1. **Purpose**
2. To establish the requirements, responsibilities, and procedures for the selection, Medical evaluation, fit testing, training, proper use, maintenance and storage and limitations of respiratory protective equipment for employees. Furthermore, to ensure compliance with the Federal Occupational Safety and Health Administration and State specific requirements.
3. **Responsibility**
	1. The Respiratory Program Administrator (RPA) shall be responsible for ensuring compliance with the provisions of this procedure.
	2. Respirator Program Administrator shall set up an Occupational Medical Facility for medical clearance for respirator use. Respirator Administrator shall ensure Key Supervisors, respirator users are trained. Respirators users are medically cleared, fit tested on each specific respirator selected prior to use.
		1. Respirator Program Administrators are:
			1. Safety Division Managers
			2. Job Site Safety Managers as delegated by their Safety Division Manager
	3. Key Supervisor is responsible for identifying potential respirators hazards and contacting Respirator Program Administrator.
	4. Respirator Program Administrator shall conduct a preliminary hazard evaluation and complete a Site Specific Respiratory Program (AISH 32-D) based on the respiratory hazard and type of work to be performed. The Site Specific Respiratory Program shall be posted and updated if the task and/or respiratory hazard changes.
	5. Employees (respirator users) shall be responsible for complying with the provisions of this procedure and the site specific Respiratory Program.
	6. Employee shall notify their supervisor if they feel that the respiratory protection has changed or is not effective. Additionally, the employee shall notify their supervisor if any significant changes occur including but not limited to dramatic weight loss/gain, dental changes, facial scarring, prescriptive eyewear, cosmetic surgery or are sick (cold/flu), all of which may affect the skin to respirator seal and increase employee exposure.
4. **Definitions**
	1. ***Air-purifying respirator***- a respirator with an air-purifying filter, cartridge or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
	2. ***Atmosphere-supplying respirator***- a respirator that supplied the respirator user with breathing air from a source independent of the ambient atmosphere.
	3. ***Canister or cartridge***- a container with a filter, sorbent or catalyst or combination of these items, which removes specific contaminants from the air passed through the container.
	4. ***End-of-service-life indicator (ESLI)***- means a system that warns the respirator user of the approach of the end of adequate respiratory protection and will make it
	5. ***Escape only respirator***- a respirator intended to be used only for emergency exit
	6. ***Filtering facepiece (dust mask)***- a negative pressure particulate respirator with a filter as an integral part of the facepiece
	7. ***Fit Factor***- a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimate the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn
	8. ***Fit test***- the use of a protocol to quantitatively or qualitatively evaluate the fit of a respirator on an individual
	9. ***High efficiency particulate air (HEPA) filter****-* a filter that is at least 99.97% efficient in removing particles of 0.3 micrometers (µm) in diameter
	10. ***Immediately dangerous to life or health (IDLH)****-* an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual’s ability to escape from a dangerous atmosphere
	11. ***Physician or other licensed health care professional (PLHCP)***- person to review medical questionnaire and/or conduct medical evaluation
	12. ***Powered air-purifying respirator (PAPR)***- an air-purifying respirator that uses a blower to force the ambient air into the inlet covering
	13. ***Qualitative fit test (QLFT)-*** a pass/fail fit test to assess the adequacy of respirator fit
	14. ***Quantitative fit test (QNFT)-*** an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator
	15. **Respiratory Program Administrator**- shall be designated be the Division Manager. The Division manager will have the authority and responsibility for implementation or change this program as necessary; and shall be sufficiently familiar with applicable Federal and State standards
	16. ***Self-contained breathing apparatus (SCBA)-*** an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user
	17. ***Service life-*** the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer
	18. ***Supplied air respirator (SAR)-*** or airline respirator means an atmosphere-supplying respirator for which the source of the breathing air is not designed to be carried by the user
5. **General Requirements**
	1. Respiratory protection (like all other personal protective equipment) shall be used only in those instances where engineering or administrative controls are ineffective, impractical, or in the process of being installed. Respiratory protection shall be provided to all affected employees at no cost. At least two brands of respirator protection shall be avialiable for the employee use.
	2. Respirator Program Administrator and Key Supervisors shall ensure that employees have been medically cleared, fit-tested, and trained prior to utilizing respiratory protection equipment. Additionally, supervisors shall ensure that employees are utilizing the correct type of respiratory protection equipment identified in the job safety analysis, pre task plan or site specific respiratory protection program.
	3. The Key Supervisor shall retain records of training on job site.
	4. The Key Supervisor shall forward all records to Respirator Administrator and/or Safety Department for retention and tracking.
		1. Retention of Exposure and/or Medical Records will follow the applicable Federal and State requirements.
	5. Respirator users shall be clean-shaven prior to wearing respirator protection equipment.
	6. Preliminary evaluations of exposure (except radiation) shall be conducted prior to the respirator selection and documented on AISH 32-D Site Specific Respirator Program. Appropriate surveillance of the work area conditions shall be performed and the degree of employee exposure shall be documented according to the following classification of the respiratory hazard:
		1. Oxygen deficiency (less than 19.5% oxygen)
		2. Gas/vapor contaminants
		3. Particulate contaminants (aerosols, mists, dusts, fumes, fogs, smoke, and sprays)
		4. Combination of those listed above.

