



Contractor Playbook (Capital Projects)
Health, Safety, Environment and Sustainability
Minimum Performance Requirements for
Contractors

Table of Contents

1.0	Introduction.....	4
1.1	Purpose	4
1.2	Scope	4
1.3	Roles and Responsibilities	4
2.0	General Requirements.....	5
2.1	Record Keeping & Document Control.....	5
2.2	Regulatory Compliance	6
2.3	Site Security or Front Desk Personnel.....	6
2.4	Stop Work Authority	6
2.5	Risk Assessments & Management of Change	6
2.6	Safe System of Work	7
2.7	Contractor Minimum Safety Requirements.....	7
2.8	Key Performance Indicators (KPIs).....	7
2.9	Site Safety Staffing	7
2.10	Site Specific Orientation.....	7
2.11	Training Requirements.....	8
2.12	Emergency Preparedness.....	8
2.13	Emergency Action Plan	8
2.14	Job Safety Boards	8
2.15	Incident Reporting and Investigation.....	9
2.16	Contractor Non-Compliance/ Worker Discipline	9
3.0	Health, Safety, Environment Rules and Standards	10
3.1	Excavations and Trenches	10
3.2	Environmental.....	10
3.3	Fire Prevention.....	11
3.4	Working Alone	11
3.5	Warning Signs.....	11
3.6	Mobile Cranes	12
3.7	Asbestos Containing Materials (ACM).....	12
3.8	Personal Protective Equipment (PPE)	12
3.8.1	Foot Protection.....	12

3.8.2	Eyewear / Face Protection	13
3.8.3	Hand Protection	13
3.8.4	Head Protection.....	13
3.8.5	High Visibility Clothing.....	13
3.8.6	Personal Fall Arrest / Restraint Equipment	13
3.8.7	Respiratory Equipment.....	13
3.9	Work Area	13
3.9.1	First Aid / Emergency Equipment.....	13
3.9.2	Control of Contaminants (Including Heat and Noise)	13
3.9.3	Mobile Device Use	14
3.9.4	Housekeeping.....	14
3.9.5	Portable Heaters	14
3.9.6	Combustion Engines.....	15
3.9.7	Floor Openings and Utility Holes	15
3.9.8	Hazardous Materials	15
3.10	Tools and Equipment	15
3.11	Confined Space	16
3.12	Electrical Work.....	16
3.13	Control of Hazardous Energy.....	16
3.14	Hot Work	17
3.15	Working at Heights	17
3.15.1	Ladders.....	17
3.15.2	Overhead Work.....	17
3.15.3	Roof Work.....	18
3.15.4	Scaffolds	18
3.15.5	Mobile Elevating Work Platforms (MEWP)	18

1.0 Introduction

1.1 Purpose

The purpose of this Model Program is to establish Charles River Laboratory's (CRL) Environmental Health and Safety (EHS&S) requirements for Contractor's qualification, selection, and management. Our safety culture requires both CRL employees and our Contractors to possess the skills, training, and commitment necessary to perform work tasks safely. Our goal is to partner with Contractors who share CRL's safe workplace values and whose employees minimize risk by using accepted safe work practices, perform their tasks competently and efficiently, and produce a consistent track record of acceptable injury performance with no serious injuries or fatalities.

The Global Contractor Playbook is designed for CRL Contractors. The information will provide our CRL employees who hire Contractors with key information and links on our procedures, standards, and practices in a concise and portable format. This information will also assist Contractors in performing on site activities in the safest manner possible. It is not the intent of these minimum requirements to address all environmental, health and safety issues that might be encountered, but rather to provide an overview of the elements that are most critical. Strict compliance with all mandated company, federal, state, and local safety, health, and environmental regulations is a must. Non-compliance with regulations may result in suspension and/or termination of work in progress and may represent a default of the Contractor. Questions about the application of issues to specific work procedures should be referred to the CRL Project Manager.

Awareness of the working environment and the risks and hazards associated with this environment are the crucial start of incident and injury prevention. With awareness comes the ability to take action that will assure a safe and hazard free workplace. Awareness leads to action which leads to taking responsibility for achieving the positive outcomes we seek regarding safety. CRL intends that this playbook not only reduce the number and severity of incidents on CRL sites, but help the participating Contractors strive to achieve an incident free culture of safe work practices.

1.2 Scope

All facilities that use Contractors to perform construction and capital projects, utility and support system operations, and general services contractors.

1.3 Roles and Responsibilities

Project Manager (PM)/ Hiring Manager/ Designated Representative

- Any CRL employee or contracted representative that manages and oversees Contractor activities (Facilities, Engineering, etc.).
- Aware for all EHS&S aspects of work that the Contractor was hired to perform.
- Ensure that the applicable requirements of this program are followed for their projects.
- Review and align with EHS that all hazards associated with the work being done have been identified and the necessary safety precautions are being or have been implemented to ensure that the work can be completed safely.
- Attend all CRL required training.

Corporate Environment, Health, Safety & Sustainability (EHS&S)

- Establish and maintain this playbook.
- Establish training and experience requirements for CRL staff responsible for management of Contractor safety.
- Collaborate with site EHS or representative on design phases of the project.

Security

- Admit only authorized Contractors to the site and assist in the removal of Contractors from sites as necessary.

Site Environment, Health, and Safety (EHS) or Designated Representative

- Assist in establishing required Contractor EHS qualifications, approving final EHS requirements for the planned work, and evaluating Contractor qualifications, programs, and specific EHS plans.
- Maintain injury/illness logs for Contractors that are directly supervised by an CRL employee.

