC Infection Control in Healthcare Personnel Page: This resource provides epidemiology and information on the control of selected infections (<https://www.cdc.gov/infectioncontrol/guidelines/healthcare-personnel/index.html>).
* CDC's Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic page: this guidance provides a framework for facilities to implement select infection prevention and control practices (e.g., universal source control) based on their individual circumstances (e.g., levels of respiratory virus transmission in the community); note that this guidance continues to apply after the expiration of the federal COVID-19 Public Health Emergency ([Current CDC Infection Control Recommendations](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control-recommendations.html&data=05|01|JCupriks%40trccompanies.com|303e85201d41499d949208db5723b109|543eaf7b7e0d4076a34d1fc8cc20e5bb|0|0|638199583206527522|Unknown|TWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D|3000|||&sdata=xHCbcBc%2FeuNj%2BqnNiRAk7EYvViVyWLLYXIdRfax1i8k%3D&reserved=0)).
* CDC’s Improvising Ventilation in Buildings page. This resource details minimum ventilation recommendations for all buildings, relationship to disease prevention strategies and provides opportunities for stakeholders to participate in the “Clean Air in Building Challenge” which offers step by step opportunities to measure and improve building air quality ([Improving Ventilation In Buildings | CDC](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/improving-ventilation-in-buildings.html)).
* Association for Professionals in Infection Control & Epidemiology/Centers for Medicare & Medicaid Services: This resource page provides guidance on required IPC measures as follows.
	+ (<https://apic.org/advocacy_update/cms-issues-updated-guidance-on-ipc-programs-in-nursing-homes/>
	+ <https://www.cms.gov/files/document/appendix-pp-guidance-surveyor-long-term-care-facilities.pdf> (page 769)

New York State

* New York State Department of Health (NYS DOH) February 10, 2023 correspondence: This advisory provides updated recommendations for the use of masks and face coverings that all healthcare settings in New York should follow during the ongoing COVID-19 pandemic. ([NYSDOH Guidance for use of Face Masks & Coverings in Health Care Facilities](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.health.ny.gov%2Fprofessionals%2Fhospital_administrator%2Fletters%2F2023%2Fdocs%2Fdal_23-02.pdf&data=05|01|JCupriks%40trccompanies.com|303e85201d41499d949208db5723b109|543eaf7b7e0d4076a34d1fc8cc20e5bb|0|0|638199583206527522|Unknown|TWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D|3000|||&sdata=M75hXkIqlXodBqxyH%2B9DLL0mcPsOZU6JZqlkeYZjOC0%3D&reserved=0)).
* NYS DOH public health law summary regarding Infection Prevention Control (IPC) practices in Nursing Homes (<https://www.health.ny.gov/regulations/public_health_law/>).

New York State

* New York City Department of Health & Mental Hygiene (NYC DOHMH) February 10, 2023 correspondence: This guide was developed for new infection preventionists and other nursing home staff with a focus on infection control and prevention. ([https://www.nyc.gov/assets/doh/downloads/pdf/em/infection-control-nursing-homes.pdf](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nyc.gov%2Fassets%2Fdoh%2Fdownloads%2Fpdf%2Fem%2Finfection-control-nursing-homes.pdf&data=05|01|JCupriks%40trccompanies.com|303e85201d41499d949208db5723b109|543eaf7b7e0d4076a34d1fc8cc20e5bb|0|0|638199583206527522|Unknown|TWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D|3000|||&sdata=%2FFIK6l0IWom2O82UAqzzQG50smGX4ZcvbX5mOgClWq0%3D&reserved=0))

**2. Responsibilities**

**2.1 Respirator Program Administrator**

**(Enter Name/Facility Department here)** has been designated as the respirator program administrator (RPA). The RPA has received appropriate training and is knowledgeable about the requirements of the OSHA Respiratory Protection standard and all elements of the respiratory protection program that need to be implemented to be effective. **(Enter Facility Name Here)** administration department has responsibility for all aspects of this program and has given this individual authority to make decisions required to ensure program success. Authority includes, but is not limited to, conducting hazard assessments for selecting appropriate respiratory protection, purchasing the necessary equipment and supplies, as well as developing and implementing the policies and procedures described in the written RPP.

Specifically, the RPA or other staff in conjunction with the RPA will, in accordance with OSHA’s Respiratory Protection standard

(29 CFR 1910.134):

* Conduct a hazard assessment and select the appropriate level of respiratory protection for each task or job title with potential exposure and record this information in the “Respirator Assignments by Task or Location” in Appendix A of this RPP.
* Develop and monitor respirator maintenance procedures.
* Coordinate the purchase, maintenance, repair, and replacement of respirators.
* This RPP is a dynamic document, and it must be at least annually evaluated for effectiveness, with employee input, and changes being made as needed. Any significant operations change represent changed conditions which require a similar re-evaluation.
* Provide or arrange for annual training on the use and limitations of respirators.
* Ensure that medical evaluations are provided.
* Ensure that annual respirator fit testing is provided.
* Maintain records of respirator training, medical clearance, and fit testing as required by 29 CFR 1910.134 and 29 CFR

1910.1020.