Each classification shall be further evaluated to determine if it is immediately dangerous to life/health, exceeds applicable occupational health standards, or is less than applicable standards. **Apollo employees will not work in IDLH environments unless approved by Corporate Safety Manager.**

* 1. Periodic inspections and worksite evaluations shall be performed by the Respirator Program Administrator to determine the continued effectiveness of respirators and the respiratory protection program.
	2. Supervisory personnel shall periodically monitor the use of respirators to ensure that they are being worn and stored properly.
1. **Respirator Selection**
	1. Following the preliminary hazard evaluation, the Respiratory Program Administrator and/or Apollo Safety will select and provide the appropriate NIOSH-certified respirator based on the hazard(s) to which the worker will be exposed. Selection of respirators and appropriate cartridges will be based on the hazard’s air concentration, chemical and physical form and the availability of oxygen. Evaluation of employee exposure levels will be used using personal monitoring and/or chemical manufacturer’s recommendations.
	2. Respirators and all filters, cartridges and canisters will be NIOSH-certified and shall be used in compliance with the conditions of its certification.
	3. For protection against gases and vapors, the employee will be provided with:
		1. An atmosphere-supplying respirator, or
		2. An air-purifying respirator provided that it is equipped with an end-of-service-life indicator (ESLI) or will have a change out schedule. In ideal conditions, respirator canisters used indoors will be replaced every 10 hours; respirator canisters used outdoors will be replaced every 8 hours. Hours are subject to change due to variables such as humidity, temperature and the individual. Apollo Safety, the Key supervisor and/or Respiratory Program Administrator are responsible to monitor, evaluate and take actions to control hazards that may be influenced by these variables.
	4. For protection against particulates, the employee will be provided with:
		1. An atmosphere-supplying respirator, or
		2. An air-purifying respirator provided that it is equipped with a HEPA filter or a filter certified for particulates by NIOSH.
	5. For those conditions where the nature and/or degree of the hazard(s) are unknown or employee exposure cannot be reasonably estimated, the atmosphere will be considered IDLH.
2. **Medical Evaluation**
	1. Approved Medical Questionnaire or initial medical evaluation shall be completed prior to fit testing and wearing a respirator and annual their after.
	2. Medical Questionnaire shall be filled out by employee during normal working hours and is considered confidential (AISH 32-A).
	3. Medical Questionnaire shall be reviewed by a physician or other licensed health care professional (PLHCP). Employee will have an opportunity to discuss the questionnaire and/or examination with the PLHCP.
	4. Employer will supply the PLHCP with the following information:
		1. Type and weight of the respirator to be used by the employee
		2. Duration and frequency of respirator use
		3. Expected physical work effort
		4. Additional protective clothing and equipment to be worn
		5. Temperature and humidity extremes that may be encountered
		6. A written copy of the Respiratory Protection Program
	5. Follow up medical evaluation shall be done if one or more of the following occur:
		1. The PLHCP request it
		2. Employee answers yes to any questions 1-8.
		3. Observations made during fit testing and program evaluation
		4. A change occurs in workplace conditions that may increase the physiological burden placed on an employee (additional PPE, physical work effort, etc.)
	6. Apollo reserves the right to remove an employee from the respirator program when additional follow up appointments are required.
	7. Medical Questionnaire response (in the form of a pass or fail) from PLHCP shall be reviewed and maintained in the safety file.
	8. The respirator user shall be given a copy of the Medical Questionnaire response from the PLHCP. This shall be documented on the training attendance form.
3. **Fit Test**
	1. Fit Testing shall not be conducted until employee has been medically approved by a PLHCP to wear a respirator.
	2. Employee shall be provided with at least 2 brands of respirators to choose from to ensure best fit.
	3. Fit tests are not required for respirators that are used for voluntary use (dust mask/filtering face peice only), escape-only respirators or loose-fitting/hood respirators.
	4. When using a tight-fitting respirator the employee will be fit tested prior to initial use, whenever a different face piece is used, there are significant changes to the employee’s physical condition that could affect respirator fit (i.e. facial scarring, dental changes, cosmetic surgery, significant weight loss/gain, etc.) and at least annually thereafter.
	5. The employee will be fit tested with the same make, model, style and size of the respirator they will be using. Quantitative fit-testing for negative pressure respirators shall be performed by qualified personnel.
	6. Qualitative fit testing protocols will be followed and is acceptable for ½ mask and full face mask negative pressure respirators under Federal OSHA and OR-OSHA programs. WISHA Qualitative fit test is for ½ mask negative pressure respirators only.
		1. Refer to Qualitative fit test form (AISH 32-B)
	7. Quantitative fit-testing protocols shall be followed for all other types of respirators.
		1. Refer to Federal or State Specific Quantitative fit test protocols.
		2. Quantitative fit tests will only be performed by persons trainied in the use of necessary equipment.
	8. All fit tests shall be valid for a maximum of 1 year.
	9. Fit test record for each employee will be retained until the next fit test is administered.
4. **Training**
	1. Employee training will be completed prior to requiring the employee to wear a respirator, and must be conducted in a manner that is understandable to the employee.
	2. Respiratory Training shall be conducted annually for both mandatory and voluntary respirator use.
	3. Personnel who instruct others in the proper use, operation, and handling of respirators shall be familiar with the OSHA/OR-OSHA/WISHA training requirements and the specific respiratory needs at the jobsite.
	4. Employee shall be trained and must be able to demonstrate knowledge of at least the following:
		1. Explanation of hazards and how improper fit, usage, or maintenance can compromise the protective effect of the respirator
		2. Explanation of engineering/administrative controls in use
		3. Selection criteria
		4. Limitations and capabilities
		5. Proper use (including in emergency situations)
		6. How to inspect, put on, remove, and check the seals
		7. Procedures for maintenance, care and storage
		8. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
	5. The Respiratory Training Checklist (attachment AISH 32-C) shall be used to document respirator training (mandatory and voluntary).
	6. Employee will be given a copy of the Appendix D (AISH 32-E) and initial on Training Checklist.
	7. Retraining will be done annually and when:
		1. There are changes in the workplace or type of respirator render previous training obsolete
		2. Inadequacies in the employees knowledge or use of the respirator indicate he/she does not understand the requirements
		3. Any other situation that arises in which retraining appears necessary to ensure safe respirator use.
	8. Key Supervisor shall be trained to the requirement of this procedure.
5. **Respirator Use**
	1. For mandatory use, tight fitting respirators will not be worn by users with facial hair that comes between the sealing surface of the facepiece and the face and/or by those with any condition that interferes with the face-to-face piece seal or valve function. For voluntary use of filtering facepieces (dust masks) and the use of hoods, facial hair is permitted but not recommended.
	2. Each individual shall perform the following personal inspection of respiratory protection equipment before use and in accordance with section 10.3 of this procedure.
	3. Users must perform a seal check prior to each use:
		1. *Positive pressure check:* close off the exhalation valve and exhale gently into the face piece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the face piece without any evidence of outward leakage of air at the seal.
		2. *Negative pressure check:* close off the inlet opening of the canister or cartridge(s) by covering with the pals of the hand(s) or by preplacing the filter seal(s). Inhale gently so that the face piece collapses slightly, and hold the breath for 10 seconds. If the test cannot be effectively covered by the hands, use a piece of latex or nitrile glove. If the face piece remains its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.
	4. The respirator and its components will be reevaluated when there are changes in work area conditions or stress that may affect respirator effectiveness.
	5. The employee must leave the respiratory use area to wash their faces or respirator, change the respirator filter, cartridge or canister elements or if they detect a vapor or gas breakthrough, changes in breathing resistance or leakage of the face piece. If they detect a breakthrough the employee is required to leave the area and contact their supervisor, Apollo Safety or the Respiratory Program Administrator. The respirator must be evaluated, replaced or repaired before the employee is allowed to return to that work area.
	6. Air quality for supplied-air and SCBA respirators will meet the requirements for Grade D quality breathing air.
	7. Compressors gaseous air shall also be Grade D quality. Lubricated compressors shall have a high temperature alarm and a Carbon Monoxide detection system. Only compressors designed for breathing air shall be used.
	8. Only breathing air hoses and connections original from the manufacture shall be used. These connections cannot be interchanged with other air hoses and connection.
	9. Only respirator equipment approved by the NIOSH shall be used. Each respirator shall be used only under those conditions included in the respective approvals.
6. **Maintenance, Care and Storage**
	1. Cleaning and Disinfecting
		1. Each respirator issued will be clean, sanitary and in good working order.
		2. Dust masks are not to be shared between employees. At a minimum they are to be disposed of by the end of shift, or as often as necessary to ensure they are clean and in good working order.
		3. After each use employee shall cleaned and disinfected the respirator in an atmospherically clean environment and put in a sealable plastic bag for storage.
			1. 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.
			2. Wash components in warm water with a mild disinfecting detergent or use cleaner recommended by the manufacture. Where water is not available alcohol wipes are acceptable..
			3. Rinse components thoroughly in clean, warm water. Drain.
			4. Components should be hand-dried with a clean lint-free cloth or air dried.
			5. Reassemble face piece, replacing cartridges, filters, and canisters where necessary.
			6. Test the respirator to ensure that all components work properly.
		4. Respirators used in fit testing and training shall be cleaned and kept in sanitary condition and stored in a sealable plastic bag.
		5. Cartridge change out should fallow the schedule of the manufacturer of the filter company or on an as needed basis based on exposure.
	2. Storage
		1. Clean respirators shall be kept in a clean atmosphere within sealable containers/bags. Containers must protect them from extreme temperatures, excessive moisture, sunlight, and damaging chemicals.
		2. Shall be packed and stored to prevent deformation of the face piece and exhalation valve.
		3. Emergency respirators must be kept accessible to the work area, in a clearly marked compartment and in accordance to manufacturer’s recommendations.
	3. Inspection
		1. All respirators shall be inspected prior to each use. Inspection should include:
			1. The plastic bag in which the respirator is packaged is intact and unopened prior to respirator use
			2. Filters or hose connections are tight
			3. View windows are clear
			4. Various parts including but not limited to: face piece, valves, regulators, straps, buckles, connecting tube, cartridges and sealing surfaces are in good condition (no missing parts, rips, tears, holes, etc.)
		2. Respirators used for emergency situations shall be inspected at least monthly and in accordance with the manufacturer’s recommendations.
	4. Repairs/Failure
		1. Respirators that fail an inspection or are otherwise found to be defective will be removed from service and either discarded or repaired.
		2. If an employee detects or suspects a breakthrough or resistance during use, he/she shall leave the contaminated area immediately and inspect his respirator for any damage. If breakthrough is confirmed, the employee shall report the incident to his/her supervisor immediately. Depending on the exposure the employee suffered an incident report or near miss report may be filled out.
		3. Repairs will only be done by a qualified person and in accordance to manufacturer’s recommendations.
		4. Parts from different manufacturers cannot be interchanged on the respirator.
7. **Program Evaluation**
	1. Random inspections may be conducted and documented by Apollo IS&H to ensure that respirators are properly selected, used, maintained and respiratory fit is still effective.
	2. A comprehensive respirator program self-evaluation (AISH 32-F) shall be conducted as necessary and at least annually by the Respiratory Program Administrator by doing the following:
		1. Make sure site specific procedures and program specifications are followed and appropriate.
		2. Make sure selected respirators continue to be effective in protecting the employee.
		3. Ensure supervisors are periodically monitor employee respirator use to make sure employees are using them correctly.
		4. Regularly ask employees required to use respirators about their views concerning the program effectiveness and whether they have problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:
			1. Respirator fit during use
			2. Any effects of respirator use on work performance
			3. Respirators being appropriate for the hazards encountered
			4. Proper use under current worksite conditions
			5. Proper maintenance
	3. Accidental exposure to potentially harmful contaminants shall be investigated to determine any relationship to inadequate respiratory protection.
8. **Voluntary Respirator Use**
	1. In situations where respirator use is not mandatory, NIOSH approved filtering facepieces (dust masks) may be used if employee chooses. No other type of respirators shall be used.
	2. Employees who choose to use filtering facepieces voluntarily shall be trained on the uses, limitations and capabilities, cleaning, maintenance and storage of the dust masks. A copy of AISH 32-E Appendix D to 1910.134 shall be given to the employee. No fit test or medical exam is required.
	3. Training Record AISH 32-C will be completed and retained in the employee’s file.
	4. Employee engaging in voluntary respirator use should be aware of the following:
		1. Read and follow all manufacturer instructions for use, maintenance, cleaning, care and limitations
		2. Dust mask must be NIOSH certified
		3. Do not wear dust mask into atmospheres containing contaminants for which it is not designed
9. **Record Keeping**
	1. Prior to wearing a respirator, the employee must have these documents on file:
		1. Mandatory use:
			1. Attachment AISH 32-A (Medical Questionnaire and response from PLHCP)
			2. Attachment AISH 32-B (Fit Test Record (Qualitative or Quantitative))
			3. Attachment AISH 32-C (Training Record)
		2. Voluntary use:
			1. Attachment AISH 32-C (Training Record)
	2. Records of medical evaluations will be retained and made available in accordance with 29 CFR 1910.1020.
		1. The RPA is responsible to ensure the Medical facility used to medically clear an employee shall maintain records. If this is not possible then the RPA shall send records for secure storage to HR department.
	3. Records of Qualitative and Quantitative fit tests for each employee will be retained until the next fit test is administered
	4. A written copy of the current respirator program will be retained. Copies of the Site Specific RPP should be maintained with Project documents.
10. **Attachments**

