## INDEX

1. PURPOSE ................................................................................................................................. 4
2. SCOPE ................................................................................................................................... 4
3. GENERAL HS&E RESPONSIBILITIES ...................................................................................... 4
4. SUBCONTRACTOR HS&E REQUIREMENTS ........................................................................... 7
   4.1 SUBCONTRACTOR’S HS&E PROGRAMS ........................................................................... 7
   4.2 SUBCONTRACTORS WHO HIRE THEIR OWN SUB-CONTRACTORS ............................... 7
   4.3 HS&E SUPPORT RESOURCES ......................................................................................... 8
   4.4 SAFE WORK EXECUTION PLAN ....................................................................................... 8
   4.5 OPERATOR COMPETENCY ................................................................................................. 8
   4.6 STATISTICAL REPORTING REQUIREMENTS / SUBCONTRACTOR HS&E PERFORMANCE SUMMARY ....................................................................................................................... 8
   4.7 INCIDENT, NEAR MISS REPORTING AND INVESTIGATION REQUIREMENTS ............ 9
   4.8 TRAINING ........................................................................................................................... 10
   4.9 EMERGENCY RESPONSE PLANS .................................................................................... 11
   4.10 SAFETY MEETINGS ......................................................................................................... 11
   4.11 MENTORSHIP (SHORT SERVICE OR NEW WORKER) .................................................... 11
   4.12 HAZARD IDENTIFICATION AND RISK ASSESSMENT ................................................... 11
   4.13 PPE REQUIREMENTS ....................................................................................................... 11
   4.14 WORKSITE INSPECTIONS ............................................................................................... 12
   4.15 HOUSEKEEPING ............................................................................................................. 12
   4.16 SPECIAL HS&E CONSIDERATIONS ............................................................................... 12
   4.17 HEALTH MONITORING PROGRAM .................................................................................. 16
   4.18 DRUG & ALCOHOL PROGRAM ....................................................................................... 16
   4.19 ENVIRONMENTAL PROTECTION .................................................................................... 17
   4.20 TRAFFIC CONTROL PLANS ............................................................................................. 17
   4.21 RECORD KEEPING ........................................................................................................... 18
5. HS&E PERFORMANCE Review ............................................................................................... 19
6. RIGHT TO APPLY CONSEQUENCES .................................................................................... 20
APPENDIX A – SUBCONTRACTOR HS&E PERFORMANCE SUMMARY
LEDCOR CONTRACTORS DIVISION
SUBCONTRACTOR HS&E STANDARD

1 PURPOSE
Ledcor Contractors Ltd., its affiliates and subsidiaries (Ledcor) is fully committed to providing a healthy, safe and environmentally friendly work place for its employees and subcontractors. Ledcor’s expectation is to employ subcontractors whose management, leadership and systems have demonstrated positive results in health, safety and environmental performance.

2 SCOPE
Ledcor’s Subcontractor HS&E Standard applies to all subcontractors engaged by Ledcor and is intended to enhance project performance on all work sites. It is the intent of this Standard to:

- Provide you (the Subcontractor), with the minimum Health, Safety and Environmental (HS&E) requirements when working for Ledcor.
- Provide the Subcontractor with Ledcor’s Health, Safety and Environmental expectations.
- Establish performance monitoring systems that will be used to evaluate Subcontractor’s HS&E performance both during Subcontractor’s engagement and upon completion of work to provide opportunities for continuous improvement.
- Provide a safer work environment for all stakeholders on the work site.
- Provide uniformity in safety practices, standards, evaluation and enforcement for all subcontractors, their sub-subcontractors and their respective workers.
- Require the Subcontractor, its sub-subcontractors and their respective workers comply with the Program.
- Minimize losses to workers, business equipment, property and environment.
- Maximize safe production.
- Maintain a high worker morale and confidence in the HS&E Management System.

Please note, that this standard sets the minimum Health, Safety & Environmental requirements when working for Ledcor. All project, site or client (Client) specific requirements are outlined in the Project Specific Safety Program (PSSP) and must be adhered to at all times. A copy of the PSSP will be provided to Subcontractor and must be reviewed to ensure understanding of all expectations. Where these expectations and standards are exceeded by Subcontractor’s manual or Federal, Provincial/State, and/or Municipal Acts, Regulations and Codes, the more stringent standard shall be applied.

3 GENERAL HS&E RESPONSIBILITIES
The terms of reference in this section of the Standard are written to clearly identify the areas of responsibility and accountability related to incident prevention for the following individuals:

- Ledcor Designate
- Subcontractor
- Subcontractor (Operations) Supervisors – Person in Charge
- Subcontractor Workers
LEDGORT DESIGNATE

- Deliver the appropriate Risk Control Category as determined by the Subcontractors Evaluation Risk Rating, i.e. Lower Risk, Medium Risk or Higher Risk.
- Ensure, as far as reasonably practicable, that subcontractors under his/her direction comply with the provisions of applicable client, health, safety and environmental laws, by-laws, rules, regulations, and orders made by any governmental or regulatory body (Regulatory Requirements) and this Standard.
- Coordinate activities between Subcontractor, Ledcor’s other subcontractors and Ledcor and assist with coordinating Subcontractor’s sequence of operations to avoid adverse interaction.
- Ensure proper reporting, investigations and costing of incidents and promote proactive preventative actions.
- Review working methods and precautions with Subcontractor on an ongoing basis and ensure that work, once started, is carried out as planned; and that relevant Regulatory Requirements and all applicable safety procedures are strictly observed.
- Assist with implementing Ledcor’s Subcontractor HS&E Management Program and Subcontractor HS&E Standard and monitor Subcontractors’ adherence to this Standard.
- Ensure the Subcontractor has a drug and alcohol program that aligns with Ledcor’s drug and alcohol program.
- Ensure that a Project Emergency Response Plan is developed and communicated to everyone on the Project.

