



Medical Evaluation & Respirator Fit Test

Robin Tutor Marcom, EdD, MPH, OTR
The Pesticide Stewardship Alliance
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Memphis, Tennessee





Respirator Requirements in Revised Worker Protection Standard Rule: 170.507(b)(10)

- When a respirator is required by the labeling, handler employer must provide handlers with the following before the handler performs any activity requiring the respirator:
 - Medical evaluation
 - Fit test
 - Respirator trainingThese requirements mirror OSHA 1910.
- Handler employer must maintain records for 2 years documenting completion of these.



Medical Evaluation: Basic Information

- When: Before the employee is fit tested and uses the respirator for the first time; and again if certain criteria are met
- Required for **all types of respirators** (if respirator use is required)
- Employer must identify a physician or another licensed health care professional (PLHCP)

Medical Clearance



Additional medical clearance is required when:

- Employee reports medical signs/symptoms related to ability to use respirator;
- Medical professional, program administrator or supervisor recommends medical evaluation;
- Information from the respirator program, including observations made during fit testing & program evaluation indicates a need; or
- Change occurs in workplace conditions that may substantially increase physiological burden on employee

Note: Annual review of medical status is not required by OSHA or WPS; however, depending on the medical provider issuing the medical clearance, medical clearance may be granted for a time limited period.



Steps to Respiratory Compliance

- Determine type of respirator needed based on product label
- Complete Medical Clearance
- Complete fit test
- Purchase respirator based on outcome of medical clearance and fit test
- Complete required training



Options for Completing Medical Clearance

- On-line provider
- Stand alone occupational health company
- Occupational health clinic associated with a hospital
- Private physician
- Urgent Care



Provider Considerations

- Occupational health companies or clinics most familiar with OSHA protocols and have mechanisms in place to complete medical clearance and respirator fit testing
- Limited availability of occupational health companies or clinics in rural areas; some providers willing to travel but usually charge daily minimum
- Other healthcare providers may or may not be familiar with OSHA protocols; may need guidance as to what documentation is needed
- Other healthcare providers may complete medical clearance but not fit testing
- Providers may not be familiar with respirator use in agricultural settings
- Providers may or may not have non-English speaking personnel



**PROVIDERS OF MEDICAL CLEARANCE
&/or RESPIRATOR FIT TESTING**

Check with the NC Agromedicine Institute to learn more about medical clearance, respirator fit testing and/or selection, use and care of respirators.
Phone: 252.744.1008 OR CLIFTT@ECU.EDU



*denotes organizations that provide services outside their area code

IN 919 AREA CODE

Concentra Medical Care

4909 Green Road
Raleigh, NC 27616
Phone: (919)790-0288
Hours: 7:30A-6P M-F
Walk-ins welcome
Bring respirator.
Prices: Medical Clearance: \$37.50, In-depth \$74.50; Spirometry: \$56.50
Fit Testing: \$50.00-\$60.00
Spanish Language Assistance: Phone translation service

Concentra Medical Care

4104 Surler Court Suite 11
Durham, NC 27703
Phone: (919) 941-1911
Hours: 7:30A-6P M-F
Walk-ins welcome
Please arrive at least 30 minutes prior to closing; bring respirator.
Prices: Medical Clearance: \$37.50, In-depth \$74.50; Spirometry: \$56.50
Fit Testing: \$55.00
Spanish Language Assistance: Phone translation service

5.17

Note 1: Spirometry is the same as lung function or pulmonary function test. It is not required but recommended.

Note 2: Respirators **should not** be purchased prior to medical clearance and respirator fit testing.

Provider Guidance

Physician or Licensed Healthcare Provider Guidelines for Respirator Medical Clearance

Dear Physician or Licensed Healthcare Provider:

Effective January 2, 2017, the U.S. Environmental Protection Agency requires documentation of medical clearance prior to respirator use for any individual using a pesticide labelled for respiratory protection.

Rationale: Respirator use can impose both physical and psychological stress on the body, especially the pulmonary and cardiovascular systems. The medical clearance is used to determine if there are medical conditions that would either be aggravated by a respirator or prevent the safe and effective use of a respirator.