* Maintain a copy of this written RPP and program evaluations and ensure that they are readily accessible to anyone in the program.

**2.2 Supervisors**

Supervisors of employees included in the RPP will:

* Participate in the hazard assessment by evaluating all potential exposures to respiratory hazards, including exposure to chemicals and aerosol transmissible disease (ATD) pathogens, and communicating this information to the RPA.
* Identify employees and/or tasks for which respirators may be required and communicate this information to the RPA. It is anticipated that this will be a shared responsibility as the supervisor knows the day-to-day jobs/tasks, and the RPA may have more knowledge regarding respiratory protection requirements.
* Be responsible for ensuring that employees in their units follow the procedures outlined in the RPP. Schedule employees for medical evaluations, training, and fit testing and ensure that they are allowed to attend these appointments during work hours.

**2.3 Employees in the Program**

Employees assigned to jobs/tasks requiring the use of a respirator will:

* Complete the required questionnaire for medical clearance and participate in a medical examination.
* Adhere to facility policies on facial hair and respirator seal protection.
* Attend annual training and respirator fit testing as required in the RPP.
* Use, maintain, and dispose of respirators properly in accord with training and the procedures in the RPP.

**3. Respirator Selection**

**3.1 Hazard Assessment**

The RPA will select the types of respirators to be used by staff, based on the hazards employees may be exposed to and in accordance with aforementioned regulations and guidance (i.e., OSHA, CDC/ Healthcare Infection Control Practices Advisory Committee or HICPAC, NYS DOH/NYC DOH). The RPA and supervisor shall conduct a hazard assessment for each task, procedure, and work area with the potential for airborne contaminants to be present. The hazard assessment will include the following, as needed:

* Identification of potential exposures - Potential exposures to Aerosol Transmissible Diseases (ATDs) such as tuberculosis and SARS-CoV-2 are expected to be greatest for employees providing increased levels of resident interaction and/or direct care.
* A review of work processes to determine levels of potential exposure for all tasks and locations.
* Quantification or objective determination of potential exposure levels, where possible. This may not be feasible for ATD pathogens.

**3.2 NIOSH-Certified Equipment**

All respiratory protective equipment shall be approved by the National Institute for Occupational Safety and Health (NIOSH) for the configuration and environment in which it is going to be used. The NIOSH Certified Equipment List is found at the following Internet address: <http://www.cdc.gov/niosh/npptl/topics/respirators/cel>

The following definitions apply to equipment that may be issued to employees under this program:

1. **Filtering facepiece respirators (FFR):** Disposable, negative-pressure, air purifying respirators where an integral part of the facepiece or the entire facepiece is made of filtering material. The most commonly use and available type are N-95 respirators, but other types (N-99, N-100, P-95, P-99, P-100, R-95, R-99, and R-100) offer the same or better. A FFR may be reused by the same user, under some circumstances, so long as the respirator has not been obviously soiled or damaged (See discussion of specific conditions in which FFR reuse may be acceptable in section 8.1). It is noted that close/tight fitting respirators (i.e.., elastomeric facepieces) are suitable for the prevention of droplet transmissible infections. Note that respirators with an exhalation valve are not necessarily appropriate for prevention of such infections, unless worn in the company of staff donning similarly protective respiratory equipment.
2. **N-95 respirator: See above**; general term for a half mask negative pressure air-purifying respirator with NIOSH-approved N95 filters or filter material. N-95 filtering facepiece respirator or equivalent protection have increased abilities to prevent droplet transmissible infections relative to non-NIOSH certified respirators, surgical masks and face coverings, but are not considered as effective as close/tight fitting respirators described above. Note that for the purposes of this RPP, N-95 respirators are approved for working with residents with an airborne transmissible infection.
3. **KN-95 respirator**: KN-95 respirators are available and reserved for specific uses including return to work procedures, staff/visitor voluntary use as well as upgraded universal source control during a potential outbreak scenario.
4. **Powered air-purifying respirators (PAPR):** Air-purifying respirators that use a blower to force ambient air through air-purifying elements and into the respirator facepiece, helmet, or hood. As masks are maintained under significant positive pressure, the possibility remains for droplet transmissible infections.

**3.3 Assignment of Respirators by Task and Location**

The RPA will use the hazard assessment to assign respirators for use by personnel during specific procedures or in specific areas of the Nursing Home. These assignments are listed in Appendix A of this RPP, although it is noted that the N-95 may be required for all facility staff dependent on the level of risk present at the facility.

**3.4 Updating the Hazard Assessment**

The RPA will revise and update the hazard assessment any time an employee or supervisor identifies or anticipates a new exposure or changes to existing exposures. Any employee who believes that respiratory protection is needed during a particular activity must contact his or her supervisor or the RPA. The supervisor must contact the RPA whenever respiratory protection is requested. The RPA will assess the potential hazard with the employee and supervisor. If it is determined that respiratory protection is needed, all elements of this program will be in effect for those tasks and this RPP will be updated accordingly.