SUBCONTRACTOR

- The Subcontractor and its sub-subcontractors and their respective workers are expected to know and comply with all applicable Regulatory Requirements and Ledcor / Client HS&E requirements.
- The Subcontractor and its sub-subcontractors and their respective workers are required to meet Ledcor and Client site specific training requirements. See Section 4.8 for minimum requirements.
- The Subcontractor and its sub-subcontractors are to ensure that anyone placed in a supervisory position or with supervisory accountability is given adequate training and support appropriate to their scope of responsibility.
- The Subcontractor is expected to take all reasonable steps to ensure that it, its sub-subcontractors and their respective workers comply with applicable Regulatory Requirements, the Program and follow all applicable safe work practices, procedures and rules.
- The Subcontractor is responsible to ensure that it, its sub-subcontractors and their respective workers have appropriate and adequate training, information, safety equipment and personal protective equipment required to work safely.
- The Subcontractor is responsible to notify the Ledcor Designate of any incidents, injuries, property damage, near misses or spills occurring while under contract to Ledcor as per the guidelines in Section 4.7 of this document. This includes any incidents involving its sub-subcontractors.
- The Subcontractor is responsible for immediately investigating any incidents involving its workers and/or equipment and its sub-subcontractors’ workers and/or equipment, and submitting the appropriate documentation to the Ledcor Designate.
- The Subcontractor and its sub-subcontractors are responsible to notify the Ledcor Designate of any unsafe conditions or practices that may pose a danger to any workers or the environment.
- The Subcontractor and its sub-subcontractors are responsible to ensure that appropriate and adequate safe work practices and job procedures are in place for the work being contracted and
that the practices and procedures meet applicable Regulatory Requirements as a minimum. Ledcor or the Client may choose to impose more rigorous standards on any project.

- The Subcontractor and its subcontractors shall assist the Ledcor Designate with hazard assessments, inspections and other reasonable HS&E activities related to the work when asked to do so.

**SUBCONTRACTOR (OPERATIONS) SUPERVISORS – PERSON IN CHARGE**

- Know, implement, encourage, and ensure compliance and leads work to meet applicable HS&E regulations, standards, safe work practices, procedures and rules within their respective work areas and/or scope of responsibility.
- Ensure that employees under their direction are adequately trained and informed of their rights and obligations under HS&E Requirement and this Standard.
- As far as reasonably practicable, ensure that workers under their direction use appropriate personal protective equipment and procedures needed to protect themselves, their co-workers and the environment.
- Ensure that all employees new to a job or a work site are oriented to site/job specific hazards and risk mitigation measures before commencing work.
- Lead; participate in, review and document hazard assessments prior to starting work and/or when there is a change in hazards, conditions or job assignments.
- Carry out and document regular inspections to ensure a safe and healthy work site.
- Document and report all accidents, incidents or spills immediately.
- Ensure regular safety meetings are conducted, recorded and minutes shared.
- Set a good example by modeling the desired HS&E performance.
- Manage or have oversight of any Subcontractor that is hired by them.

**SUBCONTRACTOR WORKERS**

- Know and comply with the HS&E regulations, standards, safe work practices, procedures and rules applicable to the work scope.
- Co-operate for the purposes of protecting the health and safety of everyone and take every reasonable step to protect personal safety, the safety of others and the environment.
- Utilize the safety equipment, personal protective devices and protective clothing designated by Ledcor, the Client or the Subcontractor.
- Notify the supervisor of unsafe conditions and work practices that may pose a danger to workers and the environment.
- Report all accidents, incidents, spills, injuries and near miss events to the Subcontractor Supervisor as soon as possible.
- Report to work “fit for duty” and be free from any conditions and substances that will adversely affect performance. Report to the Subcontractor Supervisor any condition that may limit fitness for duty including the use of “over the counter” or prescription medication that may affect the ability to work safely.
- Set a good example by modeling the desired HS&E performance.
4 SUBCONTRACTOR HS&E REQUIREMENTS

4.1 SUBCONTRACTOR’S HS&E PROGRAMS

The Subcontractor must ensure that its own HS&E program is current and specific for the work being undertaken and shall include but not be limited to the following:

1. A safety policy, which clearly indicates the Subcontractor’s senior management’s commitment to health, safety and the environment.

2. A responsibilities section that clearly states HS&E responsibilities for all levels of management/supervision in the Subcontractor’s organization and includes responsibility instructions for the various levels of operations management (from Front Line Supervisors / Foreman to Superintendents to Senior Leadership), workers, sub-subcontractors, visitors and HS&E representatives / coordinators.

3. A risk assessment process designed to identify hazards, evaluate risks, develop mitigation using the hierarchy of control methods, and the preparation of safe work practices and procedures.

4. A system for regular work site inspections that include written guidelines for documenting findings, communicating of findings to affected workers, tracking and completing corrective actions.

5. A system for complying with the provisions of WHMIS, including proper inventory, storage, MSDS provision, training of workers, and the safe use of all controlled products. A complete inventory of all controlled products shall be maintained along with current copies of MSDS for all products included in the inventory.

6. An incident management process that includes response, care for injured party and control of scene, drug and alcohol testing, investigation that supports correct determination of direct and root causes and the development of effective short term and permanent corrective measures.

7. An effective communications system to accurately and rapidly transfer information to management, supervisors and workers regarding HS&E matters and for workers to communicate concerns to supervision and management regarding HS&E matters.

8. An effective system for determining requirements, need (gap identification) and how to supply and deliver worker training.

9. A process for the inspection of all PPE required for a particular scope of work. The PPE supplied will not be less than specified by Ledcor or applicable Regulatory Requirements.

10. Written procedures for the discipline of persons violating rules or established HS&E standards.

11. Written Emergency Response Plan that is specific to the work site and related hazards. These procedures will be communicated to all workers and will include provisions for accessing additional support, communication, evacuation and training.

4.2 SUBCONTRACTORS WHO HIRE THEIR OWN SUB-CONTRACTORS

The Subcontractor shall be responsible for ensuring that any sub-subcontractor it may choose to use has an HS&E program that, at a minimum, complies with the provisions of this Subcontractor HS&E Standard or shall directly supervise any of its subcontractors that does not meet the provisions.

The Subcontractor shall notify Ledcor of its intention to engage a sub-subcontractor and demonstrate the sub-subcontractor’s ability to meet the provisions of this Subcontractor HS&E Standard prior to mobilizing the sub-subcontractor.