- Complete periodic performance and program evaluations and serve as the primary contact to regulatory agencies as required.

Contractor

The Minimum Expectations are:

- Comply with the work specific EHS plan and applicable regulations.
- Appoint a qualified Contractor safety representative where appropriate/applicable.
- Maintain daily/weekly scope of work reviews and identify any specific risk exposures.
- Require all sub-contractors and suppliers to comply with this playbook.
- Provide trained, competent, and qualified workers.
- Complete daily construction site inspections and other work inspections as specified.
- Maintain good housekeeping and promptly correct unsafe acts/conditions.
- Promptly report and investigate all EHS incidents and provide documentation.
- Maintain EHS records.
- Maintain EHS awareness and take corrective action as needed.
- Immediately stop work upon recognition of a significant hazard.
- Provide for first aid or emergency medical treatment and maintain injury/illness records.

Contractor: Contractor Supervision (Foreman)

- Enforce program requirements with their employees and Subcontractors.
- Complete all necessary inspections and permits before starting work.
- Work in accordance with site requirements and the Contractor Job Site Safety Plan (i.e., risk assessment, work instructions or other recorded methods of how the work will be controlled, including local regulatory requirements).
- Communicate the expectation that all workers participate in safe work practices, including work planning, reporting hazards, and working in a safe manner, according to site and Contractor requirements.
- Perform self-assessments to ensure implementation and effectiveness of the procedures.
- Address all identified deficiencies as soon as reasonable and provide documentation of corrective actions.
- Ensure contractor employees have appropriate equipment and materials to implement procedures effectively.
- Ensure all workers are trained for the tasks they are assigned and the potential hazards they are exposed to.
- Communicate this procedure and supporting information to applicable employees and subcontractors.

Contractor: Contractor Employees and Subcontractors

- Ensuring they use Personal Protective Equipment (PPE) as required by this program.
- Understanding the use and limitations of such equipment.
- Pre-planning the job with supervision to agree that the job can be done safely.
- Following health and safety work requirements outlined to them by their supervisor.
- Notifying their supervisor of any hazards within their scope of work.
- Understanding the potential hazards of the work they are performing.
- Inspecting equipment before each use and reporting defective equipment immediately to supervision.
- Conducting work only after all hazards have been eliminated or properly mitigated.
- Promptly report near misses, incidents, injuries, and property damage.
- Stopping work if hazardous conditions prevent the job from being done safely.

2.0 General Requirements

2.1 Record Keeping & Document Control

Contractor and its subcontractors shall allow CRL or CRL's representative to audit and review any documentation required under this Program. Contractor agrees to cooperate fully with CRL relating to any investigations, safety observation tours, audits of information, or requests that may be made in connection with

the provision of services or applicable laws. Contractor and its subcontractors must keep the following documents and records:

- Safety Plans
- Worker training records
- Pre-Task Plans
- Planned Inspection Records
- Preventative maintenance records for Safety Critical Equipment
- Licenses, permits, or other regulatory records as necessary
- Incident reporting and investigation records
- Corrective Action Plans

2.2 Regulatory Compliance

CRL operates facilities in 20 countries and territories. Contractors and subcontractors working within the operating boundaries of and CRL facility will be aware that in addition to CRL policy and specifications, all work will be performed in compliance with the latest applicable local (municipal, state, or provincial) and national regulations, as well as industry standards. Should any provisions of this Global Contractor Playbook conflict with local laws and regulations, the Contractor will assure that local laws and regulations are met or exceeded.

Contractor's compliance with a local law or regulation that provides protection equivalent to that provided by a specific requirement of this Program, will be considered compliant with CRL's specific requirements. When a local law or regulation contains only general requirements, or when there is no local law or regulation addressing a requirement, the requirements of this Playbook must be satisfied. The CRL Project Manager and site EHS&S staff must be consulted when there is a question whether compliance with a local law or regulation would be adequate to satisfy a specific requirement of this plan.

2.3 Site Security or Front Desk Personnel

All Contractors, subcontractors and guests that enter CRL properties are required to go through site security or front sign-in. Security reviews the ID of all visitors prior to providing temporary badges and allowing entry. Security may also verify Contractors' conformance with pre-qualification requirements at sites where this is a requirement (e.g., Jaggaer, platform systems, etc.).

Contractors, subcontractors, and visitors are required to park in designated spots and obey all traffic signs while driving on our properties.

2.4 Stop Work Authority

Stop Work Authority (SWA) process involves a stop, notify, correct, and resume approach for the resolution of a perceived unsafe condition, act, error, omission, or lack of understanding that could result in an unsafe event. All workers have the authority and obligation to stop any task or operation where concerns or questions regarding the control of health, safety, or environmental risks exist. Stop Work applies to all CRL projects.

2.5 Risk Assessments & Management of Change

Risk assessment is the process of identifying potential unsafe acts and conditions in order to implement controls to prevent incidents throughout the life of a project. At CRL risk is continually evaluated to ensure safe completion of project activities. Risk assessments include:

- Project level JSA, RAMS, or as legally required conducted by Contractor and reviewed by CRL or designated personnel.
- Contractors will review and identify the hazards associated for each scope of work and will identify controls that need to be implemented to execute the project safely.
- Contractor will deliver JSA to CRL as part of the pre-construction activities. JSAs must be reviewed and updated as the job tasks become relevant on the project.

