Contractor Manual

This document provides a general overview of Newfoundland and Labrador Hydro's health, safety, and environmental expectations for planning and carrying out contracted work.

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Updates:

Date: January 17, 2017

Section: 5.1 and 5.2 – Updated the OH&S and Environmental Policies.

Initials: BL

Date: January 23, 2017

Section: Section 6.6 - Confined Space - Requirement for wearing a full body harness in a confined space. Section 6.19 – PPE – Requirement for safety head wear and what can be worn underneath. Section 6.25 – Working at Height – Requirement for using a pole choker for climbing wooden structures.

Initials: RH, BL

Date: September 14, 2017

Section: Section 5.4 Corporate Principles - Addition of new section - Diversity, Inclusion & Respectful Workplace. Content requires contractors to align with NL Hydro's Commitment

Section 5.1 and 5.2 – Updated the OH&S policy

Initials: RH, BL

Date: July 25, 2018

Section: Section 7.0 General Environmental Requirements – Addition of new section – NL Hydro Energy Sustainability Strategy – Contractor Orientation

Initials: SC

Date: August 15 – October 23, 2018

Section: Updates page format revised; Section 5.1 Occupational Health and Safety Policy updated; definition of Environmental Management System updated.

Initials: SC

Date: January 24, 2019

Section: WHSCC replaced with Workplace NL throughout; Section 6.25 Working at Height updated to include full body harness requirements; Section 6.12 updated with additional slinging and rigging information.

Initials: SC

Date:	October 26, 2020
Section:	Section 6.4 Barricades and Signs added; Section 5.1 Occupational Health and Safety Policy updated; Corporate structure updated in Introduction
Initials:	SC

Date:	March 22, 2021
Section:	Section 5.1 Occupational Health and Safety Policy updated; References to MSDS revised to SDS; Section 6.8 Electrical Safety – Grounding and Bonding (Worker Protection) updated to include requirement for portable grounds to be inspected and tagged; Section 6.16 Labour, Training, and Competency – Site Orientation updated with requirement for Site Orientation Card removed
Initials:	SC

Date:	October 19, 2021
Section:	References to Nalcor Energy updated to Newfoundland and Labrador Hydro (NL Hydro)
Initials:	SC

Date:	November 29, 2021
Section:	Section pictures updated; Table of Contents updated; Section 1.0 Introduction information updated to reflect organizational changes.
Initials:	SC

Date:	March 7, 2023
Section:	Updated policies and hyperlinks.
Initials:	BL

Date:	August 21, 2025
Section:	Removed OHS and Environment policies and added direct link from vendor website. Removed Sustainability info from Section 7.0 and added direct link from vendor website. Section 7.0 General Environment al Requirements was reviewed and updated.
Initials:	MC

Table of Contents

1.0 Introduction

Newfoundland and Labrador Hydro (NL Hydro) includes the following subsidiaries: Churchill Falls and Energy Marketing. The Contractor Manual is used by and applies to all.

1.1 Corporate Message

This document communicates the general health, safety, and environmental (HSE) expectations of Contractors, and Subcontractors, for planning and carrying out work at NL Hydro Workplaces. The expectations and guidelines presented herein are intended to compliment, support your company's existing HSE management program, and may at times establish higher standards than the minimum prescribed through legislation.

As an essential partner in our success, we expect all Contractors and Subcontractors performing work at NL Hydro Workplaces to understand and comply with the HSE expectations and guidelines presented in this manual. Additionally, all applicable federal, provincial, and municipal laws and regulations that pertain to health, safety, or environmental requirements, standards, and/or work practices are expected to be complied with at all times. Failure to abide by these expectations and applicable legislative requirements may subject Contractors or their representatives to disciplinary action, up to and including immediate removal from the worksite or termination of any contractual agreements with NL Hydro. When there is a discrepancy between this document and the applicable regulation, the regulations shall take precedence. When there is a discrepancy between this document and the contract document, the contract document shall govern.

NL Hydro has a strong commitment to the health and safety of its employees, Contractors, and visitors. No one is expected to work in an unsafe environment or perform an Unsafe Act. No one will be penalized for refusing to do so. It is the responsibility of each individual working for or at

NL Hydro Workplaces to take responsibility for their safety and the safety of those working around them. NL Hydro is also committed to sustaining a diverse and healthy environment for present and future Newfoundlanders and Labradorians by maintaining a high standard of environmental responsibility and performance through the implementation of a comprehensive Environmental Management System (EMS).

Contractors are required to immediately report to their Supervisor and to NL Hydro's Contract Manager any Incident or situation that is, or has the potential to become, a threat to workplace safety and/or the environment. It is every Worker's responsibility to read and understand all safety and environmental procedures and practices in order to protect themselves, co-workers, and members of the public and the environment from potential hazards.

NL Hydro is continuously looking for ways to improve our health, safety, and environment programs. To communicate feedback for improvement or changes to this document, please notify your Contract Manager.

1.2 How to Use This Manual

The intent of this manual is to provide guidance to our Contractors regarding NL Hydro's general HSE expectations and guidelines. The contents of this manual should be reviewed, discussed, and understood by Contractors before any work is performed. If an HSE issue arises, that is not addressed in this manual or by the Contractor's own HSE program, the Contractor shall ask for guidance from its Supervisor or NL Hydro's Contract Manager. The Contractor shall be familiar with NL Hydro expectations and guidelines, many of which are presented in this manual and during Site Orientations. The information contained in this manual is intended to supplement, not replace, the Contractor's own HSE management program. Every Contractor should have a copy of this manual accessible to them. It is the Contractor's responsibility to ensure that its Subcontractors and other representatives meet the requirements outlined in this document.

2.1 Definitions

Capitalized terms in this document will have the meaning defined under this section.

Authority Having Jurisdiction – a federal, provincial, or municipal ministry, department, board, agency, or commission which has responsibility for regulating by statute the use of products, materials, or services within its jurisdiction.

Barricade – Physical obstruction such as tape, screens, or cones intended to warn and limit access to a hazardous area.

Bonding – Method of physically inter-connecting conductive parts to maintain an equal potential with the objective of avoiding harmful shock currents by minimizing any potential difference across a worker's body.

Confined Space – An enclosed or partially enclosed space that:

- Is not designed or intended for human occupancy except for the purpose of performing work.
- Has restricted means of entry and exit.
- May become hazardous to a person entering it as a result of (i) its design, construction, location, or atmosphere (ii) the materials or substances in it (iii) or any other conditions relating to it.

Contractor – A company or person, who supplies goods, works, or services under contract.

Contract Manager – A NL Hydro employee who is responsible for preparing and managing a contract to ensure the work is completed and in compliance with the contract.

De-energized – Where energy has been discharged through a connection to an effective ground potential (*Electrical*)**;** Where hazards due to temperature, pressure, chemical substances, gases, radiation and motion have been minimized or, where practical, eliminated by physical measures such as: operating valves, gates and dampers**,** opening pipes or equipment to atmosphere, purging, ventilating or cooling**,** applying brakes and blocking motion, or discharging loaded springs (*Mechanical*).

Emergency – An unusual condition that endangers life and/or property.

Energized (Alive, or Live) – Capable of delivering energy by reason of being dynamically alive or charged.

Environmental Management System (EMS) – *part of the management system used to manage environmental aspects, fulfil compliance obligations, and address risks and opportunities.* See section 3.1.2 of the ISO 14001:2015 Standard. NL Hydro has developed a comprehensive, systematic, planned and documented EMS that adheres to the ISO 14001:2015 Standard.

Excavations – Any opening made in the ground, street, or sidewalk in connection with NL Hydro work, e.g. holes, trenches, ditches, or tunnels.

Grounding (Earthing) – Provision of a continuous conductive path to the earth that has sufficient capacity to carry any fault current that may be imposed on it. It has a sufficiently low impedance to limit the voltage rise above ground potential. It facilitates the operation of the protective devices in the circuit as quickly as possible. It bleeds any excess energies induced by electric and magnetic fields or static sources.

Hazard – A hazard is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work. A hazard can cause harm or adverse effects (to individuals as health effects, to the environment as waste or pollution, or to organizations as property or equipment losses).

Hot Work – Any work that could cause sufficient heat, spark, or flame igniting flammables or combustibles that are or could be present at a work location. Examples of hot work include, but are not limited to, welding, cutting, brazing, grinding, use of non-intrinsically safe power tools, sandblasting (static charge), and steam cleaning.

Incident – An event that could (near miss) or does (loss) result in unintended harm to people, damage to equipment, property or the environment.

- Near Miss incident – an undesirable event, which under slightly different circumstances could have resulted in harm to people, damage to equipment, property or the environment.
- Loss incident – undesirable event that resulted in harm to people, damage to equipment, property or the environment.

Isolated – means that normal sources of energy have been disconnected by opening and securing all associated switches, and that mechanical equipment has been rendered and secured non-operative by disconnecting, stopping, depressurizing, draining, venting or other effective means.

Job – A specific piece of work required to be completed as part of the work. A job will consist of many individual tasks.