**4. Medical Evaluation**

Employees whose work activities require the use of respiratory protective equipment shall receive medical clearance prior to the use of a respirator and prior to being fit tested for a respirator. Medical evaluations will be performed by a physician or other licensed health care professional (PLHCP) at **(Enter Facility Name Here).** Evaluations shall be kept medically confidential, conducted by a qualified individual, and at no cost to the employee. To ensure the confidentiality of medical information, the medical evaluation shall not be conducted by the employee’s immediate supervisor and others in the employee’s direct line of authority.

Before being assigned to work in an area where respirators are required, each employee will complete the questionnaire in Appendix B of this RPP and deliver it to the in-house Physician or other licensed health care professional (PLHCP) in Charge **(Insert Name/Facility Department Here).** Employees may also speak directly with the PLHCP if they have questions. The PLHCP shall be familiar with the RPP, information from the RPA regarding the type of respiratory protection to be used by employees, duration, and frequency of respirator use, expected physical effort, other protective equipment worn, and any expected extremes of temperature or humidity.

The PLHCP will review completed questionnaires and make a medical determination as to whether the employee can don a respirator safely. The PLHCP may make this determination based on the questionnaire alone but may also require a physical examination of the employee and any tests, consultations, or procedures the PLHCP deems are necessary. The PLHCP will provide a written recommendation to **(Enter Name/Facility Department Here)**, which may clear the employee for all respirator use, or may specify restrictions or limitations on use, such as the type of respirator that may be worn, the duration that it may be worn, and the acceptable level of exertion while wearing the respirator. A copy of this written determination shall also be provided by the PLHCP to the employee.

Although the above is required upon initial respirator assignment and no less than annually thereafter for all qualifying staff, there are instances when an additional medical evaluation may be required (i.e., at a greater frequency). Such instances include when there are any changed conditions and can include:

* The employee reports medical signs or symptoms pertaining to the ability to properly use a respirator.
* The employee experiences facial changes occur that could affect the proper fit of the respirator (i.e., weight loss, cosmetic surgery, facial scarring, the installation of dentures or absence of dentures that are normally worn).
* A PLHCP, supervisor, or the RPA requests a re-evaluation.
* Observations made during fit testing or program evaluation indicate a need for re-evaluation (i.e., claustrophobia or difficulty breathing during the fit test).
* Changed working conditions are present (i.e., physical work effort, protective clothing, or temperature) which may result in a substantial increase in the physiological burden placed upon employee donning the respirator.
* Supply of a new type of respirator brand (i.e., make/model/manufacturer) previously not fit tested for.

**5. Fit Testing**

Prior to allowing any employee to don a tight-fitting facepiece (any approved device except a PAPR with loose-fitting facepiece, hood, or helmet that does not rely upon a tight-fitting facepiece-to-face seal), she/he will be fit tested by **(Insert Name/Facility Department/Current Vendor Here)** with the same make, model, style, and size of respirator to be used. Employees who use tight-fitting respirators are not permitted to have facial hair that interferes with the facepiece seal or valve function.

All employees required to wear respiratory protection shall receive medical clearance prior to completion of fit testing or donning of the respirator. Fit tests shall be provided at the time of initial assignment and annually thereafter. Additional fit tests will be provided whenever the employee experiences or the supervisor or RPA observes physical changes that could potentially affect respirator fit. Such changes include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

Employees who will be using only a PAPR with loose-fitting facepiece, hood, or helmet do not need to be fit tested. Any employee who cannot be successfully fit tested with a tight-fitting respirator may be assigned a PAPR with a loose-fitting facepiece, hood, or helmet for all tasks requiring a respirator. Per **(Insert Name of Facility Here)**, **a PAPR may be used for employees who have facial hair, and who cannot otherwise pass a fit test with a provided tight-fitting respirator as specified in this RPP.**

A qualitative fit test may be used for all wearers of half mask APRs, including filtering facepiece respirators with N-95. The qualitative test will follow the protocol for saccharine or Bitrex® solutions found in Appendix C. These documents are taken from Appendix A of the OSHA Respiratory Protection Standard (29 CFR 1910.134).

**6. Training**

Annual respirator training will be provided for all employees covered by this program. The training will be conducted by

**(Insert Name/Facility Department or current vendor here)** and will include the following:

* The general requirements of the OSHA Respiratory Protection standard
* The specific circumstances under which respirators are to be used.
* Respiratory hazards to which employees are potentially exposed during routine and emergency situations.
* Why the respirator is necessary and how proper fit, usage, and maintenance can ensure the protective effect of the respirator as well as how improper fit, usage or maintenance can compromise the protective effect of the respirator.
* The limitations and capabilities of the respirators that will be used.
* When and how to effectively use the respirators, including emergency situations and situations in which the respirator malfunctions.
* How to inspect, put on, remove, use, and check the seals of the respirator (for tight-fitting respirators such as N95 filtering facepiece respirators).
* The procedures outlined in this program for maintenance, storage, and cleaning or disposal of respirators. Employees who are issued PAPRs shall be instructed in procedures for charging and maintaining the batteries, and for checking the air flow rate.
* How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
* How and when to decontaminate (or safely dispose of) a respirator that has been contaminated with chemicals or hazardous/infectious biological materials.