For any change, modification or deviation to the contractor's work processes, the contractor must use a documented Management of Change process (MOC) to identify any new hazards associated with the change. Identified hazards must be mitigated prior to adopting the change. At a minimum, the MOC Process must apply to the following changes:

- New or modified equipment and tools

- Change in processes and/or work methodology
- New chemical materials
- Change in regulations

2.6 Safe System of Work

The Safe System of Work where a risk assessment is undertaken process is a vital component in assessing and controlling high risk work activities. The safe system of work should ensure that a risk assessment has been undertaken and controls and measures are put in place. As many projects are drawn out between the initial planning stage and the various stages of implementation, that serves as a checkpoint that all potential hazards identified in the design and bid stages are reviewed and satisfactory mitigations are in place before performing work. Coordination with multiple trades as well as operating facilities is imperative for the duration of the work, and control of work documents that all stakeholders have been notified and their operations considered.

2.7 Contractor Minimum Safety Requirements

The Contractor is responsible to prequalify all Subcontractors/trade contractors engaged on a project. Examples of criteria for Contractor Evaluation may include:

- Total Recordable Incident Rating (“TRIR)
- Experience Modification Rate (“EMR”) (U.S. only)
- Fatalities
- Documentation of Insurance
- Safety Policy and Emergency Planning and Response
- Necessary licenses, certifications, and competency
- Process for identifying, assessing, and managing risk
- Qualified staff including Safety Officer(s), Safety Specialists
- Safety Training program
- Incident investigation process
- Violations issued by a regulator within the current year and 3 previous calendar years.

2.8 Key Performance Indicators (KPIs)

For projects longer than 3 months in duration, Key Performance Indicators (KPIs) are designed to measure safety related performance, and will be used to identify areas for improvement, encourage action, document mitigation efforts, and reinforce improvements in behavior. Project Safety Scorecards will be shared during safety meetings and submitted to the PM monthly.

Leading Indicators:

- Number of safety observation reports
- Number of Field Audits Required
- Number of ToolBox Talks conducted
- Number of reported near misses
- Number of orientation/induction training

Lagging indicators (site-specific):

Days Away, Restricted or Transferred (DART) incidents
 Number of work-related incidents (including environmental incidents)
 Total Recordable Injury Rate (TRIR)

2.9 Site Safety Staffing

Depending upon the project risk assessment and legal requirements, the Contractor will supply project safety staff sufficient to ensure that all elements of the Playbook required are implemented and Contractor’s responsibility for maintaining a safe worksite is achieved. Contractor will submit safety staff resumes to CRL PM, or a designated Owner’s Rep, for review and acceptance.

2.10 Site Specific Orientation

Contractors are required to maintain and conduct Site Specific Orientation for their workers and Subcontractors prior to performing any work on site to effectively communicate safety information specific to work performed by Contractor on the CRL site.

In addition to the site-specific orientation, Contractors will be responsible for assuring their workers have received all required training, including safety training appropriate to the work to be performed. Upon request, the Contractor must provide CRL with documentation of all required training.

2.11 Training Requirements

Contractors must ensure that all personnel and Subcontractors are trained and competent on the roles and responsibilities they are expected to perform under the project scope. Detailed training requirements are provided below. Minimum training requirements must be reviewed by CRL as follows:

- Must complete site and work location-specific orientation.
- Must be trained to identify hazards and recognize deviations from procedures.
- Training must meet regulatory requirements for the work to be performed and documentation retained.
- Additional/Supplemental Training: Repeat training should be completed when audits or investigation into incidents, near-miss or periodic assessments suggest there are gaps in personnel understanding, or when there is a significant change in risk or procedures.

2.12 Emergency Preparedness

Contractors must develop and maintain an Emergency Action Plan (EAP) for the Contractor's Scope of Work. At a minimum, the Contractor shall comply with the following:

- Contractor shall coordinate and identify any work that requires the impairment or disconnection of any life safety system (fire alarm or suppression systems, smoke, or gas detectors).
- Review the posted evacuation plan and know the location of safest and most direct evacuation routes from the work area.
- Ensure that work activities do not block the evacuation routes.
- Know the procedure and method for initiating emergency response.
- Know the location of the site's established evacuation assembly points.
- In case of an emergency follow the directions of site security and emergency response team.
- Ensure that all contractor's employees are made aware of the above-mentioned elements.

2.13 Emergency Action Plan

The EAP must be posted in the work area, and the Contractor shall review the details of the EAP with the working crew, including Subcontractors, at time of implementation of the EAP, as well as whenever the EAP is changed, when a worker's responsibilities under the plan change, or whenever a new worker is assigned to the project. The EAP must comply with all applicable local laws and regulations, and at a minimum shall contain the following information:

- A preferred method and/or procedures for reporting emergencies.
- Emergency escape procedures and route assignments, such as floor plans, workplace maps, and safe or refuge areas.
- Procedures to account for all workers after an evacuation.
- Names, titles, and telephone numbers of individuals both within and outside the company to contact in case of an emergency.
- Procedures for workers who are expected to participate in emergency response, such as spill cleanup, or use of fire extinguishers.

The Contractor shall ensure that all workers and Subcontractors have been given adequate instruction in fire prevention methods (e.g. extinguishers if fire watch is needed) and emergency evacuation procedures applicable to their workplace.

