**<< FARM NAME >> HEARING CONSERVATION & NOISE PROTECTION POLICY**

**PURPOSE**

In recognition that continuous exposure to high levels of noise can result in hearing loss or damage, << FARM NAME >> has adopted this Hearing Conservation and Noise Protection Policy to protect workers from these hazards and ensure compliance with the requirements of Part 2 of the Nova Scotia Occupational Health and Safety Workplace Regulations and the Farm Safety Plan.

## DEFINITIONS

For purposes of this Policy:

**Abnormal Audiogram** means an Audiogram that indicates:

* The threshold in either ear is more than 25 dB at 500, 1000, or 2000 Hz; or
* The threshold in either ear is more than 60 dB at 3000, 4000, or 6000 Hz; or
* There is one‑sided hearing loss with the difference in hearing threshold level between the better and the poorer ear exceeding the average of 30 dB at 3000, 4000, and 6000 Hz.

**Abnormal Shift** means a threshold shift, in either ear, of 15 dB at two consecutive test frequencies from 1000 Hz up to and including 6000 Hz when compared to the baseline test.

**Audiometer** means a device meeting the specifications for an audiometer set out in ANSI S3.6-2004, Specification for Audiometers.

**Audiometric Technician** means a person who has passed an audiometric technician course approved by the Alberta Director of Medical Services, or who has been approved by the Director of Medical Services as having the equivalent of an approved audiometric technician course and who, in either case, has passed a prequalification exam when requested to do so by the Director of Medical Services.

**Competent** when used to refer to a person, means the person is adequately qualified, suitably trained, and sufficiently experienced to perform work without supervision or a minimal degree of supervision.

**3 Decibel Exchange Rate** means that when the sound energy doubles, the decibel level increases by three.

**dBA** means a measure of sound level in decibels as measured using a reference sound pressure of 20 micropascals when measured on the “A”‑weighting network of a sound level meter.

**Hearing Protection** means a personal protective device designed to reduce the level of sound reaching the eardrum.

**Hz** means Hertz, a unit of frequency of electrical vibrations equal to one cycle per second.

**Lex** means the level of a worker’s total exposure to noise in dBA, averaged over the entire work day and adjusted to an equivalent 8-hour exposure measured in accordance with Section 216 of the Code and based on a 3-decibel exchange rate.

**Noise** means sound energy at a work site.

**Reasonably Practicable** means a standard used to determine whether a specific safety measure is appropriate and viable for use by the farm to control a specific noise hazard at its workplaces applied by farm management on a case-by-case basis and involves the determination of:

* Reasonableness - an evaluation that weighs factors such as degree of risk to workers, nature of the hazard, length and frequency of exposure, number of workers exposed, and severity of consequences the hazard can result in; and
* Practicability - an evaluation of whether a particular method of controlling the noise hazard is technologically feasible, affordable, cost-effective for the particular hazard, suited to the circumstances of the workplace, or otherwise viable.

To be deemed not “reasonably practicable,” a noise control measure must be more than simply inconvenient or costly but impossible to adopt or possible to implement only by investing time, energy, money, and other resources that are disproportionate to the safety benefits the measure would provide.

## POLICY STATEMENT

<< FARM NAME >> will ensure that all reasonably practicable measures are used to reduce the noise to

which workers are exposed in areas of the work site where workers may be present and that worker’s exposure to noise does not exceed the safe occupational exposure limit to noise, i.e., noise that exceeds either:

* + Refer to the noise exposure limits set out in American Conference of Industrial Hygienists (ACGIH) tables; or
  + 85 dBA.

**THIS POLICY IS INTENDED TO PROTECT**

The intent of this policy is to ensure that all workersengaged to work at the farm work sites who are or may be exposed to hazardous levels of noise are properly protected regardless of who pays or employs those workers, including:

* Full- or part-time workers;
* Temporary employees placed by an outside agency to work at the site; and
* Contract labourers engaged to perform work at the site.

