



CONTRACTOR SAFETY MANUAL

Lhoist North America

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This document is intended to provide all contractors, including subcontractors, and contract employees ("Contractors") with the essential Environmental, Health and Safety ("EHS") standards required to successfully complete tasks while working on and/or adjacent to Company job sites. This manual highlights some of the key regulatory requirements, as well as noting where Lhoist North America (LNA), including its subsidiaries and related entities, (collectively, the "Company") has requirements that are above and beyond the regulatory requirements. **It is not intended to replace or limit EHS requirements imposed by federal, state or local regulations or to preempt standard industry practice.**

The Company constantly strives to maintain a safe and healthy workplace for employees and Contractors. Additionally, the Company is cognizant that our operations may impact the environment and our goal is to minimize any adverse environmental effects. To meet these goals, we need assistance from our contractors on two key points:

- The Contractor shall report any unsafe work condition or environmental condition which *has* or *could* have an adverse impact.
- The Contractor shall refuse to work if an unsafe condition is not corrected.

While these guidelines are helpful in preventing accidents, good judgment and common sense also play an important role in accident prevention. It is the Contractor and its employees' responsibility to work safely and to insist that others working with them do the same. Before undertaking a task take a moment to think about safety and the consequences of your actions.

Thank you for your commitment to our cooperative Contractor Safety Program. Your continued safety is our primary goal!

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INTRODUCTION

Contractors are required to comply with all applicable Federal, State and local safety, health and environmental regulations including all Company site-specific and/or business unit policies and procedures applicable to the scope of work being conducted. The guidelines presented in this document are not an exhaustive list of all applicable requirements and regulations for the Contractor to conduct work for the Company. Instead, these guidelines highlight certain regulatory requirements and Company standards that may be applicable for the Contractor based on the scope of work.

It is essential that these rules and safety responsibilities are understood before starting work on Company property and/or projects. Violating safety requirements could jeopardize the welfare of the Contractor and/or Company employees and could result in removal from Company property and/or project and deny the Contractor the opportunity to be considered for future Company projects.

The Company updates this manual periodically. As part of the Contractor's obligation, the Contractor shall request from the Company an updated Contractor Safety Manual annually throughout the term of the project.

The Company requires that Contractors:

- Comply with applicable federal, state and local EHS laws, regulations and requirements. In addition, where applicable, comply with FDA Food Safety Modernization Act (FSMA) requirements.
- Maintain communication with the employee representing the Company with the primary responsibility of overseeing the completion of the work being performed by Contractor personnel ("**Company Representative**") throughout the duration of the project.
- Commit to worker health, safety and environmental protection and maintain an effective EHS compliance program.
- Employ only trained qualified individuals at the work site.
- Provide employees with appropriate equipment and training to protect workers and eliminate adverse environmental impacts.
- Work in a legal and ethical manner to protect the environment, as well as the health and safety of their work force at the project site.
- Cease operations immediately if a serious health, safety or environmental hazard exists at the work site.
- Review each project to identify activities that may create safety hazards or adverse impacts to the environment or the public.
- Hold jobsite safety meetings with all affected employees.
- Perform EHS site audits to identify and correct substandard EHS conditions and work practices.
- Provide full time, on-site safety coordinator/supervisor when the number of employees or subcontractors exceeds 20 employees, unless otherwise directed by the Company's Representative. The Safety Coordinator shall have adequate documented training and experience to perform the role.

Contractor employees must notify their supervisor of any unsafe conditions observed at the jobsite or work conditions having an adverse impact on the environment or the public. Contractor employees should stop work if an unsafe condition is not mitigated or controlled sufficiently.

Contractors are advised that the Company retains the right to question Contractor employees regarding the content of this manual and to stop work if Contractor employees are observed operating in disregard to EHS requirements.

If these standards are not clearly understood, or if safety problems arise which are not covered by these standards, contact the Company Representative or safety supervisor before proceeding.

All contractors shall provide direct supervision of their employees. Contractors or subcontractors shall not be supervised by Company personnel.

The minimum age requirement for all Contractor and temporary workers is 18 years.

The company has established "Cardinal Safety Rules (CSR)" to recognize that some safety procedures that, if not followed, can result in serious injury or death. The Company requires that the Contractor take these procedures equally seriously. If a Contractor is observed violating a Category One CSR, the event will be fully investigated by the company and disciplinary action will be taken up to and including immediate removal from project and banishment from future projects. The Category One CSR Rules require full compliance with the following company and regulatory requirements:

- Hazardous Energy Control
- Permit Required Confined Space
- Working at Heights
- Drug and Alcohol
- False Reporting

The requirements contained in this Manual are included as part of the Contract for Services with the Contractor. By signing the Contract for Services, the Contractor agrees to perform all activities in conformance with this manual as well as all applicable Safety and Health regulations.

