



***SAFETY AND
HEALTH ARE
VALUES!***

Stakeholders Best Practices Tailgate Health Meeting Series

"Underground Air Quality"

The air in an underground mine can easily become contaminated. Oxides of nitrogen (NO_x), carbon monoxide (CO), and carbon dioxide (CO₂) are introduced by blasting and internal combustion engines. Dust is created by virtually every aspect of the mining process. Diesel particulate matter (DPM) is present where diesel engines are operated. Without controls, every miner is subjected to health hazards ranging from eye and throat irritation to death.

Best Practices:

- Provide adequate ventilation to supply fresh air and remove/ dilute contaminants and pollutants
- Install and maintain proper ventilation controls
- Test and monitor mine atmosphere for concentrations of dust, diesel particulate matter, gases, etc.
- Restrict unnecessary idling of diesel equipment
- Implement a preventive maintenance program for diesel equipment
- Develop and maintain a communication program for the reporting of ventilation problems and changes
- Consider planning and scheduling equipment operation and traffic patterns to optimize air quality
- Use water to suppress dust when necessary



Developed in cooperation with:

Sperry Mine, United States Gypsum Company, Des Moines County, Iowa (Team Leader)

Douds Underground Mine, Douds Stone Inc., Van Buren County, Iowa

Galena Platteville Mine, Conco Western Stone Company, Kane County, Illinois

Morton Salt Fairport Mine, Morton Salt Division, Rohm and Haas Company, Lake County, Ohio