2.14 Job Safety Boards

Contractors shall post and maintain a job safety board at the project site in a conspicuous location that is accessible to the subcontractors/trade contractors, workers and other personnel arriving at or entering the

project area. The general contractor/construction manager shall notify all personnel working in the project area of the location of the job safety board, which at a minimum shall provide the following information:

- Basic project information
- Minimum PPE requirements
- Regulatory required Health and Safety Posters
- Names and contact numbers for key personnel and subcontractors/trade contractors • Directions for Emergency Evacuation (Muster Points)
- Location of the Job Site project-specific plan
- Location of project-related safety data sheets (SDS)
- Shutdown notices and posting of other activities requiring coordination
- Notices for upcoming job and safety meetings
- Monthly summary of recordable injuries/illnesses, lost-time and total recordable rates, near miss incidents
- Directions for Obtaining First Aid and Reporting Incidents

2.15 Incident Reporting and Investigation

Contractors shall immediately report any injury, spill or damage to any property, which involved Contractor or Subcontractor employees to the CRL PM or Designee. The incident scene shall be made safe and preserved for review by CRL.

In order to prevent further occurrences, all accidents, incidents, and potentially serious near misses involving one or more Contractor must be reported and will be subsequently investigated in accordance with CRL procedures. These include, but are not limited to:

- Near misses with the potential to harm people, the environment, or assets.
- Work related injuries or illnesses; property damage including vehicle incidents.
- Hazardous chemical spillage, loss of containment, and/or contamination.
- Non-conformance to safety or environmental rules, policies, or standards.

If notification to any government or regulatory agency is required, the Contractor shall first notify the CRL PM or Designee and site EHS&S. All potential serious incidents, first aid cases, property damage, and spills shall be immediately reported to the emergency contact number provided to the Contractor by their CRL PM. A written report containing all pertinent information about the accident, incident or significant near miss must be provided by the Contractor to their CRL PM or Designee within one business day of the event. For reporting purposes, the Contractor will use the CRL [Contractor Incident Report](#) may use their own reporting form if equivalent.

Chart 2.15

TYPE OF INCIDENT	WHO TO NOTIFY VERBALLY	WHEN	INCIDENT REPORT FORM
Injury Above Minor First Aid	911 / Site Medical / CRL PM	Within 2 hours	Yes
Injury or Hospitalization required to be reported by regulatory agency	OSHA or Governing Regulatory Agency/ CRL PM	Within 8 hours; or per regulation	Yes
Fire / Explosion	911 / Site Fire Response / CRL PMP	Within 2 hours Immediate or when possible	Yes
Reportable Spill	Site EHS / CRL PM	Within 2 hours	Yes
Property/Vehicle Damage	CRL PM & EHS&S	Within 24 hours	Yes

2.16 Contractor Non-Compliance/ Worker Discipline

CRL holds all Contractors and their personnel accountable to abide by the safety rules and regulations. All workers on site shall do their part in participating safely in all phases of work. Each Contractor supervisor shall organize, pre-plan and execute the work according to the plan.

CRL reserves the right to remove any contractor or subcontractor from site for any reason, including safety infractions.

In the event of Contractor failure to comply with CRL Contractor Playbook and/or applicable regulatory safety requirements, CRL PM has the following options:

- Immediately remove the Contractor involved from the site.
- Immediately investigate and communicate the violations to Site Management, Site EHS and Procurement.
- Immediately remove contract firms that are involved in significant safety violations from the list of approved contractors.

3.0 Health, Safety, Environment Rules and Standards

3.1 Excavations and Trenches

All ground disturbance and excavations over 6 inches (15 cm) in depth require a completed Permit to Work and JSA, unless the county's regulations are more stringent. Contractor is responsible to locate utilities and any underground services prior to digging.

Contractor will use multiple means to locate services including contacting local utilities to identify existing underground services. Any such services must be exposed by hand digging before using mechanical excavators.

All excavations capable of creating a hazard to workers must be appropriately mitigated as necessary to safeguard personnel (i.e., trenching and shoring). This must be evaluated by a competent person appointed by the contractor. The competent person must evaluate the excavation during changing weather conditions.

Contractor will provide engineering data for any method or equipment used to shore trenches or excavations to protect from cave-in or collapse and provide method for safe off any excavation and trench.

Contractor is not permitted to handle any known or suspected contaminated soil unless approved by CRL PM in consultation with site EHS. Exceptions exist for landlord owned property.

Unattended excavations, trenches, open manholes, or areas where grating has been removed are to be guarded, barricaded or covered.

All excavations and trenches shall be barricaded and visible day and night in accordance with applicable regulations.

Inspection of excavations, the adjacent areas, and protective systems will be made by a competent person on a daily basis, or when environmental conditions change, for evidence of any situation that could result in cave-ins, failure of protective systems, hazardous atmospheres, or other unusual conditions.

3.2 Environmental

All Contractors working on CRL property shall comply with all environmental rules set forth by CRL, as well as all applicable local and federal laws and regulations pertaining to the environment. These requirements will vary by site and country, but at a minimum, all contractors shall observe the following practices:

- Contractors expected to generate large amounts of refuse because of their work activity shall develop and follow a general waste management plan.
- Wastes are to be properly disposed of according to local regulations. Options for recycling Construction and Demolition materials must be considered as part of the project.
- The contractor is strictly prohibited from dumping any material into any drain (inside or outside the facility) without written approval from CRL.
- Waste that may be considered hazardous must be disposed of in accordance with all applicable regulations. The Contractor shall coordinate with CRL PM and/or site EHS regarding proper disposal procedures for hazardous or potentially hazardous waste.
- Open-top dumpsters kept on site with construction debris must be covered with a tarp whenever not in use. Rainwater or snow must not be allowed to accumulate in dumpsters.
- Whenever working next to stormwater manholes, the contractor shall take the necessary measures to prevent any work-related debris, spills and/or runoff from going into the storm sewer.
- Contractors are responsible to verify that all waste / recycling are properly handled, stored and removed in accordance with all regulatory and code requirements.