Ledcor and Client (where applicable) reserve the right to refuse the engagement of any sub-subcontractor(s) whose HS&E management system is deemed insufficient to support the HS&E requirements of the scope of work.
4.3 HS&E SUPPORT RESOURCES
The Subcontractor shall, in all cases designate a competent person whose responsibility will be to lead the application of the HS&E program. The level of competency required will be determined by the HS&E requirements based on the scope of work and the number of workers Subcontractor will have working on site.

A supervisor or worker representative, as a minimum, shall be designated when Subcontractor has 24 people or less on site or a full time HS&E representative when it has 25 or more people on site. Additional representation may be required when deemed necessary by the Ledcor Designate.

The persons shall be identified prior to mobilization. It shall be clearly defined that all levels of supervision are held accountable for health and safety performance within their areas of responsibility.

A resume of the competent person assuming the HS&E role shall be provided for review and acceptance by Ledcor.

The Subcontractor is required to provide adequate resources to the HS&E management function. This includes staff, training and financing. Senior managers of the Subcontractor are required to be involved in health and safety management efforts, including establishing clear lines of communication with supervisors, sub-subcontractors and Ledcor.

4.4 SAFE WORK EXECUTION PLAN
The Subcontractor shall submit a project specific safe work execution plan for the specific scope of work to be performed by Subcontractor to Ledcor for review and approval (Safe Work Execution Plan). Subcontractor shall submit the Safe Work Execution Plan prior to or at the pre-mobilization meeting.

The Safe Work Execution Plan is to include at minimum:

1. An overview of the work scope and identification of major job tasks.
2. An identification of all known hazards and the methods that will be used to control them, such as a “JHA” or “JSA” (i.e. Job Hazard Assessment or Job Safety Assessment).
3. Documented safe work practices for the execution of work scope.

Ledcor will review the Safe Work Execution Plan and notify you, the Subcontractor, of any concerns or questions and if revisions or additional documents are required. The Subcontractor shall not be relieved of any of its obligations or liabilities under the Safe Work Execution Plan notwithstanding the review and/or approval by Ledcor of the Subcontractor’s Safe Work Execution Plan.

NOTE: Approval by Ledcor of the Safe Work Execution Plan should be given at the Work commencement kick-off meeting. If an approval to the Safe Work Execution Plan cannot be given at the work commencement kick-off meeting, the Subcontractor’s work commencement will be delayed (at no cost to Ledcor) until Ledcor is satisfied and able to approve Subcontractor’s Safe Work Execution Plan.

4.5 OPERATOR COMPETENCY
The Subcontractor must have a competency verification process for all its workers that will operate equipment on site. This process will include a written evaluation that is signed off by a competent person for the individual operating the applicable equipment. All documentation shall be readily available on site prior to work commencement. Ledcor may ask, and Subcontractor shall provide, this information prior to mobilization to site.

4.6 STATISTICAL REPORTING REQUIREMENTS / SUBCONTRACTOR HS&E PERFORMANCE SUMMARY
The Subcontractor and its sub-subcontractors will be expected to submit the following information to Ledcor each month:

1. Monthly and/or End of contract reporting requirements include:
   • Total person hours worked, including any of its sub-subcontractors.
• HS&E activities and statistics:
  ▪ Number of incidents and incident frequency rates,
  ▪ Number of safety meetings held,
  ▪ Number of worksite safety inspections conducted,
  ▪ Number of FLHAs completed
  ▪ Number of safety infractions and orders issued by regulatory body.

To submit the information, Subcontractor shall use Ledcor’s “Subcontractor HS&E Performance Summary”, which is included in Appendix A of this standard.

4.7 INCIDENT, NEAR MISS REPORTING AND INVESTIGATION REQUIREMENTS

FIRST AID INJURIES & SERIOUS NEAR MISS INCIDENTS

• Shall be reported to the Ledcor Designate immediately after the incident has occurred. A preliminary report shall be provided within twenty-four (24) hours of the incident and a final investigation report provided within 72 hours of the incident.

MEDICAL AID INJURIES & MINOR PROPERTY DAMAGE AND SPILLS

• Shall be reported to the Ledcor Designate immediately after the incident has occurred. A preliminary report shall be provided within twenty-four (24) hours of the incident and a final investigation report provided within 72 hours of the incident.

• If the final investigation report cannot be delivered within 72 hours of the incident, an explanation as to why the final investigation report is delayed and the expected completion date.

• Ledcor Designate may participate in the investigation.

• All notifications to WCB injuries of Subcontractor’s shall be done by, the Subcontractor.

• All notifications to Provincial OH&S Authorities and/or Environmental Authorities shall be done by the Ledcor Designate unless otherwise directed by Ledcor.

LOST TIME INJURIES & MAJOR PROPERTY DAMAGE AND ENVIRONMENTAL IMPACT INCIDENTS

• Shall be reported to the Ledcor Designate immediately after the incident has occurred. A preliminary report shall be provided within twenty-four (24) hours of the incident and a final investigation report provided within 72 hours of the incident.

• If the final investigation report cannot be delivered within 72 hours of the incident, an explanation as to why the final investigation report is delayed and the expected completion date.

• Ledcor Designate may participate in the investigation or may choose to lead the investigation.

• All notifications to WCB for your employee injuries shall be done by the Subcontractor.

• All notifications to Provincial OH&S Authorities and/or Environmental Authorities shall be done by the Ledcor Designate unless otherwise directed by Ledcor.

INCIDENTS THAT MUST BE REPORTED TO THE OH&S AUTHORITY

The following types of incidents must be reported to the applicable Occupational Health and Safety authority, without delay. This is in addition to any other reporting obligations required in this section (NOTE: reporting requirements may vary by jurisdictional authorities).

a) An injury which results in death;
b) An injury or accident that results in a worker being admitted to a hospital for more than 2 days;
c) An unplanned or uncontrolled explosion, fire or flood that causes a serious injury or that has the potential of causing a serious injury;
d) The collapse or upset of a crane, derrick or hoist;
e) The collapse or failure of any component of a building or structure necessary for the structural integrity of the building or structure; or
f) The release of a hazardous substance.