Training shall be provided at the time of initial assignment to respirator use, but before actual use, and annually thereafter. Additional training will be provided when there is a change in the type of respiratory protection used, or when inadequacies in

the employee's knowledge or use of the respirator indicate that he or she has not retained the requisite understanding or skill.

The employee shall also receive training during the fit testing procedure regarding proper handling and fitting of the respirator, challenging of the facepiece-to-face seal, donning it during both normal (i.e., no challenge atmosphere) to familiarize themselves with the respirator, and finally to wear it in a challenge (i.e., fit testing procedure) atmosphere. Each tested employee shall receive proper fitting instructions, including demonstrations with practice regarding how the respirator should be worn, performing adjustments, and user seal checks per the manufacturer’s instructions (Appendix E of this RPP). This hands-on training shall supplement RRP Training requirements listed on the previous page.

Employees shall be given the opportunity during training, annual retraining and throughout the year to provide feedback on the effectiveness of the program and suggestions for its improvement. Based on experience, the most opportune time to provide feedback is at the annual training, although another venue may be chosen at the discretion of **(Insert Name of Facility Here).**

**7. Respirator Use**

Employees shall follow procedures for proper use of their respirator(s) under conditions specified by this program and in accordance with manufacturer make/model-specific respirator training. The primary respirator type to be used at the facility includes N-95s in affected patient areas, however all appropriate types of respirators to be used and their respective exposure conditions are listed in the respirator selection chart in Appendix A of this RPP.

Respirators relying on a tight facepiece-to-face seal must not be worn when conditions prevent a good seal. Such conditions may include a beard, long moustache, sideburns, sufficient razor stubble as well as scars, other facial deformities, piercings, and temple pieces on glasses. In addition, the absence of one or both dentures may also seriously affect the fit of a facepiece.

Employees and supervisors are expected to be diligent in observing practices pertaining to ensuring the safe use of respirators. To ensure proper protection, the wearer will perform a user seal check, in accord with manufacturer’s instructions and the training provided at the time of fit testing, each time he or she puts on a tight-fitting respirator. Employees who wear corrective glasses or other personal protective equipment must wear these during their fit testing to ensure that it does not interfere with the facepiece seal.

Employees must leave the respirator use area:

* To adjust their respirator if the respirator is not fitting correctly or impeding their ability to work.
* To wash their face if the respirator is causing discomfort or rash.
* To change the respirator.
* To inspect the respirator if it stops functioning as intended.

**8. Storage, Reuse, Maintenance, and Care of Respirators**

**8.1 Storage and Reuse**

Conventional Use of respirators should be standard practice; accordingly, use of given, approved and disposable N-95 respirator is permitted only for one (1) shift, unless replacement criteria are met as noted in this RPP. As it is not standard practice to re-use disposable N-95 respirators, Conservation and Crisis Capacity use can only be practiced when allowed by aforementioned guidance and standards put forth by CDC, NYS DOH and NYC DOHMH.

When criteria for re-use have been met, reusable respirators will be stored in a manner to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. In such a case, the respirator must be discarded when it is no longer in its original working condition, whether that condition results from contamination, structural defects, or wear. **[Insert facility policies regarding when FFRs will be used and discarded. This includes polices pertaining to training and procedures to reduce contact transmission and when reuse of the FFRs by employees are allowed.]** Disposable filtering facepiece respirators that will be reused in resident care areas should be stored in a breathable container such as a paper bag labeled with the user’s name, as per program policy.

PAPRs shall be cleaned and stored after use **(Insert Facility Location/Department)** and will be provided to employees upon request for use during aerosol-generating procedures being conducted on residents with suspected or confirmed airborne infectious disease or for use by individuals who are unable to wear a respirator with a tight-fitting facepiece. PAPRs must be stored at room temperature in a dry area that is protected from exposure to hazardous contaminants as per the manufacturer’s instructions.

**8.2 Inspection, Maintenance and Repairs**

All respirators will be inspected by the user prior to each use. Inspections should include a check of:

* Condition of the various parts including, but not limited to, the facepiece, and head straps.
* PAPR connecting tubes or hoses, air flow, and batteries.

Any defective respirators shall be removed from service. Defective disposable respirators will be discarded and replaced. Defective reusable respirators will be turned in to **(Insert Name/Facility Department Here)** for repair, adjustment, or disposal. **(Insert Name/Facility Department Here)** is responsible for charging and maintaining PAPR pumps, filters, and batteries when they are stored or not in use.