AISH 32-A Respirator Medical Questionnaire

AISH 32-B Qualitative Fit Test Form

AISH 32-C.1 Respirator Training Checklist (Mandatory Use)

AISH 32-C.2 Respirator Training Checklist (Voluntary Use)

AISH 32-C.3 Respirator Training Checklist (PAPR Use)

AISH 32-D Site Specific Respirator Program

AISH 32-E Appendix D

AISH 32-F Annual Respiratory Program Self-Evaluation

AISH 32-G Rainbow Passage

1. **References**

29 CFR 1910 Occupational Safety and Health Standards (OSHA)

WAC 296-842 Occupational Health Standards (WISHA)

OAR 1910.134 OR-OSHA Respiratory Protection

**AISH 32-A**

**RESPIRATOR MEDICAL QUESTIONNAIRE**

**Please Print Clearly. Please give information or details to any "yes" answers. This will help the Dr. to better evaluate this questionnaire.**

**To the employer:**

You must not review employee questionnaires.

**To the employer's PLHCP:**

Answers to questions in Section 1 and question 9 in Section 2 of Part A do not require further medical evaluations.

**To the employee:**

Your employer must allow you to answer this 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 health care 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. Date of Birth: 4. Sex (circle one): Male / Female

5. Your height:\_\_\_\_\_\_\_\_\_\_ft.\_\_\_\_\_\_\_\_\_\_in. 6. Your weight:\_\_\_\_\_\_\_\_\_\_\_\_lbs.

7. Your job title:

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):

1. The best time to telephone you at this number:

10. Has your employer told you how to contact the health care 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 (dust mask style, half facepiece respirators without cartridges).

b.\_\_\_\_\_\_Check all that apply.

o Half mask o Full facepiece mask o Helmet hood o Escape

o Non-powered cartridge or canister o Powered air-purifying cartridge respirator (PAPR)

o Supplied-air or Air-line o Disposable filtering facepiece (for example N-95)

Self contained breathing apparatus (SCBA): o Demand or o Pressure demand

Other:

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”).

