Part 62: Requirements and Best Practices for Metal/Nonmetal and Aggregate Mines

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Noise Trends

- **Equipment/Job**
  - Jet piercing channel operator
  - Continuous miner operator
  - Drill operator, jackleg/stoper
  - Drill operator, rotary and rotary air
  - Stone polisher/cutter
  - Bulldozer operator
  - Laborer, bullgang
  - Kiln/dryer operator

- Noise exposure potential across all commodities and mine type (surface vs. underground)
Emphasis Program

- Conduct comprehensive noise inspections at MNM mines
- Work with operators and stakeholders to reduce noise exposures below PEL through implementation of feasible controls
- Assist operator with:
  - Understanding the requirements of the standard
  - Hearing conservation
  - Understanding audiograms
  - Reporting requirements
Part 62, Occupational Noise Exposure

- 62.110, Noise exposure assessment
  - Establish a system of monitoring
  - Determine dose
  - Observation of monitoring
  - Miner notification

- 62.120, Action level (AL)
  - 85 dBA (enforced at 87 dBA, > 66% dose)
  - Enroll in hearing conservation program when action level is exceeded

- 62.130, Permissible exposure limit (PEL)
  - 90 dBA (enforced at 92 dBA, > 132% dose)
  - Implement all feasible engineering and administrative controls
  - Maximum exposure of 115 dBA

- 62.140, Dual hearing protection
  - Requires dual hearing protection
Part 62, Occupational Noise Exposure

- **62.150, Hearing conservation**
  - System of monitoring
  - Provision and use of hearing protectors
  - Audiometric testing
  - Training
  - Record keeping

- **62.160, Hearing protectors**
  - Miners trained and provided hearing protectors
  - Allow miner to choose
  - Ensure good condition and fit
  - Provided at no cost to miner
  - Worn if exposure is over the PEL as supplement to controls
  - Worn if exposure is over the AL if threshold shift or 6 months til baseline audiogram
Part 62, Occupational Noise Exposure

- 62.170-175, Audiometric testing
  - Test procedures
  - Evaluation
  - Follow-up
  - Miner notification and MSHA reporting

- 62.180, Training
  - Effects of noise on hearing
  - Purpose and value of hearing protectors
  - Types, care, fitting, and use of hearing protectors offered
  - Requirements under this standard
  - Tasks in maintaining controls
  - Purpose, value, and procedures of audiometric testing

- 62.190, Records
Compliance with Action Level (85 dBA)

Action Level (Dose) Results

- <66%
  - Periodic Re-evaluation

- ≥66%
  - Was PEL Dose ≥ 132%?
    - Yes: Go to PEL chart
    - No: Is miner in HCP?
      - No: Corrective Action
      - Yes: Is HCP compliant with all parts of 62.150?
        - Yes: Periodic Re-evaluation
        - No: Corrective Action
Compliance with the PEL (90 dBA)

- **PEL (Dose)**
  - Results
- **Is Dual Hearing Protection Worn?**
  - Yes
  - **Are all feasible engineering and administrative controls implemented and maintained?**
    - Yes
    - **Are administrative control procedures posted & copies provided to affected miners?**
      - Yes
      - **Is miner enrolled in Hearing Conservation Program compliant with 62.150?**
        - Yes
        - **Are miners using required hearing protection?**
          - Yes
          - Periodic Re-evaluation
    - No
      - Corrective Action
      - Periodic Re-evaluation
- **Periodic Re-evaluation**
  - <132%
  - Yes
- **Corrective Action**
  - No
  - >1056%
  - Yes
P-Action Code

- Exposures entered into MSHA database and code assigned to indicate disposition
  - C-action code = citation
  - P-action code = no citation issued because is compliant with standard but still over PEL
    - Feasible controls
    - HCP
    - Compliant with other requirements

- MSHA intends to discontinue the practice of issuing memorandums to operators indicating the P-action code was used
Hearing Conservation

- The following are required for compliant hearing conservation program
System of Monitoring

- Performance based requirement
- Notify miners of their exposure if AL or PEL is exceeded
- Can use representative sampling

**Best Practice:** Use of noise dosimeters
- Calibrate and maintain equipment
- Knowledgeable person conducting and interpreting sampling
- Exposure based on full-shift
Hearing Protectors

- **Action Level** ($TWA_8 \geq 87 \text{ dBA} \text{ or } D \geq 66\%)**
  - Operator must provide two plug types & two muff types of hearing protection
  - It is the miner’s option to wear hearing protection, UNLESS
    - The miner has incurred a Standard Threshold Shift (STS); or
    - More than 6 months will pass before the miner can take a baseline audiogram

- **Permissible Exposure Level** ($TWA_8 > 92 \text{ dBA} \text{ or } D > 132\%)**
  - Miner must wear one type of operator-provided hearing protection

- **Dual Hearing Protection Level** ($TWA_8 > 107 \text{ dBA} \text{ or } D > 1056\%)**
  - Miner must wear both earplug and earmuff type operator-provided hearing protection

- **BEST PRACTICE:** hearing protectors should be fitted by trained professional
Audiometric Testing

- The operator must offer miners the opportunity to take an annual audiogram.
- The miner must avoid high levels of noise for at least 14 hours prior to taking a baseline audiogram.
- Hearing protectors may be used as a substitute for this quiet period.
Reporting of Hearing Loss

- **REPORTABLE HEARING LOSS** - A change in hearing sensitivity for the worse, relative to the miner’s baseline audiogram, or the miner’s revised baseline audiogram where one has been established in accordance with 62.170(c) (2), of an average of 25 dB or more at 2000, 3000, and 4000 Hz in either ear.

- **STANDARD THRESHOLD SHIFT** - A change in hearing sensitivity for the worse relative to the miner’s baseline audiogram, or relative to the miner’s most recent revised baseline audiogram where one has been established, of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.
Training

- Conducted within 30 days of enrollment into HCP
- Refresher training every 12 months thereafter
- Topics
  - Effects of noise on hearing
  - Purpose and value of engineering controls and wearing hearing protection
  - Pros and Cons of hearing protection offered
  - Care, fit, and use of available hearing protection
  - General requirements of 30 CFR Part 62
  - Maintaining noise controls
  - Purpose, value, and procedures of audiometric testing
Records

The mine operator is required to keep accurate records of the following:

- Training certifications
- Notice of exposure
- Audiogram results
- Reportable hearing loss

It is recommended that the miner keep copies of any information provided by the mine operator for his/her own record.
More Information

- Contact local field office and district office
- MSHA noise resource page
  - Noise Control Resource Guide
  - Noise sampling guidance
  - Workshop materials
  - Various presentations
Questions?
Comments?