Job Hazard Assessment – A written step-by-step description on how to proceed from start to finish, in performing a task properly.

Lock-Out Tag-Out (LOTO) – The placement of a lockout and tag out device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Minimum Approach Distance (MAD) – The minimum distance in air to be maintained between any part of the body of a worker, including any object (except appropriate tools for live working) being directly handled, and any parts at different potentials.

Qualified – A person knowledgeable of the work, the hazards involved, and the means to control said hazards due

to education, training, experience, or a combination of the above.

Risk – Amount or degree of potential danger perceived by a given individual when determining a course of action for a given task.

Site Orientation – A contractor's introduction to the site where the work will be performed and the workplace hazards. A NL Hydro employee who is familiar with the workplace, the work to be performed, and the safe work practices related to the work involved will deliver it. The orientation will provide site-specific information and discuss local hazards and controls, such as emergency response procedures and areas with restricted access.

Subcontractor – Any person, firm or corporation employed by or having a direct contract with the contractor for the performance of any portion of the work including supply of labor and/or the furnishing of goods, materials, equipment and/or services, but excluding employees of the contractor. It is the contractor's responsibility to ensure sub-contractors are familiar and in compliance with legislated and NL Hydro-specific requirements.

Supervisor – A person authorized or designated by an employer to exercise direction and control over workers of the employer.

Tailboard Safety Talk (Toolbox Talk) – A group discussion among workers to discuss the identification and control of hazards prior to each job and any time the job changes.

Task – A segment of a job or a set of actions required to complete a specific job.

Unsafe Act – Departure from an accepted normal or correct procedure or practice which has actually produced injury or property damage or which has the potential for producing such loss.

Walking/Working Surface – Any surface, whether horizontal or vertical, on which an employee walks or works, including but not limited to floors, roofs, ramps, bridges, runways, formwork, and concrete reinforcing steel. Does not include ladders, vehicles, or trailers on which employees will be located to perform their work duties.

Warning Signs – Any sign or similar means of notifying workers or the public of a hazard.

Worker – Any person who is an employee of NL Hydro or a company contracted/subcontracted to perform work for NL Hydro.

Working Alone – to work in circumstances where assistance would not be readily available to the worker(s) in case of an emergency or in case a worker is injured or ill.

Workplace –a place where a worker or self-employed person is engaged in an occupation and includes a vehicle or mobile equipment used by a worker in an occupation.

Work Protection – A guarantee that an isolated, or isolated and de-energized, condition has been established for worker protection and will continue to exist, except for authorized tests.

3.0 Legislation

3.1 Occupational Health and Safety Act and Regulations

At a minimum, all Contractors and their Subcontractors are expected to comply with the Newfoundland and Labrador Occupational Health and Safety (OHS) Act and associated regulations. Additionally, all applicable federal, provincial, and municipal laws and regulations of any governmental organization that pertain to health, safety, or environmental requirements, standards, and/or work practices are expected to be complied with at all times.

3.2 Worker's Basic Rights and Responsibilities

Worker's Rights

KNOW	• **RIGHT TO KNOW**, or to be informed about actual and potential dangers in the workplace.
PARTICIPATE	• **RIGHT TO PARTICIPATE** in the workplace health and safety activities through the joint OHS Committee.
REFUSE	• **RIGHT TO REFUSE** work that the worker has reasonable grounds to believe is dangerous to human health or safety.

Worker's Responsibilities

Under Section 17 of the NL OHS Regulations a Worker's general responsibilities are:

(1) A Worker shall make proper use of all necessary safeguards, protective clothing, safety devices, lifting devices or aids, and appliances

(a) Designated and provided for his or her protection by the employer; or

(b) Required under these regulations to be used or worn by a worker.

(2) A Worker shall follow the safe work procedure in which he or she has been instructed.

(3) A Worker shall immediately report a hazardous work condition that may come to his or her attention to the employer or Supervisor.

3.3 Employer Responsibilities

Under Section 14 of the NL Occupational Health and Safety Regulations an employer's general responsibilities are:

(1) An employer shall ensure, so far as is reasonably practicable, that all buildings, structures, whether permanent or temporary, excavation, machinery, workstations, places of employment and equipment are capable of withstanding the stresses likely to be imposed upon them and of safely performing the functions for which they are used or intended.

(2) An employer shall ensure that necessary protective clothing and devices are used for the health and safety of his or her Workers.

(3) The employer shall ensure that safe work procedures are followed at all Workplaces.

(4) An employer shall ensure, so far as is reasonably practicable, that work procedures promote the safe interaction of Workers and their work environment to minimize the potential for injury.

3.4 Environmental Legislation

Contractors are required to follow all applicable environmental federal and provincial legislation and municipal by-laws when carrying out work on NL Hydro Workplaces. Some examples of the principal federal statutes to consider include the Fisheries Act, the Canadian Environmental Protection Act, Canadian Environmental Assessment Act, Transportation of Dangerous Goods, Hazardous Products Act, Migratory Birds Convention Act, and the Species at Risk Act. Some examples of the principal provincial environmental statues to consider in Newfoundland and Labrador include Halocarbon Regulations, Environmental Assessment Regulations, Wildlife Act, Waste Management Regulations, and the Environmental Protection Act.

The relatively large geographical extent, duration and variety of NL Hydro activities result in the involvement of a large number of environmental regulatory agencies. It is the Contractor's responsibility to be familiar with the specific legislation, the Authorities Having Jurisdiction, and the organizations that function in a consultative role.

Although guidelines such as those issued by the Canadian Council of Ministers of the Environment (CCME) are not regulatory requirements, NL Hydro is committed to meeting these guidelines, which makes them a mandatory requirement for Contractors.

4.0 Roles and Responsibilities

4.1 **NL Hydro (Owner)** shall:

NL Hydro acts through its Contract Manager (or designate), who is responsible to:

- Brief Contractors before work begins on the activities to be performed,
- Provide Contractors with a safe Workplace and address any identified Hazard or HSE issue promptly,
- Participate in the Contractor's Tailboard Safety Talks,
- Ensure the Contractor receives a Site Orientation prior to the start of work,
- Inform Contractors of the identified Hazards that may exist in the Workplace as well as any identified controls,
- Coordinate contracted work activities with NL Hydro operations,
- Be knowledgeable of the applicable safety requirements pursuant to NL Hydro policies and procedures, contract specifications, the *Newfoundland and Labrador Occupational Health and Safety Act and Regulations* and all government laws, regulations, and policies that are applicable to the work being performed,
- Be knowledgeable of the applicable environmental requirements pursuant to NL Hydro policies and procedures, contract specifications, and applicable environmental laws, regulations, and policies,
- Verify Contractors have the appropriate training and qualifications for the work,
- Ensure that the safety, health, and environmental requirements in the contract are complied with, and

- Arrange pre-mobilization meetings with the Contractor's Supervisor/management prior to starting work.

4.2 Contractor shall:

- Be aware of and adhere to applicable safety requirements pursuant to NL Hydro policies and procedures, contract specifications, the *Newfoundland and Labrador Occupational Health and Safety Act and Regulations*, and all government laws, regulations, and policies that are applicable to the work being performed,
- Be aware of and adhere to applicable environmental requirements pursuant to NL Hydro policies and procedures, contract specifications, and applicable environmental laws, regulations, and policies,
- Ensure that employees are fit for duty,
- Ensure that employees have the appropriate training and qualifications, and are competent to perform the work in a safe and environmentally responsible manner,
- Ensure that safety and environmental protection measures contained in the contract are in effect at all times,
- Attend Tailboard Safety Talks prior to starting work each day and whenever there are changes to the Job,
- Ensure that any Subcontractors working under its control are aware of and agree to adhere to the requirements contained within this document and are adequately supervised,
- Follow a documented Hazard and Risk assessment process, and
- Attend NL Hydro's Site Orientation.

4.3 Contractor's Site Supervisors shall:

- Participate in safety meetings and conduct Tailboard Safety Talks, ensuring that employees are in attendance,
- Identify Hazards in the Job planning stage and lead regular Hazard and Risk assessments,
- Coordinate daily work activities with other work going on at or near the worksite,
- Ensure proper equipment and materials are available and in safe operating condition,
- Ensure equipment is free from leaks and proper spill response materials are available,

- Ensure safe work procedures and practices are followed by employees and Subcontractors,
- Ensure environmental protection procedures and practices are followed by employees and Subcontractors,
- Ensure their Workers are fit for duty and provide a level of supervision that would be attentive to impairments such as fatigue, physical disability, emotional state, cold/heat-related conditions, drugs or alcohol, and hours worked,
- Provide specific safety instruction directly to employees and Subcontractors, as required,
- Ensure personal protective equipment is available and properly used and maintained,
- Set an example for their employees and Subcontractors in the use of safety equipment, in safe work habits, and implementing environmental protection measures,
- Stop work being performed in an unsafe manner or during an unsafe condition that may present a Risk to people, property, or the environment,
- Report injuries, illnesses, and near misses to the Contract Manager immediately and participate in Incident investigations, as required.
- Report all environmental releases and environmental Incidents to the Contract Manager immediately and participate in Incident investigations, as required.