**1.** Do you ***currently*** smoke tobacco, or have you smoked tobacco in the last month: Yes / No

**2.** Have you ***ever had*** any of the following conditions?

a. Seizures (fits):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Diabetes (sugar disease):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Allergic reactions that interfere with your breathing:\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Claustrophobia (fear of closed-in places):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

e. Trouble smelling odors:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Yes / No

**3.** Have you ***ever had*** any of the following pulmonary or lung problems?

a. Asbestosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Asthma:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Yes / No

c. Chronic bronchitis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Emphysema:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

e. Pneumonia:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

f. Tuberculosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

g. Silicosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

h. Pneumothorax (collapsed lung):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

i. Lung cancer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

j. Broken ribs:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

k. Any chest injuries or surgeries:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

l. Any other lung problem that you've been told about:\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

**4.** Do you ***currently*** have any of the following symptoms of pulmonary or lung illness?

a. Shortness of breath:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Shortness of breath when walking fast on level ground or walking

up a slight hill or incline:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Shortness of breath when walking with other people at an ordinary

 pace on level ground:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Have to stop for breath when walking at your own pace on

 level ground:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

e. Shortness of breath when washing or dressing yourself:\_\_\_\_\_\_\_\_\_\_ Yes / No

f. Shortness of breath that interferes with your job:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

g. Coughing that produces phlegm (thick sputum):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

h. Coughing that wakes you early in the morning:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

i. Coughing that occurs mostly when you are lying down:\_\_\_\_\_\_\_\_\_\_ Yes / No

j. Coughing up blood in the last month:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

k. Wheezing:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

l. Wheezing that interferes with your job:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

m. Chest pain when you breathe deeply:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

n. Any other symptoms that you think may be related to lung problems: Yes / No

**5.** Have you ***ever had*** any of the following cardiovascular or heart problems?

a. Heart attack:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Stroke:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Angina:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Heart failure:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

e. Swelling in your legs or feet (not caused by walking):\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

f. Heart arrhythmia (heart beating irregularly):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

g. High blood pressure:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

h. Any other heart problem that you've been told about:\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

**6.** Have you ***ever had*** any of the following cardiovascular or heart symptoms?

a. Frequent pain or tightness in your chest:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_Yes / No

b. Pain or tightness in your chest during physical activity:\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Pain or tightness in your chest that interferes with your job:\_\_\_\_\_\_\_ \_Yes / No

d. In the past 2 years, have you noticed your heart skipping or

missing a beat: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Yes / No

e. Heartburn or indigestion that is not related to eating:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

f. Any other symptoms that you think may be related to heart

or circulation problems:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_Yes / No

**7.** Do you ***currently*** take medication for any of the following problems?

a. Breathing or lung problems:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Yes / No

b. Heart trouble:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

c. Blood pressure:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

d. Seizures (fits):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

**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:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

b. Skin allergies or rashes:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

c. Anxiety:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

d. General weakness or fatigue:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_Yes / No

e. Any other problem that interferes with your use of a respirator:\_ \_\_\_Yes / No

**9.** Would you like to talk to the health care professional who will review this

questionnaire about your answers to this questionnaire:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

**Stop Here if you are only going to use a Half-Face Respirator. Continue if you are going to use a Full-Face Respirator.**

**Part A. Section 3. Mandatory for SCBA or Full Facepiece Respirator Users**

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.

**10.** Have you ***ever lost*** vision in either eye (temporarily or permanently):\_\_\_\_\_\_ Yes / No

**11.** Do you ***currently*** have any of the following vision problems?

a. Wear contact lenses:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Wear glasses:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Color blind:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Any other eye or vision problem:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_Yes / No

**12.** Have you ***ever had*** an injury to your ears, including a broken ear drum: \_\_\_ Yes / No

**13.** Do you ***currently*** have any of the following hearing problems?

a. Difficulty hearing:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Wear a hearing aid:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Any other hearing or ear problem:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

**14.** Have you ***ever had*** a back injury:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

**15.** Do you ***currently*** have any of the following musculoskeletal problems?

a. Weakness in any of your arms, hands, legs, or feet:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

b. Back pain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

c. Difficulty fully moving your arms and legs:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

d. Pain or stiffness when you lean forward or backward at the waist: \_\_\_\_\_\_\_\_\_Yes / No

e. Difficulty fully moving your head up or down:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

f. Difficulty fully moving your head side to side:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

g. Difficulty bending at your knees:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

h. Difficulty squatting to the ground:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes / No

i. Climbing a flight of stairs or a ladder carrying more than 25 lbs.: \_\_\_\_\_\_\_\_\_\_Yes / No

j. Any other muscle or skeletal problem that interferes with using a respirator:                                                                                                           Yes / No

**AISH 32-B**

**Respirator Qualitative Fit Test Form**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Company:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Respirator Type (circle one): Air-purifying Half-Face / Air-purifying Full Face

2. Make:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Model:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Size:\_\_\_\_ Filter Type:\_\_\_\_\_\_\_

3. Approved by Physician or other licensed health care professional (PLHCP): Yes / No

 If yes is selected, date of approval:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Type of testing media used: \_\_\_\_\_Saccharin \_\_\_\_\_Bitrex \_\_\_\_\_\_ Irritant Smoke

\_\_\_\_\_Other (describe)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Have user compete the following:

|  |  |
| --- | --- |
| **Description** | **Completed** |
| Wear respirator to be tested for at least 5 minutes prior to fit test |  |
| Verify user has completed respirator training to include proper fit, wear, and maintenance as outlined in Apollo AISH 32 |  |
| Verify user has no facial hair or sideburns that effect mask-to-face seal  |  |
| Demonstrate proper donning and doffing and ensures proper seal around face |  |
| Complete negative and positive seal check |  |
| Conduct a sensitivity check on user without respirator to elicit a response and make them familiar with its irritating properties |  |
| Have the worker attach the P-100 filters suitable for stannic chloride (irritant smoke), put on, adjust, and seal check the respirator without assistance |  |