- Contractors are to ensure that any waste or contaminants do not enter the sewer or storm water system. In the event of discharge, immediate notification to CRL and incident reporting is required.
- Contractors are to receive authorization prior to drawing large quantities of water from the facility's water supply and prior to adding substances to the facilities plumbing system (e.g., pouring materials down the drain).

3.3 Fire Prevention

Contractor will provide an emergency action plan to include fire protection and prevention as applicable to their scope of work. Fire protection is a key aspect of CRL's overall health and safety program, and the Contractor shall observe all of the site's fire prevention rules, and will follow the basic guidelines of fire prevention outlined below:

- No equipment or material shall be stored or placed where it would block or impede any fire protection or other emergency equipment such as sprinkler heads, eyewashes / safety showers as well as emergency exits and walking aisles.
- Under no circumstances shall the Contractor disable or impair any part of the facility's fire protection system, without first notifying and getting approval from the CRL PM. Temporary covering of such fire protection devices as sprinklers, smoke detectors, and heat detectors is considered to be impairment.
- Contractors are required to provide portable fire extinguishers for any activity that has the potential of generating heat, flames, sparks, or as required by specified activities including Hot Work (see section 13). Contractors cannot use the building's fire extinguishers for their activities.
- Contractors are required to provide at least one fire extinguisher of rating not less than 20-B units, for any area used for storage of flammable liquids. The fire extinguisher shall be located in such a manner as to be accessible in case of a fire.
- All fire extinguishers used by the Contractor are required to be inspected on a monthly basis. The date of inspection and the inspector's name must be recorded on a tag, and the tag be displayed on the fire extinguisher.
- Personnel expected to use fire extinguishers must be trained on how to properly operate and inspect them.

In the event of a fire, the Contractor must immediately activate the alarm system and warn personnel in the vicinity, then evacuate to the designated muster point. All fires, including those that are extinguished, are to be reported to the CRL PM as soon as the scene is made safe (ASAP).

Only properly trained and authorized workers are permitted to suppress incipient fires. If the evacuation alarm is sounded all incipient fire suppression activities shall immediately stop, and personnel will evacuate the building via the nearest exit.

3.4 Working Alone

CRL expects that all contractors have and enforce their own individual working alone procedures.

3.5 Warning Signs

Barricades and signage requirements apply when the Contractor's work creates a condition that may expose other persons to a hazard. Protective devices must be used as a warning or barrier for others to avoid the hazard. Contractor will furnish, erect, maintain, and dismantle safety barricades required for their work, and coordinate all barricades belonging to any subcontractors. Each barricade will be tagged/signed to identify owner, purpose, date erected, and the contract information of the barricade owner.

Contractors are required to provide and post warning signs, barriers, barricades, etc., as appropriate to the work being undertaken and the risk to the building tenants and general public. Contractors are responsible to ensure all warning signs and or tags are clearly legible and in both official languages where required.

All signs posted must meet the requirements of the applicable regulations and be posted in sufficient numbers to provide adequate warning of the hazards associated with the work taking place. The contractor is responsible to remove all warning signs posted in their work area at the end of the work.

Where signs and barricades do not provide adequate protection, particularly along a road or walkway, flagmen are to be used.

3.6 Mobile Cranes

This playbook applies to all lifting and rigging operations on CRL facilities by any vendor, General Contractor or Subcontractor within the CRL operating boundaries who are engaged in activities utilizing the following:

- Conventional lifting equipment such as mobile cranes and tower cranes.
- Non-conventional equipment when used for lifting such as a backhoe or forklifts and telehandlers when used with approved lifting attachments in addition to, or in place of, factory installed attachments.
- Load-bearing lifting equipment such as jacking equipment, come-along winches, hoists, slings, shackles, spreader bars, and lifting baskets/cages.

A written lift plan must be reviewed and approved by CRL PM prior to the use of a crane. Contractor will ensure that all workers are trained, qualified, or certified according to Local/Regional requirements. This includes equipment operators, signal persons and riggers. Reference Lift Plan Review-Crane Pick Permit

The contractor is required to have a written procedure in place for the safe operation of equipment around or near any power lines or outdoor electrical equipment.

3.7 Asbestos Containing Materials (ACM)

Prior to conducting any work on-site, contractors are to request the facility Asbestos Survey Report from the CRL to ensure that known or suspected asbestos containing materials are not unintentionally disturbed during the course of work. Contractors are to stop work and notify CRL immediately if previously unidentified suspected or known asbestos material is encountered, or if known asbestos-containing materials are identified to be in fair or poor condition.

All work involving planned or possible disturbance of asbestos-containing materials must comply with local, state, provincial and federal regulations. Authorization is required from CRL before initiating any work that will involve asbestos and must be conducted in a manner that minimizes impact to the building occupants.

Contractors conducting work involving asbestos are required to have the requisite training and insurance. All asbestos work is to be conducted in accordance with the building requirements, which may include supervision by a qualified hazardous materials consultant and air monitoring. Contractors are responsible for providing advance written notification to local, state, provincial or federal authorities when such notification is required.

The disposal and transport of asbestos waste is to comply with requirements of the local, state, provincial and federal environmental protection act and transportation of dangerous goods act.