5.0 NL Hydro Guiding Principles

5.1 Safety Credo and the Internal Responsibility System (IRS)

Safety Credo

The safety of our employees, contractors, visitors and the public is our first and most important priority. Our goal is a Workplace where nobody gets hurt - *zero harm* - and a working environment where each and every employee is always concerned for their own safety and the safety of others. Everyone at NL Hydro is personally committed to these basic safety values as the foundation for our success as a safety leader.

Internal Responsibility System (IRS)

NL Hydro follows the principles of the Internal Responsibility System (IRS) in which every individual is responsible for health and safety. The expectation is that every employee and contractor takes the initiative on safety and health issues and works to solve problems and make improvements to ensure a safe and healthy Workplace for themselves, their fellow Workers, and the public.

5.2 Corporate Principles

Alcohol and Drug:

The use of illicit drugs or other mood altering substances, and the inappropriate use of alcohol and medications, can have serious adverse effects on Job performance and can be a threat to personal safety and well-being. The use of illicit substances and the inappropriate use of alcohol and medications are strictly prohibited.

Since March 2015, NL Hydro has implemented a comprehensive Alcohol and Drug Program to manage alcohol and drug-related challenges in the Workplace. Contractors are expected to be knowledgeable of this Program and must ensure their employees and representatives (e.g. Subcontractors, visitors, suppliers) are in compliance with its requirements.

In general, the program establishes requirements related to the use of alcohol and illicit drugs, as well as the responsible possession and usage of medication when engaged in NL Hydro business and while on our premises and worksites. In addition, the program describes how potential violations will be investigated, including the requirements for alcohol and drug testing.

Contractors are encouraged to implement their own Alcohol and Drug Program and at minimum, they will be required to adhere to NL Hydro's Alcohol and Drug Program and acknowledge this by returning a signed Contractor Acknowledgment Form prior to starting work. Violations of the program could result in employee dismissal and/or contract suspension or termination.

Smoking:

Smoking is not permitted in NL Hydro office buildings, power plants, or terminal stations. Smoking within proximity to the doorways of these assets is also prohibited. Smoking is not permitted near flammable/combustible liquids or gases.

Scent-Free Workplace:

Due to health concerns arising from exposure to scented products, NL Hydro strives to be as scent-free as possible and advises all employees, Contractors, and visitors to use fragrance-free personal care products to ensure a scent-free environment.

Electronic Devices:

The use of cellular telephones is not permitted while operating motor vehicles, machinery/mobile equipment, and while performing other high-risk activities. Drivers are encouraged to use the voicemail option of their cell phone service to receive incoming messages while driving. Messages can be checked once the vehicle has come to a complete stop in a safe location. To place a call while travelling between destinations, find a safe place on the side of the road to pull over and come to a complete stop.

Violence in the Workplace:

Any attempted or actual physical force used to cause injury to a Worker, including threatening statements or behavior which gives a Worker reason to believe that he or she is at a Risk of injury, will be subject to disciplinary action which could result in the individual(s) being permanently removed from the Workplace.

Personal Conduct:

All employees are expected to conduct themselves in a professional manner at all times. Pranks, contests, horseplay, unnecessary running, and rough and boisterous conduct will not be permitted at the Workplace.

Fitness for Duty:

NL Hydro expects the Contractor to ensure the fitness of their Workers to perform their Job functions in a safe manner and to provide adequate supervision that will alert them of Worker impairments. NL Hydro is required to report any serious impairment of their contracted employees, whether obvious or perceived, to obtain further evaluation of the Contractor's abilities.

Diversity, Inclusion & Respectful Workplace:

NL Hydro is committed to creating a safe, respectful workplace where all workers are valued and treated with dignity and respect and requires all contractors to comply with this commitment. It is expected that all NL Hydro contractors and subcontractors will demonstrate a commitment to diversity and inclusion in their employment and contracting processes, ensuring a respectful and inclusive work environment and encouraging the employment of women and other designated groups in occupations in which they are underrepresented. NL Hydro specifically expects all contractors to be familiar with our Gender Equity, Diversity & Inclusion strategy and to adhere to our Respectful Workplace Policy and principles. For more information, please visit www.NL Hydro.com/diversity. For detailed Diversity and Inclusion Contractor Requirements, please visit https://bids.NL Hydro.com/Module/Tenders/en."

Safe Parking:

NL Hydro requires all person(s) parking on NL Hydro property to do so in a safe and responsible manner and to back-in to parking spaces (with the exception of angled park spaces). Where applicable, parking brakes and wheel chocks should be applied. All vehicles should be parked to enable access/egress of buildings and allow access to Emergency equipment.

6.0 General Health and Safety Requirements

General health and safety requirements are described in this section. The topics are arranged alphabetically.

6.1 Aerial Lifts

- Only trained and authorized persons shall be permitted to operate aerial lifts.
- Daily inspections shall be performed at each operator change during a shift and at each shift change.
- Boom-supported elevating work platforms require that all personnel in the platform wear fall protection devices at all times, including a full body harness and 100 per cent tie-off.
- Aerial lifts must have an established rescue plan that is documented and reviewed with workers prior to use.
- Scissor lifts or vertical mast lifts require a minimum of a fall restraint system to be utilized unless a higher degree of protection is otherwise required.
- Operation will follow the manufacturer's instructions for the device.
- Load limits specified by the manufacturer shall not be exceeded.
- Controls shall be plainly marked as to their function and tested for safe operation each day, prior to use. Lifts shall be given a warm up period prior to use.
- A malfunctioning lift shall be tagged and taken out of operation immediately until repaired.
- Avoid dynamic forces, such as sudden starts and stops of the lifting equipment. Operate

the controls with slow and even pressure.

- Aerial lifts shall not be used near electric power lines unless the lines have been De-energized or an Energized Power Line Permit is granted from the utility and adequate clearance is maintained.
- Ground controls shall not be operated unless permission has been obtained from personnel in the platform, except in case of an Emergency.
- The operator shall face the direction the platform is travelling and shall ensure a clear path of travel before it is moved. The platform must be in the lowered position while being moved.

6.2 All-Terrain Vehicle (ATV) and Snowmobile Operation

- Only Qualified Workers are permitted to operate ATVs and snowmobiles. NL Hydro expects the Contractor to provide suitable training to their employees and be able to demonstrate their competency in its operation.
- The operator prior to use (e.g. verifying the throttle, lights, and braking system are functioning properly) shall perform pre-use Inspections.
- Operators are to ride within their capabilities and use proper positioning of their hands and feet.
- Operators will wear Department of Transportation DOT-approved, or equivalent certification (i.e. Snell M2010, ECE Regulation 22.06), safety helmets, and other appropriate PPE, at all times while in operation.
- Operators will understand and follow requirements in the manufacturer's instructions prior to operation.
- When operating an ATV on forest land during the forest fire season the operator shall be equipped with a fire extinguisher containing a minimum of 227 grams of ABC class dry chemical, as prescribed by the NL Forest Fire Regulations, Section 11(2).
- ATVs must be equipped with a muffler and baffle and a functioning seatbelt which must be worn by workers in the vehicle.

6.3 Asbestos

Asbestos may remain in some older facilities and is generally found in pipe insulation, electrical wiring, and on structural materials, such as floor and ceiling tiles. Breathing asbestos dust is hazardous. To minimize health Risks it is important not to drill, cut, remove, tear, step on, brush against, hammer on, or in any way disturb suspected asbestos. Contact the Contract Manager if you suspect asbestos or if it is necessary to disturb any suspected asbestos. Only trained

personnel with proper equipment will disturb or remove asbestos. The installation of new materials that contain asbestos is prohibited.

6.4 Barricades and Signs

All hazardous areas at a work site shall be suitably identified and marked with approved barricades and signs.

Proper barricades and signs shall be placed at openings and at hazardous and restricted areas to provide protection to workers, contractors, and to the public.

Energized parts of stations where additional work is being performed must be carefully identified and barriers installed as required.

When work is being completed outside around energized equipment barriers that have the potential to blow around and/or break in the wind (i.e. colored tape as described below) and come in contact with the energized parts are not to be used. Heavier barriers such as cones, rope or plastic chain would be considered more suitable in such circumstances.

Signs, barricades, and other safety markers shall be used whenever a job obstructs a portion of road or highway used by vehicles and/or pedestrians.

An area roped off by yellow/black tape means **CAUTION**; Areas roped off with red/black tape means **DANGER- DO NOT ENTER**. The yellow and black "**Caution**" barrier tape means that the area can be entered but the worker/workers entering the area have to be aware of the hazards that are present and have the proper controls in place for their protection. The red and black "**Danger**" barrier tape means that the area cannot be entered until approval is given by a worker inside the barricaded area or another employee in control of the area.

A barricade tag should be attached to the Caution or Danger tape informing who installed the barricade, when it was installed and the reason for installing the barricade.