6. Conduct test while user performs the following actions and positions in order:

|  |  |  |
| --- | --- | --- |
| **Description** | **Pass** | **Fail** |
| Normal breathing while standing for 1 minute |  |  |
| Deep breathing while standing for 1 minute |  |  |
| Slowly turn head from side to side while standing for 1 minute, pausing at each extreme position to inhale (be careful not to bump the respirator) |  |  |
| Slowly move head up and down while standing to extreme positions for 1 minute, inhaling in the up position (be careful not to bump the respirator) |  |  |
| Have the worker talk slowly and loud enough to be heard clearly for 1 minute (have the worker read from a prepared text such as the rainbow passage( Appendix G), count backwards from 100, or recite a song or poem) |  |  |
| Have the worker grimace, smile, or frown for 15 seconds |  |  |
| Bend over to touch toes while standing and repeat at a comfortable pace for 1 minute |  |  |
| Normal breathing again while standing for 1 minute |  |  |
| Have the worker remove the respirator and perform another sensitivity check and check for response to irritant smoke |  |  |

7. Question the worker on the comfort of the respirator experienced during the test (if worker experienced discomfort, provide another model and/or size of respirator and conduct new fit test procedure).

User Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fit Test Administrator Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**APOLLO RESPIRATORY PROTECTION TRAINING CHECKLIST (AISH 32-C.1)**

**Mandatory Only**

User’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Trainer’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Medical Evaluation: Yes (*date*)\_\_\_\_\_\_\_\_\_\_\_ No
2. Fit Tested: Yes (*date*)\_\_\_\_\_\_\_\_\_\_\_ No
3. Training: Mandatory Voluntary (complete other side)

**NIOSH Approved Respirator Information:** Type\_­­­\_\_\_\_\_ Manufacture\_\_\_\_\_\_\_\_\_ Size\_\_\_\_\_\_\_

1. **When is a respirator necessary?**
	1. When it’s required by the SDS
	2. When the PEL is exceeded
	3. When it’s required by company policy
	4. All of the above
2. **True or False:** The results of the preliminary workplace hazard assessment, knowledge of the chemical, extent of use, levels in the air and Permissible Exposure Level (PEL) will determine the type of respirator and cartridge used.
3. **The following can affect the effectiveness of the respirator:**
	1. Improper fit
	2. Improper usage
	3. Facial hair
	4. Lack of maintenance
	5. All of the above
4. **True or false:** facial hair is permitted while using a respirator for mandatory use.
5. **Respirators should be the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ line of defense to control respirable hazard.**

a. First b. Last c. Only d. We don’t conduct work that requires respiratory protection

1. **True or False:** All cartridges are the same, so it does not matter what color I get and can intermix styles from different manufacturers.
2. **True or False:** The fit test is for the specific make, model, and size of the respirator. If one of those changes a new fit test is required.
3. **Limitations of air-purifying respirators include:**
	1. Must be changed regularly
	2. The right cartridge for the contaminant of concern must be chosen
	3. Use in oxygen deficient atmosphere
	4. They may not provide adequate protection in confined spaces, major leaks/spills, or for certain highly toxic chemicals
	5. All of the above
4. **You must inspect your respirator prior to each use for the following:** (circle all that apply)
	1. Filters are tight/correct for the hazard
	2. View windows are clear
	3. Valves, regulators and buckles are tight
	4. Positive and negative seal check
5. **True or False:**Respirators must be cleaned after each use and stored in a clean, dryroom out of direct sunlight.
6. **True or False:** If someone is breathing heavily, sweating profusely, fidgeting, dizzy, and/or having a panic attack stay calm and get them to a safe area prior to removing the respirator.

I have been trained and understand the above information

**Trainer only**

Witnessed respirator wearer don/doff respirator correctly and seal check effectively **Initial\_\_\_\_\_\_\_\_\_\_\_**

Score:

Circle one: Pass Fail

I have received a copy of PLHCP Medical Recommendations (Medical Clearance)

Reviewed AISH 32

User’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

Trainer’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

**APOLLO RESPIRATORY PROTECTION TRAINING CHECKLIST (AISH 32-C.2)**

**Voluntary Only**

User’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Trainer’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Medical Evaluation: N/A (for voluntary use only)
2. Fit Tested: N/A (for voluntary use only)
3. Training: Voluntary

**NIOSH Approved Filtering Face-piece Respirator ‘Dust Mask’:** Yes\_­­­\_\_\_\_\_ No\_\_\_\_\_\_\_\_\_

1. **True or False:** In situations where respirator use is not mandatory, NIOSH approved filtering face-piece respirator (dust mask) may be used if the employee chooses. No other type of respirators shall be used.
2. **True or False:** Filtering face piece respirators protect you from airborne dust, spray, mist, fog, fume or aerosol particulates, not solvent vapor, gas or oxygen deficiency.
3. **For voluntary respirator use, the following are required:**
	1. Medical clearance
	2. Fit test
	3. Training
	4. All of the above
4. **The following can affect the effectiveness of the respirator:**
	1. Improper fit
	2. Improper usage
	3. Lack of maintenance
	4. All of the above
5. **True or false:** facial hair is permitted while using a filtering face-piece respirator (dust mask) for voluntary use.
6. **True or False:** one disadvantage is that filtering face-piece respirator (dust mask) are a one-size-fits-all.
7. **The following must be inspected prior to each use:**
	1. Tears and rips
	2. Cleanliness
	3. Elasticity of the head band
	4. All of the above
8. **True or False:** afiltering face-piece respirator (dust mask) must be cleaned after each use.
9. **Filtering face piece respirators** **are effective in:**
	1. Emergency situations
	2. Oxygen deficient atmospheres
	3. Dusty areas
	4. All of the above
10. **True or False:** Sharing filtering face-piece respirator (dust mask) is permitted at Apollo.
11. **True or False:** If someone is breathing heavily, sweaty, fidgeting, and/or having a panic attack you need to stay calm and get them to a safe area prior to removing the respirator.

