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CMS SUBCONTRACTOR HS&E REQUIREMENTS

HEALTH, SAFETY AND ENVIRONMENT

Document No. **HSE-CTM-RF-001** Rev. **01**

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2.0 PURPOSE

To provide Subcontractors with Ledcor's Health, Safety, and Environmental (HS&E) expectations and minimum requirements when working for Ledcor.



Where these expectations and requirements are exceeded by the Subcontractor's Health and Safety Program or Federal, Provincial/State, and/or Municipal Acts, Regulations and/or Codes, the more stringent requirements must be applied.

3.0 SCOPE

This is a Corporate document, applicable to the Constructors, Construction, LRT, LTS, and Corporate HS&E workgroups. Changes to this document are governed by the HS&E element.

This document applies to all Subcontractors who perform work for Ledcor.

4.0 RESPONSIBILITIES

Subcontractor

- Submit all requested HS&E documentation when required by the Owner/Client, Ledcor or applicable legislative requirements.
- Participate in the **Subcontractor Pre-Mobilization Meeting** and the **Subcontractor Kickoff Meeting** to address any conflicting requirements and gaps between their respective company's HS&E Program and safe work processes, and Ledcor's HS&E Plan and safe work processes.
- Implement their respective company's HS&E Program and safe work processes at the worksite or follow Ledcor's HS&E Plan and safe work processes.
- Comply with all Ledcor/Client HS&E requirements, HS&E Plan, worksite rules, and applicable legislation.
- Assign a competent employee to the worksite to supervise and manage all aspects of the Subcontractor's work in a safe and healthy manner.
- Verify Supervisors or personnel with supervisory responsibilities are given training and support appropriate to their scope of responsibility.
- Comply with Ledcor and Client worksite-specific training requirements for their workers and Subcontractors.
- Verify that their workers and the Sub-subcontractors they supervise have the applicable safety equipment and personal protective equipment required to work safely.
- Manage all workers or organizations that perform work on behalf of the Subcontractor, if applicable.
- Verify the appropriate and adequate safe work processes are in place for the work being contracted and that the practices and procedures meet applicable legislative requirements, as a minimum (Ledcor or the Client may choose to impose more stringent standards on any project).
- Immediately comply with any orders imposed by local government agencies or issued by Ledcor.

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- Assist the Ledcor Designate with hazard assessments, inspections, and other reasonable HS&E activities related to the work, when requested.
- Notify the Ledcor Designate of any unsafe conditions or practices that may pose a danger to any workers at the worksite or the environment.
- Notify the Ledcor Designate of any Subcontractor involvement in incidents, injuries, property damage, near misses or spills occurring while under contract with Ledcor.
- Immediately investigate any incidents involving their workers and/or equipment and their Subcontractors' workers and/or equipment and submit the applicable documentation to the Ledcor Designate.
- Participate in the **HS&E Performance Review** process.

Subcontractor Supervisory Representative (Subcontractor Supervisor)

- Verify work activities comply with applicable legislation, Ledcor/Client requirements, and rules within their respective work areas and/or scope of responsibility.
- Verify workers under their direction are trained and competent to perform their tasks and are informed of their rights and obligations specified within this document.
- Verify that workers under their direction use appropriate PPE and follow the applicable safe work processes associated with their tasks.
- Lead, participate in, review and document hazard assessments (Job Hazard Assessment, Field Level Hazard Assessments) prior to starting work and/or when there is a change in hazards, conditions, or job assignments.
- Review with all workers new to a job or worksite the Job Hazard Assessment for the scope of work before commencing work.
- Conduct and document formal inspections.
- Report all incidents and near misses immediately to the Ledcor Designate.
- Conduct or participate in HS&E meetings.
- Manage their contractors per the requirements in this document and site-specific requirements.
- Complete the **Subcontractor HS&E Statistics Form** and submit it to Ledcor on a regular and timely basis as agreed with the Ledcor Operating Group.

Subcontractor Workers

- Comply with applicable legislation, Ledcor requirements, and rules while conducting work for Ledcor.
- Co-operate with all workers 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.
- Use appropriate PPE and follow the applicable safe work processes associated with their tasks.
- Notify the Subcontractor Supervisor of unsafe conditions and work practices that may pose a danger to workers and the environment.
- Report immediately all incident and near misses to the Subcontractor Supervisor.
- Report to work fit for duty and be free from any conditions and substances that will adversely affect their performance.