6.5 Chainsaw Operation

- Workers assigned to operate chain saws, brush saws, or clearing saws shall be trained and Qualified in their use and shall wear all appropriate protective equipment.
- All chainsaws will be Canadian Standards Association (CSA)-approved or meet a standard offering equivalent protection and maintained as per the manufacturer's instructions.
- An ABC multi-purpose dry chemical fire-extinguishing agent shall be available in the vicinity where chainsaws are fueled.
- Chainsaws shall not be operated from a pole or ladder unless a pole adapter or other

safety equipment feature is used. Qualified persons shall only perform operation from a tree.

- Only authorized personnel are permitted to operate a chainsaw from an aerial device.
- Fuel shall be carried in an approved safety container and the saw will be fueled in a clear area away from the cutting zone.
- Prior to refueling a chainsaw, it shall be shut off and allowed to cool for an appropriate amount of time.
- A Worker shall not operate a chainsaw while Working Alone. A minimum of two Workers must be present at the Workplace where a chainsaw is in operation.
- The operator shall inspect the saw before starting work and only operate the saw if no defects are noted and all the safety features are properly functional.
- Chainsaws are to be started with the chain break in the ON position.

6.6 Compressed Gas

- The Contractor will properly label, handle, store, transport, and inspect cylinders to ensure compliance with regulations and industry standards (e.g. CSA, NFPA). Defective equipment should be immediately taken out of service for repair or replacement.
- All cylinders must be returned promptly to their designated storage area after use. Storage places shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons.
- Protective caps must be placed over the cylinder valves when not in use or when the cylinders are being transported by any means. Cylinders, whether empty or full, shall be stored or transported in an upright position and chained or otherwise secured so they cannot fall.
- Cylinders must be kept away from heat including direct sunlight, fire, molten metal, or electrical lines. Cranes may not be used to transport cylinders unless a carrier designed for that purpose is used.
- Acetylene or liquid gas cylinders should never be operated in a horizontal position, as the liquid may be forced out through the hose causing a fire hazard or explosion.
- Workers shall not place hands over leaks in compressed airlines, compressed gas cylinders or the associated valves or hoses, with the intent to stop or restrict the escape of gas. This is a dangerous practice that could result in a bubble of gas entering the bloodstream through the skin, causing a gas embolism.
- Workers shall never force connections, which do not fit, nor shall they tamper with the

safety relief devices of cylinder valves. Wrenches should never be used to open hand-operated valves.

- Compressed gases shall only be used and stored in well-ventilated areas.

6.7 Confined Space

NL Hydro requires Contractors working in Confined Spaces to be identified and shall follow applicable regulatory requirements. At minimum, Contractors are required to:

- Have a written Confined Space program and have up-to-date training completed for their employees (from a Workplace NL approved training provider).
- Complete a hazard assessment specific to the Job, develop and implement hazard control measures, and have a written Emergency response rescue plan or procedure for rescuing entrants from a Confined Space.
- Contractors entering a Confined Space shall have a documented entry plan and have a permit in place prior to entry.
- Initial gas tests and continuous monitoring is required for entry into a Confined Space. Contractors may be requested to demonstrate or provide evidence of competency in the use of air monitoring equipment. Calibration records shall be made available to NL Hydro upon request.
- With the exception of compressed breathing air, compressed gas cylinders shall not be taken into Confined Spaces.
- Contractors must ensure that all entrants, attendants and rescuers involved in Confined Space work have the necessary physiological and psychological capability to safely perform their assigned duties. Additional training and certification, such as Confined Space Rescue, Lock Out/Tag Out, and High Angle Rescue, may be required depending upon the nature of the work.
- Entrants entering a confined space to complete work should wear a full body harness unless, by doing so, compromises the safety of the individual.

6.8 Electrical Safety

- Portable tools and equipment shall be routinely inspected by a Qualified Person. Any electrical items brought to site by contracted employees may also be subject to inspection by NL Hydro. Non-compliant items will be immediately removed from service at the Contractor's expense.

- Only Qualified Workers, who are authorized

to access the required parts of the electrical system, are permitted to work on or near exposed electrical lines or equipment.

- All work on or near Energized electrical equipment shall be planned to identify and control the Hazards of the work.
- Protective apparel shall be worn by all employees exposed to hazards such as arcs and flames arising out of electrical faults. Arc-rated clothing shall be in accordance with industry standards.
- Contractor shall provide ground fault circuit interrupter protection for all cord sets, receptacles, and electrical tools including connections to generators and equipment connected by cord and plug.
- Portable bond mats, which are designed to place a Worker in an equipotential zone, shall comply with ASTM F2715, Standard Specification for Temporary Protective Equipotential Bond Mat.
- Voltage detectors shall meet industry standard and be used to verify that a part of the electrical system has been Isolated and that zero potential has been achieved.

Energized Power Line Permit

Contractors working on or near power lines are required to provide proof of successful completion of Power Line Hazards Certification training through a Workplace NL approved training provider.

Contractors working on or near Energized power lines must obtain advance permission from the appropriate regional power utility. They will assess the work to be completed and will issue a permit that will specify the necessary controls, such as minimum clearance requirements. Depending on the scope of work, it may be necessary to establish a hold-off and/or Isolate and De-energize the line or piece of equipment.

Power Line Hazards

- Always contact the utility company before you start to dig. They will identify and mark the location of cables.
- A person shall not operate a mobile crane, boom truck or similar equipment that has the capacity of encroaching on a power line without having first completed Power Line Hazards Training (by an approved Workplace NL provider).
- Maintain a minimum clearance of 18 ft. (5.5 m) 230 kV and below, when working near power lines, unless a written clearance from the power utility has been obtained.

- Qualified Workers shall maintain a Minimum Approach Distance (MAD) from all Energized parts when working on or near Energized conductors. Under no circumstances shall the Worker's body, material, or tool the Worker is handling come closer to the Energized conductor then the distance specified in the MAD table. No conductive object shall be brought within the MAD, unless the Worker is insulated or isolated from the Energized line or equipment and the Energized line or equipment is insulated from any other line or equipment at a different voltage.
- Contact the Motor Registration Division of the Department of Government Services for a special permit when a vehicle or equipment exceeds the defined limits for weight, height and/or dimensions on the Province's roads.
- Use a competent signal person during the movement of equipment or material when there is a danger of becoming energized by power lines.

Grounding and Bonding (Worker Protection)

- *Temporary Protective Equipotential Bonding and Grounding for Overhead Transmission and Distribution Lines* – Equipotential Bonding and Grounding (EBG) is the preferred method for Grounding Isolated electrical lines and equipment at the worksite. EBG is not required where there are additional barriers in place to assure Worker protection. For example, where there is additional visible isolation points cut in and there is no possible way for the worksite to become Energized accidently. Use short Grounding cables whenever possible. If long leads must be used they shall be lashed with rope either to the structure or to the insulator string to reduce "whipping" during fault conditions. Do not wrap the Grounding cable around structural steel. Ensure ground clamp jaws and conductors are clean prior to using. Always use a temporary protective ground that is a size which is capable of withstanding the maximum available fault current at the location where the work is being performed. Temporary portable grounds are required to be inspected and tagged to ensure they are adequate for use. All contractor grounding and bonding plans must be documented, and reviewed with all workers involved. This should be specific to where and how grounds will be applied, and what qualifications are necessary to apply the grounds.
- *Flammable Liquids and Gases* – When transferring a flammable liquid from one container to another, the containers must be bonded (such as by using a metal bonding strap or wire to both containers) and then grounded (such as by connecting the container to an already grounded object that will conduct electricity). Grounding and Bonding will prevent the buildup of static electricity and prevent sparks from causing a fire/explosion.

Lock-Out Tag-Out (LOTO)

When machinery or equipment is shut down for servicing, repairs, tests or maintenance, it will be locked out and tagged out and isolation will be verified to prevent the unintended start-up of machinery and equipment. LOTO also occurs during the release of stored materials or hazardous energy sources such as electricity, hydraulic fluids, pressurized water systems, steam, compressed gases, or chemical systems.

A Work Protection Permit is required whenever equipment must be Isolated or De-energized to perform work. No work on any piece of equipment is permitted until NL Hydro has issued a Work Protection Permit, and the equipment has been properly locked out and zero energy verified. NL Hydro will verify the isolations with the Contractor(s) performing work. Contractors have the right to verify zero energy and may put their own lock and tag on the equipment or lock-box. Contractors may attach their own locks if they are single-keyed and serialized (or otherwise identifiable). A LOTO tag must be used in conjunction with the lock and will hold the isolating device in the 'safe' or 'off position.'

Only authorized personnel will perform LOTO and all affected personnel will be notified prior to the start of work. Anyone working under the Work Protection Permit is required to successfully complete Work Group Member Awareness Training. This training takes approximately 0.5-1 hour to complete and will be delivered by a Qualified NL Hydro employee prior to performing LOTO work.

6.9 Emergency Preparedness and Response

Contractors will be briefed on NL Hydro's site-specific Emergency requirements as part of the Site Orientation provided before work commences. Emergency response and associated requirements will be the responsibility of the Contractor unless otherwise specified. The Contractor shall develop, implement, and enforce its own site-specific Emergency response plans for the work being performed and ensure it clearly links with NL Hydro's site-specific Emergency requirements.