1.0 DEFINITIONS

1.1 COMPANY:

Lhoist North America, including its subsidiaries and related entities.

1.2 COMPETENT PERSON:

A competent person is one who has been trained and is authorized to identify existing and predictable dangers and hazards in employee working conditions and has the authorization and training to take prompt corrective action.

1.3 CONTRACTOR:

Any person contracted to perform short or long-term work for the Company. With respect to this policy, references to "Contractor" shall also include sub-contractors, third party contractors, third party inspectors, consultants, and day laborers hired by the contractor.

1.4 COMPANY REPRESENTATIVE:

The person representing the Company with the primary responsibility of overseeing the completion of the work being performed by Contractor. Generally, the Company Representative is an LNA employee but could be a contracted third party.

1.5 COMPANY PROPERTY, JOBSITE, JOB, WORKSITE OR CONSTRUCTION SITE:

Property on which Contractor will be performing work for the Company whether owned or operated by the Company or not, including terminals, facilities, stations, roads, parking lots, pipeline rights-of-way, common areas, compressor/pump station or offices.

1.6 WORK:

All services, acts, obligations, duties, and responsibilities necessary to the successful completion of the project assigned to or undertaken by Contractor under the Contract Documents, including the furnishing of all labor, services, materials, equipment and other incidentals.

2.0 PRE-JOB REQUIREMENTS

- 2.1 Prior to performing any work, all contractor employees must receive site-specific training. training shall include a review of emergency procedures, restricted areas, security, hazards that contract personnel may encounter, evacuation routes, assembly areas, emergency systems (such as eye washes, safety showers), Contractor access and parking requirements, and FSMA requirements (where applicable).
- All Contractor employee orientations shall be documented with the content of the orientation. The document must be signed by the contractor employee.
 - A copy of the completed form shall be retained by the Company project representative and placed in the job file.
 - Where applicable Contractor employees shall be issued the Company's current "Contractor Safety Orientation" sticker for their hard hats.
 - Site-specific orientation must be repeated each calendar year.
- 2.2 All Contractor employees and visitors to Company facilities or job sites shall sign in each time they enter/leave Company property.
- 2.3 Visitors shall not be granted entry without an escort and prior permission from Company site personnel.

3.0 ACCIDENT / INJURY REPORTING

- 3.1 A Reportable Incident within LNA is defined as any act, accident, injury, occurrence, unwanted release of energy, unwanted release of product or near miss (defined below) situation that is not considered a normal operating procedure; an occurrence which results in employee injury or monetary loss.
- 3.2 A Near Miss, near hit or close call is an unplanned event that has the potential to cause, but does not actually result in human injury, environmental or equipment damage, or an interruption to normal operation.
- 3.3 The Contractor shall immediately report all Reportable Incidents to the Company Representative and the local EHS representative. A determination by the Company will be made if MSHA should be contacted immediately.
- 3.4 The Contractor supervisor (or designated safety representative) shall submit a copy of the written report and investigation to the Company Representative within 24 hours of occurrence.
- 3.5 The Contractor shall investigate all incidents that result in, or have the potential to result in, injury or illness, property damage, process/product loss or harm to the environment.
- 3.6 The investigative process includes identifying root causes or causal factors that contributed to the occurrence, determining the necessary corrective actions and timely follow-up to ensure that corrective actions have been completed. Based on the severity of the incident, the Contractor will be required to submit a detailed root cause analysis in a timely manner.
- 3.7 After the Company Representative has completed the investigation the report shall be forwarded to the Company EHS representative for review and approval. The Contractor and Company representative will work together to define any corrective actions needed.
- 3.8 In addition to the Contractor's analysis/investigation, the Company retains the right to investigate any illnesses, injuries, fatalities, accidents or near misses occurring at its jobsite.
- 3.9 Contractors shall maintain an OSHA 300 Log (if applicable) or MSHA Accident and Injury Log Part 50, 7000-1 Form, for their respective employees. Contractors may be required to supply a safety and environmental performance report on a weekly basis, summarizing injuries and illnesses with total work hours and the total number of employees and the total number of spills and/or releases to the environment that have occurred on the project.
- 3.10 All contractor workers involved in any incident, which results in property damage (including mobile equipment) or injury (including first aid), will be required to undergo a drug (10 panel) and alcohol screening to determine if the contractor is impaired. The worker(s) cannot return to work on Lhoist property, until the test results are reviewed by an LNA representative. If the results are positive, the workers will be banned from working at all company locations until re-instated per LNA guidelines.

