



# Hearing Conservation Program Tactics, Techniques, and Procedures (TTP)



Force Readiness Command  
(FORCECOM)

CGTTP 4-11.11  
November 2015

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CGTTP 4-11.11  
5 NOV 2015

## COAST GUARD TACTICS, TECHNIQUES, AND PROCEDURES 4-11.11

Subj: HEARING CONSERVATION PROGRAM

Ref: (a) Safety and Environmental Health Manual, COMDTINST M5100.47 (series)  
(b) Occupational Noise Exposure, 29 CFR 1910.95  
(c) Coast Guard Medical Manual, COMDTINST M6000.1 (series)

1. PURPOSE. To provide the unit Hearing Conservation Program (HCP) manager with Coast Guard tactics, techniques, and procedures (CGTTP) on developing, implementing, and maintaining a written unit HCP.
2. ACTION. This CGTTP publication applies to all Coast Guard units that have identified the need for a hearing conservation program due to the results of a hazard assessment on any other conditions in reference (a). Internet release is authorized.
3. DIRECTIVES/TTP AFFECTED. None.
4. DISCUSSION. This TTP publication provides guidance to HCP managers, unit safety coordinators, safety officers, employees, and unit personnel with the knowledge to prevent occupational hearing loss and ensure auditory fitness through the implementation of a written unit-specific HCP.
5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is itself a rule. It provides guidance for Coast Guard personnel and does not impose legally-binding requirements on any party outside the Coast Guard.
6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. While developing this publication, Integrated Process Team (IPT) members examined environmental considerations under the National Environmental Policy Act (NEPA) and determined they are not applicable.
7. DISTRIBUTION. FORCECOM TTP Division posts an electronic version of this TTP publication to the CGTTP Library on CGPortal. In CGPortal, navigate to the CGTTP Library by selecting **References > Tactics, Techniques, and Procedures (TTP)**. FORCECOM TTP Division does not provide paper distribution of this publication.

8. RECORDS MANAGEMENT CONSIDERATIONS. Integrated Process Team (IPT) members thoroughly reviewed this publication during the TTP coordinated approval process and determined there are no further records scheduling requirements per Federal Records Act, 44 U.S.C. Chapter 31 § 3101 et seq., National Archives and Records Administration (NARA) requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This publication does not have any significant or substantial change to existing records management requirements.
9. FORMS/REPORTS. None.
10. REQUEST FOR CHANGES. Submit recommendations for TTP improvements or corrections via email to FORCECOM-PI@uscg.mil or through the TTP Request form on CGPortal. In CGPortal, navigate to the TTP Request form by selecting **References > Tactics, Techniques, and Procedures (TTP) > TTP Request**.

Send lessons learned applicable to this TTP publication via command email to FORCECOM TTP Division at CMD-SMB-CG-FORCECOM.

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By Direction of Commander,  
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# Chapter 1: Introduction

## Introduction

This chapter overviews the background, scope, and audience of this TTP publication. It also defines the use of notes, cautions, and warnings in TTP publications.

## In This Chapter

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This chapter contains the following sections:

Section	Title	Page
A	Introduction	1-2
B	Notes, Cautions, and Warnings	1-4

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## Section A: Introduction

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### A.1. Introduction

This TTP provides procedures for implementing the United States Coast Guard (USCG) Hearing Conservation Program (HCP). It applies to all military and Coast Guard civilian employees exposed to noise hazards and sets procedures for implementing, managing, and enforcing the HCP. Many occupational activities in the USCG produce hazardous noise that may cause temporary or permanent hearing loss. The best practice is to reduce risk of exposure to hazardous noise through the following controls in order of decreasing effectiveness:

- Elimination/Substitution (e.g. removing noise producing equipment or switching to equipment that produces less noise).
- Engineering controls (e.g. redesign equipment; construct acoustic barriers).
- Administrative controls (e.g. change employee's work schedule).
- Personal Protective Equipment (PPE) (e.g. noise rated ear muffs, ear plugs).

Use PPE in combination with administration controls to provide worker protection when engineering controls are not adequate or feasible to remove the noise hazard.

The Safety and Environmental Health Division at the Health, Safety, and Work-Life Service Center [HSWL SC (se)] developed this publication to provide guidance to units that have determined the need for a HCP as a form of workplace protection. The guidance in this publication complies with policy and regulations in reference (a), Safety and Environmental Health Manual COMDTINST M5100.47 (series), and reference (b), OSHA Occupational Safety and Health Standards Occupational Noise Exposure, 29 CFR 1910.95.