NL Hydro expects the Contractor to ensure that all essential Emergency equipment (fire extinguishers, eye wash stations, first aid kits, spill kits, etc.) brought to the site is proper for the work to be performed, readily accessible, in good working condition, and regularly restocked or refilled. All individuals working on the site must know the location and proper use of this equipment. Fire extinguishers shall be properly inspected and tagged and Workers shall be trained in its use.

Contractors' first aid resources shall meet all applicable regulatory requirements. The nearest medical facility, and its contact information, shall be identified and documented in the

Contractor's site-specific Emergency response plan. The Contractor is expected to have available all emergency responders' contact information, including all pertinent NL Hydro Emergency contact names and numbers.

Contractors shall determine if 911 services are available in the area. In addition, the availability of cell phone coverage should be determined prior to starting work. If no cell phone coverage is available, the Contractor shall address the Hazards and controls associated with this situation.

6.10 Forklifts

- NL Hydro expects the Contractor to provide suitable training and to demonstrate the competency of its Workers in operating any type of forklift. Training shall be in accordance with the applicable CSA standard for lift trucks.
- Forklift shall always be operated at a safe speed for existing conditions. Before moving the equipment, the operator will ensure a clear path of travel in all directions, particularly overhead.
- Documented pre-use equipment inspections will be conducted on all forklifts (e.g. brakes and control testing). Equipment with mechanical or electrical defects shall not be operated.
- When a forklift operator is not occupying the unit, the forks must be fully lowered with the engine off and the brake set. Wheels will be chocked when the truck is parked on an incline.
- To avoid exposure to carbon monoxide, equipment with internal combustion engines are not permitted in confined spaces, unless equipped with a scrubber or adequate ventilation is present.
- The forks shall be set squarely and as far as possible under the load. Loads are not permitted to be raised or lowered during travel. Forks, whether loaded or empty, should be carried as low as possible while ensuring that they are high enough to clear uneven surfaces. No one is permitted to stand or walk under elevated forks.
- Battery-powered lift trucks shall be charged in accordance with approved procedures in a well-ventilated area. No smoking or Hot Work shall be permitted near a forklift on charge.
- When a load obstructs the operator's view, the lift truck will be driven in reverse.
- Audible warnings will be sounded when the lift truck is backing up (e.g. sounding the horn twice before backing up).
- A forklift is not to be used to ride or to lift personnel to perform work.

6.11 Hazard Identification, Evaluation, and Control

Contractors shall have and follow a written Hazard identification, evaluation, and control program. It is the Contractor's responsibility to perform a Hazard/Risk assessment for the overall work as well as the critical tasks to be performed to ensure proper protective measures are taken.

Contractors are required to list the main Tasks/steps to be performed so they may identify the health, safety, and environmental Hazards associated with each Task/step and specify the control measures required to eliminate or minimize the Hazards. In addition, evaluating the Risk associated with each Task/step will help determine the effectiveness of the controls established.

Hazards shall be engineered or administratively controlled first, while PPE shall be the last line of defense. The Hazard control hierarchy includes:

- Elimination/substitution of the Hazard (whenever practical)
- Engineering controls (ventilation, site spacing, etc.),
- Administrative controls (procedures, training, etc.), and
- PPE (hearing protection, safety boots, safety glasses, etc.).

Job Hazard Assessment

Contractors are required to prepare a Job Hazard Assessment before commencing work to provide a structured approach for identifying potential Hazards and developing control measures. This should follow the Contractor's own processes and ensure that the proper people, equipment, preparation, and processes are identified and acted upon.

Safe Work Procedures

Contractors are required to have applicable safe work procedures before commencing work. The safe work procedure should follow the Contractor's own processes and analyze a specific Task to identify the associated health, safety, and environmental Hazards, as well as identify specific mitigation actions necessary to prevent Incidents.

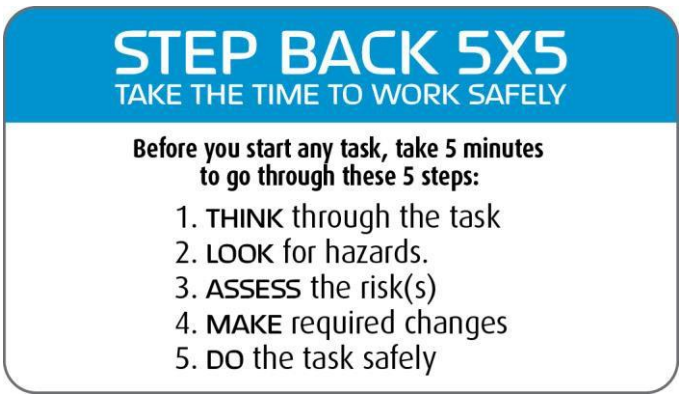
Tailboard Safety Talks

Contractors in supervisory positions will conduct a Tailboard Safety Talk, or equivalent, with their employees at the beginning of each shift and when conditions change. Supervisors may share this responsibility with their employees as a mentoring opportunity. Performed prior to the start of a Job, the Tailboard Safety Talk reviews the identified Hazards and controls associated with the work. These talks can also help to keep Workers informed of work-related Incidents and allow employees to draw on work experience to help identify the Hazards

involved in work processes, tools, equipment, and/or materials.

Step Back 5x5

As a part of our personal commitment to safety, we encourage all individuals to do a personal Risk assessment before starting any Task. You are the best person to identify the Risks involved in whatever you are doing. Before any Task is started, we ask that you take 5 minutes to go through the 5 steps in a *Step Back 5x5* or equivalent process.



Workplace Inspections

Contractors shall routinely inspect their Workplaces to ensure they are free from uncontrolled Hazards and that safe work procedures are being followed. Copies of completed inspection forms shall be made available to NL Hydro upon request.

Field HSE Audits

To help Contractors meet NL Hydro's HSE expectations, Contractors may be routinely audited. Feedback on audit findings will be provided to the Contractor to facilitate continuous improvement in HSE performance. Contractors shall participate in field HSE audits and provide information as necessary. Serious or repeated breaches of HSE expectations or legislative requirements may result in disciplinary action, up to and including the Contractor's dismissal from site.

6.12 Hazardous Materials

All Contractors who work with or in proximity to a controlled product shall have valid Workplace Hazardous Materials Information System (WHMIS) training prior to commencing work. In addition, Workers shall familiarize themselves with the location of the nearest eyewash station, safety shower, or water supply.

The Contractor shall notify the Contract Manager of all controlled products that will be introduced to the Workplace and shall provide the associated Safety Data Sheets (SDS) prior to commencing work. Copies of the SDS shall be available at the Workplace and maintained by the Contractor at all times. Contractors will review the SDSs and ensure the Hazards, controls, and any special requirements are communicated and understood by all employees working with or near hazardous materials. SDSs can be used to establish safe work procedures for work in proximity to or involving the use of controlled products.

All WHMIS 2015 with GHS controlled products will have a proper WHMIS label as required by the regulations and any unused portion or spent containers shall be taken with the Contractor when leaving the Workplace. The disposal of all controlled products will be in accordance with applicable legislation and should be consistent with requirements in the SDS.

Transportation of Dangerous Goods (TDG)

Contractors who offer to transport, accept, or transport regulated dangerous goods must have appropriate TDG training. TDG training shall be obtained within every 36 months for all people involved in the transport of dangerous goods by road vehicle, railway vehicle, or ship and within every 24 months for transport by aircraft. Proof of training must be on the person at all times while handling dangerous goods. NL Hydro expects that Contractors will understand and execute their obligations under the *Transportation of Dangerous Good Act* when dealing with the transportation of regulated dangerous goods. For example, having dangerous goods identified with the appropriate safety mark.

6.13 Hoisting and Lifting Equipment

- Workers who operate hoisting/lifting equipment shall have suitable training, and certification where required, and be competent in its use.
- The rated capacity of the hoisting/lifting device shall not be exceeded.
- A Worker must not ride on a load, sling, hook or any other rigging equipment.
- Rigging fittings shall be marked with the manufacturer's identification, product identifier and the working load limit or sufficient information to readily determine it.
- Equipment and rigging hardware shall be operated and maintained in a safe and responsible manner and in compliance with the manufacturer’s instructions and applicable regulations.
- A spreader bar or other specialized below-the-hook lifting devices shall be constructed, inspected, installed, tested, maintained and operated in accordance with the requirements of the latest version of ASME B30.20 "Below-the-Hook Lifting Devices" and its working load limit shall be certified by a professional engineer or established by its manufacturer.
- A spreader bar or specialized below-the-hook lifting device shall display a nameplate or other permanent marking showing the:
    - manufacturer's name and address;
    - serial number;