**For respirators maintained for emergency use, (Insert Name/Facility Department here) must:**

* Ensure that respirators remain accessible to the work area.
* Store respirators in such a manner as to be clearly marked for emergency use.
* Store respirators in accordance with any applicable manufacturer instructions.
* Inspect respirators at least monthly and in accordance with the manufacturer’s recommendations.
* Check for proper function before and after each use.
* Certify the respirator with documentation of date of inspection, inspector name/signature, findings, remedial action taken if necessary, and serial number.
* Provide certification information on a tag or label kept with the respirator or included in inspection reports stored as paper or electronic files.

**8.3 Cleaning and Disinfection**

PAPR issued for the exclusive use of an employee will be cleaned and disinfected **(Insert Name/Facility Department Here (if a centralized procedure is present))** as often as necessary to maintain a sanitary condition.

Reusable respirators used in fit testing and training will be cleaned and disinfected after each use.

**9. Program Evaluation**

The RPA will conduct an annual evaluation of the RPP to ensure that all aspects of the program meet the requirements of the OSHA Respiratory Protection standard and that the RPP is being implemented effectively to protect employees from respiratory hazards. This evaluation will be done at least annually and any time practices or products used change.

Program evaluation will include, but is not limited to:

* A review of the written program.
* A review of feedback obtained from employees (to include respirator fit, selection, use, and maintenance issues) to be collected during the annual training session.

The RPP will be revised as necessary, and records of revisions shall be maintained on file together with the written RPP. Any procedural changes that are implemented as a result of program evaluation shall be communicated to the employees and reinforced by their supervisors.

**10. Recordkeeping**

The RPA will ensure that the following records are maintained:

* Personnel medical records such as medical clearance forms required to don a respirator shall be retained by **(Insert Name/Facility Department Here)** as part of a confidential medical record. Medical clearance records must be made available in accord with the OSHA Access to Employee Exposure and Medical Records standard (29 CFR 1910.1020) and maintained for a minimum of thirty (30) years after an employee’s separation or termination.
* Documentation of training and fit testing will be kept by **(Insert Name/Facility Department Here)** until the next training or fit test. Fit testing information for each employee shll include the following: name, date, role at facility, specific N-95 product information and size for which fit testing was completed. Details of annual training as covered above are to be kept as part of the recordkeeping requirement.
* A copy of this RPP and records of program evaluations and revisions shall be kept by **(Insert Name/Facility Department Here)** and made available to all affected employees, their representatives, and representatives of OSHA upon request.

**Appendix A: Respirator Assignments by Task or Location**

**[Adapt as needed for tasks and exposures in your facility]**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task or Location** | **Potential Exposure** | **Respiratory Protection** | **Employees Included** |
| Performing, or present during, routine resident care and support operations for or near a resident suspected or confirmed with a disease requiring Airborne Precautions | Infectious aerosols | Minimum N-95 respirator or a more protective respirator | Physicians, NPs, infection control nurse, RNs/LVNs/LPNs, CNAs, medical technicians, dieticians, facilities, janitorial cleaning staff, chaplain, palliative care/ complimentary therapist, activities director, social workers, cafeteria staff, administrative, and direct serve professionals such as PT/OT/speech therapists, respiratory therapists, psychologists and all vendors |
| (Continue to add other activity descriptions here) |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Appendix B: Medical Clearance Questionnaires**

Appendix B to Sec. 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

([For the online PDF version of this OSHA document, please go to: **Respirator Medical Evaluation Questionnaire)**](https://www.osha.gov/sites/default/files/publications/OSHA3790.pdf)

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Your employer must allow you to answer the questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the healthcare professional who will review it.

**Part A Section 1. (Mandatory)** The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date:

2. Your name:

3. Your age (to nearest year):

4. Sex (circle one): Male/Female

5. Your height:

6. Your weight:

7. Your job title:

8. A phone number where you can be reached by the healthcare professional who reviews this questionnaire (include the

Area Code):

9. The best time to phone you at this number:

10. Has your employer told you how to contact the healthcare professional who will review this questionnaire

(circle one): Yes/No

11. Check the type of respirator you will use (you can check more than one category):

a. N, R, or P disposable respirator (filter-mask, non-cartridge type only).

b. Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

12. Have you worn a respirator (circle one): Yes/No If “yes,” what type(s):

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle “yes” or “no”).

