

Enhancing Respiratory Protection in Mining

Xiaoliang Wang¹, Judith C. Chow¹, John G. Watson¹, Jocelyn Najera¹, Diane K. Hale², Dahiana Pimentel², James Lage³, and Robert Lage³

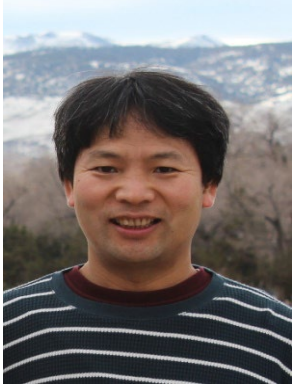
¹Desert Research Institute (DRI), Reno, NV

²Best in the West Safety, Las Vegas, NV

³Sonoma Health & Safety Center, Winnemucca, NV

May 7, 2025

Instructors



Dr. Xiaoliang Wang
xiaoliang.wang@dri.edu



Ms. Jocelyn Najera
jocnajera7@gmail.com



Dr. Judith C. Chow
judy.chow@dri.edu



Dr. John G. Watson
john.watson@dri.edu



Ms. Diane Hale
dhale@biwsafety.com



Ms. Dahiana Pimentel
Dpimentel@BIWSafety.com



Mr. James Lage
sonomahealthsafety@yahoo.com



Mr. Robert Lage
sonomasafety@yahoo.com

Training Logistics

- Safety exits and bathrooms
- Breaks
- End-of-training quiz
- Training evaluation and feedback
- Post-training follow-up survey





Training Goal

- **Goal:** To assist Nevada miners and contractors in implementing effective respiratory protection practices and preventing unhealthy exposures to airborne hazards.
- **Training Components:**
 - 1) Training for respirator wearers.
 - 2) Additional information for Mine Supervisors and Respiratory Protection Program Administrator.
 - 3) A customizable respiratory protection program template.

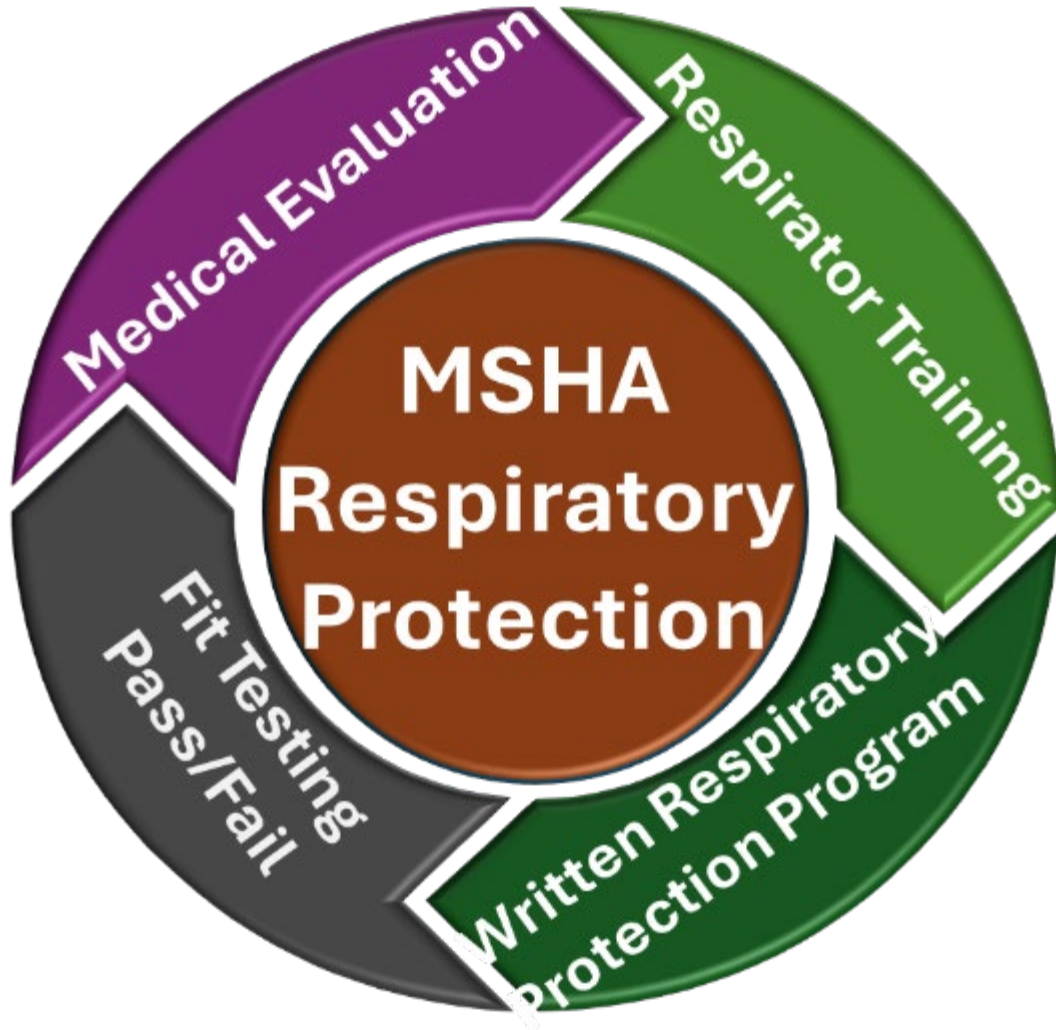
Objectives for Miner/Contractor Training

- Understand the different types of respirators and how to select the appropriate one.
- Learn how to use respirator, don, doff, and perform user seal checks.
- Master procedures for respirator inspection, cleaning, maintenance, and storage.
- Learn about medical evaluations and annual fit testing.
- Understand MSHA requirements and wearer responsibilities.

Objectives for Mine Operator and Safety Manager Training

- Understand MSHA regulations for respiratory protection and mine operator responsibilities.
- Learn requirements for a written respiratory protection program.
- Understand Standard Operating Procedures (SOPs) for respirator use.
- Access a free template for written respiratory protection program.

Requirements for Wearing A Respirator



Every mine or contractor that requires miners to wear respiratory protection must complete the following:

1. Written Respiratory Protection Program (RPP)
2. Training
3. Medical Evaluation
4. Fit Testing