    - weight of the device where it weighs more than 45 kilograms; and
    - working load limit.
- A lift plan shall be completed for all critical lifts, as defined by the Provincial NL OHS legislation, and submitted for NL Hydro's review and acceptance.
- A written safe work procedure shall be completed for all heavy lifts, tandem lifts, and non-routine lifts.
- Crane operations shall not proceed when there is lightning in the vicinity.
- A pre-use inspection shall be completed for cranes and rigging gear such as slings, personnel baskets, etc.
- Wire rope, alloy steel chain, metal mesh, synthetic fiber rope and synthetic fiber web slings shall meet the requirements of the latest version of ASME B30.9, "Slings".
- For the first lift of the day, the load shall be test-lifted (load lifted several inches) and the brakes checked.
- Signalers shall be Qualified and maintain constant communication with the operator. When the operator of a crane or hoist does not have a clear and unobstructed view of the boom, jib, load, line, load hook and load throughout the whole range of the hoisting operation, the operator must act only on the directions of a qualified signaler who has a clear view of the things the operator cannot see. Two-way radio or other audio or video systems must be used if distance, atmospheric conditions or other circumstances make the use of hand signals hazardous or impracticable.
- The operator of the crane or hoist must stop the operation of the equipment on receiving a stop signal from any person.
- A crane or hoist must be operated in a manner that prevents any part of the crane or hoist, load line, rigging or load from coming within the minimum distance of Energized high voltage electrical conductors or equipment.
- Chain hoists and chain or wire rope slings shall not be used near Energized lines or equipment when there is a possibility of violating the Working Minimum Approach Distance (MAD).
- All rigging equipment shall be inspected by a Qualified Worker prior to use and shall not be used if the inspection discloses any flaw, worn link, fracture, broken strands, or other defects. The defective equipment shall be immediately removed from service and tagged or destroyed to prevent use.
- The Working Load Limit (WLL) shall not be exceeded for any rigging equipment.
- Softeners shall be used where practical, particularly when hoisting material with sharp

edges.

- Tag lines shall be used whenever loads require guiding or stabilizing. It is recommended that a minimum distance of 4 ft. be maintained away from the load. Dry Polypropylene rope is recommended for work near overhead power lines. Tag lines will be free of any knots, splices, or loops.

6.14 Hot Work

Hot Work involves burning, welding, cutting, grinding, using fire or spark producing tools, or other work that produces a source of ignition. A Hot Work permit is required when working with ignition sources near combustible materials. Contractors requesting to perform Hot Work shall obtain a NL Hydro Hot Work permit prior to starting work. Contractors may also maintain their own Hot Work permit and make copies available to NL Hydro upon request. A permit is not required for designated fire-safe areas, such as maintenance, machine, or technical shops, where Hot Work operations are routinely conducted and proper fire safeguards are in place.

A Hazard assessment shall be completed for these areas prior to work. Workers who perform Hot Work must be qualified to do the work. The Worker performing the Hot Work must post the Hot Work permit in a visible location in the work area and retain copies on site.

During and after Hot Work, the following precautions shall be implemented:

- Fire Watch will be provided during Hot Work and for sixty (60) minutes after work. Contractors may also be required to provide periodic monitoring of the Hot Work area for up to three (3) hours after the sixty (60) minute Fire Watch.
- Fire Watch will be supplied with a suitable fire extinguisher, properly trained in its use, and be knowledgeable in the location and activation of the nearest local fire alarm.

6.15 Housekeeping

Housekeeping shall be addressed on a continuous basis. Each Contractor is responsible for maintaining high standards of cleanliness and orderliness; anything less is unacceptable.

- Material and equipment shall be placed, stacked or stored in a stable and secure manner that does not constitute a Hazard to a Worker who is in the area or who is manually stacking the items.
- Construction materials shall be kept in a neat, consolidated, and organized manner. Deliveries shall be sequenced so that only one (1) week's supply of materials are on site at any given time, unless the Contractor has been given a specific lay down area. Unused or excess/scrap materials shall be promptly removed from the site.
- Temporary cords or hoses, not able to be raised off the floor, shall be secured to the

floor and protected from damage to eliminate trip Hazards. The area shall be properly marked with Warning Signs or traffic cones to alert other Workers in the area.

- Workers shall place waste materials in proper containers and remove all waste materials and debris daily. Hazardous, flammable, and/or excess waste material shall be removed from the work area daily.
- Contractors will place equipment and materials so as not to block exits, aisles, doors, stairs, ladder ways, Emergency equipment or electrical panels.
- Workers will remove nails and other sharp objects protruding from surfaces and will sweep up loose nails and screws.
- Reinforcing steel or similar material projecting above horizontal surfaces shall be capped or otherwise covered to prevent the hazard of impalement.
- Contractors are encouraged to recycle discarded materials such as wood, cardboard, steel, copper, wire, etc.

6.16 Labor, Training, and Competency

Labor Supply

The Contractor shall discuss staffing levels with the Contract Manager to ensure they are sufficient. The Contractor may be requested to provide a resource labor profile showing how the Contractor proposes to complete the scope of work in the timeframe allocated in the schedule.

Competency and Qualifications

The Contractor shall supply appropriate labor that is both trained and qualified to safely and competently complete the Tasks within their scope of work. The Contractor is required to have a training program suitable to the work they perform.

Site Orientation

Prior to commencing work on-site, all Contractors are required to complete a Site Orientation that provides a general introduction to NL Hydro, along with site specific information on Workplace Hazards. Additional orientations may be required based on the nature of the work to be performed.

6.17 Ladders (step, single, or extension)

- Before a ladder is to be used, the Contractor shall perform a pre-use inspection.
- Ladders should be placed on level firm ground, free-standing ladders should be fully opened.
- All portable ladders shall be CSA-approved.
- Another person while in use shall hold the ladder in place and/or the ladder shall be tied off at the top and bottom to prevent movement.
- Ladders shall not have their working load rating exceeded.
- Only CSA-approved non-conductive (e.g. fiberglass) ladders are permitted for electrical work or use near Energized lines and locations which contain live electrical apparatus, such as battery and computer rooms.
- The bottom of ladders shall be set one (1) ft. out for every four (4) ft. up (i.e. a slope of 4:1).
- Extension ladders will not have more than three (3) sections.
- Side rails of the ladder shall extend at least 1 m above any platform or landing to which the ladder is a means of access.
- The Worker will have both hands free for climbing when ascending or descending a ladder, e.g. maintaining three points of contact on the ladder at all times. A hand line will be used for handling materials.
- Never overextend sideways while on a ladder. To help with proper positioning, the Worker shall keep their belt buckle positioned between the side rails at all times. This will help maintain their center of gravity and help prevent falling off, or tipping over, the ladder.
- If the ladder is not in a safe operating condition, tag it for maintenance, and remove it from service.

6.18 Manual Material Handling

Manual Materials Handling (MMH) means moving or handling things by lifting, lowering, pushing, pulling, carrying, holding, or restraining. MMH is a common cause of occupational fatigue, as well as lower back pain and injuries.

Planning the Lift

- The Contractor will always check before lifting to see if mechanical aids such as hoists, lift trucks, dollies or wheelbarrows are available. Where practicable, mechanical lifting aids will be used for the lift, and performed by employees knowledgeable of their safe operation.
- The Contractor should be careful with heavy or awkward loads. The load should not be lifted if the worker is unsure whether the load can be handled safely.
- Contractors should assess and identify the weight of the load, making sure that they can lift the load without over-exertion.
- The planned path and final location of the load should be free of obstacles and debris.

Safe Lifting Techniques

- Contractors shall prepare for the lift by warming up the muscles.
- Contractors shall stand close to the load, facing the way they intend to move.
- A clear line of sight should be maintained when carrying the load, ensuring that vision does not become obstructed.
- A wide stance should be used to gain balance, place feet about shoulder-width apart.
- Contractors must ensure they have good grip on the load.
- Keep the arms, back straight, and head up. Avoid twisting and side bending while lifting.
- Tighten abdominal muscles and tuck the chin into the chest. Lift heavy objects with the leg muscles, NOT with the back muscles.
- Lift the load as close to the body as possible.
- Lift the load gradually and smoothly without jerking.

6.19 Motor Vehicles

- Prior to each use, motor vehicle operators shall complete a pre-use inspection to ensure that the vehicle is safe to use (e.g. inspect lights, inspect tire pressure and treads, test breaks, test windshield wipers). Items, which affect the safety of the vehicle, shall be repaired prior to its continued operation.
- Operators have properly orientated themselves with the vehicle.
- Contractors who regularly operate a motor vehicle as part of their work are encouraged to complete a defensive driving course.

- Abide by the law – e.g. hold a valid driver's license, wear seat belts, do not exceed the posted speed limits, do not operate a cellular phone while driving.
- Avoid unnecessary idling.
- Avoid distracted driving such as using cellular phones, texting, emailing, programming GPS devices, and wearing ear buds while driving. Other distractions that should be kept at a minimum include conversations with passengers, eating/drinking, and grooming.
- Have a first aid kit and/or an Emergency car kit available.
- Back-in the vehicle when parking.
- Materials being transported in the back of pickups or by any other means of transport must be tied down or secured in a proper manner.
- Avoid stopping on a highway whenever possible. If it is necessary to stop on a highway, vehicle operators shall exercise extreme caution and use warning signals and lights, tail lights/Emergency flashers, rotating beacons, or reflectors (if equipped), or traffic control devices (together with flag persons, where necessary) if work is in progress.
- Truck safety flags must be removed or secured in the lowered position when entering into an Energized switchyard or terminal station.

