

QP Energy Services LLC
Hearing Conservation Program
HSE Manual Section 7
Effective Date: 5/30/15
Revision #:

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1.0 Reference Standard

- Occupational Safety and Health Administration, Subpart G: 29 CFR 1910. 95, Occupational Noise Exposure

2.0 Purpose

- This procedure establishes minimum requirements to evaluate noise exposure in the facility and to protect personnel from noise induced hearing loss.

3.0 Scope

- This procedure applies to all of our company employees, all contractors and vendors performing work on company property, and all other individuals who are visiting or have business with our company.

4.0 Responsibilities

- Management is responsible for development and review of this program. Management is also responsible for appropriate employee training.
- Management and supervisors are responsible for enforcement of this program.
- Employees shall comply with all procedures outlined in this policy.
- Contractors and vendors shall comply with all procedures outlined in this policy.

5.0 Definitions

Action Level: The action level for noise exposure is: 85 dBA for an 8 hour Time WeightedAverage (TWA)

Audiogram: A screening test to determine hearing acuity through administration of air conduction tones transmitted through head phones.

Baseline Audiogram: The initial audiogram taken upon hire or assignment to a noisy area.

Contractor: A non-company employee being paid to perform work in our facility.

Decibel: Abbreviated dB-a measure of sound pressure or loudness. For purposes of OSHA compliance noise is measured in dBA (decibels on the A scale, Slow response)

Dosimeter: An electronic device that converts sound pressure into an electronic signal that is stored for future evaluation. All continuous, intermittent and impulse sound between 80 and 130 decibels will be integrated into the readings.

Noise: Unwanted sound.

Sound Level Meter (SLM): An SLM is a device that is capable of giving a direct, instantaneous reading of the sound pressure or loudness. The SLM can also record the highest impulse noise that has occurred. The SLM has three scales: A, B and C, and a Fast and Slow Response capability.

Standard Threshold Shift: A permanent change in hearing (worsening) found when comparing an annual audiogram with a baseline audiogram.

Vendor: A non-company employee being paid to perform a service in our facility.

6.0 Procedure

6.1 Noise Exposure

- Whenever feasible, noise exposure exceeding that listed below will be controlled by engineering or administrative means.
- When it is impractical to use engineering or administrative controls a hearing conservation program will be implemented.

<u>Duration per day, Hours</u>	<u>Sound Level (dBA, slow response)</u>
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
.5	110
.25 (or less)	115

6.2 Monitoring

- Whenever information indicates that noise exposure may be at or above 85 dBA, in an area or department monitoring will be performed utilizing either a Sound Level Meter or a Dosimeter.
- All instruments used for noise monitoring will be calibrated before and after use and a record maintained of the calibrations and readings derived through monitoring.
- Whenever readings are taken for OSHA compliance purposes the meter or dosimeter will be set to the A scale, Slow response.
- Monitoring will be repeated whenever a change in production, process, equipment or controls increases, or could increase exposure.
- Employees (or their representatives) will be allowed to observe monitoring. Employees who have an 8 hour TWA of 85 dBA or greater will be notified of the results of the monitoring in writing.

6.3 Hearing Conservation Program

All employees who are exposed to noise level of 85dBA or greater 8 hour TWA, will be required to participate in the hearing conservation program. This program will consist of:

- Audiometric testing
- Mandatory hearing protection*
- Training

* Our Company has decided to mandate the use of hearing protection at 85dB rather than the OSHA requirement of 90dB

6.3.1 Audiometric Testing:

- Audiograms will contain the following information or the information will be readily accessible and linked to the audiogram:
 - o Name and job classification of the individual
 - o Date of the audiogram
 - o The examiner's name
 - o Date of the last acoustical or exhaustive calibration of the audiometer
 - o Employee's most recent noise exposure assessment
 - o The background sound pressure levels in the audiometric test room/booth

6.3.2 Baseline Audiogram:

- A baseline audiogram will be obtained as soon as possible, within the first six months after employment or assignment to an area with noise exposure at or above a Time Weighted Average of 85 dBA. If a mobile test van is used, the baseline audiogram will be completed within one year of employment or initial assignment to a noise exposure area.
- At least 14 hours without workplace exposure will precede the baseline audiogram. Hearing protectors can be required to be used as a substitute for 14 hours without exposure. Employees will also be notified to stay away from significant non-occupational noise for 14 hours.