|  |  |  |
| --- | --- | --- |
|  | **YES** | **NO** |
| 1. | Do you currently smoke tobacco, or have you smoked tobacco in the last month? |  |  |
| 2. | Have you ever had any of the following conditions? |  |  |
|  | a. | Seizures |  |  |
|  | b. | Diabetes (sugar disease) |  |  |
|  | c. | Allergic reactions that interfere with your breathing |  |  |
|  | d. | Claustrophobia (fear of closed-in places) |  |  |
|  | e. | Trouble smelling odors |  |  |
| 3. Have you ever had any of the following pulmonary or lung problems?   |
|  | a. | Asbestosis |  |  |
|  | b. | Asthma |  |  |
|  | c. | Chronic bronchitis |  |  |
|  | d. | Emphysema |  |  |
|  | e. | Pneumonia |  |  |
|  | f. | Tuberculosis |  |  |
|  | g. | Silicosis |  |  |
|  | h. | Pneumothorax (collapsed lung) |  |  |
|  | i. | Lung cancer |  |  |
|  | j. | Broken ribs |  |  |
|  | k. | Any chest injuries or surgeries |  |  |
|  | l. | Any other lung problem that you've been told about |  |  |
| 4. Do you currently have any of the following symptoms of pulmonary or lung illness?   |
|  | a. | Shortness of breath |  |  |
|  | b. | Shortness of breath when walking fast on level ground or walking up a slight hill or incline |  |  |
|  | c. | Shortness of breath when walking with other people at an ordinary pace on level ground |  |  |
|  | d. | Have to stop for breath when walking at your own pace on level ground |  |  |
|  | e. | Shortness of breath when washing or dressing yourself |  |  |
|  | f. | Shortness of breath that interferes with your job |  |  |
|  | g. | Coughing that produces phlegm (thick sputum) |  |  |
|  | h. | Coughing that wakes you early in the morning |  |  |
|  | i. | Coughing that occurs mostly when you are lying down |  |  |
|  | j. | Coughing up blood in the last month |  |  |
|  | k. | Wheezing |  |  |
|  | l. | Wheezing that interferes with your job |  |  |
|  | m. | Chest pain when you breathe deeply |  |  |
|  | n. | Any other symptoms that you think may be related to lung problems |  |  |
| 5. Have you ever had any of the following cardiovascular or heart problems? |  |  |
| a. Heart attack |  |  |
| b. Stroke |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **YES** | **NO** |  |
|  | c. | Angina |  |  |
|  | d. | Heart failure |  |  |
|  | e. | Swelling in your legs or feet (not caused by walking) |  |  |
|  | f. | Heart arrhythmia (heart beating irregularly) |  |  |
|  | g. | High blood pressure |  |  |
|  | h. | Any other heart problem that you've been told about |  |  |
| 6. Have you ever had any of the following cardiovascular or heart symptoms?   |  |
|  | a. | Frequent pain or tightness in your chest |  |  |
|  | b. | Pain or tightness in your chest during physical activity |  |  |
|  | c. | Pain or tightness in your chest that interferes with your job |  |  |
|  | d. | In the past two years, have you noticed your heart skipping or missing a beat |  |  |
|  | e. | Heartburn or indigestion that is not related to eating |  |  |
|  | f. | Any other symptoms that you think may be related to heart or circulation problems |  |  |
| 7. Do you currently take medication for any of the following problems?   |  |
|  | a. | Breathing or lung problems |  |  |
|  | b. | Heart trouble |  |  |
|  | c. | Blood pressure |  |  |
|  | d. | Seizures |  |  |
| 8. If you've used a respirator, have you ever had any of the following problems? (If you've never  used a respirator, check the following space and go to question 9.) |  |
|  | a. | Eye irritation |  |  |
|  | b. | Skin allergies or rashes |  |  |
|  | c. | Anxiety |  |  |
|  | d. | General weakness or fatigue |  |  |
|  | e. | Any other problem that interferes with your use of a respirator |  |  |

9. Would you like to talk to the healthcare professional who will review this questionnaire about  

your answers to this questionnaire?

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

|  |  |  |
| --- | --- | --- |
|  | **YES** | **NO** |
| 10. Have you ever lost vision in either eye (temporarily or permanently)? |  |  |
| 11. Do you currently have any of the following vision problems? |  |  |
| a. Wear contact lenses |  |  |
| b. Wear glasses |  |  |
| c. Color blind |  |  |
| d. Any other eye or vision problem |  |  |
| 12. Have you ever had an injury to your ears, including a broken eardrum? |  |  |
| 13. Do you currently have any of the following hearing problems? |  |  |
| a. Difficulty hearing |  |  |

|  |  |  |
| --- | --- | --- |
|  | **YES** | **NO** |
| b. Wear a hearing aid |  |  |
| c. Any other hearing or ear problem |  |  |
| 14. Have you ever had a back injury? |  |  |
| 15. Do you currently have any of the following musculoskeletal problems? |  |  |
|  | a. | Weakness in any of your arms, hands, legs, or feet |  |  |  |
|  | b. | Back pain |  |  |  |
|  | c. | Difficulty fully moving your arms and legs |  |  |  |
|  | d. | Pain and stiffness when you lean forward or backward at the waist |  |  |  |
|  | e. | Difficulty fully moving your head up or down |  |  |  |
|  | f. | Difficulty fully moving your head side to side |  |  |  |
|  | g. | Difficulty bending at your knees |  |  |  |
|  | h. | Difficulty squatting to the ground |  |  |  |
|  | i. | Climbing a flight of stairs or a ladder carrying more than 25 lbs |  |  |  |
|  | j. | Any other muscle or skeletal problem that interferes with using a respirator |  |  |  |

Any additional comments you would like to make:

To the best of my knowledge, the information I have provided is true and accurate

Employee Signature Date

**Appendix C: Qualitative Fit Test Protocol**

**[The protocols for qualitative fit testing with saccharin and Bitrex® is included. Edit this section if your facility performs the quantitative fit testing instead.]**

Appendix A to §1910.134—Fit Testing Procedures (Mandatory) Part I. OSHA-Accepted Fit Test Protocols

A. FIT TESTING PROCEDURES—GENERAL REQUIREMENTS

The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA- accepted fit test methods, both QLFT and QNFT.