4.0 ASBESTOS

- 4.1 The potential of encountering Asbestos-Containing Material ("ACM") while performing work in Company facilities exists. It is the responsibility of the Company to identify those areas where ACM may be present and to inform Contractors of the presence and location of the ACM.
- 4.2 The Contractor shall contact the Company Representative prior to removal of ACM and notify the applicable state agencies as required by regulation.
- 4.3 All Contractors who perform work where a potential for exposure to asbestos exists shall have a written ACM Compliance Program that meets the minimum content requirements as it relates to their specific scope of work.
- 4.4 For work requiring asbestos removal, the Contractor shall provide supervision by an individual that has received comprehensive abatement training that meets the EPA Model Accreditation Plan criteria. All asbestos abatement workers shall be trained to understand the associated health hazard, as well as the personal protective equipment and monitoring requirements associated with asbestos abatement. Training records and certificates shall be documented and maintained by the Contractor. All training records and certificates shall be readily available for review by the Company upon request.
- 4.5 An enclosure shall be constructed around the area from which friable asbestos is to be removed to restrict emissions to adjacent areas.
- 4.6 The Contractor shall maintain a written work plan delineating the scope of work, responsible parties and site-specific work procedures. This work plan shall be available at the jobsite.
- 4.7 Daily exposure monitoring shall be conducted to ensure worker exposure is less than the Permissible Exposure Limit. Appropriate respiratory protection shall be worn as determined by the monitoring results. The Company may request documentation of monitoring results.

5.0 CHAINS, SLINGS, CABLES, AND LIFTING EQUIPMENT

- 5.1 The Contractor shall ensure all pins, rings, chains, slings, cables, and other lifting equipment are applicable for the job and are maintained according to the manufacturer's requirements.
- All chains, slings and cables shall have an identification tag attached that shows its load rating and limitations. Never exceed the assigned load rating for chains/slugs/cables.
 - Chains shall not be used for vertical lifting of materials weighing over 1000 lbs.
 - Employees shall be trained in rigging practices.
 - Lift plans shall be conducted prior to lifts.
 - Risk Assessments shall be conducted, and hazards mitigated prior to work.
- 5.2 Daily inspections before use shall be conducted by the Contractor to look for wear, abrasions, collapse, and any other visible damage. A person trained to recognize defects shall perform the required inspections. Defective or damaged chains, slings, cables, or components shall be removed from service immediately. Hooks, rings, links, or any coupling device shall have the same or higher rating as the chain to which it is affixed. Never use makeshift links or coupling devices. Make sure attachments meet the same load standards as the cable.

6.0 CONFINED SPACE ENTRY

- 6.1 Where confined space hazards exist, the Contractor is required to have a written Confined Space Entry Program. The Contractor's written program shall meet the minimum requirements of 29 CFR 1910.146(c) (4) and any applicable MSHA, state and or local Confined Space Entry regulations and requirements.
- 6.2 Various recognized confined space areas on Company property fall under the OSHA definition of "Permit Required Confined Space." The Company may choose to treat all confined space areas as "Permit Required Confined Spaces," depending upon the type of work to be performed within the space.
- 6.3 Confined space means a space that:
- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
 - Has limited or restricted means for entry or exit; and
 - Is not designed for continuous employee occupancy.
- 6.4 Confined spaces may include, but are not limited to pits, tanks, vessels, vaults and manholes.
- 6.5 Permit Required Confined Space (permit space) means a confined space, as defined above, which has one or more of the following characteristics:
- Contains or has the potential to contain a hazardous atmosphere;
 - Contains a material that has the potential for engulfing an entrant;
 - Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
 - Contains any other recognized serious safety or health hazard.
- 6.6 The Contractor employees shall not enter a Permit Required Confined Space until they have:
- Been trained in Permit Required Confined Space Entry;
 - Completed and posted a written confined space permit issued by the Contractor and signed off by Lhoist at the entry location;
 - Ensured all potential sources of toxic fumes and flammable vapors have been identified and isolated;
 - Available properly functioning air monitoring equipment and an air monitoring plan.
 - A defined rescue plan and readily available rescue equipment as defined in the rescue plan to respond in the event of an emergency.
 - Assigned a trained attendant dedicated exclusively, for the duration of the work, to those duties detailed in the Permit Required Confined Space procedure and capable of initiating an emergency rescue.
- 6.7 Training records and certificates shall be documented and maintained by the Contractor and made available upon Company request.