I have been trained and understand the above information

I understand that this training expires one year from today

I have received a copy of Appendix D (for voluntary use only)

Reviewed AISH 32

User’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

Trainer’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

**Trainer only**

Witnessed respirator wearer don and doff respirator correctly **Initial\_\_\_\_\_\_\_\_\_\_\_**

Score:

Circle one: Pass Fail

**Trainer only**

Witnessed respirator wearer don and doff respirator correctly **Initial\_\_\_\_\_\_\_\_\_\_\_**

Score:

Circle one: Pass Fail

**APOLLO RESPIRATORY PROTECTION TRAINING CHECKLIST (AISH 32-C.3)**

**PAPR Only**

User’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Trainer’s name (print)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Medical Evaluation:
2. Fit Tested: N/A
3. Training: PAPR
4. **Yes or No:** Have you been through a hands-on demonstration of the PAPR.
5. **True or False:** PAPR’s protect you from airborne dust, spray, mist, fog, or Welding fumes, not solvent vapor, gas or oxygen deficiency.
6. **Which of the following are required when using a PAPR:**
	1. Medical clearance
	2. Fit test
	3. Training
	4. Both A and C
7. **The following can affect the effectiveness of the PAPR:**
	1. Improper fit
	2. Improper usage
	3. Lack of maintenance
	4. All of the above
8. **True or false:** facial hair is permitted while using a PAPR.
9. **True or False:** one disadvantage of using a PAPR is that PAPR’s are big and bulky.
10. **The following must be inspected prior to each use:**
	1. Tears and rips
	2. Cleanliness
	3. Battery and filter
	4. All of the above
11. **True or False:** aPAPR must be cleaned after each use.
12. **PAPR’s are effective in:**
	1. Emergency situations
	2. Oxygen deficient atmospheres
	3. Dusty areas
	4. All of the above
13. **True or False:** In addition to the PAPR, general ventilation should be used to protect surrounding workers.
14. **True or False:** If someone is breathing heavily, sweaty, fidgeting, and/or having a panic attack you need to stay calm and get them to a safe area prior to removing the respirator.
15. **True or False:** your PAPR should be stored in a clean dry area or in its original bag at the end of each s

I have been trained and understand the above information

I Understand that this training expires one year from today

Reviewed AISH 32

User’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

Trainer’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

**AISH 32-D Apollo Site Specific Respirator Program (Non-Voluntary)**

|  |  |
| --- | --- |
| Project Name: | Project Number: |
| Location: | Date: |
| Program Administrator: |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Specific Tasks Being Performed** | **Routine?** | **Respiratory Hazards** (Check one) | **Type of Respirator**(Check one)Contact Safety Dept. for assistance | **Required Forms Completed and on Site for ALL employees involved** |
|  | Yes | No | \_\_\_ Oxygen Deficient (less than 19.5%)\_\_\_ Gas/Vapors\_\_\_ Particulate (aerosols, mists, dusts, fumes, fogs, smoke, and sprays)\_\_\_\_ Combination of those listed above |  | Half mask | Canister: | 1. AISH 32-A Medical Questionnaire
2. AISH 32-B Fit Test
3. AISH 32-C Training Checklist
 |
|  | Full Face piece | Canister: |
|  | Powered air-purifying Respirator (PAPR)  | Canister: |
|  | Supplied-air |
|  | Self-contained breathing apparatus (SCBA) |
|  | Disposable filtering face piece |
|  | Yes | No | \_\_\_ Oxygen Deficient (less than 19.5%)\_\_\_ Gas/Vapors\_\_\_ Particulate (aerosols, mists, dusts, fumes, fogs, smoke, and sprays)\_\_\_\_ Combination of those listed above |  | Half mask | Canister: |
|  | Full Face piece  | Canister: |
|  | Powered air-purifying Respirator (PAPR) | Canister: |
|  | Supplied-air |
|  | Self-contained breathing apparatus (SCBA) |
|  | Disposable filtering face piece |
|  | Yes | No | \_\_\_ Oxygen Deficient (less than 19.5%)\_\_\_ Gas/Vapors\_\_\_ Particulate (aerosols, mists, dusts, fumes, fogs, smoke, and sprays)\_\_\_\_ Combination of those listed above |  | Half mask | Canister: |
|  | Full Face piece  | Canister: |
|  | Powered air-purifying Respirator (PAPR) | Canister:  |
|  | Supplied-air |
|  | Self-contained breathing apparatus (SCBA) |
|  | Disposable filtering face piece |

**Change out Schedule: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Medical Evaluations conducted by:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Valid for**: 1 year

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Fit Tests conducted by:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Valid for**: 1 year

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Training conducted by:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Title\_\_\_\_\_\_\_\_\_\_\_\_\_Company\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Valid for**: 1 year