6.3.3 Annual Audiograms:

- Annual audiograms will be provided for all employees who are exposed to noise at or above a Time Weighted Average of 85 dBA.

Standard Threshold Shift (STS):

- The annual audiogram will be compared to the baseline audiogram to determine if a standard threshold shift has occurred. A standard threshold shift is defined as a change in hearing threshold of an average of 10 dB at 2000, 3000 or 4000 Hz in either ear.
 - If an STS is determined a retest will be conducted within 30 days. The retest results can then be used as the annual audiogram.
 - Any audiogram showing an STS will be referred to audiologist, otolaryngologist or physician for evaluation.
- If an STS occurs the following will be done:
 - The employee will be notified in writing within 21 days of the determination
 - The employee will be refitted and retrained in the use of hearing protection
 - The medical opinion of the evaluating practitioner will be followed and/or communicated to the employee regarding the need for follow-up medical evaluation either for occupational or non-occupational reasons.
 - Communication with the employee will be in writing.
- Age correction will be taken into account as permitted by OSHA. See Appendix F of 29 CFR 1910.95, Occupational Noise Exposure
- When the audiologist, otolaryngologist, or physician determines that an STS has occurred, the revised audiogram will be used as the new baseline
- The STS will be recorded on the OSHA 300 Log if:
 - Hearing level is 25 dB or greater from audiometric zero at any test point
 - An STS of 10 dB or greater is identified
 - A medical professional says the hearing loss is work related

6.4 Medical Management

- All audiometric testing will be conducted by individuals who are certified by the Council of Accreditation in Occupational Hearing Conservation.

Technicians will report to an audiologist, otolaryngologist or physician who will advise management regarding program administration, employee audiometric health and other matters pertaining to the Hearing Conservation Program. Our Medical Manager will ensure that all audiometric testing requirements are met.

6.5 Hearing Protectors

- All employees with a noise exposure at or above a Time Weighted Average of 85 dBA will wear company provided hearing protectors for their entire shift while in areas with noise exposure at or above 85 dBA.
- Hearing protection will provide the greatest attenuation possible and in no case allow greater than 80dBA calculated exposure.
- We will provide a choice of at least two suitable hearing protectors.
- If noise exposure increases, we will re-evaluate all hearing protection to ensure adequate protection.
- The following formula will be used to determine the efficiency of hearing protection:
 - o Subtract 7dB from the NRR of the hearing protector
 - o Subtract the modified NRR (determined in the step above) from the 8 hour TWA for the employee exposure as determined through monitoring

6.6 Training Program and Access to Information

- All employees exposed to noise at or above the time weighted average of 85 dBA will receive training as outlined below.
- Content of the training will be:
 - o Areas with noise exposure
 - o Facility rules requiring use of hearing protection
 - o The effects of noise on hearing
 - o The purpose of hearing protectors including: advantages, disadvantages, attenuation, and fitting and care instructions for each available type
 - o The purpose for and explanation of the procedure for audiometric testing
- Training will be provided at time of hire or assignment into an area with noise exposure at or greater than 85 dBA, and repeated annually thereafter.

- A copy of 29 CFR 1910.95, Occupational Noise exposure will be available to employees from the program administrator. *Additionally*, as required in 29 CFR 1910.95(l)(1), a copy of this standard has been posted: at the office in Smithville & on the bulletin boards at the Yards.
- Any additional materials supplied by OSHA to this facility pertaining to Hearing Conservation will also be made available to employees.
- All employees and their representatives have access to the OSHA standard and any other government provided information regarding hearing conservation, our facility hearing conservation program, and their individual audiometric test record. Additionally, the program administrator will provide assistance with understanding this information.

6.7 Recordkeeping

- All monitoring data, personal and area sampling and SLM readings, will be evaluated for permanent records retention due to the value in determining workers' compensation compensability of hearing loss. In no case will such data be retained less than two years.
- Audiometric testing records will be retained for at least the duration of employment and will be evaluated for permanent records retention due to the value in determining worker's comp compensability of hearing loss.

7.0 Revision History Record:

Revision Number	Section	Revised By	Description
0	NA	NA	Original document.