Levitt-Safety has been serving the Canadian environmental, health, safety and fire market since 1935. Today we’re proud to announce that our EHS Training & Consulting Services group has developed a standardized protocol for providing customers Occupational Noise Exposure Assessment Services.

We are the solution for a turnkey Noise Exposure Survey & Assessment service and provide the expertise required to develop and launch a company specific Hearing Conservation Program.

Our work may include, but is not limited to: the timely delivery of employee training and awareness, the selection of suitable hearing protection devices according to circumstances, and providing assistance with the determination of mandatory hearing protection areas and audiometric testing support.

The following represents our protocol with respect to our Noise Exposure Assessment Services:

**Preamble**

This protocol has been developed to guide Levitt-Safety | EHS Training & Consulting Services (LTCS) technicians along a track that ensures rigid focus on consistency and quality assurance during all facets of customer work. It provides the technician with clear and concise objectives that define occupational study approaches that are typical and representative of the workplace environment, regardless of the industry type or workplace surroundings. Logical steps have been incorporated so that all key and critical survey and assessment elements are considered and applied during the work process, ensuring that customer expectations are met, while all applicable standards, codes, and legislation are complied with. Our LTCS team strives for excellence in all that it does within a framework that recognizes the criticality of these key business imperatives. LTCS technicians are specialists required to embrace these values in all they do, while making certain that all such work is carried out within the herein described framework.
Pre-Assessment & Planning

In order to prepare a cost-effective and timely execution plan and proposal for our customer that is objective and representative of the workplace circumstances, one or more LTCS representatives will arrange an exploratory meeting with the customer at earliest opportunity. This meeting will normally take place at the customer’s work premises and if deemed necessary, may include time in the physical workplace. This time will be used to gain a clear understanding of the customer’s needs and expectations.

It is important for the customer to have an idea of what they need and to determine an expected outcome prior to the meeting and to then provide LTCS as much detail as possible in relation to their specific requirements. The detail required would include, but is not limited to: the reasoning behind the assessment (i.e. government ordered), applicable government documentation (written orders), the type of substances to be studied, the size of the study group (projected number of workers to be studied), the physical locations of the areas to be assessed, and if possible, the causative factors associated with the need for the assessment in the first place.

The customer will be provided with a detailed proposal for the work to be carried out by LTCS, along with a breakdown of the associated costs. The completed proposal is normally delivered to the customer within one week or less following the exploratory meeting. Depending on the scope and magnitude of the customer’s requirement, it may have been determined that a separate and more detailed visit of the workplace(s) is required in order to plan and prepare more accurately, therefore supporting the preparation of a more comprehensive proposal. In such instances, the delivery of a final proposal will be delayed according to the circumstances.

Methodology

The Sound Level Survey and Personal Noise Dosimeter steps will be planned and executed in accordance with the local Occupational Health and Safety Authority while applying CSA Standard Z107.56-06 (Procedures for the Measurement of Occupational Noise Exposure). The applicable ANSI Standards will be followed during the set-up and use of Sound Level Meters and Personal Noise Dosimeter instrumentation. Attention will be paid to ensure that instruments are programmed to recognize local laws, such as “The Exchange Rate/Doubling Rate” (either 5dB or 3dB) factor. The Sound Level Surveys and Individual Noise Dosimeter Assessment work will be carried out and collected using Levitt-Safety supplied, approved, calibrated, and battery-powered instrumentation, including:

- Basic Sound Level Meter
- Integrating Sound Level Meter
- Sound Level Meter with Octave and Third Octave Band Filters
- Noise Dosimeter
Conformance

In all instances, local government legislation will be referenced and applied to whatever extent is necessary to ensure absolute compliance with applicable standards and codes. All sound surveys and noise assessment work will be carried out in accordance with Canadian Standards Association (CSA) Standard Z107.5606, while applicable American National Standards Institute (ANSI) Standards will also be referenced and followed during the set-up and use of Sound Level Meters and Personal Noise Dosimeter instrumentation. Our technicians are expected to execute their work to the highest standards possible. Their individual performance is otherwise measured on their adherence to this code of conduct, providing another way to enforce the necessity of integrity in all aspects of customer prescribed activity.