3.8 Personal Protective Equipment (PPE)

Contractors must identify required PPE using a risk assessment for the task and ensure that all materials, equipment or devices that are necessary to ensure safe conditions for all the Contractor's personnel who may be exposed to hazards during their work. Contractors must ensure that all PPE is in good working order and suitable for the task being performed.

Contractors also must comply with any facility designated site-specific and area-specific PPE requirements. Workers must consider their work attire as part of their safety. If any person is not wearing appropriate PPE, they must not enter the work area.

3.8.1 Foot Protection

Foot protection suitable to the hazard is required. Steel toe (or composite toe) shoes, which meet ANSI Z41 or equivalent, are required at construction sites that may be at risk from falls on slippery surfaces, cuts and puncture to feet, or objects crushing feet.

At a minimum, steel toed (or composite toe) boots, covering the ankle and made of substantial leather type material are required to be worn by all Contractor employees and subcontractors at all times when performing construction activities.

3.8.2 Eyewear / Face Protection

Contractor shall ensure that all persons under their supervision, in an area where construction activities are in progress, wear appropriate eye protection meeting current ANSI Z87.1 specifications or equivalent.

Different eyewear may be required based upon the type of hazard present at the CRL areas (e.g., impact, heat, chemical, biological, dust and light or radiation, or welding).

3.8.3 Hand Protection

Based on the risk assessment, suitable hand protection, i.e., gloves, must be worn to meet the specific requirements of the work to be undertaken.

3.8.4 Head Protection

Contractor employees working in areas where construction activities are occurring must wear protective hardhats which meet ANSI Z89.1 or equivalent. Head protection is also required at all sites where a head protection use policy in place.

3.8.5 High Visibility Clothing

At a minimum, high visibility (HI Viz) safety vests, or equivalent must be worn at all times in areas where powered material handling equipment is operated. HI Viz clothing must also be worn in outdoor settings where traffic or equipment is in motion.

3.8.6 Personal Fall Arrest / Restraint Equipment

Based on regulatory requirements and risk assessment, contractors must ensure that each worker who is at fall hazard risk is provided with 100% fall protection and be accompanied by an emergency rescue plan. All personal fall protection equipment must meet ANSI Z359 or equivalent requirements. All employees required to use Fall Arrest / Restraint equipment must be properly trained in its use.

3.8.7 Respiratory Equipment

Contractors are required to provide their employees with respiratory protection appropriate to the nature of the work and the environmental conditions. Respiratory protection is to be NIOSH approved and meet the applicable regulatory standards.

3.9 Work Area

3.9.1 First Aid / Emergency Equipment

First-aid equipment, fire extinguishers, fire blankets, stretchers, eyewash fountains, deluge showers, and other emergency equipment must not be moved, relocated or blocked unless absolutely necessary and alternate equipment is provided in the interim. In all instances authorization from CRL is required.

Contractors are to provide first aid supplies and ensure the appropriate number of trained first aid responders is located on-site in accordance with applicable local, state, provincial and federal regulations.

Contractors are required to provide their own safety equipment appropriate to the work being conducted on-site. All emergency equipment, fire extinguishers, first aid kits, eye wash stations, must meet at a minimum all applicable standards. Emergency equipment not meeting the required minimum standard will not be allowed on site.

3.9.2 Control of Contaminants (Including Heat and Noise)

The Contractor shall coordinate with CRL PM and/or site EHS regarding any mitigation plan for any

contaminants that may negatively impact the building occupants, equipment or the general public. Contaminants include thermal and noise contamination. Enhanced mitigation measures may be required if the work is being conducted in areas of sensitivity (e.g., laboratories, location with sensitive equipment).

Work generating a contaminant is to be scheduled in accordance with best engineering practices and at times that will minimize negative impacts. Contractors shall consult with CRL to ensure that work generating a contaminant is performed in compliance with any other site-specific requirements.

Based on the risk assessment, contractors may be required to provide contaminant monitoring. Contractors are to ensure all employees wear the appropriate PPE where exposure to a contaminant is possible.

3.9.3 Mobile Device Use

All Contractors on site shall follow CRL's Mobile Device Policy, and at a minimum shall observe the following rules:

- Do not use cell phones while operating vehicles, equipment, machinery. Workers must stop or move to a safe zone/area to use cellphones or other mobile devices.
- Do not use a cell phone at elevated heights such as ladders, roof edges, etc.
- Do not walk and text, walk and read or walk and e-mail. Workers should move to a safe area, stop, and then use the device.
- Earpieces can be a distraction from one's surroundings. Limit earbud/headset use to tasks seated in an office environment or another safe location.
- Local laws or regulations may include additional restrictions for using mobile devices and should always be observed.
- Observe CRL restrictions on photography. Contractors will contact the CRL PM for permission to take pictures on site.

3.9.4 Housekeeping

Contractors and all Subcontractors

- Keep the work site clean and orderly and store away tools and material at the end of each workday.
- Keep the premises free from accumulation of waste materials or rubbish caused by their operations and remove rubbish/waste at completion of each workday.
- Store materials or place equipment where they will not become a trip hazard or block exits, emergency controls or supplies, etc.
- Do not leave tools or material on top of equipment, scaffolds, ladders, pipes, tanks, or other places where they may become dislodged and fall.
- Keep the premises clean and free from fire hazards and maintain the work and materials stockpiles neat and orderly throughout the construction period to permit safe and convenient access.

3.9.5 Portable Heaters

Based on the risk assessment, CRL must approve any portable heaters brought on-site. All portable heaters are required to be approved by the Canadian Standards Association, or Underwriter's Laboratory, European Conformity, or equivalent standards.