Many aspects of HCP require technical assistance. Contact your Safety and Environmental Health Officer (SEHO) or HSWL SC (se) for support. Find your District's SEHO contact information on the HSWL SC (se) portal page by clicking [here](#) or by contacting HSWL SC (se) at (757) 628-4392.

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### A.2. Background

The goal of the Coast Guard HCP is to prevent occupational hearing loss and ensure auditory fitness for the military and civilian workforce. Hearing loss has been, and continues to be, a source of concern within all Coast Guard communities. Occupational hearing loss resulting from exposure to hazardous noise, the high cost of related compensation claims, and the resulting drop in productivity and efficiency, highlight a significant occupational problem that requires considerable attention.

Noise control and hearing conservation measures contribute to operational readiness by preserving and optimizing auditory fitness for duty in Coast Guard personnel. Hazardous noise is part of the military environment; therefore, hearing conservation cannot be taken for granted.

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### **A.3. Scope**

This TTP publication assists HCP managers in administering all elements of the HCP, including procedures and resources to develop, implement, and maintain the written HCP. The HCP provides unit level guidance for:

- Identifying hazardous noise sources.
- Proper PPE selection and use.
- Unit specific roles and responsibilities.
- Unit specific program requirements.

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### **A.4. TTP Assumptions**

This TTP publication assumes the unit has identified the need for a HCP because of a hazard assessment or any other conditions in reference (a), Safety and Environmental Health Manual COMDTINST M5100.47 (series). It also assumes the person selected as the HCP manager has received training for the role as required by references (a) and (b), Occupational Noise Exposure, 29 CFR 1910.95. The Unit Safety Coordinator (USC) course satisfies the HCP manager training requirement.

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## Section B: Notes, Cautions, and Warnings

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**B.1. Overview**      The following definitions apply to notes, cautions, and warnings found in TTP publications.

**NOTE:**      **An emphasized statement, procedure, or technique.**

**CAUTION:**      **A procedure, technique, or action that, if not followed, carries the risk of equipment damage.**

**WARNING:**      *A procedure, technique, or action that, if not followed, carries the risk of personnel injury or death.*

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## Chapter 2: Hearing Conservation Program

### Introduction

This chapter discusses how to develop, implement, and maintain the unit written Hearing Conservation Program. This chapter also outlines the necessary documentation for a complete program.

### In This Chapter

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This chapter contains the following sections:

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## Section A: Hearing Conservation Program

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### A.1. Developing the HCP

Reference (a), Safety and Environmental Health Manual, COMDTINST M5100.47 (series), requires the CO/OIC to develop and implement HCP whenever employee noise exposures equal or exceed:

- A continuous or intermittent noise level at 85 decibels measured on the A scale dB(A) for an 8-hour time-weighted average (8-hr TWA).
- Or,
- 140 decibel level at peak pressure dB(P) impact/impulse noise.

Use the template in this [link](#), along with the guidance in this TTP to develop the unit specific HCP.

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### A.1.a. Components of a HCP

Include the following components in the unit specific HCP:

- Results of sound level surveys (SLS).
- Location of all hazardous noise hazards sources (i.e. areas, equipment) that personnel may be exposed to during work.
- Location and description of training resources.
- Procedures to ensure medical monitoring of personnel with hazardous noise exposure.

Table 2-1 lists records and documentation needed to complete the unit specific HCP. Attach the completed documents to the unit HCP.

Record Type	Documentation Required	Frequency
Written Unit HCP	A unit instruction created from the <a href="#">template</a> in this publication establishing the HCP.	Initially and reviewed annually.
Noise Sampling	Document locations of work environments requiring hearing protection.	Initially and when there is a change/modification in procedures and/or equipment.
Noise Assessment	Maintain a list of identified hazardous noise work areas.	Initially and reassess when there is a change/modification in procedures and /or equipment.
Audiogram Test	Occupational Medical Surveillance and Evaluation Program (OMSEP) coordinator responsible for ensuring audiogram is complete.	Annually or within 6 months of an employee’s first exposure to noise hazard. Update as required.
Hearing Protection Training	Maintain records of employees that have completed hearing protection training.	Initially and annually thereafter.