1. The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.

3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.

4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.

5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.

6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:

(a) Position of the mask on the nose

(b) Room for eye protection

(c) Room to talk

(d) Position of mask on face and cheeks

7. The following criteria shall be used to help determine the adequacy of the respirator fit: (a) Chin properly placed;

(b) Adequate strap tension, not overly tightened; (c) Fit across nose bridge;

(d) Respirator of proper size to span distance from nose to chin;

(e) Tendency of respirator to slip;

(f) Self-observation in mirror to evaluate fit and respirator position.

8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from

side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.

11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the

test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

14. Test Exercises.

(a) Employers must perform the following test exercises for all fit testing methods prescribed in this appendix, except for the two modified ambient aerosol CNC quantitative fit testing protocols, the CNP quantitative fit testing protocol, and the CNP REDON quantitative fit testing protocol. For the modified ambient aerosol CNC quantitative fit testing protocols, employers shall ensure that the test subjects (i.e., employees) perform the exercise procedure specified in Part I.C.4(b) of this appendix for full-facepiece and half-mask elastomeric respirators, or the exercise procedure specified in Part I.C.5(b) for filtering facepiece respirators. Employers shall ensure that the test subjects (i.e., employees) perform the exercise procedure specified in Part I.C.6(b) of this appendix for the CNP quantitative fit testing protocol, or the exercise procedure described in Part

I.C.7(b) of this appendix for the CNP REDON quantitative fit testing protocol. For the remaining fit testing methods, employers shall ensure that the test exercises are performed in the appropriate test environment in the following manner:

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

(4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

(5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

RAINBOW PASSAGE (TO BE READ ALOUD DURING FIT TEST)

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

(6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for

QLFT)

(7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.

(8) Normal breathing. Same as exercise (1).

(b) Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

B. QUALITATIVE FIT TEST (QLFT) PROTOCOLS

1. GENERAL

(a) The employer shall ensure that persons administering QLFT are able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.

(b) The employer shall ensure that QLFT equipment is kept clean and well maintained so as to operate within the parameters for which it was designed.

2. SACCHARIN SOLUTION AEROSOL PROTOCOL

The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste threshold screening. The saccharin taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of saccharin.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches in diameter by 14 inches tall with at least the front portion clear and that allows free movements of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.

(2) The test enclosure shall have a 3⁄4 -inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his/her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a sweet taste.

(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the threshold check solution into the enclosure. The nozzle is directed away from the nose and mouth of the person. This nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The threshold check solution is prepared by dissolving 0.83 gram of sodium saccharin USP in 100 ml of warm water. It can be prepared by putting 1 ml of the fit test solution (see (b)(5) below) in 100 ml of distilled water.

(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that it collapses completely, then released and allowed to fully expand.

(7) Ten squeezes are repeated rapidly and then the test subject is asked whether the saccharin can be tasted. If the test subject reports tasting the sweet taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.

(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.

(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the saccharin is tasted. If the test subject reports tasting the sweet taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.

(10) The test conductor will take note of the number of squeezes required to solicit a taste response.

(11) If the saccharin is not tasted after 30 squeezes (step 10), the test subject is unable to taste saccharin and may not perform the saccharin fit test.

Note to paragraph 3(a): If the test subject eats or drinks something sweet before the screening test, he/she may be unable to taste the weak saccharin solution.

(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test. (13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.

(14) The nebulizer shall be thoroughly rinsed in water, shaken dry, and refilled at least each morning and afternoon or at least every four hours.

(b) Saccharin solution aerosol fit test procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test. (2) The fit test uses the same enclosure described in 3. (a) above.

(3) The test subject shall don the enclosure while wearing the respirator selected in section I. A. of this appendix. The respirator shall be properly adjusted and equipped with a particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.

(5) The fit test solution is prepared by adding 83 grams of sodium saccharin to 100 ml of warm water.

(6) As before, the test subject shall breathe through the slightly open mouth with tongue extended, and report if he/she tastes the sweet taste of saccharin.

(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of saccharin fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test. A minimum of 10 squeezes is required.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(9) Every 30 seconds the aerosol concentration shall be replenished using one half the original number of squeezes used initially (e.g., 5, 10 or 15).

(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of saccharin is detected. If the test subject does not report tasting the saccharin, the test is passed.

(11) If the taste of saccharin is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

(12) Since the nebulizer has a tendency to clog during use, the test operator must make periodic checks of the nebulizer to ensure that it is not clogged. If clogging is found at the end of the test session, the test is invalid.

3. BITREXTM (DENATONIUM BENZOATE) SOLUTION AEROSOL QUALITATIVE FIT TEST PROTOCOL

The BitrexTM (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the test subject prior to the conduct

of the screening test.