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5.0 SUBCONTRACTOR HS&E REQUIREMENTS

5.1 Health, Safety & Environmental Support Resources

A full time HS&E Representative is required when the Subcontractor has 50 or more people on site. Additional HS&E representation may be required when deemed necessary (e.g., when performing tasks with **Life-Critical Risks**) by the Ledcor Designate or Client, if applicable. The level of competency required will be determined based on the scope of work. The competent person assuming the HS&E role must be identified prior to mobilization. A resume of the competent person must be provided to the Ledcor Designate for review and acceptance by Ledcor.

Senior Leadership of the Subcontractor are required to be involved in the HS&E management efforts, including establishing clear lines of communication with Supervisors, their own Contractors and Ledcor, and providing adequate resources to maintain the HS&E requirements (i.e., staff, training, and finances). It must be clearly defined that all levels of Subcontractor supervision are held accountable for HS&E performance within their areas of responsibility.

5.2 Pre-Mobilization Requirements

Pre-Mobilization Activities

During the period between award and prior to the Pre-Mobilization Meeting, the Subcontractor must complete the following Pre-Mobilization activities:

1. Review the requirements within this document.
2. Review the HS&E Plan.
3. Review the Subcontractor HS&E Pre-Mobilization Evaluation.
4. Review the HS&E Foreman Evaluation Procedure and HS&E Foreman Evaluation.
5. Review the Subcontractor HS&E Statistics Form.
6. Submit their HS&E documentation specified in this document to Ledcor for evaluation.



Ledcor's review/endorsement of the Subcontractor's HS&E documentation does not relieve the Subcontractor of their full and complete responsibility and liability for the safety or environmental compliance of its operations.

Documentation for Submission

The Subcontractor must provide the following documents (at a minimum) to the Ledcor Designate as part of the Subcontractor HS&E Pre-Mobilization Evaluation for review and approval prior to the start of the Pre-Mobilization Meeting.

- Resume of the competent person assuming the HS&E role, if applicable.
- **Hazard identification, risk assessment and control** processes, as applicable, including:
 - Job Hazard Assessments (JHA) applicable to the scope of work
 - Identification and control plans for **life-critical risks** applicable to the scope of work
- **Subcontractor management** process if managing their own Sub-subcontractors

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- **Training and Orientation** requirements and competency verifications including employee training records and certificates of qualification pertaining to the work they are performing
- **Mentorship program**
- **Emergency management plan**
- **Incident investigation and reporting process**
- Leading indicator processes (i.e., behavior-based observations, **inspections**, hazard identification)
- Supplementary HS&E processes (i.e., safe work practices, **traffic control plan**, stretching program, etc.) associated with the scope of work
- **Personal protective equipment** requirements
- **Environmental protection plan**
- A health monitoring program/exposure controls plans (if the Subcontractor's activities expose workers to asbestos, silica, coal dust, lead, and noise)
- **Drug and alcohol program**
- **Occupational injury or illness management**
- **HS&E performance statistics**, previous HS&E-related investigations, infractions, and/or audits from regulatory bodies
- Site-specific documentation including (but not limited to):
 - A list of **hazardous products/chemicals** brought to the worksite and associated their Safety Data Sheet (SDS)
 - Completed evaluations for Contractors they will be managing while working for Ledcor
 - Certifications of equipment inspection issued by registered professionals

These documents must meet or exceed Ledcor's safe work processes (i.e., Standards, Programs, Procedures, and Practices).

Ledcor may require or make recommendations for improvements to these documents. The Subcontractor must cooperate with Ledcor in this capacity and must support Ledcor's desire to positively influence health, safety, and environmental management.

Subcontractor Pre-Mobilization Meeting

The Subcontractor's supervisory representative(s) who will be directly involved in the work, must participate in the **Subcontractor Pre-Mobilization Meeting**.

The HS&E items to be discussed include (at a minimum):

- Requirements within this document
- Additional project/worksite and/or Client-specific requirements
- Results from the Subcontractor Prequalification and HS&E Pre-Mobilization Evaluation including:
 - identified gaps
 - required corrective actions
- Subcontractor's risk rating

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- Ledcor's involvement in monitoring activities based, including an HS&E Foreman Evaluation, on the Subcontractor risk rating and the Subcontractor HS&E Management Task Calendar
- Subcontractor's commitment to submit a **Safe Work Plan** for Ledcor's approval prior to the **Subcontractor Kickoff Meeting**

The Subcontractor's supervisory representative must acknowledge and sign the Subcontractor HS&E Pre-Mobilization Evaluation at the end of the Subcontractor Pre-Mobilization Meeting.