7.0 CONTROL OF ALCOHOL, ILLEGAL DRUGS AND FIREARMS

- 7.1 The possession of firearms or other perceived dangerous weapons while on Company property is strictly prohibited.
- 7.2 The use, sale, purchase, transfer or possession of alcohol or any illegal drugs or any controlled substance for which you do not possess a valid prescription is strictly prohibited while on Company property.
- 7.3 Based on the contracted activities, such as DOT requirements, the Contractor and its subcontractors may be required to establish and maintain acceptable Anti-drug and Alcohol Misuse Programs.
- 7.4 The Contractor shall have a written "Drug and Alcohol Policy" and shall provide a copy upon request. The policy should include pre-hire D&A testing and random testing requirements.
- 7.5 If a contractor is involved in an accident resulting in injury or property damage, or if the company representative believes there is reasonable suspicion that a worker is impaired while working, the company representative will request the worker stop working and will notify the contractor supervisor to request a drug and alcohol test. The worker will not be able to return to work at Lhoist facilities until negative test results have been provided.

8.0 ELECTRICAL SAFETY

- 8.1 The Contractor shall be responsible for implementing all electrical safety requirements in accordance with OSHA and MSHA Regulations.
- 8.2 Work on “live” electrical components at 50v (ac or dc) or higher is prohibited without written approval by LNA. Requests for such work must be submitted in writing to the Contractor Representative and approved by the Plant Manager prior to the commencement of any “electrical hot work”.
- 8.3 The Contractor shall identify all overhead power lines in the work area with signage. When it is determined that electrical lines may be affected, the Contractor shall take steps to elevate, cover or otherwise protect such cables from incidental contact. The Contractor shall advise their employees of the location of any power lines, the hazards involved and the protective measures to be taken. This also includes power cords located on the ground.
- 8.4 The Contractor shall contact the local utility company and be aware of any special requirements. Contractor shall maintain the clearance to the power line facilities in accordance with 29 CFR 1926.550(a) (15).
- 8.5 Contractor shall clearly mark all lifting or boom type equipment to show the maximum height or extension possible as measured from the ground level. If the work cannot be performed while maintaining the proper working clearances, a detailed work planning meeting shall be held with the Company Representatives, Contractor and utility company.
- 8.6 In addition to federal, state and local EHS laws, regulations and requirements, where applicable the Contractor shall meet the following general guidelines:
 - National Electric Safety Code – NESC
 - National Association of Corrosion Engineers – NACE – Standard RP-01-77
 - National Fire Protection Association – NFPA – 70E (Latest Edition)
- 8.7 In work areas where the exact locations of the underground electrical power lines or other utilities are unknown, the Contractor shall locate and clearly identify all such lines prior to beginning excavation. Power cable systems within the work area shall be de-energized during excavation whenever there is doubt about cable location.
- 8.8 The Contractor shall protect employees from electric shock while using power tools, appliances, and related equipment. The Contractor shall install a Ground Fault Interrupter (“GFI”) on all power outlets/sources that will be used during construction and maintenance.
- 8.9 Continuity and resistance of grounding systems shall be tested immediately after installation, repair, and modification; and annually thereafter. The resistance measured during the most recent tests shall be recorded and made available on a request.
- 8.10 For Company equipment operating on 440 volts or higher, Contractors shall use caution around all electrical equipment, especially in wet weather. In addition to the following safety precautions, applicable laws, regulations, and operating procedures shall be followed when work is performed with or around electrical equipment:

- Always follow the Company's Lockout/Tagout/Try procedures.
- Only qualified and authorized employees shall work on electrical equipment. Training records and certificates shall be documented and maintained by the Contractor and made available upon Company request.
- All electrical equipment shall be properly grounded and/or bonded.
- Reconnect all grounding/bonding cables that were removed before energizing the equipment.
- All electrical equipment will be treated as if it were energized.
- The Contractor shall not leave cover plates off electrical connection boxes, pressure switches or similar small electrical equipment. Replace all cover plate bolts or screws when work is completed, and equipment energized. Do not leave the door or front panel open on any motor controller or other electrical enclosure.
- Guards and barriers shall be used to prevent accidental contact with exposed circuits.
- Where appropriate Arc Flash PPE and training may be required.

9.0 EMERGENCY EVACUATION PROCEDURES

- 9.1 The Contractor and contract personnel shall be familiar with the Company site specific Emergency Evacuation Plan, including the location of assembly areas and routes of evacuation. In the event of a fire or hazardous materials release the Contractor and their personnel are to follow the direction of Company personnel unless otherwise directed by emergency personnel (e.g., fire department, police or other regulatory personnel).
- 9.2 The following is a summary of Contractor requirements in the event of an emergency:
- Shut off all equipment if doing so does not present a risk of bodily injury;
 - Evacuate the area. In the event of a fire or other emergency incident, contract employees are to immediately evacuate the area by the safest available route. Normally, evacuation routes shall be as specified by Company personnel;
 - Confirm all Contractor employees are accounted for;
 - All Contractor employees shall remain at the assembly areas until directed otherwise by Company or emergency personnel.
- 9.3 If any Contractor employee suspects that an emergency condition exists, they shall immediately contact Company personnel as described within the site-specific training or local authorities (e.g., call 911 or the emergency phone number in the area).