To complete medical clearance:

1. The worker should complete a **Respirator Medical Evaluation Questionnaire** (or complete an equivalent assessment) according to Appendix C (OSHA Respiratory Standard. 1910.134)
<https://www.osha.gov/SLTC/respiratoryprotection/standards.html>

Section of the questionnaire should be completed are as follows:

Part A Section 1	All respirator users
Part A Section 2, Questions 1-9	All respirator users
Part A Section 2. Questions 10 – 15	Only those that wear a full face piece respirator or Self Contained Breathing Apparatus (SCBA)
Part B	Health provider discretion

2. The questionnaire should be reviewed by a physician or other licensed health care provider (PLHCP).
3. A follow-up medical examination is required for individuals giving a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C or whose initial medical examination demonstrates the need for a follow-up medical examination.

4. The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

(Follow up should begin with a conversation with the individual about the positive responses. Further evaluation is typically based on the nature of the positive responses.)

5. Guidance on medical conditions that impact an individual's ability to wear a respirator can be found in the resources listed below.
6. The individual's employer must obtain a written recommendation from the PLHCP on whether the individual is medically able to wear a respirator. The recommendation must identify any limitations on the individual's use of the respirator as well as the need for follow-up medical evaluations that are needed to assist the PLHCP in making a recommendation. A copy of the written recommendation (Medical Clearance form) must be provided to the worker and their employer.

For technical assistance, contact:

NC Agromedicine Institute
Phone: 252.744.1008
Email: tutorr@ecu.edu or wilburnj15@ecu.edu

For more information, check out these resources:

US Department of Labor OSHA Respiratory Protection, Section VIII, Chapter 2, "VI Medical Evaluation and Conditions" @ https://www.osha.gov/dts/osta/otm/otm_viii/otm_viii_2.html

American Society of Safety Engineers, ANSI/AIHA Z88.6-2006. Respiratory Protection-Respirator Use, Physical Qualifications for Personnel.
<http://www.asse.org/ansi/asse-z88-6-2006-respiratory-protection-respirator-use-physical-qualifications-for-personnel-electronic-copy/>

McLellan, R; Schusler, K. (2000) Guide to the Medical Evaluation for Respirator use. Beverly Farms MA: OEM Press.

Medical Clearance Procedures Vary

- Grant clearance based on knowledge of individual
- Review OSHA questionnaire
- Do physical exam
- Review OSHA questionnaire & do physical exam
- Conduct spirometry (lung function) & blood pressures screenings



Individual Considerations

OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE (MANDATORY) (To Be Completed By the Employee)

Note 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. If the employee requires assistance with this questionnaire, please complete the following:
Employee Assisted By: _____ Phone #: _____

Note to the employee: Your employer must allow you to answer this questionnaire during normal working hours or at a time and place that is a convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers. 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) Employees selected to use any type of respirator must provide the following information:

