

RESPIRATORY PROTECTION



CONTAMINANT CONTROL

- ⌘ **Engineering**
 - ☒ Exhaust Fans
 - ☒ Tractor with Filtered Cab
- ⌘ **Substitution**
 - ☒ Less Hazardous Chemical
- ⌘ **Personal Protective Equipment**
 - ☒ Respirator

RESPIRATORY PROTECTION REQUIREMENTS

OSHA Standard 29 CFR 1910.134

- ⌘ **Written Program**
- ⌘ **Selection Based on Hazards**
- ⌘ **Medical Evaluation**
- ⌘ **Training**
- ⌘ **Fit Testing**
- ⌘ **Area and Worker Surveillance**
- ⌘ **Program Evaluation**

WRITTEN PROGRAM

- ⌘ Standard Operating Procedure
- ⌘ Selection of Respirator
- ⌘ Use of Respirator
- ⌘ Cleaning, Inspection
- ⌘ Medical Surveillance
- ⌘ Training
- ⌘ Fit Testing Procedures
- ⌘ Evaluation

RESPIRATOR SELECTION

- ⌘ Oxygen Level
- ⌘ Contaminant
 - ☒ Particle Size
 - ☒ Worker/Area Surveillance
- ⌘ Exposure Limit
- ⌘ Warning Properties
- ⌘ Eye/Skin Irritant

RESPIRATOR APPROVAL

- ⌘ NIOSH
 - ☒ Establishes Testing Criteria
 - ☒ Conducts Approval Testing
 - ☒ 42 CFR Part 84
- ⌘ TC Number
 - ☒ "Tested and Certified"
 - ☒ Gases/Vapors - 23C
 - ☒ Dusts/Mists - 21C/84A

RESPIRATOR CARTRIDGE

Color Codes

- | | |
|---------------------|--------|
| ⌘ Acid Gases | White |
| ⌘ Organic Vapors | Black |
| ⌘ Ammonia Gas | Green |
| ⌘ Acids & Organics | Yellow |
| ⌘ HEPA | Purple |
| ⌘ Dust, Fumes, Mist | Grey |

MEDICAL EVALUATION

Recommended Parameters

Needed for ALL respirator wearers. It's an added strain to wear a respirator.

- ⌘ Medical History
- ⌘ Pulmonary Function Test
- ⌘ Chest X-Ray
- ⌘ Physical Exam
- ⌘ Physician's Written Opinion

TRAINING REQUIREMENTS

- ⌘ Expected Hazards
- ⌘ Inspection of the Respirator
- ⌘ Cleaning and Storage
- ⌘ Cartridge Change Out Schedule
- ⌘ Donning of the Respirator
- ⌘ Perform Fit Checks

INSPECTION OF RESPIRATOR

- ⌘ Check Straps
- ⌘ Inspect Inhalation/Exhalation Valves
- ⌘ Inspect Rubber of Mask
- ⌘ Remove Cartridges, Inspect Gaskets
- ⌘ Inspect Filters/Cartridges

DONNING OF RESPIRATOR

- ⌘ Place Chin in Cup
- ⌘ Push Up On Bridge of Nose
- ⌘ Adjust Straps from Low to High
- ⌘ Straps Snug, Not Over-tight
- ⌘ No Facial Hair Where Respirator Seals

PROPER FIT

- ⌘ No Facial Hair
- ⌘ Proper Size
- ⌘ Comfort
 - ☑ Fit Across Bridge of Nose
 - ☑ Room to Talk
 - ☑ Tendency to Slip
 - ☑ Room for Safety Glasses

FIT TESTING

⌘ Qualitative Fit Test

- ☑ Banana oil, Smoke, Saccharin, Bitrex
- ☑ Subject Sensitivity
- ☑ Honesty

⌘ Quantitative Fit Test

- ☑ Cost
- ☑ Accuracy

⌘ Fit Checks

ASSIGNED PROTECTION FACTORS

The expected level of protection that would be provided by a properly functioning respirator on a fitted and trained worker

⌘ Half Mask

- ☑ 10 times protection

⌘ PAPR (loose fitting hood)

- ☑ 25 times protection

⌘ Full Face

- ☑ 50 times protection

CARE AND STORAGE

⌘ Clean and Inspect After Every Use

- ☑ Soap Solution

⌘ Store

- ☑ Dry
- ☑ Clean
- ☑ Room Temperature