10.0 ENVIRONMENTAL REQUIREMENTS

- 10.1 The Contractor shall review and comply with all applicable environmental permits and all applicable federal, state, and local environmental laws, regulations, and requirements.
- 10.2 The Contractor shall handle, treat, characterize, and dispose of all waste in accordance with the Resource Conservation and Recovery Act ("RCRA") and any specific contract requirements, such as Company approval of the disposal site. The Contractor shall maintain a clean and safe worksite by properly disposing of trash and debris. Trash and debris generated from the project shall not be burned on site. Waste and hazardous materials shall be labeled, stored, or secured while on the worksite. Unused hazardous materials shall depart the site with the contractor.
- 10.3 The Contractor shall not make any un-permitted discharges to water. If the Contractor obtains a discharge permit under the Clean Water Act ("CWA") or an applicable state law, it shall comply with all permit requirements.
- 10.4 The Contractor shall perform work in a manner that prevents offsite effects of soil erosion and sedimentation in compliance with the CWA. The Contractor shall stay on approved access roads, working and parking areas. Clear and grade only areas necessary for construction by separating and replacing topsoil in accordance with project requirements. Sediment barriers shall be installed, inspected, and maintained to contain spoil on the construction site and away from wetlands and water bodies. Disturbed areas shall be stabilized as soon as possible following construction in compliance with permit conditions or in accordance with landowner requirements.
- 10.5 The Contractor shall not collect or disturb cultural artifacts or human remains in compliance with the National Historic Preservation Act ("NHPA"). If artifacts or remains are discovered, work shall stop immediately in the areas of the discovery and a Company Representative shall be notified. Work in the area may resume only after the Company provides approval.
- 10.6 The Contractor shall not agitate, take, feed or otherwise harm wildlife or migratory birds or their nests in compliance with the Endangered Species Act ("ESA") and the Migratory Bird Treaty Act ("MBTA"). If wildlife or migratory birds and/or nests are affected by the construction activity, Contractor shall stop activity in the area and notify a Company Representative. Work in area may resume only after the Company provides approval.
- 10.7 All Contractors who meet the requirements for needing a Spill Prevention Control and Countermeasure plan ("SPCC") shall comply with all applicable local, state and federal requirements. The SPCC, if needed, shall be submitted to the Company.
- 10.8 Contractors must register all petroleum aboveground storage tanks (ASTs) as required by state regulation and must meet all AST regulatory requirements.
- 10.9 Spills resulting from Contractor activity shall be reported to a Company Representative immediately, reported to regulatory agencies, and cleaned-up in accordance with state and federal regulations. Contractors shall investigate and document all Contractor incidents within 24 hours. These types of spills include but are not limited to: small quantities of hydraulic fluid, motor oil and fuel spilled

during equipment refueling operations. For spills of petroleum product, chemicals, or other hazardous materials release, also see Identification of Hazardous Materials Section 19.0.

- 10.10 With respect to dust control and any other requirements related to clean air, the Contractor shall comply with all Federal, State, and local regulations, including, but not limited to, the Clean Air Act.

11.0 FOOD SAFETY MODERNIZATION ACT (FSMA)

- 11.1 Facilities certified to the 21 CFR Part 507 the Contractor shall review and comply with all required conditions prior to and during work.
- 11.2 The Contractor shall not introduce any biological, chemical, or physical materials or objects into the Company's product.
- 11.3 The Contractor shall follow Good Manufacturing Practices as described by FSMA. This includes but is not limited to wearing jewelry, eating, or drinking in unauthorized area, practicing proper personal hygiene, and no spitting or tobacco products.
- 11.4 The Contractor shall account for all tools or equipment used in the work to ensure none are left in the process after the work is completed.
- 11.5 Site specific training and daily sign-in sheets constitutes acceptance of these requirements.