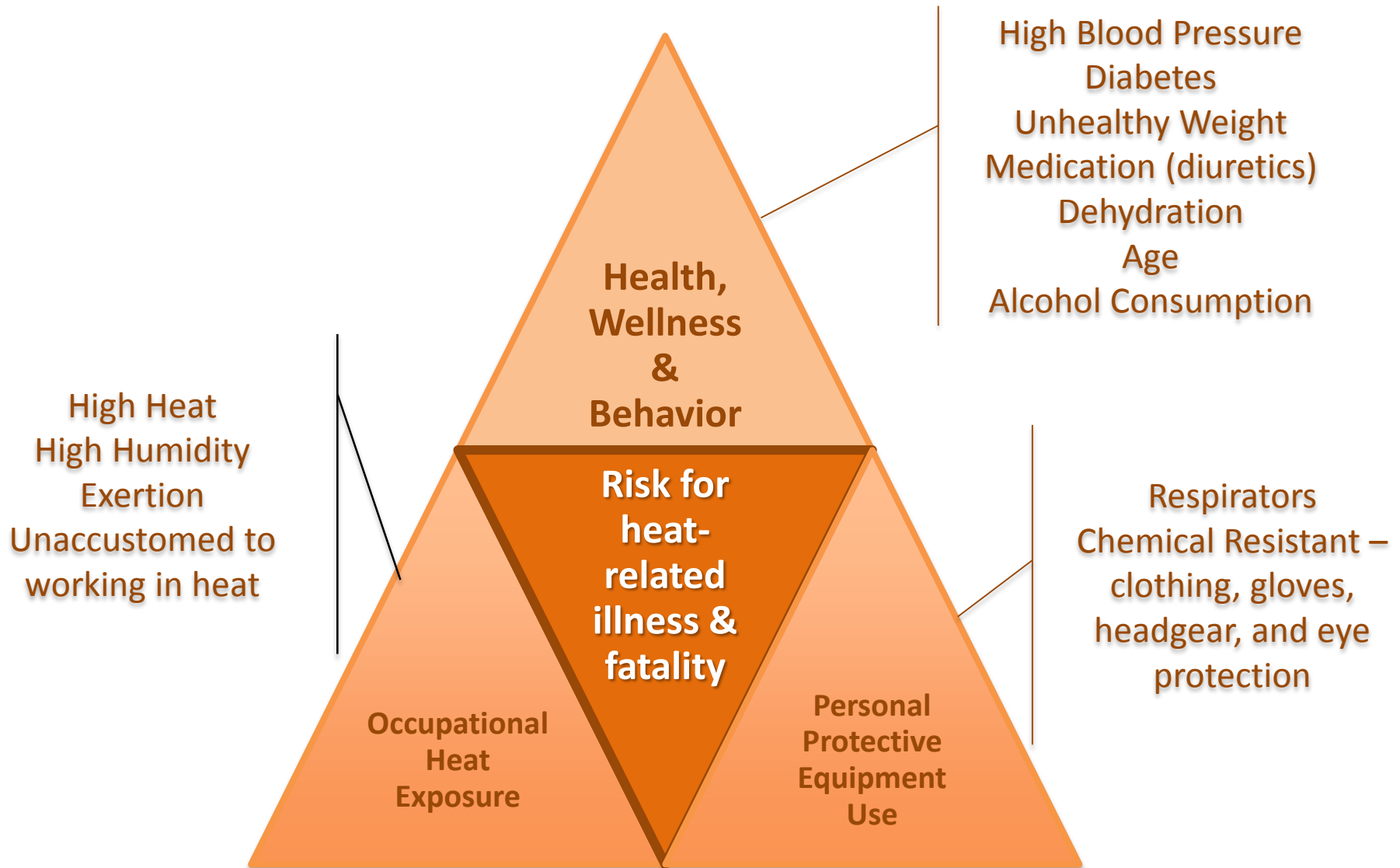
Date:		Name:	
Age:		Sex : <input type="checkbox"/> Male <input type="checkbox"/> Female	
Height:	ft. in.	Weight:	lbs.
Job title:			
Phone number where you can be reached by the health care professional who reviews this questionnaire (include area code ())			
Best time to phone you at this number: ___AM ___PM			
Has your employer told you how to contact the health care professional who will review this questionnaire? <input type="checkbox"/> YES <input type="checkbox"/> NO			

NOTE: The information below is available from your employer.

Check the type of respirator(s) you will use (you can check more than one):	N, R, or P disposable respirator (filter-mask, non-cartridge)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Half-face	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Full Face	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Powered air-purifying cartridge respirator (PAPR)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Supplied Air respirator (SAR)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Self-Contained Breathing Apparatus (SCBA)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Other (specify) _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No
What is the approximate weight of the respirator you'll be using?			
Describe the work you will be doing while wearing a respirator:			
Approximately how often will you be using the respirator?			
Approximately how long will you be wearing the respirator?			
What other personal protective equipment will you wear along with the respirator?			
Describe extremes in temperature and humidity you will experience when wearing the respirator.			

- Integrity of medical clearance is only as good as the answers that an individual gives on medical questionnaire
- Answers may not be truthful due to fear of losing employment
- Answers may not be accurate due to:
 - not understanding what question is asking due to health literacy or translation not meaning the same thing as employee's native language
 - answers being inputted by another individual due to literacy or computer skills

Health and it's Relationship to Heat & PPE Use



Inconsistent Medical Clearance Documentation





PIEDMONT HEALTH SERVICES, INC.

PROSPECT HILL COMMUNITY HEALTH CENTER

140 MAIN ST., PROSPECT HILL, NC 27314

PHONE: 336-562-3311 • FAX: 336-562-3229



- T. Meyers, M.D., DEA #BM1223281, UPIN #E17720
- A. Peraldo, M.D., DEA #BP2301808, UPIN #B52827
- W. Selvidge, M.D., DEA #BS1148686, UPIN #B29364
- B. Steiner, M.D., DEA #BS7502948, UPIN #F67494

- L. Brown, FNP, DEA #MB1236454, NC #200687
UPIN #S50041
- J. Mako, FNP, DEA #MM1539081, NC #005002633

PATIENT'S NAME: _____

DOB: _____

ADDRESS: _____

*pt is medically cleared to use a
respirator.*

Use Spanish Language

M. Selena

Product selection permitted

Dispense as written

09/07

Wilson Immediate Care, P.A.