4.8 TRAINING

MANDATORY REQUIREMENTS

All on-site workers and representatives of the Subcontractor and its sub-subcontractors shall meet the following minimum training requirements prior to being mobilized on to the project site:

- Construction Safety Training System (CSTS) or equivalent (RSTS, PCST)
- Ledcor Safety Orientation
- Client Safety Orientation, where applicable

Any supervisors who direct personnel must meet minimum Ledcor approved Safety Leadership training requirements (i.e. Leadership for Safety Excellence, etc.)

Project sites may determine additional training requirements depending on Client expectations and on-site work activities as outlined during the pre-mobilization review meeting.

ORIENTATION OF WORKERS

The Subcontractor and its sub-subcontractors shall attend a Ledcor general orientation. Subcontractor must also provide its workers with a site specific orientation relevant to Subcontractor’s scope of work. The orientation shall include, but not be limited to:

a) Health and safety responsibilities of management, supervisors and workers;
b) Workers’ rights and responsibilities;
c) Regulatory requirements for the relevant jurisdiction – MSHA, Ministry of Mines, Provincial OH&S, Federal OHSA, etc.;
d) Hazards of the job and established risk control measures;
e) Personal protective equipment (PPE) site requirements;
f) Emergency and evacuation procedures, muster points and location of emergency equipment;
g) Process for reporting hazards, first aids and health, safety or environmental incidents;
h) Process for safety meetings and/or daily tail-gate meetings;
i) Requirements for completing hazard assessments i.e. Field Level Hazard Assessments;
j) Fire prevention and protection;
k) WHMIS;
l) Drug and Alcohol Policy and testing requirements;
m) Harassment, Workplace Violence and Discipline Policies
4.9 EMERGENCY RESPONSE PLANS
Subcontractor shall ensure that sufficient resources and plans are in place to deal with emergencies at the site. The Subcontractor will, at a minimum, have a written emergency response plan that addresses:

a) Identification of potential emergencies and procedures for dealing with identified emergencies;
b) First aid services;
c) Transporting injured to medical aid;
d) Initial fire suppression;
e) Environmental spill/release;
f) Communication methods to contact outside agencies for assistance;
g) Posting the site location and contact numbers at the job;
h) Other systems required for efficient response as identified by the project hazard assessment.

Emergency response plans and emergency numbers will be posted at appropriate locations on each site.

4.10 SAFETY MEETINGS
The Subcontractor must hold weekly Subcontractor crew safety meetings, which must be attended by all workers and supervisors. The intent of these meetings is worker education and two-way communication. Ledcor may distribute hazard alerts or other safety bulletins with information that is current and relevant to the work. Meeting minutes must be kept of who attended and the material covered. A copy of the minutes must be submitted to the Ledcor Designate each week.

4.11 MENTORSHIP (SHORT SERVICE OR NEW WORKER)
You as the Subcontractor will be expected to have a mentorship program that minimizes the risk to new or inexperienced employees by providing quality instruction, guidance and coaching from an experienced mentor for the safe performance of their duties. If you do not have such a program in place which meets or exceeds Ledcor's mentorship program then you shall follow Ledcor's program.

4.12 HAZARD IDENTIFICATION AND RISK ASSESSMENT
It is necessary to identify the hazards related to the work being done, evaluate the risk and develop effective measures to eliminate or control the risk to protect the health and safety of workers, the public and the environment.

The Subcontractor shall utilize a process that assesses, evaluates and controls hazards for its day-to-day activities. This may be in the form of a Field Level Hazard Assessment or other means of hazard identification and control, as approved by Ledcor. Completed hazard assessments shall be readily available on site throughout the project for review by a Ledcor Designate. The Subcontractor shall not be relieved of any of its obligations or liabilities under the Section 4.12 notwithstanding any review and/or approval by Ledcor.

4.13 PPE REQUIREMENTS
The basic equipment for all Ledcor work sites is a hard hat, reflective vest, safety glasses and steel toed boots and Subcontractor shall supply all such basic equipment to its workers. In certain circumstances, determined by the risk or Client, it may also be necessary to wear hearing protection, gloves/hand protection, face shields, respirators, fall protection, traffic control coveralls and other protective clothing and Subcontractor shall supply to its workers all such equipment that is required as a result of the risk or as determined by the Client. The hazard assessment process shall help determine the appropriate PPE requirements and Subcontractor shall supply to its workers all such equipment that is required as a result of the hazard assessment process. Subcontractor must ensure that its workers are trained in the correct use, care, limitations and maintenance of PPE and that its workers inspect PPE before each use.
4.14 WORKSITE INSPECTIONS

Subcontractor’s work areas, including lay-down areas, lunchrooms and site offices shall be regularly inspected by Subcontractor to detect and correct substandard conditions, behaviors, practices and fire hazards.

The Subcontractor shall perform formal documented inspections of its work areas at a minimum weekly or at intervals suitable for controlling hazards from developing.

Copies of all inspections and corrective action plans shall be submitted to the Ledcor Designate at the end of each week.

4.15 HOUSEKEEPING

Subcontractor shall maintain clean and tidy work areas that remain free of tripping and slipping hazards. The frequency of clean-up activities will be related to the pace of Subcontractor’s work and the level of waste or other extraneous material build up in Subcontractor work area. Subcontractor shall give suitable consideration to all other relevant factors including:

- Flammable and combustible materials shall not be allowed to accumulate and must be stored properly.
- The Subcontractor is responsible for snow removal and sanding its assigned work, lay-down and lunch room/office areas.
- All power and welding cables and hoses shall be coiled and stored if not in use.
- Access ways shall be kept clear of materials and are not to be used as storage areas.
- Oil, grease and other such liquid spills shall be cleaned up at the time of the spill and are not to be left unattended.

If Subcontractor work areas are not maintained, the Ledcor Designate shall give written notice to have the area cleaned up.

4.16 SPECIAL HS&E CONSIDERATIONS

The Subcontractor is expected to develop, implement and enforce adequate policies, procedures, practices and monitoring systems to control risk to an acceptable level to the extent the following categories are within Subcontractor’s scope of work.