**ROLES & RESPONSIBILITIES**

<< FARM NAME >> owners, managers, supervisors and others who may be defined as an “employer” under the OHS Act are responsible for overall implementation of this policy, including ensuring that:

* The resources necessary to implement this policy effectively are provided;
* All reasonably practicable measures are taken to keep workers’ exposure to noise;
* The noise exposure assessment required by this policy is carried out and appropriately reviewed;
* Workers are allowed to participate in the noise exposure assessment and the selection of hazard controls either directly or through the farm Health and Safety Committee or Representative;
* Where workers are exposed to excessive noise, a Noise Management Program required by this policy is created and effectively implemented;
* Workers exposed to noise hazards are provided and properly use the required hearing protection;
* Workers receive the necessary safety information and training;
* Workers receive at << FARM NAME >>'s expense, the audiometric testing to which they’re entitled under Part 2 of the Nova Scotia OHS Workplace regulations;
* Workers receive credit for time at work for the time they spend getting tested;
* This policy and the Code of Practice is applied to Prime Contractors, contractors, and subcontractors hired to work at the farm work sites to perform work involving exposure to excessive noise; and
* This policy is appropriately reviewed.

**Managers/Supervisors**

Managers, Supervisors, Foremen, and other persons in charge of work operations involving exposure are responsible for properly carrying out the measures set out in this policy and Noise Management Program to protect workers from noise, including ensuring that:

* Workers exposed to noise hazards are notified of those hazards and the hearing protection equipment necessary to protect them;
* Workers receive training in the proper use, limitations, maintenance, and storage of the hearing protection equipment they are required to use, including, without limitation, how to ensure a proper fit;
* Workers are notified of their rights to receive audiometric testing at << FARM NAME >>'s expense
* The safe work procedures required to limit workers’ exposure to excessive noise are properly carried out;
* Workers are held accountable for complying with this policy and Noise Management Program, including where necessary via the imposition of discipline for serious infractions;
* This policy and the Noise Management Program are properly applied to workers of Prime Contractors, contractors, and subcontractors hired to work at the farm work sites who are or may be exposed to excessive noise; and
* This policy is appropriately reviewed

**Workers**

Workers exposed to excessive noise will cooperate with the farm in its efforts to implement this policy by:

* Attending, learning, and applying the safety training provided under this policy and the Noise Management Program;
* Properly using and caring for the hearing protection they’re required to use;
* Making sure such hearing protection equipment fits properly and is properly inspected;
* Getting the audiometric tests to which, they are entitled;
* Providing the medical history information requested by an audiometric technician when required by this Policy; and
* Reporting any noise hazards, hearing protection equipment defects, or symptoms of hearing damage to their supervisor.

**Audiometric Technician**

The audiometric technician who administers the audiometric tests provided for under this policy will ensure such tests are carried out properly and in compliance with the policy by:

* Consulting with the physician, audiologist, or occupational health nurse designated by the farm;
* Ensuring that testing methods and devices meet all requirements, including but not limited to for permissible background noise set out in this policy;
* Keeping the required audiometric testing log book;
* Properly notifying the worker and designated physician, audiologist, or occupational health nurse when testing indicates an abnormal audiogram or abnormal shift; and
* Keeping the worker’s health information private.

**Workplace Health & Safety Committee or Representative**

The workplace Health and Safety Committee or Health and Safety Representative will:

* Participate in the noise exposure assessment, if requested;
* Provide input into the selection of controls appropriate to protect workers from hazards identified in the noise exposure assessment;
* Provide input into the development of any required Noise Management Program;
* Consider the effectiveness of noise control measures and hearing protection equipment as part of the routine monthly workplace inspection;
* Issue recommendations for improving noise protection;
* Participate in the investigation of incidents or complaints of hearing damage; and
* Participate in the review of this policy, the noise exposure assessment, and the Noise Management Program.

**Visitors**

Visitors to the farm will refrain from entering parts of the work site that contain noise hazards or potential noise hazards unless they are ready, willing, and able to properly use the required hearing protection equipment.