6.20 Personal Protective Equipment (PPE)

Workers who wear personal protective equipment shall be adequately instructed in the correct use, limitations, and assigned maintenance duties for the equipment to be used, as prescribed by NL OHS Regulations.

As a minimum requirement, the following PPE shall be worn in the field unless a higher degree of protection is deemed necessary due to the specific nature of the work being performed. The Contractor is required to provide all necessary PPE to their employees.

CSA-Approved Headwear

- Headwear shall meet the CSA Standard Z94.1 Industrial Protective Headwear or, in the case of Emergency response personnel, the applicable National Fire Protection Association Standard.
- Headwear is to be inspected by the wearer at the beginning of each workday or shift. The Worker shall inspect for cracks, signs of impact or rough treatment. Shells and suspensions shall be kept clean and maintained in excellent condition at all times and any defective parts shall be replaced immediately.
- Safety headwear must be properly adjusted and secured with all components in place, in order to provide the designed protection. Unauthorized materials shall not be worn

under safety headwear. This includes ball caps, hoodies, wool caps, etc. Only approved hardhat liners should be worn in conjunction with the hard hat. The use of a thin fleece balaclava can be used as it reduces the issue of impaired vision and results in a more secure fit.

- NL Hydro requires all new employees, who have less than six (6) months of cumulative service (with NL Hydro) in the trade or discipline for which they were hired, to wear a green hard hat. Contractors are expected to recognize our new employees and pay extra attention to those wearing green hard hats in the area where they are performing work. Contractors are not included in this initiative and are expected to provide their own hard hat suitable for the work.

CSA-Approved Safety Glasses

- Safety glasses with non-conductive frames and permanent side shields are required when the Risk of a face or eye injury exists. Eyeglasses (even with hardened lenses) are not a substitute for safety glasses.
- Full coverage goggles and/or face shields shall be worn when a Worker is at increased Risk of injury to the face and/or eye. For example, when power grinding, air or sandblasting, handling acids, caustics, chlorine, ammonia, or other similar liquids or gases (except when approved complete head coverings are worn).

CSA-Approved Footwear

- Footwear will have sole protection, Grade 1 toe protection, and be CSA-approved. This is indicated by a green CSA triangle.
- Footwear will also be electrically resistive. This is indicated by a CSA symbol, along with an omega symbol.
- Footwear will have adequate ankle support where the Risk of rolling or twisting an ankle exists.
- If conductive sole footwear is required, a detailed risk assessment must be conducted, and workers have to be informed of the hazards.

CSA-Approved High-visibility Safety Apparel (HVSA)

HVSA, such as vests, bibs, and coveralls, are required when there is low light and poor visibility, especially if you are working around moving vehicles (cars, trucks or other machinery traveling under their own power such as forklifts, boom trucks, and backhoes). HVSA shall meet CSA Standard Z96 High-Visibility Safety Apparel requirements. NL Hydro's minimum HVSA standard for fieldwork is Class 2, Level 2.

Safety Gloves

Workers engaged in work where there is a danger of cuts, abrasions, burns, contact with hazardous materials, exposure to heat and cold, etc., shall wear suitable gloves for hand protection.

Hearing Protection

Appropriate hearing protection shall be worn at all times where the exposure to noise exceeds 85 dB (e.g. when operating tools and equipment). Warning Signs indicating areas where noise exposure is above 85 dB must be posted to indicate where hearing protection is required. Double hearing protection is required where the exposure to noise meets or exceeds 105 dB.

Respiratory Protection

If work conditions require the use of air-purifying respirators or supplied air (SCBA or Cascade system), it is the Contractor's responsibility to have a written respiratory protection program, have the employee(s) medically cleared and fit-tested for the type of respirator supplied, and provide them with the required training (e.g. respirator care, maintenance, and inspection).

Clothing

Workers shall wear clothing suitable for the type of work being performed. At minimum, this includes long pants and a t-shirt (no sleeveless shirts).

6.21 Powered Equipment and Tools

All equipment and tools necessary to complete the assigned task must be in good condition and operated per manufacturer's recommendation. Unless otherwise stated, the Contractor will supply equipment and tools necessary to complete the work. All moving parts that constitute a Hazard to a Worker shall be equipped with guards that are maintained in good working condition. Any damaged equipment or tools will be taken out of service and discarded or repaired in accordance with manufacturer's instructions. Factory-installed equipment guards will not be removed during operation.

All electric power tools shall be Canadian Standards Association (CSA) or Underwriters Laboratories of Canada (ULC) approved. In addition, tools must be double insulated.

Workers shall wear appropriate PPE appropriate for the Hazards they may be exposed to (e.g. dust, metal cuttings, noise) from the operation of the tool or equipment. Electric tools are not permitted in hazardous atmospheres (e.g. where there are flammable vapors, gases, or dusts)

unless the equipment is marked or designated intrinsically safe, or explosion proof, by the manufacturer.

6.22 Security and Site Access

Contracted employees may be required to sign in/out with NL Hydro site security personnel each time a Worker enters/exits the Workplace. Some Workplaces will issue electronic access cards, while other locations may require physical signing in and out at the security office.

Some Workplaces will have areas with restricted access (e.g. switchyards, underground, etc.). Specific information on accessing these restricted areas will be given, as required, during the Site Orientation.

Contracted employees must obtain advance permission from the Contract Manager for any visitors intended to come to the Workplace.

6.23 Subcontractors

NL Hydro must approve all Subcontractors before being authorized to conduct work on site. The Contractor shall inform the Contract Manager in advance if they intend to use Subcontractors to undertake the scope of work. NL Hydro reserves the right to refuse the use of Subcontractors.

Contractors will be held accountable to ensure that their Subcontractors are held to the same standards as their employees. This includes ensuring that Subcontractors are qualified to perform the work and are meeting NL Hydro's expectations while performing the scope of work.

Contractors who require Subcontractors shall submit a subcontracting plan, which details the work and/or services to be subcontracted, the selection criteria to be used to select Subcontractors, and plans to ensure HSE performance from Subcontractors. Contractors shall ensure that their Subcontractors are familiar and in compliance with legislation, NL Hydro specific requirements, and this document.

6.24 Trenching and Excavations

When undertaking trenching or excavation work that is greater than six (6) inches in depth, the Contractor shall ensure an excavation permit is in place and the appropriate power utility has been notified. For trenches or Excavations that require access by personnel, a written daily inspection and safe work procedure are required.

In addition, the Contractor shall ensure the following minimum precautions are taken:

- Shoring, bracing, or other suitable means of securing the sides of an excavation or trench must be in place, as necessary, to withstand lateral soil pressure or nearby forces

such as those exerted from vehicles or equipment.

- Trenches 1.2 m (4 ft.) or greater must be sloped back to a safe angle of repose or supported as specified by a professional engineer.
- Unsecured material within 1.83 m of the excavation area must be secured or removed before an excavation can begin.
- No material, equipment, or tools shall be laid within 1 m of the edge of an excavation.
- A safe means of entry and exit into and out of all Excavations and trenches shall be established, such as using ladders, stairs, or ramps.
- Excavations and trenches must be adequately illuminated and barricaded.

6.25 Working Alone

When Working Alone (or in isolation) cannot be avoided, the following shall be followed:

- Personnel who are performing work alone shall have a minimum of Standard First Aid training from an approved provider. If a group of Workers is working in isolation, at least one of the Workers shall have a minimum of Standard First Aid from an approved provider.
- Identify the Hazards and establish controls that eliminate or control the identified Hazards and minimize Risk to an acceptable level. Some things to consider include extreme weather/temperature, vehicle breakdown, personal injury, cell phone reception, wildlife encounters, and personal safety or security.
- A formal check-in and checkout procedure is required to verify the well-being of a Worker who is assigned to work alone or with a group of Workers assigned to work in isolation. The frequency of check-ins is based upon the level of Risk associated with the work. The steps to follow in the case a worker cannot be contacted should be considered, as well as provisions for Emergency response. For example, the location, contact information, and services offered at the nearest clinic and/or the contact information for Emergency helicopter service.
- Know your destination, including GPS coordinates when possible and have signage erected for First Responders if they need to come to your worksite.
- Provide an effective means of communication, and back-up communication, between the Worker and response personnel. Workers and response personnel shall be knowledgeable in the operation of the communication devices provided.

6.26 Working at Heights

Fall Protection

Personnel must use fall protection equipment when exposed to a work area that is:

- 3 meters or more above the nearest safe surface or water;
- above a surface/thing that could cause injury to the worker if the worker were to fall on the surface/ thing; or
- above an open tank, pit or vat containing hazardous material.