GENERAL

- All vehicles used to transport workers shall comply with OH&S and Motor Vehicle Regulatory Requirements. All drivers shall have a valid driver’s license of the correct class for the vehicle they are operating.
- All persons riding in a motor vehicle must use a seat belt. The number of persons allowed in a vehicle is restricted to the number of seatbelts available. No person shall ride in or on the box of a vehicle.
- All internal combustion engines used inside closed buildings or hoarded areas shall have the exhaust vented outside or have a functioning exhaust scrubber.
- Suitable barriers shall be placed around all propane tanks and cylinders in excess of 100 pound capacity to prevent impact damage.
- Subcontractor is responsible for the security of its materials, tools, equipment and facilities.
- Products containing asbestos shall not be utilized.
- The tail swing area of equipment, such as mobile cranes or excavators, shall be controlled to prevent entry by workers.
- Equipment, tools, parts and other material shall be hoisted with proper rigging designed for the lifting application.
- Chains shall not be used for towing or lifting. They may be used to tie down equipment only. The use of lever boomers is prohibited only ratchet style boomers are acceptable.
CONTROLLED PRODUCTS

Subcontractor shall obtain the approval of Ledcor (such approval may be withheld at Ledcor’s sole and absolute discretion) prior to bringing a controlled product on the site. Prior to bringing any controlled product on site, Subcontractor must have readily available a copy of a current MSDS for each controlled product. Proper training, labeling and use of the controlled product must be in accordance with applicable WHMIS/TDG/HazCom Regulatory Requirements.

FALL PROTECTION

Fall protection plans shall be implemented by the Subcontractor if any of its workers perform any work from a temporary work area when the possibility of falling 3 meters (10 feet) or more exists, or if a fall from a lesser height may involve an unusual risk of injury; and/or personnel working from a permanent work area could fall 1.2 meters (4 feet). NOTE: Some Clients may impose a more stringent standard for when fall protection must be worn. This will be communicated as required.

The Subcontractor shall provide Ledcor with a Fall Protection Plan that addresses the following as a minimum:

- Responsibilities;
- Hazard assessment and evaluation identifying the fall hazards at the work site;
- Fall prevention and protection strategies to be used;
- Personal Fall Arrest System that will be used;
- The anchors to be used during work;
- That clearance distance below the work area, if applicable, have been confirmed as sufficient to prevent a worker from striking the ground or an object or level below the work area;
- Written procedures;
- Training;
- Rescue plans and provisions;
- How the fall protection plan will be monitored.

FIRE PROTECTION & FIRE EXTINGUISHERS

Subcontractor shall take all necessary precautions to protect workers, the public, environment and property from fire.

Subcontractor shall provide a sufficient number of fire extinguishers to adequately protect your portion of the work and your mobile equipment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Fire Extinguisher Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>All vehicles, including automobiles that enter the work areas.</td>
<td>1 – 10 lb. ABC per unit (minimum)</td>
</tr>
<tr>
<td>Cranes, light towers and generators.</td>
<td>1 – 20 lb. ABC per unit</td>
</tr>
<tr>
<td>All other mobile equipment.</td>
<td>1 – 20 lb. ABC per unit</td>
</tr>
<tr>
<td>Fuel storage tanks and containers.</td>
<td>2 – 20 lb. ABC or BC</td>
</tr>
<tr>
<td>Office trailers and lunchrooms.</td>
<td>1 – 10 lb. ABC mounted at each entrance</td>
</tr>
<tr>
<td>Tool cribs and storage trailers.</td>
<td>1 – 20 lb. ABC mounted at the entrance</td>
</tr>
<tr>
<td>Welding operations.</td>
<td>1 – 20 lb. ABC within 6 m</td>
</tr>
<tr>
<td>Confined spaces.</td>
<td>1 – 20 lb. ABC outside each entry point of the confined space</td>
</tr>
</tbody>
</table>
TRENCHING AND EXCAVATIONS

Prior to beginning any excavation or trenching, all underground utilities shall be located and the positions identified. Extreme caution and care shall be exercised when excavation or trenching in the vicinity of underground utility systems.

With the facility exposed and in view of the equipment operator or spotter, all surfaces of mechanized equipment, including attachments, shall remain clear of below grade facilities such as existing cables or conduits by at least 0.3m (12 inches) and existing pipelines by at least 0.6m (24 inches). Final exposure of underground facilities shall be done by hand.

It is the Subcontractor’s responsibility to be familiar with and comply with applicable HS&E Regulatory Requirements for trenching, excavations and shoring.

CONFINED SPACE ENTRY

Subcontractors involved with confined space entry work shall provide a Code of Practice for the specific confined space entry and adequately train all workers and supervisors who may be involved in an entry and/or work in a confined space.

The Subcontractor shall provide Ledcor with its Code of Practice that addresses the following as a minimum:

- Training of workers, attendants and atmospheric monitoring personnel;
- Hazard / risk analysis and control methods;
- Gas testing and monitoring;
- Entry permit system;
- PPE requirements;
- Isolation / Lock-out;
- Ventilation;
- Communication strategies;
- Attendant’s roles and responsibilities;
- Emergency plan and rescue equipment.

ENERGY ISOLATION / LOCK-OUT / TAG-OUT

Subcontractor shall have an Energy Isolation/Lock-out/Tag-out Procedure within its HS&E program. The procedure should reflect the risk involved in Subcontractor’s scope of work and meet Regulatory Requirements. A vehicle or mobile equipment that is being serviced must be isolated or locked out.

Subcontractor shall provide Ledcor with your Energy Isolation / Lock-out / Tag-out procedure for review and approval. The Subcontractor shall not be relieved of any of its obligations or liabilities under this section notwithstanding the review and/or approval by Ledcor.

ELECTRICAL SAFETY

Subcontractor shall use approved and certified Ground-Fault Circuit Interrupters (GFCI’s) on all 120-volt AC single phase 15-ampere through 20-ampere receptacles used by workers in a damp or outdoor location. The GFCI shall be in the first outlet from the receptacle or distribution panel. There shall be a system to regularly test the GFCI’s to ensure that they will operate properly.