**NOISE EXPOSURE ASSESSMENT**

<< FARM NAME >> will designate a competent person, i.e., an industrial hygienist, audiologist, or other professional with appropriate training, to perform a noise exposure assessment where workers are or may be exposed to noise at the farm work sites above the safe occupational exposure limits referred to in this policy. To perform the noise exposure assessment, the competent person will measure noise in accordance with CSA Z107.56-06, Procedures for the Measurement of Occupational Noise Exposure. The person who measures noise exposure at a work site will use:

* A sound level meter that meets the requirements for a Type 2 instrument set out in ANSI S1.4-1983 (R2006), Specification for Sound Level Meters; or
* A noise dosimeter that meets the requirements for a Type 2 instrument set out in ANSI S1.25-1991 (R1997), Specification for Noise Dosimeters, and which is set at:
  + A criterion level of 85 dBA with a 3 dB exchange rate AND
  + A threshold level at or below 80 dBA or “off” AND
  + Slow response

Or

* An integrating sound level meter that meets the requirements of i. ANSI S1.43-1997, Specifications for Integrating Averaging Sound Level Meters, or ii. IEC 61672-1 (2002), Electroacoustics – Sound Level Meters, Part 1: Specifications, and Part 2: Pattern Evaluation Tests.

**Interpretation of Noise Exposure Assessment**

The farm will ensure that the competent person who performs the noise exposure assessment or another competent person, i.e., an industrial hygienist, audiologist, or other professional with appropriate training, interprets the data from the assessment.

**Updating of Noise Exposure Assessment**

The farm will ensure that the noise exposure assessment is updated if a change in equipment or process affects the noise level or length of time the worker is exposed to noise or in response to other indications that raise concerns about whether it’s accurate or up to date, including but not limited to worker complaints or reports of symptoms associated with hearing damage.

**Records of Noise Exposure Measurements**

The farm will ensure that the results of noise exposure measurements are recorded and include all of the following:

* The dates of measurements
* The workers or occupations evaluated
* The type of measuring equipment used
* The sound level readings measured
* The work location evaluated

Copies of the results of the noise exposure assessment will be made available upon request to:

* Affected workers, either directly or via the farm Health and Safety Committee or Representative; and
* Nova Scotia Occupational Health and Safety inspectors and officials.

The farm will retain the record of the noise exposure assessment for as long as it continues to operate in the province of Nova Scotia.

**CONTROL OF NOISE HAZARDS**

As required by Part 2 of the Nova Scotia OHS Workplace Regulations and the American Conference of Industrial Hygienists (ACGIH) tables, where the noise exposure assessment shows that workers are exposed to excessive noise on the farm, << FARM NAME >> will create and implement a Noise Management Program that include all of the following:

* A plan to educate workers about the hazards of exposure to excessive noise and train them in the correct use of control measures and hearing protection;
* The methods and procedures to be used when measuring or monitoring worker exposure to noise;
* The posting of suitable warning signs in any work area where the noise level exceeds 85 dBA;
* The methods of noise control to be used;
* The selection, use, and maintenance of hearing protection devices to be worn by workers;
* The requirements for audiometric testing and maintenance of test records; and
* An annual report for exposed workers that addresses:
  + The effectiveness of the education and training plan;
  + The need for further noise measurement; and
  + The adequacy of noise control measures.

Workers subject to noise management must cooperate with the farm in implementing the Noise Management Program.

**Selection of Controls**

The farm will use the following methods to control noise hazards:

* Engineering controls to eliminate or reduce the noise hazards to acceptable levels;
* Where engineering controls are not effective or reasonably practicable to eliminate noise hazards, administrative or work controls will be used to reduce it to acceptable levels; and
* Where administrative controls are not effective or reasonably to reduce noise hazards to acceptable levels, PPE and hearing protection equipment will be used to control noise hazards.

**Engineering Controls**

Where reasonably practicable and effective, the farm will use one or more of the following types of engineering controls to eliminate or reduce noise hazards:

* Substitution, i.e., replacing noisy equipment, machinery, or processes with quieter ones;
* Modification, i.e., changing the way noisy equipment, machinery, or process operates so it makes less noise;
* Isolation, i.e., isolating workers from areas of the work site that contain noise hazards;
* Maintaining noisy equipment or machinery so that it makes less noise;
* Ensure that the following are designed and constructed in such a way that the continuous noise levels generated remain below 85 dBA or as low as reasonably practicable:
  + New work areas on the farm;
  + Significant physical alterations, renovations, or repairs to existing work sites or areas;
  + Work processes introduced on the farm or work area; and
  + Significant equipment introduced to the work site or work area.