1725 South Tarboro Street
Wilson, North Carolina 27893
(252) 237-2891 fax: (252) 237-0115
occmed@centurylink.net

Your employee _____ presented to our office
today for a Pulmonary Function Test (PFT) and Respirator Questionnaire Review.

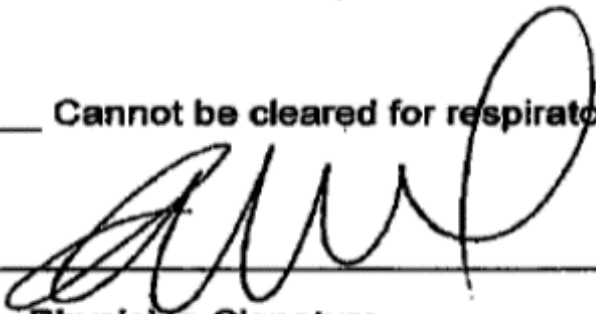
Results:

_____ Cleared for respirator use with a recheck in 3 years.

_____ Cleared for respirator use with a recheck in 2 years.

Cleared for respirator use with a recheck in 1 years.

_____ Cannot be cleared for respirator use.



Physician Signature

3/18/16

Date



HENDERSON & ASSOCIATES, INC.
Dr. Steven Manuli, MD
Manuli Internal Medicine

RESPIRATOR CLEARANCE
PHYSICIANS WRITTEN OPINION

COMPANY _____ HENDERSON & ASSOCIATES, INC. – ELIZABETH CITY, NC _____

EMPLOYEE _____ JOE DOE _____ ID# _____

Based on the medical evaluation for fitness to wear a respirator, the above referenced employee has been determined to have:

_____ NO RESTRICTIONS ON WEARING A RESPIRATOR

_____ NO RESPIRATOR USE PERMITTED

_____ SOME SPECIFIC USE RESTRICTIONS AS FOLLOWS

_____ EMPLOYEE NEEDS MEDICAL EVALUATION PRIOR TO CLEARANCE

_____ EMPLOYEE REQUESTS TO TALK WITH THE HEALTH CARE PROFESSIONAL
REVIEWING THE MEDICAL QUESTIONNAIRE

_____ EMPLOYEE NEEDS A PULMONARY FUNCTION TEST

RESTRICTIONS: _____

COMMENTS: _____

DATE

SIGNATURE OF PHYSICIAN M.D.

***Test result valid for one year from date of test.**

EMPLOYEE INFO

Name:
Company: Plant:
Job: Shift:
Date: 4/11/2012 9:06:08 PM Dept:

CLEARED RESPIRATORS

The OSHA Respiratory Protection Standard requires that your employer provide you with a medical evaluation to determine if you can wear the respirator type listed below as identified by the employer in the *Type Respirator and Conditions of Use Questionnaire*. It will be the employer's responsibility to see that the respirator type you wear is the same as listed below:

- Filtering Facepiece ('dust mask', single use, disposable, particulate)

MEDICAL DETERMINATION

The determination listed below was based on the above information reported by your employer in the *Type Respirator and Conditions of Use Questionnaire*, the information reported by you in the *Medical Evaluation Questionnaire* and any other additional medical tests or information received.

Note: All employees must be allowed to wear glasses while wearing the respirator if they need to do so. Steps should be taken to ensure that glasses can be safely worn when wearing the respirator in these instances.

Medically eligible with the following limitations:

- The employee must keep medical condition(s) under control.

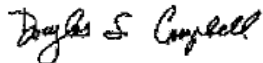
The employee has been notified of the specifics of the limitations on their personal respirator medical clearance notification report.

NOTES

The employer has a responsibility to train the employee in the use and care of the respirator and to ensure that the employee only uses the above listed respirator. The standard requires the employer to have the employee reevaluated for respirator use if one of the following criteria apply: 1) the employee reports having any medical signs or symptoms that are related to wearing the respirator, 2) upon the advise of the physician or licensed healthcare professional, 3) if there is a significant change in the workplace conditions, or 4) if there is either information from management involved in the program or from elements of the program that indicates the employee had a medical problem while using the respirator.

This respirator medical clearance is valid for 12 months from the date of this report.

This determination made by:



Dr. Douglas S. Campbell, MD, MPH
Occupational Health Physician
The EI Group, Inc.