12.0 EXCAVATIONS/TRENCHING/SHORING

- 12.1 All projects concerning excavation, including but not limited to trenching and shoring, shall comply with the requirements outlined in 29 CFR 1926 Subpart P.
- 12.2 Adequate protective systems such as benching, sloping or shoring are required when the sides of a trench are more than five feet deep. The use of protective systems is also required if an excavation is less than five feet in depth and the soil is unstable.
- 12.3 Excavations over 20 ft deep or that do not meet OSHA requirements shall be designed by a Professional Engineer. This design shall outline the Contractor's plan for excavation requirements, such as trenching, sloping and or shielding for the project. The Professional Engineer design documentation shall be on site.
- 12.4 All excavations shall be inspected daily by a trained and competent individual ("Contractor's Competent Person"). The Contractor's Competent Person shall conduct daily excavation inspections prior to anyone entering an excavation and this documentation shall be present at each excavation. If the inspection shows the area to be unsafe, the unsafe condition shall be mitigated prior to resuming work.
- 12.5 A secured ladder, ramp or other means of egress shall be provided within 25 feet of all workers in a trench that exceeds four feet in depth.
- 12.6 Each job specification will determine what atmospheric monitoring (e.g., O_2 , LEL, H_2S , CO), will be conducted prior to an employee entering an excavation that exceeds 4 feet in depth and has the potential to contain a hazardous atmosphere.
- 12.7 Excavated material shall be placed at least two feet away from the edge of the excavation (e.g., tools, spoil pile, rocks, broken concrete, or other debris).
- 12.8 If walkways are provided over excavations, they shall be capable of supporting the weight of the traffic, guardrails and toe boards are required if employees will be working below the walkway.
- 12.9 After dark, excavations shall be secured to keep vehicles and unauthorized personnel out. It is required that all excavations in high profile/traffic areas warn of the danger by utilizing high visibility fencing material placed 6 feet from the edge of the excavation when possible.
- 12.10 A Company Representative shall review each excavation inspection report for accuracy and completion and retain in the job file.
- 12.11 See the Company facility or business unit's site-specific excavation procedures for any additional requirements.

13.0 FALL PROTECTION

- 13.1 Fall protection devices shall be used whenever fall hazards of four feet or greater exist.
- 13.2 Training records and certificates shall be documented and maintained by the Contractor and made available to the Company upon request.
- 13.3 Workers shall be protected from fall hazards by guardrails or personal fall arrest systems. Personal fall arrest systems shall be rigged so the worker cannot fall more than six feet or contact any hazard at a lower level.
- 13.4 Full body harnesses, shock absorbing lanyards and a proper attachment point are the minimum requirements for a personal fall arrest system. All fall protection devices shall be properly stored, maintained, and inspected for defects before each use. A person trained to recognize defects shall perform the required inspections on fall protection devices prior to each use. Defective or damaged harnesses, lanyards or any fall protection components shall be removed from service immediately.
- 13.5 Harnesses, lifelines, retractable lifelines, and lanyards shall be constructed of a durable material and marked with a tag stating maximum load and name of the manufacturer. Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds. The Contractor is responsible to supply all fall protection equipment required for their employees. Positioning devices shall be rigged to prevent free falls more than two feet.
- 13.6 The Contractor shall provide a trained and certified Competent person to oversee fall protection and compliance. All workers who will don fall arrest equipment shall receive training from a Competent Person, which includes fall protection systems, equipment inspection, and rescue planning. Training records and certifications will be provided to the Company upon request.
- 13.7 Prior to any work requiring fall arrest equipment, the Competent Person shall complete a written hazard assessment to ensure equipment (anchor points, lanyard, and harness) is appropriate and protective measures are in place to prevent serious injury and a rescue plan is defined. The Contractor will confirm the defined rescue personnel and equipment is readily available prior to performing the work.
- 13.8 The Company representative or company safety supervisor may audit a Working at Heights activity. Any identified shortcomings will be corrected immediately by the contractor.

14.0 FIRE PREVENTION AND PROTECTION

- 14.1 The Contractor shall be required to provide fire prevention protection in accordance with the requirements outlined in 29 CFR 1910 Subpart L and 1926 Subpart F and/or MSHA and/or any environmental regulatory requirements. Fire extinguishers shall be used only for the control of incipient stage fires.
- 14.2 A *Fire Watch* is an individual who has been designated for monitoring hot work activities. This individual can evaluate unsafe conditions and initiating emergency action in the event of a fire. The fire watch can have no other assigned duties while conducting this task and must be maintained at least 60 minutes after the hot work is complete
- 14.3 The Contractor shall supply firefighting equipment and ensure a Fire Watch is present while performing any hot work within 35 feet of combustible material or as requested by the Company.
- 14.4 Training records for the Fire Watch shall be documented and maintained by the Contractor and made available to the Company upon request.
- 14.5 Fire response equipment shall be inspected on a periodic basis, maintained in good working condition, and be available during all hot work activities.
- 14.6 Smoking is allowed only in designated areas. Designated smoking areas will be identified during the project pre-job construction meeting.
- 14.7 "Strike Anywhere" matches or uncovered and trigger-type lighters are not allowed where potentially hazardous atmospheres may exist.
- 14.8 Fire extinguishers must contain a minimum, 4.5 pounds extinguishing agent. Larger extinguishers may be required depending on work to be performed and area where work is performed.