Safe Work Plan

The Subcontractor must submit to Ledcor, a Safe Work Plan for the scope of work to be performed, for review and approval prior to the **Subcontractor Kickoff Meeting**.

The Safe Work Plan must include (at a minimum):

- An overview of the work scope and identification of tasks with **Life-Critical** .
- An identification of all known hazards and the methods that will be used to control them, such as a JHA.
- Documented safe work processes for the execution of the work scope.
- Mitigation plans that address the gaps and corrective actions identified at the Pre-Mobilization Meeting.
- Site-specific plans which meet the requirements within this document which may include (but not limited to):
 - **Emergency management plan**
 - **Environmental protection plan**
 - **Traffic control plan** (if the Subcontractor's scope of work requires traffic accommodation for the execution of controlling or warning traffic in order to accomplish work on or adjacent to roadways)

Ledcor will review the Safe Work Plan and notify the Subcontractor of any concerns or questions, as well as if any revisions or additional documents are required.



The Subcontractor must not be relieved of any of its obligations or liabilities under this section, notwithstanding any review and/or approval by Ledcor.

Ledcor approval of the Safe Work Plan will be given at the Subcontractor Kickoff Meeting. If an approval to the Safe Work Plan cannot be given at the Meeting, the Subcontractor's work commencement will be delayed (at no cost to Ledcor) until Ledcor is satisfied and able to approve the Subcontractor's Safe Work Plan.

Subcontractor Kickoff Meeting

The Subcontractor's supervisory representative(s) must attend the Subcontractor Kickoff Meeting before work begins to ensure that:

- Ledcor's HS&E expectations are understood and communicated directly to the Subcontractor's supervisory representatives and the Subcontractor's crew.

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- All gaps and corrective actions as recommended in the Subcontractor HS&E Pre-Mobilization Evaluation / at the Subcontractor Pre-Mobilization Meeting have been closed and are accepted.
- Ledcor's involvement in the monitoring and control activities identified in the risk rating process and the Subcontractor Management Task Calendar is explained and understood by the Subcontractor.
- Additional HS&E documentation/requirements not discussed at the Subcontractor Pre-Mobilization Meeting are addressed.
- Worksite and/or client-specific HS&E requirements are reaffirmed.
- Subcontractor's Safe Work Plan is approved.
- Subcontractor's supervisory representative understands and will commit to following the HS&E Plan and has signed the HS&E Plan Acknowledgement Form.

Subcontractors are not permitted to start work until:

- All action items are closed from the Subcontractor HS&E Pre-Mobilization Program Evaluation.
- The Subcontractor's Safe Work Plan is approved by the Project/Site Leadership Team.

5.3 Hazard Identification, Risk Assessment, and Controls

The Subcontractor must identify the hazards related to their scope of work, 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 must 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 (FLHA) or other means of hazard identification and control, as approved by Ledcor. Completed hazard assessments must be readily available on the worksite or project for review by a Ledcor Designate.



Subcontractors are not relieved of any of its obligations or liabilities under this section, notwithstanding the review and/or approval by Ledcor.

Life-Critical Risks

The Subcontractor must provide written programs and safe work processes to control life-critical risks to Ledcor for review prior to implementation.

Life-critical risks are identified as:

- Working at heights
- Energy
- Transportation
- Impairment
- Ground Disturbance
- Hazardous Atmospheres

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- Disabling Safety Devices
- Violence

Tasks with life critical risks include (but not limited to):

- Energized electrical work
- Hazardous energy control/line breaking
- Working near or within the limits of approach for overhead
- Operating cranes and rigging
- Material handling/load securement
- Operating motorized heavy equipment
- Operating light duty vehicles
- Ground disturbance
- Confined space entry

Subcontractor programs and site-specific safe work processes associated with life critical risks must meet or exceed Ledcor's requirements and applicable legislation.



Subcontractors are not relieved of any of its obligations or liabilities under this section, notwithstanding the review and/or approval by Ledcor.

5.4 Subcontractor Management

A Subcontractor that is performing work on behalf of Ledcor is responsible for the health, safety, and performance of any Sub-subcontractors they hire.