**Table 2-1 HCP documentation requirements and schedule**

**A.2. Implementing the HCP**

Use the process below to implement the HCP:

1. Designate HCP manager in writing.
2. HCP manager develops written Hearing Conservation Program using template at this [link](#).
3. Identify potential hazardous noise areas and sources using [Figure 3-1, Chapter 3 Section A.2](#), as a guide.
4. Contact your local SEHO to obtain SLS and personal dosimetry monitoring, if applicable. SEHO assesses and designates hazardous noise areas, levels, and equipment.
5. Maintain listing of all hazardous noise areas, hazardous noise power equipment, and associated SLS.
6. Employ appropriate engineering and administrative controls to reduce or eliminate noise exposures when feasible.
7. Use hearing protective devices based on noise level in work area and SEHO determination. Use single hearing protection for noise levels over 85 dB(A) but under 104 dB(A). Use a combination of insert and circumaural type hearing protective devices (double hearing protection) in areas where noise levels exceed 104 dB(A).

8. Post “Hearing Protection Required” warning signs at accesses to spaces or by machinery that exceeds 85 dB(A) or 140 dB(P) in accordance with Chapter 3, Section C of this TTP.
  9. Provide hearing conservation training to all personnel exposed to hazardous noise. Document all training.
  10. Provide personnel with appropriate PPE.
  11. Ensure the hearing conservation protocols of the OMSEP is being fully administered at the local level.
  12. Evaluate new work tasks and processes for hazardous noise exposures to ensure appropriate HCP controls are implemented.
  13. Update HCP when there is a change/modification in procedures and or equipment.
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## Chapter 3: Identifying Hazardous Noise Sources

**Introduction** This chapter discusses the process for identifying, assessing, and documenting hazardous noise sources.

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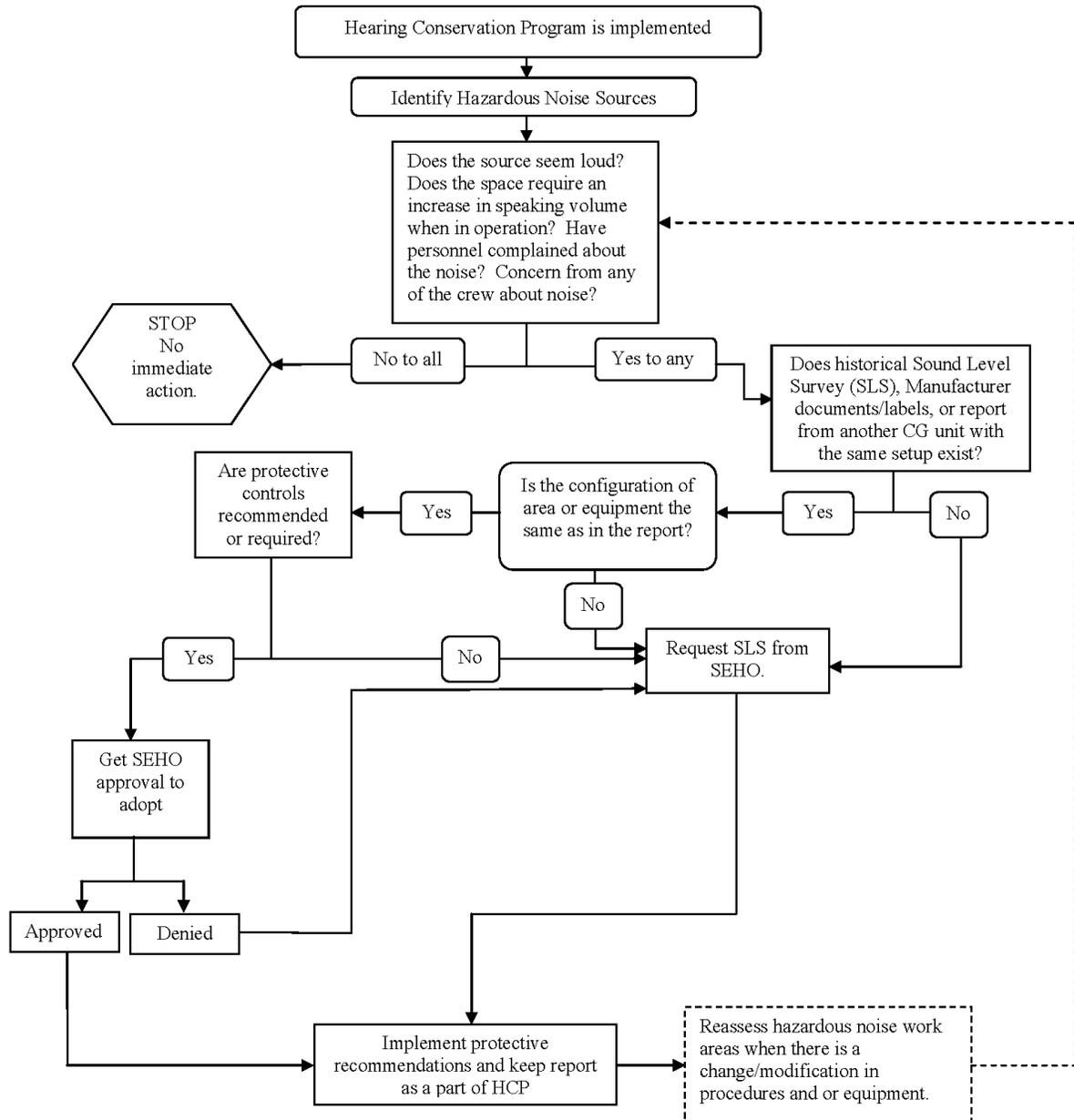
**In This Chapter** This chapter contains the following sections:

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B	Sound Level Surveys	3-5
C	Labeling	3-6

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## Section A: Hazardous Noise Sources

**A.1. Inventory of Hazardous Noise Sources** The flowchart below illustrates the entire process for identifying hazardous noise sources and the steps to control exposures after identification. Use the flowchart along with guidance in this TTP to identify and document hazardous noise sources.



**Figure 3-1: Identifying Hazardous Noise Sources**

**A.2. Hazardous  
Noise  
Assessment**

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The HCP manager does not have the responsibility to assess noise; however, the HCP manager should request a SLS from their local SEHO after identifying potential hazardous noise areas and determining if the SLS is required.

Use the following guidance to determine necessity for a SLS or dosimetry:

1. Using unit diagrams, document target areas of potential hazardous noise along with noise sources (e.g., machinery, processes).
2. Identify areas to determine if a person has to raise their voice from a distance of 3 feet or less.
3. Interview members that work in target spaces and discuss noise patterns, training, precautions, and equipment history.
4. Identify controls that are currently in place to protect members and determine which controls are not being used properly.
5. Identify spaces that have recent alterations and may have different levels of noise.
6. Document all findings as a “potential” noise hazard then contact local SEHO to discuss the need for monitoring and protection.

**A.3. Shore  
Facilities  
Common Noise  
Sources**

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The information below can be used as a guide to determine if hazardous noise is present.

Common hazardous noise sources at shore facilities include:

- Grounds maintenance: lawn tractors, special purpose motorized equipment (SPME), and other lawn equipment including mowers, weed whackers, chain saws, and leaf blowers.
- Power tools: grinders, power saws and other shop equipment.
- Range operations: shooting, ventilation system.
- Air station operations: engine start-up, taxiing, take-off, hovering, corrosion control equipment, air tools, and commercial and other military aircraft operations.
- Aids to navigation operations (ATON): crane operations, buoy recovery, pile driving, helo ops, pressure washing, fog horn.
- Major industrial operations: blasting, painting, sandblasting, crane operations.

**A.4. Afloat  
Common Noise  
Sources**

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Use the information below to determine if hazardous noise is present.

Common noise sources include:

- All engineering spaces, including engine rooms, auxiliary machinery spaces, steering gear space.
  - Armory and GUNEX operations.
  - Scullery operations.
  - Bridge watch, when fog horn is in use.
  - Small boat operations including underway operations, rescue and recovery, pump use, light off, and use of sirens, radios, and horns.
  - Helicopter operations.
  - Maritime Law Enforcement/Boarding Team Operations.
  - Portable Damage Control equipment.
  - Rescue and Assistance Operations.
  - Diaphragm pump for sewage (aka vacuum pump).
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## Section B: Sound Level Surveys

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### B.1. Sound Level Surveys

- Complete and document initial identification of hazardous noise sources (see [Section A](#)).
- Determine if identified hazardous noise areas or equipment had previous SLS completed. Review the most recent report. If a change has occurred or there is no survey, contact the SEHO to request a new SLS.
- Recommend protective measures that could be used as an interim until the full SLS is completed.
- Review results from sound level survey to determine permanent protective measures.
- Keep the most current SLS on file with the HCP.