Other Electrical safety considerations that Subcontractor shall comply with include:

- No “Y” type extension cords are allowed unless approved by a recognized standards agency (CSA, ANSI).
• All single-phase low voltage extension cords shall be three wire conductor type with a minimum size of 14/3 industrial service.

• Double insulated power tools do not protect against defects in the cord, plug or receptacle. Continuous inspection and maintenance by a Competent Person is required.

• All cords, tools and equipment shall be maintained according to the manufacturer’s recommendations.

OVERHEAD POWER LINES

Subcontractor shall ensure that when working near energized overhead power lines:

• Equipment operation is not permitted within 7 meters (horizontal or vertical distance) of an overhead power line without first contacting the utility or power line owner/operator to obtain the voltage of the overhead power line.

• If the voltage has been obtained, then work may proceed closer to the power line but no closer than the specified safe limits of approach distances as defined in the table below.

• If work is to proceed closer than the safe limits of approach, then assistance of the utility or power line owner/operator representative must be obtained to help protect the workers involved.

• When working within a 7 meter distance from an overhead power line, a designated safety watch or flag person must assist to ensure that the safe limit of approach is not violated.

• Do not store material or equipment directly under or adjacent to an overhead power line.

• Do not place earth or other material under or adjacent to an overhead power line in such a manner that the minimum ground clearance would be reduced.

• All contacts with sources of electrical energy must be reported to the Ledcor Designate and investigated.

• If energized power line is inadvertently struck, occupants in a vehicle shall remain in the vehicle and never step from the cab to the ground until it is safe to do so.

• Appropriate signage that identifies the power line must be installed where overhead lines cross over or lie within a work site.

SAFE LIMIT OF APPROACH DISTANCES

<table>
<thead>
<tr>
<th>Operating Voltage of Overhead Power Line Between Conductors</th>
<th>Safe Limit of Approach Distance for Persons and Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 750 V Insulated or Polyethylene Covered Conductors (Note 1)</td>
<td>0.30 m (12&quot;)</td>
</tr>
<tr>
<td>0-750 V Bare, un-insulated Conductors</td>
<td>1.0 m (40&quot;)</td>
</tr>
<tr>
<td>Above 750 V Insulated Conductors (Notes 1 &amp; 2)</td>
<td>1.0 m (40&quot;)</td>
</tr>
<tr>
<td>750 V – 40 kV</td>
<td>3.0 m (9'10&quot;)</td>
</tr>
<tr>
<td>69 kV, 72 kV</td>
<td>3.5 m (11'6&quot;)</td>
</tr>
<tr>
<td>138 kV, 144 kV</td>
<td>4.0 m (13&quot;)</td>
</tr>
<tr>
<td>230 kV, 240 kV</td>
<td>5.0 m (16'5&quot;)</td>
</tr>
<tr>
<td>500 kV</td>
<td>7.0 m (23&quot;)</td>
</tr>
</tbody>
</table>

Table Notes:
1. Conductors must be insulated or covered throughout their entire length to comply with these groups.
2. Conductors must be manufactured to rated and tested insulation levels.
4.17 HEALTH MONITORING PROGRAM
The Subcontractor shall have a health monitoring program in place that meets Regulatory Requirements. This may include but not limited to workers who are exposed to asbestos, silica, coal dust, lead and noise. Each jurisdiction has varying requirements and therefore the Subcontractor shall be familiar and comply with the applicable Regulatory Requirements for the jurisdiction having authority.

4.18 DRUG & ALCOHOL PROGRAM
Ledcor and Subcontractor acknowledge the serious consequences of alcohol and drug misuse on health and safety in the workplace. Ledcor chooses to provide and maintain a work environment free of alcohol and drug use, and requires Subcontractor and its sub-subcontractors to implement reasonable work rules governing the conduct of their respective personnel while on Ledcor worksites. These work rules will include parameters and procedures for substance testing. The Subcontractor shall have an account set up with a Third Party Drug & Alcohol Testing provider to support the substance testing requirements set out in Subcontractor's Drug & Alcohol Program. The Subcontractor must ensure that testing can be supported at operational locations.

In the event where the Subcontractor or its sub-subcontractors do not have its own Drug and Alcohol Program which meets or exceeds Ledcor's Drug and Alcohol Policy, Subcontractor agrees that it and its sub-subcontractors shall follow the provisions of the Ledcor program. D&A testing while on a Ledcor project may include the following:

- Pre-Access / Pre-Employment
- Reasonable Cause
- Post Incident

DRUG & ALCOHOL POLICY

The following Policy applies to all subcontractors and sub-subcontractors including their respective employees, temporary employees, consultants, vendors, and any other individual providing service on a Ledcor worksite at any time. The Subcontractor is expected to follow its own Drug and Alcohol Policy provided it meets or exceeds the requirements stated below;

Ensuring the health, safety and well-being of employees; our customers; and the public, continues to be the number one priority of Ledcor Group of Companies (Ledcor). We recognize the misuse of alcohol and drugs as a health, safety and security problem. The use of illicit drugs, inappropriate use of alcohol, misuse of medications and other substances can have serious adverse effects on employee health, safety, job performance, our clients, and the community. The objective of Ledcor’s Drug and Alcohol Program is to reduce the risk of incidents where substance use may be a contributing factor. We expect and require that all employees assist in maintaining a safe work environment that is free from the adverse effects of alcohol and drugs.

The possession or consumption of alcohol, illicit drugs, or misuse of prescription or over-the-counter drugs is strictly prohibited on Ledcor’s premises and workplaces.

Ledcor reserves the right to conduct lawful searches for alcohol, drugs or drug paraphernalia on Ledcor premises and workplaces. A construction camp is recognized as an extension of the workplace. Where there is reasonable cause to believe a) that an individual is in non-compliance with this policy, b) that a significant problem exists regarding drug and alcohol abuse at a specific worksite, or if c) there is a published and consistently enforced lawful policy prohibiting possession of alcohol at a specific worksite camp (i.e. dry camp), Ledcor reserves the right to conduct lawful searches of employees’ construction camp rooms.