Portable heaters are only to be used as a source of supplemental heat and not as the primary heat source, except in an emergency situation. Heaters may not be left unattended and are to be placed a minimum distance of 3 feet from any flammable or combustible materials and observe a minimum overhead clearance of at least 6 feet.

Contractors are to ensure adequate ventilation is present if gas fired heaters are in use and cannot be used in a confined space. Exhaust from gas heaters is to be ducted to the outside environment. Cylinders for propane heaters are to be placed at minimum of 10 feet from the heater and away from all heat sources. Propane cylinders are to be stored in a secured outdoor location.

Heaters are to be placed on a stable level surface to prevent being overturned and away from all

travel ways. Heaters are to be periodically inspected to ensure safe operation following the manufacturer's instructions and serviced only by a licensed service technician.

Contractors are responsible to provide the necessary firefighting equipment in the immediate area where the unit is placed.

3.9.6 Combustion Engines

Combustion engines must be limited inside the buildings and CRL authorization is required prior to bringing combustion engines on-site. Contractors must provide a plan to mitigate exhaust in buildings and ensure adequate ventilation as per legal requirements.

3.9.7 Floor Openings and Utility Holes

Floor openings and manholes are to be guarded by substantial and properly secured barriers, railings, or covering material as per code or design loads.. In addition, all floor openings are to be clearly marked and identified as such (i.e. open hole below).

Where a danger of falling exists, elevated floor areas are to be provided with guardrails. In addition, toe-boards are to be provided when the possibility of falling objects striking personnel below exists.

3.9.8 Hazardous Materials

Contractors are required to obtain authorization prior to bringing hazardous materials to a work location. Only minimal quantities are to be brought and maintained at site. As per legal regulations, contractors are to maintain an updated inventory of hazardous materials on-site; current Safety Data Sheets are to be located in proximity to the hazardous materials storage and areas of use and must be accessible to CRL and emergency response personnel. All emergency contact numbers are to be clearly posted in the storage area.

Contractors are responsible to ensure all hazardous materials are properly handled, stored and disposed of in accordance with all regulatory and code requirements, which includes providing an appropriate spill response plan and maintaining the appropriate emergency equipment on-site

Contractors are to be able to demonstrate that employees have received WHMIS / HazMat training and are knowledgeable in spill response appropriate to the material at the work location. Any releases or spills that results in a requirement to contact a regulatory authority must be investigated and reported.

In addition, contractors are to be able to demonstrate that employees involved in the transporting of hazardous materials have received the required training from the authority having jurisdiction.

All compressed gas cylinders are to be stored, transported and used in a secure upright position. When not in use, the protective cap is to be placed on the cylinder and properly secured. All compressed gas cylinders both spent or full are required to be stored in a secure, clearly marked location, removed from any potential ignition sources, common travel paths and means of egress.

3.10 Tools and Equipment

Contractors are responsible for supplying all tools and equipment necessary for the completion of their work. The use of CRL owned tools and equipment is not permitted under any circumstances. Contractors are required to obtain authorization to store tools on-site.

Tools maintained on site are to be placed in locked containers or tool boxes at the end of the work day. Tools and other materials are not to be left on stepladders, scaffolds, roofs, or other places where they may be dislodged and fall or where they may create a trip hazard. Appropriate PPE is to be worn at all times to protect the user from injury.

All tools are only to be used for their intended purpose. Hand and power tools are to be maintained in good operating condition and inspected before use. All defective tools are to be tagged and

removed from service immediately.

A Ground Fault Circuit Interrupter (GFCI) is to be used when operating all electrical powered tools outside or in a wet or damp environment. All extension cords are to be utilized such that they do not create a tripping hazard.

3.11 Confined Space

Contractor must evaluate any potential confined or restricted space for any additional hazards. Contractors must know and understand the requirements for Confined and Permit Required Confined Space for their location, especially local recognized standards. Contractors performing work in confined spaces must have a program meeting required standards.

If work cannot be completed without entry into a confined space, a JSA and Permit to Work will be submitted for review in advance of the planned work. Permit required Confined Space spaces will utilize the site required permit or contractor shall be responsible for developing and implementing their own permit-required confined space program that shall meet or exceed all local laws and regulations.

The Contractor shall provide the necessary measures to protect the confined space entrants from external hazards such as vehicular traffic or overhead construction work, through signage and/or barricades. Additionally, where applicable, covers or guardrails shall be set up as necessary to prevent anyone from falling into an uncovered space.

Confined spaces must be evaluated by a competent person to determine if it is a permit or non-permit space. Only trained personnel will be allowed to enter a confined space. Contractors must provide their employees with all necessary PPE, as well as provide their own confined space rescue equipment and air monitoring devices.

3.12 Electrical Work

Contractors are required to have their own electrical safety program. Contractor programs are to be adjusted to any building specific safety requirements.

Contractors are required to receive authorization from CRL prior to shutting down any building electrical systems, circuits or equipment.

Each Contractor must have a written Electrical Safety Program applicable to their scope of work. Establish procedures for:

- Complying with applicable laws, regulations, codes, and standards.
- Informing workers of potential electrical hazards associated with tasks.
- Informing Subcontractors of potential electrical hazards to which their workers may be exposed.
- Notifying CRL if there is a potential impact to CRL operations due to planned electrical work.
- Completion of risk assessments (JSA) for electrical work.
- Required documentation and inspections.
- Energized electrical work system, if applicable. Contractors will utilize CRL Permit to Work and Energized Electrical Work Permit.
- Selection, use, care, inspection, and testing of personal Protective Equipment (PPE).
- Evaluation and provision to protect against Arc Flash/Flashover events.
- Electrical safe work practices, including control of hazardous energy/LOTO.