The Subcontractor must evaluate the HS&E performance of their Sub-subcontractors by using an approved, formal documented process that reviews (at a minimum) the Sub-subcontractor's:

- Health, Safety and Environmental Policies
- Health, Safety and Environmental Management Systems/Programs
- Life-Critical Risk Programs/Procedures
- Health and Safety Performance Statistics
- Training and competency records
- Workers' Compensation Insurance Coverage
- Certificate of Insurance

The evaluation and selection process must include (at a minimum):

- A grading or scoring method
- Management approval of Sub-subcontractor process
- A risk mitigation process for high-risk Sub-subcontractor

The Subcontractor must notify Ledcor of its intention to engage a Sub-subcontractor and provide documentation demonstrating the Subcontractor's ability to meet these requirements prior to



mobilizing the Sub-subcontractor. The Sub-subcontractor must review and sign off on the HS&E Plan.

If Ledcor identifies a high-risk Sub-subcontractor due to poor HS&E performance, the Subcontractor must provide a written risk mitigation plan to the Ledcor and enforce the requirements of the risk mitigation plan with the Sub-subcontractor.

Ledcor and Client, where applicable, reserve the right to refuse the engagement of any Subcontractor who is deemed insufficient to support the HS&E requirements for the scope of work.

5.5 Training and Orientation

Mandatory Training Requirements

The Subcontractor must meet the following training requirements (at a minimum) prior to mobilization onto the project or worksite:

- Canada:
 - Construction Safety Training System (CSTS), or
 - Roadbuilders Safety Training System (RSTS), or
 - Pipeline Construction Safety Training (PCST), or
 - Equivalent, as dictated by the Ledcor Operating Group.
- US:
 - OSHA Training (10 hours for construction workers, 30 hours for construction supervisors), or
 - MSHA Miner training (New Miner or Experienced Miner), or
 - Equivalent, as dictated by the Ledcor Operating Group.
- Ledcor Orientation
- Client Orientation, where applicable

Any Subcontractor Supervisors who direct workers or other Sub-subcontractor must meet minimum Ledcor approved HS&E Leadership training requirements (e.g., Leadership for Safety Excellence) as specified in the Subcontractor Pre-Mobilization Meeting.

Projects or worksites may determine additional training requirements depending on Client expectations and on-site work activities as outlined during the Subcontractor Pre-Mobilization Meeting.

Orientation of Workers

The Subcontractor, its workers, and its Sub-subcontractor must attend the Ledcor orientation.

The Subcontractor must conduct a site-specific orientation relevant to the Subcontractor's scope of work. The orientation must include (at a minimum):

- HS&E responsibilities of management, Supervisors, and workers
- Workers' rights and responsibilities

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- Legislative requirements for the applicable jurisdiction (i.e., MSHA, Ministry of Mines, Provincial/Territorial/State/Federal OH&S, etc.)
- Hazards assessment and established control measures
- Requirements for completing hazard assessments (Field Level Hazard Assessments, Job Hazard Assessment)
- Personal protective equipment (PPE) requirements
- Emergency and evacuation procedures and plans
- Fire prevention and protection plans
- Process for reporting hazards, injuries, and HS&E incidents or near misses
- Process for HS&E meetings and/or toolbox meetings
- WHMIS or Hazard Communication
- Drug and alcohol policy and testing requirements
- Harassment, workplace violence and discipline policies

Mentorship (Short Service or New Worker)

A Subcontractor mentorship program must be implemented to minimize 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. A Subcontractor who does not have a mentorship program in place which meets or exceeds Ledcor's Mentorship Program must follow Ledcor's program.

5.6 Worksite Maintenance

Worksite Inspections

The Subcontractor's work areas, including lay-down areas, lunchrooms and worksite offices must be regularly inspected to identify and correct substandard acts and conditions.

The Subcontractor must perform formal documented inspections of its work areas (at a minimum) weekly or at intervals suitable for preventing hazardous conditions from developing.

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

In the event that the Subcontractor fails to implement the recommendations for improvements in accordance with the corrective action plan, Ledcor may take actions it deems appropriate. Should these actions increase Ledcor's costs, Ledcor may back-charge the Subcontractor for these costs.

Housekeeping

The Subcontractor must maintain clean and organized work areas that remain free of hazardous conditions. The frequency of clean-up activities must be related to the pace of work and the level of waste or other extraneous material build up in the Subcontractor's work area.

Subcontractors must ensure:

- Flammable and combustible materials do not accumulate and are stored as per the SDS.