As per the Ledcor Drug and Alcohol Program, a supervisor or manager of an employee shall carry out an investigation if the employee is involved in an incident of significance or high potential, such as a significant near miss, significant property damage or equipment damage, or an injury requiring medical treatment beyond basic first aid. If the investigation reveals the incident results from human error by that employee (either fully or partially), and no specific
external factors can be ruled out as a direct cause, supervision will request the employee to submit to a drug and alcohol test to rule out drugs or alcohol as a contributing factor.

4.19 ENVIRONMENTAL PROTECTION

The Subcontractor shall have an environmental protection program adequate to address any and all environmental impacts that Subcontractor’s scope of work may involve. This program will include and consider the following as a minimum:

- An environmental hazard/risk assessment relative to the scope of work;
- Applicable WHMIS and TDG information;
- Appropriate mitigation and control methods;
- Required storage, handling, transportation and use requirements by all applicable jurisdictions;
- Adequate worker training, materials and equipment to handle a minor spill of low risk products (oil, diesel, etc.)
- Emergency response requirements;
- Spill/discharge reporting requirements;
- Inspection of storage and handling facilities or equipment;
- Waste disposal procedures;
- Reviews and audits of materials, quantities, facilities and emergency response capabilities;
- Adequate record keeping; and
- Applicable jurisdictional regulations and standards.

4.20 TRAFFIC CONTROL PLANS

The Subcontractor shall develop and submit a Traffic Control Plan (TCP) if your scope of work requires traffic accommodation for the execution of controlling or warning traffic in order to accomplish work on or adjacent to roadways. The level of traffic accommodation which may be required will be dependent on the following criteria:

- The type of work to be completed;
- Traffic volumes;
- Impact on traffic flow;
- Work location on the highway surface or ditch right-of-way;
- Time frame required to complete the work;
- Special circumstances because of road geography, design, or location;
- Mobility of the operation;
- Crew size required to complete the work, and
- Worker and public safety

The importance of a correctly designed, executed, and maintained work zone is critical to workers and the public alike. Subcontractor’s Traffic Control Plan will contain the following components:

- General items regarding safety, training, and project assessment;
- Implementation of the Traffic Control Plan;
- General traffic control guidelines and policies that support the strategy’s implementation;
- Outline the typical traffic control devices to be used; and
- Traffic control drawings describing work zone set-up and lane closures.

When implemented, traffic accommodation has a broad spectrum of control techniques. A traffic control assessment helps determine which single or combination of techniques corresponds with the activity. The following are some typical techniques for traffic control:
4.21 RECORD KEEPING

Subcontractor shall retain documentation regarding all sections of Subcontractor’s health and safety program that pertains to the project. This will allow the Ledcor Designate to monitor Subcontractor’s performance for effectiveness and compliance.

As a minimum, the documentation that must be retained shall include the following:

- ** Worksite inspection reports;
- ** Government inspection reports (while on Ledcor’s site);
- ** Incident investigation reports;
- ** Safety meeting minutes;
- ** Monthly safety statistical reports;
- Worker orientation records;
- Daily Tail-gate meeting minutes;
- Completed hazard assessment forms (JHA and FLHA);
- Management, Supervisor and Worker training records;
- First aid injury records;
- Equipment certification and inspection certificates;
- Any other documents required by Ledcor and/or Ledcor’s Client.

**NOTE: ** Documentation that shall be submitted to Ledcor as these activities occur at site while you as the Subcontractor are on the project.

RECORD KEEPING GUIDELINES

Injury frequency statistics are to be prepared using the following formulas:

<table>
<thead>
<tr>
<th>Lost Time Incident Frequency</th>
<th>Incident Severity Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Lost Time Injuries x 200,000 Hours</td>
<td># of Compensable Days Missed x 200,000 Hours</td>
</tr>
<tr>
<td>Exposure Hours</td>
<td>Exposure Hours</td>
</tr>
</tbody>
</table>

Total Recordable Injury Frequency (TRIF)

# of Recordable Injuries x 200,000 Hours

Exposure Hours

**NOTE: **Ledcor follows CAPP Guidelines (Canadian Association of Petroleum Producers) for Injury Classification.

RECORDABLE INJURY

A recordable injury shall be classified when any of the following occurs; (CAPP Guidelines)

1. Deaths, regardless of the time between the occupational injury or illness and death;
2. All occupational injuries resulting in any of the following:
   a. Lost work days;
   b. Medical treatment administered by a physician or by a registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though it was provided by a physician or registered professional personnel;
   c. Restricted or modified duties as a result of an injury or illness;

Note: First Aid is any one-time treatment and any follow-up visit for the purpose of observation of minor scratches, cuts, burns, splinters and so forth which do not ordinarily require medical care. Such one-time treatment and follow-up visit for the purpose of observation is considered first aid even though it was provided by a physician or registered professional personnel.

5 HS&E PERFORMANCE REVIEW

Regular and periodic reviews of Subcontractor’s HS&E performance will be conducted after the Subcontractor mobilizes on a Ledcor project site. These reviews will occur on an approximately 3 month basis. Additional reviews will be conducted on a schedule determined by one or more of the following;

- the hazards related to Subcontractor’s scope of work,
- the results of previous site visits,
- Subcontractor’s HS&E evaluation risk rating results, and
- Subcontractor’s past performance on previous projects.

The Subcontractor shall provide all requested information to Ledcor. The reviews may encompass all of Subcontractor’s HS&E responsibilities but as a minimum will focus on areas that can pose significant risks if not functioning properly (i.e. hazard control), any scope of work that is new to Subcontractor and/or areas where HS&E performance results are not within an acceptable range.

The reviews will consider as a minimum the following:

- Action taken to improve from suggestions at the HS&E evaluation stage;
- Subcontractor’s response to requests, suggestions and/or directives from Ledcor;
- The level of cooperation provided by Subcontractor site and senior management groups;
- Efforts to improve worker and supervisor safety training and knowledge during the course of the contract;
- Safety commendations and significant milestones achieved during the contract;
- Level of compliance with applicable Regulations, Standards, Policies and site specific requirements;
- Results of Ledcor HS&E performance evaluations performed during the course of the contract;
- Lagging HS&E indicators.

At the end of a Subcontractor’s engagement in a Ledcor project, Ledcor HS&E and the Project Leadership Team will review the respective Subcontractor’s HS&E performance over the duration of the Subcontractor’s involvement with the project.