**Administrative Controls**

Where reasonably practicable and effective, the farm will use administrative controls such as changes to work schedules to limit how long workers are exposed to noise.

**Hearing Protection Equipment**

Where it is not reasonably practicable or effective to use engineering controls and/or administrative controls to eliminate or reduce noise hazards to acceptable levels, the farm will provide hearing protection to any workers exposed to excessive noise. Such hearing protection will:

* Meet the requirements of CSA Z94.2-02, Hearing Protection Devices – Performance, Selection, Care, and Use; and
* Be of the appropriate class and grade as set out in American Conference of Industrial Hygienists (ACGIH) tables.

In selecting hearing protection, the farm will also consider the following factors:

* The physical characteristics of the workers who will be wearing the equipment;
* The equipment’s compatibility with other safety equipment;
* Temperature, humidity, air pressure, and other relevant workplace conditions;
* How easy the equipment is to use and handle; and
* How the equipment affects the worker’s ability to communicate.

As indicated in the American Conference of Industrial Hygienists (ACGIH) tables., workers exposed to noise greater than 110 dBA must use dual hearing protection—both earplugs and earmuffs.

Because hearing protection is less effective for noise greater than 110 dBA, where workers are exposed to noise greater than 110 dBA, dual hearing protection must be used and the time of exposure reduced to ensure that sound reaching the worker’s eardrum is below 85 dBA. The required amount of time to reduce exposure for workers using dual protection when exposed to noise above 110 dBA will be based on a 3 dBA exchange rate, as set out in the American Conference of Industrial Hygienists (ACGIH) tables.

Worker exposure must be measured in accordance with CSA Z107.56-06, Procedures for Measurement of Occupational Noise Exposure. This is total noise exposure worker may have over the work day; the worker may not be exposed to noise above 85 dBA for the remainder of the work day.

**AUDIOMETRIC TESTING**

<< FARM NAME >> will provide to workers exposed to excessive noise at their expense, the audiometric testing required by Part 2 of the Nova Scotia OHS Workplace Regulations, including:

* An initial baseline test as soon as reasonably practicable and no later than six months after the worker is employed or within six months after a worker becomes exposed to excessive noise as a result of changes in work duties or conditions;

Where reasonably practicable, baseline testing will be:

* Done after a minimum 12-hour period during which the worker is not exposed to any noise;
* Conducted in a noise-free environment when the worker has been away from noise for 14 hours, including noise exposure away from work;
* Additional testing within 12 months of the initial baseline test; and
* Additional testing at least every 2 years thereafter.

When Audiometric Testing Will Be Conducted:

If reasonably practicable, the audiometric tests required under this policy will be carried out during the worker’s normal working hours. If it is not reasonably practicable for the worker to undergo testing during their regular working hours, the farm will:

* Credit the time the worker spends getting the tests as time spent at work; and
* Ensure the worker does not lose any pay, seniority, or other benefits because they were tested.

How Audiometric Testing Will Be Conducted:

<< FARM NAME >> will ensure that the above audiometric tests are administered by an audiometric technician who will:

* Work in consultation with a physician, audiologist, or occupational health nurse designated by the farm;
* Maintain a log book for each audiometer used that:
  + Contains the written calibration records of the audiometer;
  + Remains with the audiometer throughout its useful lifetime;
  + Perform pure-tone-air conduction threshold testing of each air at 500, 1,000, 2,000, 3,000, 4,000, 6,000, and 8,000 Hz; and
  + Perform such tests in a location where background noise does not exceed the levels set out in the American Conference of Industrial Hygienists (ACGIH) tables.