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- Snow removal and sanding are conducted within their assigned work, lay-down and lunchroom/office areas.
- Power/welding cables and hoses are coiled and stored when not in use.
- Access ways are kept clear of materials and are not to be used as storage areas.
- Oil, grease, and other such liquid spills are cleaned up at the time of the spill as per the SDS and reported to the Ledcor Designate.

If the Subcontractor's work areas are not maintained, the Ledcor Designate must provide a written notice to have the area cleaned up.

Motorized Heavy Equipment

The Subcontractor must ensure that all mobile equipment used on the worksite is safe, operable, and reliable, as well as inspected and approved for use. All records and documentation of equipment inspections, maintenance, and approvals must be made available at the worksite. A competency verification process must be implemented for the Subcontractor and its workers who will operate equipment on the worksite. This process must include a written evaluation that is signed off by a competent person for the worker operating the applicable equipment. All documentation must be readily available at the worksite prior to work commencement.

Ledcor may request this information from the Subcontractor prior to mobilization to the worksite.

5.7 Emergency Management

Emergency Management Plan

The Subcontractor must implement a plan and provide sufficient resources to deal with emergencies at the worksite pertaining to their scope of work. A written emergency response plan must address (at a minimum):

- Instruction on building or worksite evacuation
- Emergency response procedures
- Rescue of employees
- The safe return to operations
- First aid (medical emergency) procedures
- Fire response
- Other systems required for efficient response as identified by the hazard assessment

The emergency response plan and emergency numbers must be posted at appropriate locations at each worksite.

Fire Protection and Fire Extinguishers

Subcontractors must take all necessary precautions to protect workers, the public, environment, and property from fire, and provide a sufficient number of fire extinguishers to adequately protect their portion of the work and mobile equipment.

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5.8 Incident Investigation and Reporting

The Subcontractor must report and investigate all incidents and near misses. Copies of all incident investigation reports must be submitted to the Ledcor Designate for review.

The Subcontractor must also report all Workers' Compensation-reportable injuries.

A competent Ledcor employee may be assigned to assist the Subcontractor in conducting an incident investigation.

All notifications to Federal or Provincial/Territorial/State OH&S Authorities and/or Environmental Authorities must be communicated by the Ledcor Designate, unless otherwise directed by Ledcor.



The HS&E Plan will define the specific regulatory reporting requirements which are applicable at the worksite.

5.9 Personal Protective Equipment

The Subcontractor must supply all PPE to its workers as determined by Ledcor/Client's minimum PPE requirements in the HS&E Plan and additional PPE as determined by the hazard assessment process. The Subcontractor must:

- Supply required PPE to its workers
- Verify workers are trained in the correct use, care, limitations, and maintenance of PPE
- Verify that their workers inspect PPE before each use

5.10 Environmental Protection

The Subcontractor must implement an Environmental Protection Plan (EPP), adequate to address all environmental impacts that the Subcontractor's scope of work may involve. The EPP must include and consider the following (at a minimum):

- Identify all aspects of the environment that may be at risk due to ongoing operations at the worksite
- Include written job procedures outlining the method used to mitigate risks to the environment (as identified through an environmental hazard assessment), which may include but are not limited to:
 - waste management
 - air quality
 - noise
 - soil conservation
 - control of noxious weeds
 - ground water
 - water discharge

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- waterways
- watercourse siltation control
- spill containment
- Include required environmental permits or licenses
- Include an Emergency Management Plan (EMP) including personnel, equipment, and emergency contact numbers
- Provide adequate worker training, materials, and equipment to handle a minor spill of low-risk products (oil, diesel, etc.)
- Inspect storage and handling facilities or equipment
- Include shipping, handling and storage requirements for environmentally hazardous products used at the worksite
- Review and audit materials, quantities, facilities, emergency response capabilities, and record keeping requirements

5.11 Hazardous Products (WHMIS) / Hazardous Chemicals (Hazard Communication)

Hazardous products/chemicals brought to the worksite must be approved by Ledcor (such approval may be withheld at Ledcor's discretion). The Subcontractor must maintain and verify that copies of the current SDS for hazardous chemicals/products are readily available at the worksite.

Training, labeling and use of the controlled product or hazardous chemicals must be in accordance with applicable legislative requirements.

Products containing asbestos must not be utilized without prior approval from Ledcor.

