

written authorization to exercise a right of access to records.

Qualified technician. A technician who has been certified by the Council for Accreditation in Occupational Hearing Conservation (CAOHC), or by another recognized organization offering equivalent certification.

Permissible exposure level. A TWA_8 of 90 dBA or equivalently a dose of 100% of that permitted by the standard, integrating all sound levels from 90 dBA to at least 140 dBA.

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.

Revised baseline audiogram. An annual audiogram designated to be used in lieu of a miner's original baseline audiogram in measuring changes in hearing sensitivity as a result of the circumstances set forth in §§62.170(c)(1) or 62.170(c)(2) of this part.

Sound level. The sound pressure level in decibels measured using the A-weighting network and a slow response, expressed in the unit dBA.

Standard threshold shift. A change in hearing sensitivity for the worse relative to the miner's baseline audiogram, or relative to the 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.

Time-weighted average-8 hour (TWA_8). The sound level which, if constant over 8 hours, would result in the same noise dose as is measured.

§ 62.110 Noise exposure assessment.

(a) The mine operator must establish a system of monitoring that evaluates each miner's noise exposure sufficiently to determine continuing compliance with this part.

(b) The mine operator must determine a miner's noise dose (D, in percent) by using a noise dosimeter or by computing the formula: $D=100(C_1/T_1+C_2/T_2+ . . . +C_n/T_n)$, where C_n is the total time the miner is exposed at a specified sound level, and T_n is the reference du-

ration of exposure at that sound level shown in Table 62-1.

(1) The mine operator must use Table 62-2 when converting from dose readings to equivalent TWA_8 readings.

(2) A miner's noise dose determination must:

(i) Be made without adjustment for the use of any hearing protector;

(ii) Integrate all sound levels over the appropriate range;

(iii) Reflect the miner's full work shift;

(iv) Use a 90-dB criterion level and a 5-dB exchange rate; and

(v) Use the A-weighting and slow response instrument settings.

(c) *Observation of monitoring.* The mine operator must provide affected miners and their representatives with an opportunity to observe noise exposure monitoring required by this section and must give prior notice of the date and time of intended exposure monitoring to affected miners and their representatives.

(d) *Miner notification.* The mine operator must notify a miner of his or her exposure when the miner's exposure is determined to equal or exceed the action level, exceed the permissible exposure level, or exceed the dual hearing protection level, provided the mine operator has not notified the miner of an exposure at such level within the prior 12 months. The mine operator must base the notification on an exposure evaluation conducted either by the mine operator or by an authorized representative of the Secretary of Labor. The mine operator must notify the miner in writing within 15 calendar days of:

(1) The exposure determination; and
(2) the corrective action being taken.

(e) The mine operator must maintain a copy of any such miner notification, or a list on which the relevant information about that miner's notice is recorded, for the duration of the affected miner's exposure at or above the action level and for at least 6 months thereafter.

§ 62.120 Action level.

If during any work shift a miner's noise exposure equals or exceeds the action level the mine operator must

§ 62.130

enroll the miner in a hearing conservation program that complies with § 62.150 of this part.

§ 62.130 Permissible exposure level.

(a) The mine operator must assure that no miner is exposed during any work shift to noise that exceeds the permissible exposure level. If during any work shift a miner's noise exposure exceeds the permissible exposure level, the mine operator must use all feasible engineering and administrative controls to reduce the miner's noise exposure to the permissible exposure level, and enroll the miner in a hearing conservation program that complies with § 62.150 of this part. When a mine operator uses administrative controls to reduce a miner's exposure, the mine operator must post the procedures for such controls on the mine bulletin board and provide a copy to the affected miner.

(b) If a miner's noise exposure continues to exceed the permissible expo-

sure level despite the use of all feasible engineering and administrative controls, the mine operator must continue to use the engineering and administrative controls to reduce the miner's noise exposure to as low a level as is feasible.

(c) The mine operator must assure that no miner is exposed at any time to sound levels exceeding 115 dBA, as determined without adjustment for the use of any hearing protector.

§ 62.140 Dual hearing protection level.

If during any work shift a miner's noise exposure exceeds the dual hearing protection level, the mine operator must, in addition to the actions required for noise exposures that exceed the permissible exposure level, provide and ensure the concurrent use of both an ear plug and an ear muff type hearing protector. The following table sets out mine operator actions under MSHA's noise standard.

Provision	Condition	Action required by the mine operator
§ 62.120	Miner's noise exposure is less than the action level.	None.
§ 62.120	Miner's exposure equals or exceeds the action level, but does not exceed the permissible exposure level (PEL).	Operator enrolls the miner in hearing conservation program (HCP) which includes (1) a system of monitoring, (2) voluntary, with two exceptions, use of operator-provided hearing protectors, (3) voluntary audiometric testing, (4) training, and (5) record keeping.
§ 62.130	Miner's exposure exceeds the PEL	Operator uses/continues to use all feasible engineering and administrative controls to reduce exposure to PEL; enrolls the miner in a HCP including ensured use of operator-provided hearing protectors; posts administrative controls and provides copy to affected miner; must never permit a miner to be exposed to sound levels exceeding 115 dBA.
§ 62.140	Miner's exposure exceeds the dual hearing protection level.	Operator enrolls the miner in a HCP, continues to meet all the requirements of § 62.130, ensures concurrent use of earplug and earmuff.

§ 62.150 Hearing conservation program.

A hearing conservation program established under this part must include:

- (a) A system of monitoring under § 62.110 of this part;
- (b) The provision and use of hearing protectors under § 62.160 of this part;
- (c) Audiometric testing under §§ 62.170 through 62.175 of this part;
- (d) Training under § 62.180 of this part; and
- (e) Recordkeeping under § 62.190 of this part.

§ 62.160 Hearing protectors.

(a) A mine operator must provide a hearing protector to a miner whose

noise exposure equals or exceeds the action level under § 62.120 of this part. In addition, the mine operator must:

- (1) Train the miner in accordance with § 62.180 of this part;
- (2) Allow the miner to choose a hearing protector from at least two muff types and two plug types, and in the event dual hearing protectors are required, to choose one of each type;
- (3) Ensure that the hearing protector is in good condition and is fitted and maintained in accordance with the manufacturer's instructions;
- (4) Provide the hearing protector and necessary replacements at no cost to the miner; and