The review results and any improvement suggestions will be documented and will be shared with Subcontractor and Ledcor management. The documentation will be retained as part of Ledcor’s Subcontractor evaluation record system.
6 RIGHT TO APPLY CONSEQUENCES

Ledcor retains the right to terminate the contract of any Subcontractor, immediately, if it is determined that:

1. The Subcontractor, its sub-subcontractors or their respective personnel is not cooperating or participating fully in the Ledcor HS&E Program or;
2. The Subcontractor has not provided sufficient resources to successfully complete the contracted scope of work with acceptable HS&E performance results, as determined by Ledcor.

Ledcor may exclude any person from the project for allowing an unsafe condition to exist, or continue to exist or if that person is not cooperating or participating fully in the Ledcor Subcontractor HS&E Standard.

The following general workplace rules must be followed by all subcontractors, sub-subcontractors and their respective workers, and visitors on a Ledcor work site at all times. Anyone who engages in any of the following activities may be subject to disciplinary action, up to and including removal from the work site.

1. Disregarding the health and safety of any person on the work site or member of the general public.
2. Failure to abide by rules or conditions set out by federal, provincial or municipal regulations as well as the owner/client.
3. Harassing, violent or disrespectful behavior.
4. Wearing clothing that’s inappropriate for the work or clothing that contains offensive slogans or images.
5. Insubordination towards Ledcor supervisors.
6. Misrepresentation of qualifications or falsification of records or reports.
7. Failure to wear the provided personal protective equipment where required.
8. Unauthorized removal or disengagement of any safeguard, locks, tags or other protective device.
9. Riding on the back of trucks or on any equipment not designed to carry passengers.
10. Possession or use on the job of unauthorized drugs or alcohol and/or reporting for work while impaired by drugs, alcohol or other influencing factors.
11. Smoking in areas of the work site that are not designated as such.
12. Engaging in horseplay, fighting or gambling on the work site.
13. Possession of firearms or other implements considered to be weapons on the work site.
14. Causing deliberate damage to property.
15. Theft of property.
16. Using chains for lifting or pulling loads.
17. Use of ‘lever-over boomers’ for tightening cargo securement chains (ratchet style boomers permitted only).
18. Use of knives except as provided for in Ledcor’s’ Knife Use Policy.
19. Failing to maintain equipment or completing a circle check of equipment before moving it.
20. Posting information or pictures that contain offensive slogans or images in the work place.
NOTE: Additional Site Specific Rules / Absolutes may be reviewed at time of pre-mobilization or work commencement.
Ledcor is committed to providing a healthy, safe and environmentally friendly work place for its employees and subcontractors. It is expected that any employer or individual contracted to Ledcor be responsible for meeting all contractual agreements and for providing a safe and healthy workplace for its workers.

In accordance with your contract with Ledcor, the Subcontractor and its personnel are responsible and held accountable for the conduct and completion of Subcontractor's scope of work without adverse impact to workers, property, Ledcor and Ledcor's Clients, and the environment. Subcontractor is further responsible to maintain and follow an effective health, safety and environmental program which shall include a drug and alcohol program. All costs associated with administering the program shall be borne solely by the Subcontractor. It is expected that the program supplements, supports and enhances the policies and standards of Ledcor, the Client and applicable Regulatory Agencies.

A copy of Subcontractor’s safety program shall be supplied to Ledcor prior to the mobilization and start of work.

Subcontractor Company Name: _________________________________________

Subcontractors Risk Rating (circle applicable): HIGHER MEDIUM LOWER

Contract Number: _________________________________

As an authorized representative for the Subcontractor, I recognize and agree with the above statements. I understand it is Subcontractor’s responsibility to ensure that the Subcontractor’s employees and personnel and Subcontractor’s sub-subcontractors (including their respective employees and personnel) comply with site HS&E requirements as outlined in the Ledcor Subcontractor HS&E Standard of which I have received a copy. I further understand that non-compliance with the intent of the Standard may result in dismissal of individuals from Ledcor project sites and/or cancellation of our contract.

Copy of Subcontractor HS&E Program received: Yes ☐ No ☐
Pre-mobilization meeting agenda reviewed: Yes ☐ No ☐
Representation of Prime Contractor assigned: Yes ☐ N/A ☐

____________________________________  __________________________  __________
Subcontractor Representative – Print Name      Subcontractor Representative - Signature      Date

____________________________________  __________________________  __________
Ledcor Designate – Print Name      Ledcor Designate – Signature      Date

NOTE: This document will be signed and collected at the pre-mobilization meeting or prior to commencement of work.
APPENDIX A

SUBCONTRACTOR HS&E PERFORMANCE SUMMARY
Subcontractor HS&E Performance Summary

As required in the Subcontractor HS&E Standard and the Subcontract Agreement, provide the following information. This information shall be submitted monthly.

Fax or Email this form each month to ____________________________
Attention: Site Safety

<table>
<thead>
<tr>
<th>Subcontractor Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name or Number:</td>
</tr>
<tr>
<td>Reporting Period:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Activity</th>
<th>Current Month</th>
<th>Project to Date (cumulative total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of Person-Hours Worked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lost Time Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Medical Aid &amp; Restricted Work Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. First Aid Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Near Misses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Total of all incidents (including property and equipment damage, environmental)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Number of Safety Meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Number of Worksite Inspections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Number of FLHAs completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Number of site visits from Regulatory Health &amp; Safety Officers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Total hours worked on site by all employees during the reporting period.
2. The number of injuries that resulted in an employee missing time from work beyond the day of injury.
3. The number of injuries that resulted in an employee receiving advanced medical treatment from a physician, chiropractor or physiotherapist and/or employees who have been given restrictions from performing their regular duties due to the injury.
4. The number of injuries that resulted in basic first aid treatment from a qualified first aider.
5. The number of near misses where no damage or injury occurred but there was a high potential for occurrence.
6. The total number of all reported incidents that occurred on site including property / equipment damage, injuries, near misses, environmental, motor vehicle collisions, etc.,
7. - 10. Self-explanatory **Refer to Subcontractor HS&E Standard for details.