**NOTE:**

**Keep SLS for as long as the current sound producing configuration is in place.**

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## Section C: Labeling Noise Areas and Sources

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### C.1. Labels

Per reference (a), Safety and Environmental Health Manual, COMDTINST M5100.47(series), units shall label designated hazardous noise areas and equipment that produce sound levels 85 dB(A) or greater, or 140 dB(C) peak sound pressure level (SPL).

Post **DANGER** signs that specify whether a single or double hearing protection is required in the entrance to, or periphery of, noise-hazardous areas (85 dB(A) or 140 dB(C) peak SPL).

- Post sign and annotate decibel level on sign.
- Ensure labels include either verbiage or visual symbols that clearly describe the potential hazard and the protective measures taken to avoid overexposure.
- Use an OSHA approved sign. Figure 3-2 provides an example.



Figure 3-2: Danger Sign for Labeling Noise Hazardous Areas

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## Chapter 4: Medical Surveillance Program

**Introduction** This chapter discusses medical monitoring responsibilities for personnel that are enrolled in the HCP.

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**In This Chapter** This chapter contains the following sections:

<b>Section</b>	<b>Title</b>	<b>Page</b>
A	Medical Monitoring	4-2

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## **Section A: Medical Monitoring**

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### **A.1. Medical Surveillance Program**

The unit OMSEP Coordinator must ensure enrollment of members who meet or exceed the standards in reference (c), Medical Manual, COMDTINST M6000.1 (series). Enrolled members are no longer required to have the initial/baseline or exit/separation physical examination. Members must complete the following:

- History and Report of OMSEP Examination, CG 5447, for initial/baseline or exit/separation examination.
  - Reference Audiogram, DD 2215, if initial/baseline or exit/separation examination.
  - Periodic History and Report of OMSEP Examination, CG 5447A, or periodic examination.
  - Hearing Conservation Data, DD 2216, if periodic examination.
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## Chapter 5: Training

**Introduction** This chapter discusses the training requirements and documentation for the HCP.

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**In This Chapter** This chapter contains the following sections:

Section	Title	Page
A	Training Records	5-2

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## Section A: Training Records

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### **A.1. Noise Hazard Awareness Training**

Ensure Coast Guard employees exposed to noise at or above an 8-hr TWA of 85 dB(A) receive initial and refresher training annually. The training shall cover the following information:

- The effects of noise on hearing;
- The purpose of hearing protectors;
- The advantages and disadvantages of various types of hearing protectors;
- Attenuation of various types of hearing protectors;
- Instruction on selection, fitting, use and care of hearing protection;
- Procedures of audiometric testing.

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### **A.2. Training Documentation**

- Document all hearing conservation training in Training Management Tool (TMT) application.
  - Ensure completion of course #100012 located on LMS is documented in TMT and subsequently from TMT into CGBI within 48 hours.
  - Manually enter other methods of training into TMT for documentation.
  - Reference the TMT User Guide and Tutorials for instructions: <http://aops.osc.uscg.mil/#>.
  - For additional training materials including hearing conservation videos or PowerPoint, contact HSWL-SC (se).
-

## Appendix A: Glossary and Acronyms

<b>A</b>	Scale on Sound Level Meter
<b>C</b>	Scale on Sound Level Meter
<b>CFR</b>	Code for Federal Regulations
<b>CO</b>	Commanding Officers
<b>dB</b>	Decibel
<b>dB(A)</b>	Decibel Level Using the A Scale
<b>dB(P)</b>	Decibel Level at Peak Pressure
<b>HCP</b>	Hearing Conservation Program
<b>HPD</b>	Hearing Protective Device
<b>HSWL SC</b>	Heath Safety Work-life Service Center
<b>OIC</b>	Officers-in-Charge
<b>OMSEP</b>	Occupational Medical Surveillance and Evaluation Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>P</b>	Peak Pressure on Sound Level Meter
<b>SEHO</b>	Safety Environmental Health Officer
<b>SPL</b>	Sound Pressure Level

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**Time-Weighted  
Average (TWA)**

The Time-Weighted Average is the average exposure to any hazardous contaminant in the workplace on the basis of an 8-hour per day or 40 hours per week work program. It is the maximum average exposure to such hazardous contaminant to which workers may be exposed without experiencing significant adverse health effects over said period. TWA is generally expressed in units of parts per million (ppm) or mg/m<sup>3</sup>, or in this case dBA.

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