5.12 HS&E Meetings

The Subcontractor must hold weekly Subcontractor crew HS&E meetings, which must be attended by all Subcontractor Supervisors and its workers. The intent of these meetings is worker education, two-way communication, and to address current HS&E issues at the worksite.

HS&E meeting minutes must be recorded, including the names of all attendees and the material covered. A copy of the minutes must be submitted to the Ledcor Designate each week or as meetings are completed.

5.13 Drug and Alcohol Program

The Subcontractor must implement a drug and alcohol program to create a safe workplace for all its employees, Ledcor employees and the public, and to maintain a worksite that is free of the effects and after-effects of drug and alcohol (D&A) use.

The D&A Program must include (at a minimum):

- An account with a third party drug and alcohol testing provider, which is able to support all operational locations where the Subcontractor performs work for Ledcor
- Testing as per client or contractual requirements (e.g., Pre-Employment / Pre-Access Testing)
- Reasonable Cause Testing

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- Post-Incident Testing

All costs associated with administering the program must be borne solely by the Subcontractor.

5.14 Occupational Injury and Illness Management

The Subcontractor must provide injured parties with medical care and perform the appropriate level of case management (i.e., initial medical treatment and follow-up surveillance).

The Subcontractor must utilize a structured occupational injury or illness management process; a proactive approach to returning injured workers to a safe and productive work environment after they have suffered a work-related injury or illness.

5.15 Security

Subcontractors are responsible for the security of their materials, tools, equipment, and facilities.

5.16 Record Keeping

The Subcontractor must retain all project/worksites records as per the Subcontractor's HS&E program. This will allow the Ledcor Designate to monitor the Subcontractor's performance for effectiveness and compliance.

At a minimum, the records that must be retained include the following:

- ** Worksite inspection reports
- ** Government inspection reports (while on Ledcor's worksite)
- ** Incident investigation reports
- ** Weekly HS&E meeting minutes
- ** Monthly HS&E statistic forms
- Orientation records
- Daily tailgate meeting minutes
- Completed hazard assessment forms (JHA and FLHA)
- Training records, including competency/qualification certificates
- First aid injury records
- Equipment certification and inspection certificates
- Tool/equipment operating instructions or product use instructions
- SDS
- Permits
- Any other documents required by Ledcor and/or Ledcor's Client



** Documentation that must be submitted to Ledcor as these activities occur at the worksite while the Subcontractor is on the project.



5.17 Statistical Reporting Requirements / Subcontractor HS&E Performance Summary

The Subcontractor, including Contractors under their supervision, must submit (at a minimum) the following information to Ledcor on a regular and timely basis, as agreed with the Ledcor Operating Group:

- Monthly and/or End of Contract reporting requirements include:
 - Total person hours worked, including any of its Contractors.
 - HS&E activities and statistics including:
 - Lagging indicators
 - Number of incidents and incident frequency rates
 - Number of HS&E infractions and orders issued by regulatory body
 - Leading indicators
 - Number of HS&E meetings held
 - Number of worksite HS&E inspections conducted
 - Number of FLHAs completed

The Subcontractor must use Ledcor’s Subcontractor HS&E Statistics Form to submit the information.

Statistic Reporting Guidelines

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

Lost Time Incident Frequency (LTIF)	$\frac{\# \text{ of Lost Time Injuries} \times 200,000 \text{ Hours}}{\text{Person hours worked}}$
Lost Time Incident Severity Rate	$\frac{\# \text{ of lost days} \times 200,000 \text{ Hours}}{\text{Person hours worked}}$
Total Recordable Injury Frequency (TRIF)	$\frac{\# \text{ of Recordable Injuries} \times 200,000 \text{ Hours}}{\text{Person hours worked}}$

Ledcor classifies all **recordable** incidents in accordance with the guidelines published by the **Canadian Association of Petroleum Producers (CAPP) – Health and Safety Performance Metrics Reporting Guide**.

5.18 Supplementary HS&E Documents & Programs

Traffic Control Plans

Traffic Control Plans (TCP) must be developed and submitted for approval if the Subcontractor’s 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:

- Type of work to be completed
- Traffic volumes
- Impact on traffic flow
- Work location on the highway surface or ditch right-of-way

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- 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
- Worker and public safety

The Traffic Control Plan must contain the following components (at a minimum):

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

Upon completion of a traffic control assessment, the Subcontractor must consider the following techniques for traffic control:

- a revolving warning light on the work vehicle,
- use of a standard warning sign(s) placed in advanced of the work zone,
- use of flag person(s),
- use of delineation,
- use of pilot vehicles, or
- use of arrow boards.