Scope of Work

The following identifies the key steps to be taken in a Sound Level/Noise Assessment Program. They are as outlined:

- **Identify job activities that do or may generate over-limit occupational noise exposures in the workplace.** If you believe or know that noise exposures in the workplace exceed the established TWA by 2dBA or more, then at minimum, a Sound Level Survey should be initiated; the result of this preliminary study would determine the need for the next steps. The LTCS technician will observe and review the applicable work activities to identify those that are or may be exposed to excessive noise levels.

- **Identify occupations and/or workers that are at risk of excessive noise exposure.** For example, at a general construction work site, a general labourer using a jack hammer to break concrete would be at greater risk than an electrician on the same site. Or, during work at a gravel crushing plant, the maintenance mechanic would be identified as being at greater risk than the plant control room operator.

- **Determine the frequency and amount of noise exposure.** Some activities generate more noise and sometimes more frequently than others; the amount of, and level of exposure will need to be determined.

- **Determine the duration of the exposure.** Workers who primarily use a cut-off saw during their regular shifts would be at greater risk than other workers who use the same cut-off saw infrequently or for much shorter periods of time.

- **Observe and assess existing loud noise work areas.** Is there an easy fix or solution to eliminate or reduce the amount of noise being emitted from a noisy piece of equipment while in operation? For example, the noise emitted during the use of a portable generator or compressor may be easily resolved by moving the equipment further away from exposed workers, even if this means having to add additional lengths of power cord or air lines. These are the kind of questions that need to be considered when...
observing this kind of activity. Are manufacturer supplied mufflers being utilized, and in good serviceable condition? Are there other methods of noise elimination or reduction that can be employed, like the placement of walls around a generator that would absorb much of the noise being emitted from it while in operation?

Workplace noise exposure can be very complicated and may require the involvement of a mechanical engineer that specializes in this kind of work - this may end up being one of the recommendations that is presented in the customer report.

The technician will take pictures of key areas and concerns identified in order to support his or her findings, and they will be included with the final report that is provided to the customer.

The sampling and assessment work will include:

- The findings associated with the preliminary Sound Level Survey work allow the LTCS technician to better determine which workers and how many should be included in the occupational, personal noise dosimeter assessment study. The observations and determinations gained from the initial steps allow the technician to make objective and representative study decisions. All employees that are selected to participate in this aspect of the program will be suitably instructed in the process and handling of the equipment to minimize unnecessary interferences or deviations in study results; this will be done by the LTCS technician responsible for the assessment.

- The preparation and strategic use of calibrated, Sound Level Meters and Noise Dosimeter instrumentation. Instrument and assessment/study integrity will be reinforced and validated through recognized pre and post calibration techniques.

- Field data log sheets will be utilized during all steps of the sampling and assessment work; these sheets will be retained on file at Levitt-Safety for a period of no less than three years from the date that the study was carried out. The preparation of a detailed report that includes the respirable exposure lab results along with recommendations based on these results and the field observations.

Extended Services for Hearing Protection and a Company Specific Hearing Conservation Program

As a well-established and key source for all aspects of hearing protection, LTCS is entirely equipped to support its customers with any and all forms of approved hearing protection as a last line of defense and will work with the customer to develop and implement a quality and approved Hearing Conservation Program. In most jurisdictions, companies that are required to provide workers with hearing protection for regular use are also required to have the same group of workers submit to regular audiometric testing as prescribed by local legislation. As a long-standing supplier of a wide range of medical and occupational health equipment, Levitt-Safety also supplies audiometric testing equipment and booths, along with all related media and educational support.