RESPIRATOR MEDICAL CLEARANCE PHYSICIAN'S WRITTEN OPINION

EMPLOYER: _____

EMPLOYEE: _____

Type of Respirator to be worn (check all that apply):

filtering facepiece (ex. N95) half-face air purifying respirator
 full face air purifying respirator other (specify): _____

The above referenced employee was evaluated on _____ (date) for medical fitness to wear the respirator(s) indicated above based on:

- Review of his/her OSHA Respirator Medical Evaluation Questionnaire
- Blood pressure screening (optional)
- Spirometry (lung function screening) (optional)
- Hands-on physical exam (optional)

Based on these findings, the above referenced employee has been determined to be:

- Medically cleared, no restrictions on respirator use.
- NOT medically cleared, significant restrictions on respirator use.
- Medically cleared with limitations. There are partial restrictions on respirator use and the employee has been informed of these limitations and the importance of managing medical condition(s).
- Medical clearance on hold until further medical evaluation has been conducted.

Comments: _____

Signature of Physician or Licensed Healthcare Professional Street Address

Print Name City/State/Zip

Name of Clinic (if different) Phone

This clearance is valid: until a change occurs in employee's medical condition
 1 years (Date): _____
 2 years (Date): _____

REMEMBER TO PROVIDE A COPY OF THIS FORM FOR THE INDIVIDUAL AND THEIR EMPLOYER

Respirator Fit Test





Fit Test: WPS

- Must provide handlers with fit testing using the respirator specified on the labeling in a manner... that conforms to 29 CFR 1910.134. (Paragraph (f))
- To ensure the respirator forms an adequate seal on the user's face. If seal is not good, won't provide expected protection.



When is a Fit Test Required?

- Before initial use
- At least annually after that
- If handler changes to a different respirator
- If change in handler's physical condition that could affect the seal:
 - Obvious change in body weight, facial scarring, extensive dental work, cosmetic surgery



When is a Fit Test Required?

- Which respirators? Any respirator with a tight-fitting facepiece
 - Form a complete seal with wearer's face
 - Includes negative pressure (air-purifying) and positive pressure (air-supplying) respirators
- If different products require different respirators, must fit test for each one
- Fit test must be conducted with same make, model, style and size respirator

Qualitative Fit Testing



- Farms can do own qualitative fit testing
- Kits range in price from \$100-\$500
- Fit testing is as much an art as an activity due to individual facial differences and differences in respirators
- Recommend training prior to farms conducting fit tests on their own

Quantitative Fit Testing



- Conducted by occupational health companies or clinics
- Machines are in the \$9-10,000 price range
- Training required prior to use

07/05/2015

LAST NAME

FIRST NAME

FIT TEST REPORT

ID NUMBER
LAST NAME
FIRST NAME
COMPANY
LOCATION

TEST DATE 07/05/2015 02:41:44
DUE DATE 08/05/2016

PORTACOUNT S/N
N95 COMPANION

RESPIRATOR 3M 6900 FULL FACE (500)
MANUFACTURER 3M
MODEL 6900
MASK STYLE FULL FACE
MASK SIZE L

PROTOCOL OSHA 29CFR1910.134
PASS LEVEL 500

APPROVAL
EFFICIENCY<99 False

Quantitative Fit Test Record

<u>EXERCISE</u>	<u>DURATION</u>	<u>FIT FACTOR</u>	<u>PASS</u>
NORMAL BREATHING	60	10783	Y
DEEP BREATHING	60	4769	Y
HEAD SIDE TO SIDE	60	15057	Y
HEAD UP AND DOWN	60	20994	Y
TALKING	60	19935	Y
GRIMACE	35	Excl.	
BENDING OVER	60	20247	Y
NORMAL BREATHING	60	24603	Y
OVERALL FF		12575	Y

FITTEST OPERATOR _____

DATE _____

NAME _____

DATE _____

FIT TEST RECORD

Employee Name: _____ Date: _____
Employee ID Number: _____ Job Title: _____
Employer: _____ Location: _____
Medically Cleared: YES NO
Respirator Type Selected: _____
Manufacturer: _____ Model: _____ Size: _____

CONDITIONS WHICH COULD AFFECT RESPIRATOR FIT:

Clean Shaven _____ Facial Scar _____
Facial Hair _____ Dentures Absent _____
Glasses _____ Other _____

COMMENTS: _____

FIT CHECKS:

Negative Pressure PASS _____ FAIL _____ NOT DONE _____
Positive Pressure PASS _____ FAIL _____ NOT DONE _____

FIT TESTING:

Quantitative FIT FACTOR _____

Qualitative ISOAMYL ACETATE PASS _____ FAIL _____
 IBANAMA OIL
SACCHARIN (1/2 of squeeze) PASS _____ FAIL _____
BITREX (1/2 of squeeze) PASS _____ FAIL _____
SMOKE PASS _____ FAIL _____

COMMENTS: _____

EMPLOYEE ACKNOWLEDGEMENT OF RESULTS:

Employee Signature: _____
Test Conducted By: _____
Date: _____

Respirator Fit Test Card
Name: _____ Test Date: _____
ID #: _____ Next Test Due: _____
Respirator Make/Model: _____
Protocol: 29CFR 1910.134
Pass or Fail: _____

Fit test conducted by _____

Qualitative Fit
Test Record & Sample Pocket Card

CERTIFICATE OF FIT TESTING
THIS IS TO CERTIFY THAT: **JOHN DOE**

In accordance with 29CFR1910.134, Respiratory Protection has successfully completed qualitative fit testing and instructed in the use, limitations and maintenance with the following respirator:

Make: 3M Model: 6300 Size: LARGE

Date: 04-20-2016 Expires: 04-20-2017

Technician: _____

RESPIRATOR FIT TEST RECORD

Company: _____
 Address: _____
 City: _____
 State: _____ Zip: _____ Tel: _____

Date: _____

Fit testing conducted in compliance with OSHA Standard 1910.134(F).
 If other local, state or federal regulations apply (such as MSHA), you may list them here:

Name of Fit Tester: _____

Signature: _____

Type of OSHA accepted fit test protocol used: (Qualitative): _____ Saccharin _____ Bitrex™ _____ Isoamyl Acetate _____ Irritant Smoke

(Quantitative): Portacount Model _____ Occupational Health Dynamic Model #: _____

Name (please print)	Signature	Date of Medical Clearance	Respirator Fit Tested (Make, Model, Style, Size) (Ex. 3M 6800, full-face, medium)	Fit Test		Could not be fit tested due to:
		Cleared with limitations (indicate Y-yes or N - no)		Pass	Fail	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	

Comments: _____

Medical Clearance & Fit Test Comparison

Company	Fit Test	Cost	Medical Clearance	Cost
OH-1	quantitative	35.00	Online; physician reviews questionnaire & issues medical clearance if no obvious health issues	35.00 online 35.00 paper
OH -2	quantitative	20.00	Physician reviews paper questionnaire & issues medical clearance if no obvious health issues; spirometry & blood pressure required at time of fit test	55.00
OH-3	quantitative	40.00	Physician reviews paper questionnaire & issues medical clearance if no obvious health issues; spirometry at time of fit test	40.00
OH-4	quantitative	25.00	Does not provide medical clearance; requires copy of on-line medical clearance or written documentation from physician	-
OH-5	quantitative	50.00	Does not provide medical clearance; requires copy of on-line medical clearance or written documentation from physician	-
Chemical Vendors	qualitative	15.00-25.00	Does not provide medical clearance; requires copy of on-line medical clearance or written documentation from physician	-
3M	-	-	Online; immediate approval if no health issues	28.00

* Daily minimum may apply if services provided off-site; depending on company ranges from 875-1000 per technician & may include fuel charge

** Will accept copy of on-line medical clearance or written documentation from physician

*** One brand of respirator only



Respirator Training Basic Information

- When?
 - Before the handler uses the respirator in the workplace and if knowledge/skill not retained by handler
- How?
 - In a manner that is understandable to the handler
 - No specific format
 - Employer must ensure that handler can demonstrate knowledge of the required points



Respirator Training Content

1. Why the respirator is necessary and how improper fit, usage and maintenance can make the respirator ineffective
2. The limitations and capabilities of the respirator
3. How to select cartridges and canisters and know the schedule for changing them out



Respirator Training Content

4. How to use the respirator effectively in emergency situations
5. How to inspect, put on and remove, use and check the seals of the respirator
6. Respirator maintenance and storage procedures
7. How to recognize medical signs and symptoms that may limit or prevent effective use of the respirator



Robin Tutor Marcom, EdD, MPH, OTR
Director
NC Agromedicine Institute
252.744.1008
tutorr@ecu.edu