5.19 Right to Apply Consequences

Ledcor must have the right to stop any and all work where life-critical injury/incident potential is unacceptable or work performance is judged to be “at-risk” with respect to either health and safety, and environmental risks.

Issues of non-compliance will be communicated to the Subcontractor verbally and followed up in writing.

Ledcor may terminate a contract if the Subcontractor fails to take corrective action once advised or continues to perform work in an unsafe or non-compliant manner.

5.20 General Workplace Rules

The following general workplace rules must be followed by all Subcontractors, their Contractors and their respective workers and visitors on a Ledcor worksite at all times. Any person who engages in any of the following activities may be subject to disciplinary action, up to and including removal from the worksite.

- Conduct by a person that exhibits a general disregard for the health and safety of any person on the worksite, or member of the general public.
- Failure to abide by rules or conditions set out by the Owner/Client.

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- Harassment or disrespectful behavior.
- Wearing clothing that is inappropriate for work or wearing clothing that contains offensive slogans or images.
- Insubordination towards Ledcor Supervisors.
- Misrepresentation of qualifications or falsification of records or reports.
- Failure to wear the provided Personal Protective Equipment (PPE), where required.
- Unauthorized removal or disengagement of any safeguard, locks, tags, or other protective device.
- Riding in the back of trucks or on any equipment not designed to carry passengers.
- Possession or use of unauthorized drugs or alcohol, and/or reporting for work while impaired by drugs, alcohol, or other influencing factors.
- Smoking in areas of the worksite that are not designated as such.
- Engaging in horseplay, fighting, or gambling at the worksite.
- Possession of firearms or other implements considered to be weapons in the worksite.
- Causing deliberate damage to company property.
- Theft of company property or personal belongings from the worksite.



Additional worksite-specific rules / absolutes may be reviewed at time of pre-mobilization or work commencement.

5.21 Supervisor HS&E Evaluation

The Subcontractor Supervisor will be subject to a Supervisor HS&E Evaluation.

5.22 Subcontractor Performance Review

The Subcontractor must participate in HS&E performance reviews conducted by Ledcor.

6.0 REFERENCES

- HS&E Plan
- Subcontractor HS&E Pre-Mobilization Evaluation
- CAPP – Health and Safety Performance Metrics Reporting Guide
- Supervisor HS&E Evaluation Procedure
- Subcontractor HS&E Statistics Form

7.0 RECORDS

- Hazard assessments
- Training records
- Orientation records
- Competency/qualification certificates
- Inspection reports
- Equipment certification and inspection certificates

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- Incident investigation reports
- First aid and medical records
- Tool/equipment operating instructions or product use instructions
- Permits
- HS&E meeting minutes
- Daily tail-gate meeting minutes
- SDS
- HS&E statistical reports
- Any other documents required by Ledcor and/or Ledcor's Client

8.0 APPENDIX

- N/A

9.0 ACRONYMS, TERMS AND DEFINITIONS

CMS Glossary

Client – A person, company, or organization that engages Ledcor for services and/or work in return for payment

Competent Person – A person who is qualified due to knowledge, training, and experience to organize their work and its performance, is familiar with the applicable legislative requirements that apply to their work and has knowledge of any potential or actual danger to health or safety in the workplace

Field Level Hazard Assessment (FLHA) – A process of hazard identification, assessment, and control / mitigation in the planning of work to be conducted by all personnel involved in performing a task. It is conducted in the “field” at the work face.

Hazard – A situation or circumstance that could cause harm to people, damage to assets, business loss, and impact on the environment or the company's reputation

Hazard Assessment – Process to identify and assess hazards

HS&E – Health, Safety, and Environmental

HS&E Plan – Also known as Project Specific Safety Plan

HS&E Prequalification Registry – Includes all services websites, where Ledcor Operating Groups may use these services to conduct Subcontractor prequalification on Ledcor's behalf (i.e., ISNetwork, Avetta, Complyworks, Cognibox, CQN Advantage, etc.)

Inspection – Review of the workplace which identifies any substandard conditions and acts. Inspections identify the symptoms associated with health, safety, and environmental program failure. Formal inspections are documented whereas informal are performed as work progresses and are not recorded.