- All users of fall protection equipment must be Qualified and properly trained by a Workplace NL approved training provider.
- A fall arrest system shall comply with Section 142 of the NL OHS Regulations.
- A fall restriction device(example Pole Choker) system shall include a full body harness.
- Contractor may be required to submit a fall protection plan to NL Hydro for acceptance. At minimum, the plan must include a list of all anticipated Tasks to be performed at elevated locations, the proposed methods of fall protection for each task, a rescue plan, and applicable inspection forms.
- All fall protection equipment must be inspected by a Qualified Worker prior to use and maintained as per the manufacturer's instructions. Defective equipment shall be discarded and replaced, or repaired.
- Any fall protection equipment that has been involved in a fall shall be immediately be put out of use and is no longer permitted to be used without testing by an approved provider.
- If using the pole choker to climb a wooden pole, the line worker shall ensure that he/she has received specific practical instruction from the device's manufacturer demonstrating how to use the device and has completed a task observation for their Supervisor on wood pole climbing. Proper use of the pole choker (adjustment and hand positions/fall arrest properties) is mandatory.

Scaffolds and Work Platforms

- Scaffolds and elevated platforms must be constructed, maintained, and used in accordance with the applicable regulations, industry standards, and manufacturer's instructions.
- Erection and dismantling of scaffolds must be performed under the supervision and direction of a qualified person experienced with or trained in scaffold erection, dismantling, and use, as well as knowledgeable about the hazards involved.

Dropped Object Prevention

Protection from falling objects is required for work performed at heights, near floor railing, on scaffolding or on platforms where objects have the potential to fall. Effective housekeeping plays an important role in reducing the Risk of falling objects. Work areas shall be regularly cleaned and organized to prevent dropped objects, as well as Worker slips, trips, and falls. Tools, equipment, and materials should be kept away from the edge of working surfaces and removed from the work area when no longer needed and at the end of the shift. Adequate signage shall also be used to warn persons in the vicinity of overhead work.

Contractors shall take all precautions to guard against falling objects. The following are the minimum control measures to be considered when mitigating the Risk of dropped objects. Additional control measures may be required where further Risk reduction is necessary.

1. Create a physical enclosure around the work area, such as a barricade, toe board, or matting over floor grating.
2. Establish a safe work zone below overhead work. The safe work zone shall be identified with Barricades or other suitable safeguards.
3. Tether tools and equipment.
4. Set up a debris net system. Debris nets will be installed as close as practicable under the Walking/Working Surface on which employees are working. Defective nets are not permitted. Debris nets will be used, maintained, and inspected in accordance with ANSI Standard A10.11 'Safety Nets Used during Construction, Repair and Demolition Operations'.

7.0 General Environmental Requirements

7.1 Environmental Management System (ISO 14001 Certified)

NL Hydro's Environmental Management System (EMS) is ISO 14001 certified, and as such subscribes to a high environmental management standard to identify and control environmental impacts associated with our operations. All contracted employees are expected to comply with our EMS by adhering to our Environmental Policy and the Operational Control Procedures, which relate to the work.

NL Hydro's EMS identifies Significant Environmental Aspects (SEAs) for operations at each Workplace. SEAs are those aspects of NL Hydro's operations that have or could have the most significant impact on the environment. Your NL Hydro Contract Manager will work with the Contractor to identify the SEAs that are relevant to the work, providing any applicable Operational Control Procedures that will be required to follow to avoid and mitigate environmental damage. The Contractor is required to address all aspects of their work that could have a significant adverse impact on the environment.

7.2 Environmental Protection

Contractor shall pay the highest regard to protection of the environment in carrying out the work. Contractor shall conform to all Agreement requirements, including Company's environmental guidelines and policies in this regard.

Contractor's environmental management shall include all environment-related functions at the Worksite(s) to protect the environment, and to prevent environmental impacts.

Contractor shall be primarily responsible for all aspects of the environment management of the work. Contractor shall be responsible for developing project specific environmental protection plans and

environmental management and mitigation plans related to all environmental aspects of the project and the Environmental Assessment (EA) registration release documentation and conditions related to the work, if applicable.

Environmental management, protection and mitigation plans will be consistent with Applicable Laws and the conditions of (EA) release, if applicable.

Some examples of topics that would be covered in environmental management, protection and mitigation plans include the following:

- *Environmental personnel and responsibilities*
- *Environmental orientation and training*
- *Environmental Permits and approvals*
- *Storage, Handling, Disposal of Fuel and Other Hazardous Materials*
- *Spill Prevention and emergency Response*
- *Protection of Fish Habitat and Water Quality*
- *Waste Management*
- *Wildlife management and protection*
- *Buffer zones*
- *Dewatering work areas*
- *Drilling and blasting*
- *Management of mobile equipment, including repairs and Maintenance*
- *Dust control*
- *Marshalling and Laydown areas*
- *Quarry development and remediation*
- *Erosion prevention, sedimentation control and Site Water Management*
- *Working in and in close proximity to Waterbodies*
- *Sewage Disposal*
- *Surface and Groundwater use*
- *Clearing Vegetation and migration bird protection*
- *Forest fire protection*
- *Historic Resource protection*
- *Site Rehabilitation*
- *Reporting*

7.3 Environmental Permits and Approvals

Contractor is responsible, except as otherwise noted, for obtaining all regulatory permits, approvals, consents, documents and licenses required for performing the Work. Contractor shall develop and maintain a permit management plan identifying permits required, dates required, and submittal and expected processing durations. Both permits and certifications will be covered in this plan.

Contractor is responsible for producing and providing any information and documentation required for Company to obtain all applicable governmental authority approvals. As requested by Company,

contractor shall submit copies of Project documentation and technical information to governmental authorities to enable Company to secure such permits.

Any consequences for non-compliance of Contractor to the required permits, documents and licenses to perform the Work shall be to contractor's account including payment of fines.

7.4 Environmental Compliance Monitoring

The Contractor shall ensure the work is performed in an environmentally responsible manner, following the applicable legislative requirements and NL Hydro's EMS. The Contractor must assign environmental responsibilities to ensure compliance with this requirement. NL Hydro will monitor the Workplace to ensure compliance with environmental permits and authorizations, and to ensure the work performed by the Contractor is in accordance with NL Hydro's EMS.

8.0 Incident Reporting

8.1 Injury, Illness, and Near Miss

All injuries, illnesses, and near misses must be immediately reported to the Contractor's Site Supervisor, as well as the Contract Manager or Construction Management Representative once any necessary first aid and/or medical treatment has been provided. The Contractor shall assist with documenting the incident in NL Hydro's Safe Workplace Observation Program (SWOP). The Contractor shall not disturb the scene of an Incident, except to rescue personnel, secure the area, or to control damage.

In the event of any type of Incident, the Contractor shall not resume any work activity until directed by the Contract Manager. Any media inquiries related to an Incident shall be directed to the Contract Manager. No photos or videos shall be taken on any of NL Hydro's Workplaces (including with personal electronic devices) without explicit permission from the Contract Manager. Contractors are required to notify the worker's compensation board and regulatory authorities in accordance with the legislative requirements for the province of Newfoundland and Labrador.

Contractors will perform an investigation, generating and completing corrective actions to prevent reoccurrence of any injuries, illnesses, or near misses.

Root cause investigation reports are required for:

- Serious injuries;
- Environmental releases;
- Any near miss that has the potential to result in a serious injury, illness, or significant environmental harm.

At minimum, investigation reports shall include the following:

- A description of the event;
- An evaluation of the Risk;
- The immediate and root causes of the Incident;
- A list of corrective actions to reduce the Risk of recurrence;
- A plan to communicate lessons learned.

A copy of the investigation shall be provided to the Contract Manager for recordkeeping. Contractors will inform their employees, Subcontractors, and other interested parties of the circumstances resulting in an Incident and provide guidance on preventative measures taken.

8.2 Unsafe Acts or Conditions

Contractors are encouraged to report any Unsafe Acts or conditions they observe at the Workplace. The Unsafe Act or condition could pose a Risk to human health and safety, the environment, or property/equipment. The Contractor shall notify the Contract Manager when an Unsafe Act or condition is observed and assist with documenting the observation. The Contractor shall ensure the Unsafe Act or condition is addressed in a timely manner and to the satisfaction of the Contract Manager and/or the Authority having Jurisdiction. The Contractor is empowered and expected to stop the work of co-workers, NL Hydro employees, or other Contractors if any person's safety or the environment are at Risk.

8.3 Environmental

Environmental Incidents are the onset of undesirable events resulting from natural, technological or human-induced factors that causes or threatens to cause environmental damage, possibly affecting human lives and/or property. Environmental incidents include events such as hazardous materials spills (such as from fuel, oil, battery acid, pesticides and ethylene glycol) and silt entering a stream or lake. An incident can also include an Unsafe Act or condition such as the improper disposal of waste or operating without a permit.

All environmental Incidents must be reported immediately to the Contractor's Supervisor, NL Hydro's Contract Manager, as well as the appropriate government authority (as prescribed by legislation) once the immediate and appropriate clean up and/or containment efforts have been made. All environmental Incidents are entered into the SWOP database to collect the necessary information to help prevent future occurrences. In addition, Contractors are required to conduct their own investigation of the environmental Incident and provide a copy to NL Hydro's Contract Manager for recordkeeping purposes. The Contractor shall be responsible for all or

any clean-up, reclamation and restorative measures as may be directed by NL Hydro or the Authority having Jurisdiction.