15.0 FIRST AID & BLOODBORNE PATHOGENS

15.1 The following are the minimum first aid requirements for Contractors working at Company facilities:

- First Aid Trained Personnel: The Contractor shall have personnel trained and immediately available to provide first aid treatment at the job site. All trained personnel shall carry a current first aid certificate.
- First Aid Kit: Each Contractor shall supply each job site with first aid kit supplies sufficient for potential exposures and number of employees at the job site.
- Emergency Procedures: Each Contractor shall post a copy of the Company's and/or Contractor's emergency medical procedures at the job site or have a copy immediately available to all employees. The procedure shall include:
 - The name of the hospital or emergency care center where employees are to be transported for treatment of non-life-threatening injuries;
 - Travel route to the hospital or emergency care center and emergency telephone numbers;
 - The statement "IN CASE OF SERIOUS INJURY CALL 911" (or a specified emergency number).

15.2 The following are the minimum bloodborne pathogens requirements for Contractor's working at Company facilities:

- The Contractor's employees shall be properly trained in basic bloodborne pathogen exposure, control, and post-accident sanitation procedures.
- The Contractor shall provide bloodborne pathogen protection supplies in a location accessible to all Contractor employees.

16.0 HAZARDOUS ENERGY CONTROL (LOCKOUT/TAGOUT)

- 16.1 The Contractor's hazardous energy control procedures shall follow applicable guidelines in accordance with the requirements outlined in 29 CFR 1910 Subpart S, 1926 Subpart Q, and 30 CFR 56/57 Subpart K and Subpart M.
- 16.2 The Contractor's key individual responsible for Lockout/Tagout/Try shall be identified to the Company Representative. All Lockout/Tagout/Try will be coordinated with Company operations personnel prior to the Contractor working in an area of hazardous or stored energy
- 16.3 Contractor will supply all needed lockout and isolation equipment, including locks, tags, and lock boxes.
- 16.4 The Contractor may not perform work until written approval, in the form of a Company Work Permit, has been received and understood.
- 16.5 The Contractor will ensure they understand the LNA's lockout/tagout/try requirements, including one lock/one person and adherence to lockout and tagout warnings.
- 16.6 All contractor employees involved in a locking out equipment shall be properly trained. Training records and certificates shall be documented and maintained by the Contractor and made available upon Company request.
- 16.7 If the lock owner is not available to remove their lock at the end of task, a formal Forced Lock Removal form must be completed and signed by the Plant manager or his/her representative prior to removing the lock.

17.0 HOT WORK PERMITS

- 17.1 *Hot Work* shall be defined as any work that involves the use of open flames or other sources of ignition with the potential to generate a spark, heat or static electricity that could cause a fire or explosion.
- 17.2 The Contractor shall establish written hot work procedures.
- 17.3 A Hot Work Permit is required PRIOR to the start of any hot work and/or work that creates a source of ignition. Hot work permits will be coordinated with Company operations personnel or designee prior to commencing any hot work. Contractors performing hot work shall be responsible for the safe execution of assigned tasks. If an unsafe condition (or potentially unsafe condition) arises, work shall be stopped, and the condition must be reported to Company management or designee.
- 17.4 Work involving open flames or other sources of ignition on the exterior of tanks, pipelines and other structures that contain flammable or combustible liquids or any other hazardous atmosphere, presents a wide variety of potential hazards. Adequate knowledge of the work to be performed is essential. Proper safeguards shall be established to guard against unsuspected changes in the situation that may alter the working conditions. Hot work intended for “in-service” equipment shall follow procedures set forth for all hot work activities. Special precautions shall be identified in the hot work permit.
- 17.5 Unless rated for the hazardous location, cell phones, computers, radios, lighting, or pagers shall not be allowed in an area where a hazardous atmosphere may exist, unless the atmosphere has been determined to be non-hazardous and a hot work permit has been completed.

18.0 HAZARDOUS MATERIALS

- 18.1 All Contractor and/or or sub-contractor employees shall be trained by their company in Hazard Communication (HazCom). The Contractor shall maintain a written program in accordance with MSHA 30 CFR Part 47 or OSHA 29 CFR 1910.1200 and applicable state and local regulations that instructs employees to comprehend Safety Data Sheets (SDS), labels and safe hazardous material handling.

Contractors shall maintain a list of hazardous chemicals, their use and storage location on the job, and the associated SDS. Training shall be performed that identifies the hazards associated with the specific chemicals and their proper handling procedures.

All chemicals used on site shall be clearly labeled in accordance with the Globally Harmonized System of Hazard Communication (GHS), and safety precautions/warnings shall be clearly visible.

Contractor employees shall be informed by the Contractor of all hazards associated with performing tasks and the physical hazards that may be present at the jobsite.