(a) Taste Threshold Screening.

The Bitrex taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of Bitrex.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure shall be clear from the respirator and allow free movement of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.

(2) The test enclosure shall have a 3⁄4 inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his or her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter taste.

(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the Threshold

Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The Threshold Check Solution is prepared by adding 13.5 milligrams of Bitrex to 100 ml of 5% salt (NaCl) solution in distilled water.

(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely, and is then released and allowed to fully expand.

(7) An initial ten squeezes are repeated rapidly and then the test subject is asked whether the Bitrex can be tasted. If the test subject reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes actually completed.

(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes actually completed.

(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether

the Bitrex is tasted. If the test subject reports tasting the bitter taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.

(10) The test conductor will take note of the number of squeezes required to solicit a taste response.

(11) If the Bitrex is not tasted after 30 squeezes (step 10), the test subject is unable to taste Bitrex and may not perform the Bitrex fit test.

(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test. (13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.

(14) The nebulizer shall be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.

(b) Bitrex Solution Aerosol Fit Test Procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test. (2) The fit test uses the same enclosure as that described in 4. (a) above.

(3) The test subject shall don the enclosure while wearing the respirator selected according to section I. A. of this appendix. The respirator shall be properly adjusted and equipped with any type particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.

(5) The fit test solution is prepared by adding 337.5 mg of Bitrex to 200 ml of a 5% salt (NaCl) solution in warm water.

(6) As before, the test subject shall breathe through his or her slightly open mouth with tongue extended, and be instructed to report if he/she tastes the bitter taste of Bitrex.

(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(9) Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).

(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of Bitrex is detected. If the test subject does not report tasting the Bitrex, the test is passed.

(11) If the taste of Bitrex is detected, the fit is deemed unsatisfactory and the test is failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

**Appendix D: User Seal Check Procedures**

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.

Available video and text resources:

<https://www.youtube.com/watch?v=pGXiUyAoEd8&ab_channel=agape1546>

 <https://www.cdc.gov/niosh/docs/2018-130/pdfs/2018-130.pdf>

**I. User Seal Check Procedures**

This is conducted by the respirator wearer to determine if the respirator is being properly worn. The user seal check can either be a positive pressure or negative pressure check. During a positive pressure user seal check, the respirator user exhales gently while blocking the paths for air to exit the facepiece. A successful check is when the facepiece is slightly pressurized before increased pressure causes outward leakage. During a negative pressure user seal check, the respirator user inhales sharply while blocking the paths for air to enter the facepiece. A successful check is when the facepiece collapses slightly

under the negative pressure that is created with this procedure. A user seal check is sometimes referred to as a fit check. A user seal check should be completed each time the respirator is donned (put on). It is only applicable when a respirator has already been successfully fit tested on the individual.

**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 E: Manufacturers’ Instructions for User Seal Checks**

**Insert copies of the applicable respirator manufacturers’ instructions for user seal checks in this section.**

**Appendix F: Pandemic Response**

Conventional Use of respirators should be standard practice; accordingly, use of given, approved and disposable N-95 respirator is permitted only for one (1) shift, unless replacement criteria are met as noted in this RPP. As it is not standard practice to re-use disposable N-95 respirators, Conservation and Crisis Capacity use can only be practiced when allowed by (Insert Facility Name here) and aforementioned guidance and standards put forth by CDC, NYS DOH and NYC DOHMH. This section should be routinely checked and reviewed to ensure that it is kept up to date.

CONTINGENCY CAPACITY

* Temporarily suspend annual fit testing.
* Use N-95 respirators beyond the manufacturer-designated shelf life for training and fit testing.
* Extend the use of N-95 respirators by wearing the same N-95 for repeated close contact encounters with several different residents.

CRISIS CAPACITY

* Use respirators beyond the manufacturer designated shelf life for healthcare delivery.
* Use respirators approved under standards used in other countries.
* Implement limited re-use of N95 respirators. During times of crisis, it may be needed to practice limited re-use with extended use. Per current CDC guidance (May 2021) limit re-use of N-95 respirators to no more than five uses (i.e., five donnings) per device by the same HCP, unless otherwise specified by the manufacturer. Recheck this guidance periodically to confirm it is current.
* Prioritize the use of N-95 respirators and facemask by activity.
* Use FDA-approved decontamination strategies for used NIOSH-approved filtering facepiece respirators.

**Appendix G: Voluntary Respiratory Use (OSHA Appendix D)**

**(N-95/KN-95 Respirators)**

**Part Number:** 1910

**Part Number Title:** Occupational Safety and Health Standards

**Subpart: 1**910 Subpart I

**Subpart Title:** Personal Protective Equipment

**Standard Number:** 1910.134 App D

**Title:** (Mandatory) Information for Employees Using Respirators When Not Required Under Standard.

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

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, of 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.

Employee Name (Print):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

RPA/Department Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Appendix H: Needs Assessment Report**