3.13 Control of Hazardous Energy

Lockout/tagout (LOTO) will be required for performing service or maintenance of any equipment that has the potential for unexpected start-up, energization, or release of stored energy.

- The Contractor shall be responsible for notifying all parties to be affected by LOTO activities prior to application and after removal of lockout or tagout devices.
- For new construction, prior to turnover to CRL, Contractors shall develop and manage an energy isolation policy and procedure. Contractors shall ensure that authorized person(s) locking out the equipment are trained and qualified on the specific equipment they are locking out.

- Contractors must never remove locks or tags that they find on building equipment or attempt to defeat them.

3.14 Hot Work

Hot work is any work that creates open flames or sparks, such as gas welding or cutting, brazing, soldering, grinding, arc welding or cutting, using a cutting wheel or chop saw or any other spark producing operation. Contractors are required to receive authorization from prior to commencing any hot work.

Contractor will utilize their own permit and report to CRL PM any planned impairment of life safety systems. It is critical that prior to signing off on a permit, the permit issuer inspects and evaluates any hazards at or near the proposed work zone. Hazards to be mindful of include the presence of flammable or combustible materials (e.g., gases, vapors, liquids, or dusts), or the potential for development of explosive atmospheric mixtures.

Contractor will ensure that the area is free of ignitable hazards within a radius of 35 feet (10 meters) and / or:

- Confine heat, sparks, and slag so that they cannot contact flammable or combustible materials (e.g., use of fireproof blankets as a barrier between hot work and flammable materials).
- Ensure that floors and surfaces within a 35-foot (10 meters) radius of the hot work area are swept free of combustible dust and debris.
- Cover all openings or cracks in the walls, floors, or ducts that are potential travel passages for sparks, heat, and flames.

The Contractor shall ensure that a designated fire watch is present for the duration of the hot work and will remain in the area for at least 60 minutes after all hot work is completed (a longer watch period may be required based on the nature of the hot work or its location).

Ensure all workers are trained for the tasks they are assigned and the potential hazards they are exposed to.

3.15 Working at Heights

3.15.1 Ladders

Contractors will be responsible for providing all ladders for their projects. All portable ladders used on site shall be of fiberglass construction and shall be rated for the intended load. Where local laws and regulations conflict with the rules outlined in this section, the Contractor shall make sure that the local laws are met or exceeded. The Contractor shall observe all of the following rules whenever using ladders on site:

- Ladders will be used only for the intended purpose for which they were designed and shall not be loaded beyond the manufacturer's rated capacity.
- Ladders must be inspected by the user immediately prior to use, and periodically inspected by the ladder owner (Contractor).
- Ladders shall be maintained free of oil, grease, and other slipping hazards.
- Extension ladders shall be secured in place to prevent them from tipping.
- The footing of the ladder will be placed on a stable and level surface.
- Ladders will not be used by more than one person at a time unless designed for such use and rated for the load.
- Ladders will not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.
- If a ladder is used next to the edge of a platform or mezzanine level, and the worker is exposed to a fall of greater than 6 feet to the level below, additional fall protection is required.
- Workers will always maintain 3 points of contact on the ladder and will carry tools/equipment on a belt or hoist up them up in a tool-bag or other safe means.
- Ladders shall not be moved, shifted, or extended while occupied.
- When not in use, ladders shall be stored in a safe location, secured from falling over, and prevented from becoming a tripping hazard or blocking walkways.

3.15.2 Overhead Work

For all overhead work, a competent must conduct a risk assessment and meet all regulatory

requirements. The area must be properly barricaded and tagged to prevent access to the work area. The barricaded area is to be large enough to protect those in the immediate area from any potential falling debris or tools. The tag shall indicate the reason for the barricade and a contact name and number.

3.15.3 Roof Work

During all rooftop operations within 6 feet or 1.8 meters of the roof edge, the contractor is to have a properly secured safety harness or a safety railing that meets all legal requirements along the roof edge.

3.15.4 Scaffolds

The use and construction of scaffolding is to comply with industry practice and all applicable requirements (including the manufacturer's requirement). The erection and dismantling of scaffolds are conducted under the supervision and direction of a qualified (competent) person. Contractors are responsible in selecting the proper type of scaffold dependent on the work and are to inspect the area for all hazards prior to erecting scaffolds.

All required ties to the structure are to be installed as soon as the scaffold has been completed to the tie-in area during erection. A safe and unobstructed means of access, such as a walkway, stair, or ladder is to be provided to all scaffold platforms. All planking shall be scaffold grade or equivalent. Platform planking shall be secured to prevent movement.

Contractors are responsible to ensure all scaffolds are not loaded in excess of their designed and constructed load limit.

3.15.5 Mobile Elevating Work Platforms (MEWP)

Contractor will comply with all manufacturer's recommendations for MEWPs and meet all regulatory requirements. In addition, the following minimum standards apply:

- The manufacturer's posted capacity of the lift will not be exceeded by the combination of personnel, tools, and material in the lift.
- Each MEWP shall be inspected, maintained, repaired, and kept in proper working condition in accordance with the manufacturer's manuals. MEWPs will be tagged out and removed if not fit for service.
- Only qualified operators may operate MEWPs. It is the responsibility of the Contractor to provide proof of training upon request.
- Any equipment equipped with outriggers will have the outriggers fully extended and set before the bucket/cage is raised.