Records of Audiometric Testing:

The audiometric technician who performs the required audiometric tests on workers will:

* Record the results of the audiometric tests performed;
* Give the worker a copy of the test results;
* Keep the audiometric test records for at least 10 years; and
* Ensure that the medical history information is under the sole control of the consulting physician, audiologist, or occupational health nurse designated by the farm referred to in the first item above.

What Happens If Tests Show Abnormal Audiogram/Abnormal Shift:

Where the audiometric test results indicate an abnormal audiogram or show an abnormal shift, the audiometric technician will:

* Advise the worker of the test results;
* Ask the worker to provide relevant medical history; and
* Forward the results, relevant medical history, and a baseline audiogram to the physician or audiologist designated by the farm to receive this information.

What Happens If Abnormal Audiogram/Abnormal Shift Is Confirmed:

Where the physician or audiologist designated by the farm confirms the audiogram as being abnormal or as showing an abnormal shift, the designated physician or audiologist will:

* Advise the worker of the confirmation within 30 days;
* Give the worker’s physician the results of the audiometric tests—as long as the worker provides written consent to do so;
* Advise the farm about the effectiveness of the Noise Management Program in place; and
* Keep the audiometric test records for at least 10 years.

Confidentiality of Worker’s Medical Information:

Audiometric test records conducted under this policy and the medical history provided by the worker will not be released to any third persons unless the worker provides written consent (except insofar as such release is required by this policy or the law).

**TRAINING**

Workers exposed to excessive noise will be trained in the proper selection, maintenance, and use of required hearing protection. Such training will include:

* The hazards of exposure to excessive noise;
* How hearing protection protects them from such exposure;
* The capabilities and limitations of particular types of hearing equipment;
* The importance of ensuring a tight and comfortable fit;
* How to affect a tight seal between earplugs and the ear canal;
* How to affect a tight seal between earmuffs and the side of head;
* How to inspect the equipment;
* How to clean and maintain the equipment; and
* Why it’s important not to modify the equipment, such as by drilling holes in earcups.

**CONTRACTORS & SUBCONTRACTORS**

<< FARM NAME >> will ensure that any contractors, and subcontractors hired to perform work involving exposure to hazardous levels noise at its work sites are, before such work begins:

* Notified about the noise hazards at the site and the dangers they pose;
* Required to ensure that all of their affected workers are provided and properly trained and instructed to use the hearing protectors required for such noise levels under this policy and the Noise Management Program; and
* Notified of the hearing testing provided by the farm to workers.

**EVALUATION**

This policy will be reviewed, in consultation with the workplace Health and Safety Committee or Representative and directly with workers on the farm who are exposed to excessive noise, at least once a year and immediately in response to:

* Worker complaints or symptoms indicating ringing in the ears or hearing loss due to exposure to excessive noise;
* Changes to equipment, machinery, tools, or work conditions that increase or have the potential to increase either:
  + How much noise the worker is exposed to; or
  + The length of time the worker is exposed to excessive noise.
* Before the construction of significant additions or alterations to a work site that have the potential to create noise hazards; and
* Any other indications suggesting that this Policy might be ineffective or not responsive to current work conditions and noise hazards.

**Legislation References:**

* Part 2 of the Nova Scotia Occupational Health & Safety Workplace Regulations.
* [American Conference of Industrial Hygienists (ACGIH) Tables](https://www.ccohs.ca/oshanswers/phys_agents/exposure_can.html)
* ANSI S1.4-1983 (R2006), Specification for Sound Level Meters
* ANSI S1.25-1991 (R1997), Specification for Noise Dosimeters
* ANSI S1.43-1997, Specifications for Integrating Averaging Sound Level Meters
* ANSI S3.6-2004, Specification for Audiometers
* CSA Z94.2-02, Hearing Protection Devices – Performance, Selection, Care, and Use
* CSA Z107.56-06, Procedures for the Measurement of Occupational Noise Exposure
* IEC 61672-1 (2002), Electroacoustics – Sound Level Meters, Part 1: Specifications, and Part 2: Pattern Evaluation Tests

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* The safety information in this policy is to be used in conjunction with all applicable Federal and Municipal Legislation.