



• Record Type:	Instruction
• Directive Number:	CPL 02-02-035
• Old Directive Number:	CPL 2-2.35A
• Title:	29 CFR 1910.95(b)(1), Guidelines for Noise Enforcement; Appendix A
• Information Date:	12/19/1983
• Standard Number:	<u>1910.95(b)(1)</u>

NOTE: Although the first three (3) pages of this OSHA Instruction CPL 2-2.35A have been cancelled, Appendix A is still valid.

Appendix A

Noise Control Guidelines

When comparing the relative degree of attenuation of personal protectors and engineering and/or administrative controls, all of the following factors in addition to the guidelines in the Field Operations Manual and Industrial Hygiene Field Operations Manual must be considered and documented in the case file:

1. Hearing Protection. Personal hearing protection must attenuate the occupational noise received by the employee's ears to within the levels specified in Table G-16 of 29 CFR 1910.95. For those employees with a standard threshold shift (STS), noise reduction must be sufficient to meet Table G-16a of 29 CFR 1910.95 (85 TWA). Hearing protectors shall be evaluated for the purposes of analyzing the benefits of engineering controls as follows:

- a. Use Appendix B of 29 CFR 1910.95 to determine the laboratory-based noise reduction for a given hearing protector.
- b. Apply a safety factor of 50 percent; i.e., divide the calculated laboratory-based attenuation by 2.

NOTE: This is a general method for taking into consideration OSHA experience and the published scientific literature, which indicate that laboratory-obtained attenuation data for hearing protectors are seldom achieved in the workplace. If a different safety factor seems appropriate in a particular instance, the ARA for Technical Support should be consulted for assistance. This procedure is not applicable, however, for determining compliance with the hearing protector attenuation requirements of the hearing conservation amendment (29 CFR 1910.95(j)).

- c. The adjusted noise reduction should be sufficient to meet Table G-16 or, as appropriate, Table G-16a. Depending on the specifics of the case, an exception may be appropriate when an employer is in compliance with the hearing conservation amendment and has a history of an effective hearing conservation program.

2. Hearing Loss. Documentation of any hearing loss shall include:

- a. The amount of hearing ability lost and date it was recorded.

NOTE: If the employer has not done so, apply age correction to audio-grams according to the guidelines in Appendix F of 29 CFR 1910.95.

- b. Exposure level.
- c. Frequency and duration of exposure.
- d. Length of employment.
- e. Explanation of any followup measures taken.
- f. Any other pertinent information.

3. Cost of Controls.

a. **Reasonability.** The estimated costs for engineering controls must be reasonable and include the annualized cost of installing controls and, if available, the annual cost of their maintenance and costs due to any resulting loss of productivity or efficiency.

b. **Relative Permanency.** In order to consider the permanency of engineering controls, compare the estimated cost for engineering controls to the estimated annual cost of a hearing conservation program multiplied by the approximate number of years the controls would be effective.

4. Employee Noise Reduction by Controls. An anticipated reduction in employee noise exposures would be considered significant if a 3 to 5 dB decrease is achieved by one or a combination of the following:

- a. Source controls.
- b. Controlling the industrial environment (e.g., barriers, enclosures, etc.).
- c. Administrative controls.

5. Control Options. When evaluation control options for the purposes of this instruction, consider all types of abatement possibilities. For example:

a. **Partial Use of Controls.** It may be beneficial to implement some of the controls while forgoing more costly ones.

b. **Substitution.** Abatement plans may include plans for replacing process equipment with quieter equipment that will significantly reduce exposure levels and make interim engineering controls for existing machinery impractical.

[Directives - Table of Contents](#)

[Freedom of Information Act](#) | [Privacy & Security Statement](#) | [Disclaimers](#) | [Customer Survey](#) | [Important Web Site Notices](#) | [International](#) | [Contact Us](#)

U.S. Department of Labor | Occupational Safety & Health Administration | 200 Constitution Ave., NW, Washington, DC 20210
Telephone: 800-321-OSHA (6742) | TTY: 877-889-5627

<http://www.osha.gov/>