**Maintenance:** Refer to Apollo AISH 32 Respiratory Protection Program

**Cleaning:** To be cleaned with mild soap and water. Dust-mask good for one use. Respirators not to be shared between employees

**Storage:** in plastic zip lock bags, stored in**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Inspection:** Prior to each use. Refer to Apollo AISH 32 for specific methods

**Ensuring Safe Air quality**: Refer to Apollo AISH 32 Respiratory Protection. **No Apollo employee will work in IDLH environments unless approved by Corporate Safety Manager Mike Ellis or Jeff Grade.**

*\*Program Administrator shall conduct random inspections to ensure proper respirator selection and use.*

**AISH 32-E**

**Appendix D**

**Information for Employees Using Respirators When Not Required Under the Standard**

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

You should do the following:

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

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

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

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

**AISH 32-F**

**Annual Respiratory Program Self-Evaluation**

|  |  |  |  |
| --- | --- | --- | --- |
| Company Name: |  | Location: |  |
| Assessment by: |  | Date: |  |
| Respiratory Protection Program (RPP) |
| Respiratory Protection Program has been reviewed for compliance with state and or federal compliance. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| At least one individual is assigned responsibility by management to implement and maintain the respirator program:  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Selection of Respirators |
| Airborne contaminants (e.g. specific chemicals) are identified in each work area or department that requires the use of respiratory protection. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
|  |
| Is respiratory hazard(s) identified in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be immediately dangerous to life and health (ILDH). |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Respiratory protection provided to employees has NIOSH approval labels and information that is clearly legible. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
|  For IDLH work, either a self-contained breathing apparatus (SCBA) with a minimum service life of 30 minutes or a combination full facepiece supplied-air respirator (SAR) with auxiliary self-contained air supply is provided to the employee. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| The respirators provided and canisters/cartridges used have been selected to protect against the specific chemical hazards in the work environment. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Respirator canister/cartridge change schedules are established based on objective information that ensures the canister/cartridge is changed before the end of its service life. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Medical Evaluations  |
| Initial medical evaluations are provided to determine the employee’s ability to use a respirator before the employee is fit tested or required to use the respirator in the workplace. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| A Physician or other Licensed Health Care Professional (PLHCP) is performing medical evaluations using the mandatory medical questionnaire or an initial exam that obtains the same information. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
|  Follow-up medical exams are provided whenever the medical exam provider notifies the employer of the need for a follow up exam. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| The PLHCP provides the employer a written opinion on the employee’s ability to wear a respirator. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Fit Testing |
| Employees required to wear a respirator pass a “fit test” per OSHA requirements before being asked to wear the respirator in the work environment. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Employees required to wear a respirator pass a “fit test” at least annually. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Use of Respirators – Face piece Seal Procedures |
| Employees assigned to wear tight-fitting face piece respirators are not permitted to have facial hair or have any other condition that interferes with the ability of the respirator to have a good seal or interfere with valve performance. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| The employer must ensure that if an employee wears corrective glasses or other PPE (e.g. safety glasses/goggles), it is worn in a manner that it does not interfere with the seal of the respirator face piece to the face of the user. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
|  |
| Employees perform a “user seal check” each time they put on the respirator. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Maintenance and Care of Respirators |
| Proper supplies and facilities are available for cleaning, disinfecting and repairing respiratory protection equipment. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| When not in use, respirators are stored in a manner that protects them against damage, sunlight, chemical contamination and temperature extremes. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Procedures exist to ensure that respirators are inspected before each use and during cleaning activities. In addition, respirators maintained for use in emergency situations (e.g. SCBA units) must be inspected monthly. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
|  |
|  Procedures exist and employees are trained to remove respirators that fail an inspection. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Employee Training |
|  Employees who are provided respirators receive initial training on proper use, limitations, and care of respiratory protection and the airborne hazards in their work area. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| 1910.134 (k) (5) Employees are provided information and training on respirator use/care/limitations at least annually or more often if retraining appears necessary to ensure safe use. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| Recordkeeping |
| Fit tests, written medical opinions from the PLHCP, and employee training records are readily available for review and maintained by the RPP Administrator. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Yes | No | N/A |  |  |
|  |  |  |
| Comments: |

 |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Completed By and Date: |
|  |

**AISH 32-G**

**The Rainbow Passage**

When the sunlight strikes raindrops in the air, they act as 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 his reach, his friends say he is looking for the pot of gold at the end of the rainbow. Throughout the centuries people have explained the rainbow in various ways. Some have accepted it as a miracle without physical explanation. To the Hebrews it was a token that there would be no more universal floods. The Greeks used to imagine that it was a sign from the gods to foretell war or heavy rain. The Norsemen considered the rainbow as a bridge over which the gods passed from earth to their home in the sky. Others have tried to explain the phenomenon physically. Aristotle thought that the rainbow was caused by reflection of the sun's rays by the rain. Since then physicists have found that it is not reflection, but refraction by the raindrops which causes the rainbows. Many complicated ideas about the rainbow have been formed. The difference in the rainbow depends considerably upon the size of the drops, and the width of the colored band increases as the size of the drops increases. The actual primary rainbow observed is said to be the effect of super-imposition of a number of bows. If the red of the second bow falls upon the green of the first, the result is to give a bow with an abnormally wide yellow band, since red and green light when mixed form yellow. This is a very common type of bow, one showing mainly red and yellow, with little or no green or blue.

From Fairbanks, G. (1960). Voice and articulation drillbook, 2nd edn. New York: Harper & Row. pp124-139.