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Job Hazard Assessment (JHA) – An element of the Work Management Process which describes the various tasks associated with completing a job and the controls utilized to reduce the inherent risks associated with the job’s tasks to As Low As Reasonably Practicable (ALARP)

Kickoff Meeting – A meeting between the Project/Site Leadership Team and the Subcontractor Leadership to verify and confirm the Subcontractor’s Safe Work Plan

Ledcor Designate – A Ledcor Superintendent, Supervisor, Discipline-specific Supervisor, or designated competent person who is assigned responsibility for the HS&E supervision of a specific Subcontractor while they are working on a Ledcor worksite, which is competent in the field of work performed by their assigned subcontractor

Pre-Mobilization Meeting – A meeting between the Project/Site Leadership Team and the Subcontractor Leadership to outline Ledcor HS&E expectations and review the Subcontractor HS&E Pre-Mobilization Evaluation prior to mobilization

Prequalification – The process of evaluating and determining the eligibility and competency of Subcontractors to perform services that meet Ledcor’s expectations

Project – Any job or work carried out by Ledcor whether it is carried out by only Ledcor workers, Ledcor workers and subcontractor(s), or only subcontractor(s) at a worksite

Project Leadership Team – Project Sponsor, Project Manager, Construction Manager, Supervisor, HS&E Manager and/or Designate

Project/Site Superintendent – Ledcor’s most senior field supervisor assigned to the project

Project Manager – Ledcor’s most senior administrator assigned to the project

Risk – An uncertain event that, should it occur, could have a positive or negative effect on the business or project

Safe Work Processes – Also known as Safe Work Methods – Administrative tools implemented and used that outline how to safely perform a specific type of work, task, or job (inclusive of all Safe Work Practices, Safe Operating Procedures, Program, etc.)

Safe Work Plan – A plan that is developed by the Subcontractor to ensure appropriate controls meeting Ledcor standards are in place before work commences (e.g., JHAs and safe work processes)

Subcontractor(s) – An individual or organization that is performing work on behalf of Ledcor. This includes, but is not limited to, Direct Service Providers and Independent Service Providers

Subcontractor HS&E Pre-Mobilization Evaluation – The process in which the Subcontractor’s HS&E Program and supporting documents are audited to legislative, industry, and Ledcor

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standards at the project level (PSSP). This evaluation, as well as the Subcontractor pre-qualification will determine the Subcontractor’s Risk Rating.

Subcontractor Risk Rating – The rating (high, medium, or low) given to a company following the evaluation of their HS&E Program through an HS&E Prequalification Registry, Ledcor internal prequalification or other approved prequalification method

Worksite – A location where a worker is, or is likely to be, engaged in any occupation and includes any vehicle, mobile equipment, shop, or office used by an employee.

Worker – Any person engaged in an occupation

Workers’ Compensation – A form of insurance providing wage replacement and medical benefits to employees injured in the course of employment in exchange for mandatory relinquishment of the employee's right to sue their employer for the tort of negligence

10.0 STANDARD DOCUMENT REVISION HISTORY

Does this document need an update? [Submit feedback here.](#)

Date	Details of Revision	Rev. No.	Prepared by	Checked by	Approved by
May-12-20	Initial Issue <ul style="list-style-type: none"> • Creation of Corporate Subcontractor HS&E Requirements. • Integrated content from Contractor’s Subcontractor HS&E Management Standard. • Updated language and format to reflect CMS formatting/language and inclusive for all Operating Groups. • Updated incident and investigation requirements to align with the Ledcor Investigation Standard. • Added reference to Hazard Communication in line with WHMIS requirements. • Updated the environmental requirements to align with the Ledcor Environmental Standard. • Updated the right to apply consequences requirements to align with Ledcor’s General Workplace Rules Standard. • Added the Subcontractor HS&E Foreman Evaluation. 	00	L. Buzon V. Choi	LSC ESC V. Choi	L. Jones

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CMS SUBCONTRACTOR HS&E REQUIREMENTS

HEALTH, SAFETY AND ENVIRONMENT

Document No. **HSE-CTM-RF-001** Rev. **01**

Jan-18-21	Revised document number as a result of system change	-	-	-	-
May-27-21	<ul style="list-style-type: none">Updated PSSP references to HS&E PlanUpdated safety meeting references to HS&E meetings.Updated HS&E Foreman Evaluation to Supervisor HS&E Evaluation	01	V. Choi	-	V. Choi L. Jones

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