- 18.2 Company shall inform the Contractor of how and where to locate safety data sheets (SDS) and any additional PPE requirements for known hazardous chemicals on site.

19.0 TASK RISK ASSESSMENT

- 19.1 Prior to work commencing, the Contractor shall conduct a daily Task Risk Assessment (TRA), using the Company TRA form (refer to Appendix A – Task Risk Assessment) or an equivalent one, to identify task hazards and define mitigation measures each hazard. This assessment shall be based on the daily job scope and work area to confirm the existence of safe working conditions for their employees. Mitigation measures will be put in place before the task is performed.
- 19.2 The Contractor shall make the TRA available to the Company Representative to review for accuracy and completion and retain in the job files.
- 19.3 Contractor shall ensure pre-placement qualifications are conducted on all job tasks to ensure employees are qualified to perform the task based on the scope of work to be performed. MSHA required task training documentation shall be provided at company request.

20.0 NOISE / HEARING CONSERVATION

- 20.1 Hearing protection shall be worn in all areas where ear protection requirements are posted by the Company or the Contractor.
- 20.2 Contractors are required to wear hearing protection when operating or using any equipment that emits noise at a level greater than 85 decibels.
- 20.3 As a general rule, if monitoring devices are not readily available, Contractors shall wear hearing protection if it is necessary to speak above normal conversational tones to be heard.

21.0 PERMIT TO BEGIN WORK

- 21.1 The Contractor is responsible for obtaining all applicable agency required permits and making all required notifications PRIOR to the start of work, unless permits are obtained, and notifications are made by the Company. This includes "One Call" or excavation notices within required timelines.
- 21.2 When required by regulation, the Contractor shall prepare a Safe Work Permit with approval from the Company Representative PRIOR to the start of work. The permits shall identify work to be completed, additional permits that may be required, potential hazards and safety measures to be followed. Additional permits that may be required are discussed in applicable sections of this manual.
- 21.3 The completion of risk assessments is required prior to work. Hazards associated with the tasks shall be identified and mitigated.

22.0 PERSONAL PROTECTIVE EQUIPMENT

- 22.1 The Contractor is required to maintain a written PPE program. Contractors shall provide training in the proper use, maintenance, and inspection of PPE to their employees PRIOR to beginning work.
- 22.2 The daily Task Risk Assessment shall identify and document any special or additional PPE requirements based on the scope of work to be conducted. (See Section 19 related to Task Risk Assessment)
- 22.3 All PPE shall comply with the applicable standards specified for that equipment.
- 22.4 The Company shall not be required supply PPE to Contractor's employees on a routine basis.
- 22.5 The minimum PPE includes hard hats, safety glasses, steel-toed boots and shall include, if needed, any site-specific PPE requirements. Refer to Appendix B – PPE Requirements for a summary of this information.

- Eye and Face Protection - Eye protection equipment shall comply with the latest revision of ANSI Z87.1. Side shields shall be worn on all safety glasses, prescription glasses included. Seal eye protection is required in high dust areas. Contact Lens are not recommended if working in areas that may generated dusty conditions.
- Head Protection – (Hardhats) Head protection shall comply with the latest revision of ANSI Z89.1.
- Body Protection and High Visibility Clothing – See Section 30 for Work Clothing for everyday body protection requirements.

Contractors shall wear a fluorescent orange-red vest, shirt, or jacket as an outer garment. Garments shall at a minimum meet the criteria of Performance Class 2 requirements as defined in ANSI/ISEA 107/2015-High Visibility Safety Apparel and Accessories and summarized below:

Type R Class 2 HVSA shall utilize at least one horizontal band of retroreflective or combined-performance material around the torso and shall include at least the minimum amounts of retroreflective or combined-performance material in the shoulder area if encircling bands are not present on sleeves.

ANSI/ISEA 107-2015 – Table One – Minimum Areas of Visible Materials

Garment Type	Performance Class	Background Material	Retroreflective or Combined-Performance Materials	Minimum Width Reflective Material
Type R Roadway and temporary traffic control	Class 2	0.50 m2 (775 in2)	0.13 m2 (201 in2)	25 mm (1 in.) 35 mm(1.38 in.)

- Foot Protection - Safety boots must meet the following minimum requirements: meet the minimum standards of ANSI Z41.1 or ASTM F2413; have a steel or composite "safety toe"; have a pronounced heel (flat bottom boots are not allowed); soles shall be slip and oil resistant; have a minimum of six inches in height as measured from the bottom of the heel to the top of the boot; and be in good condition and not show excessive wear.

- Hearing Protection - Hearing protection shall be worn in areas that have been identified or where there is a potential for exposure to high sound levels (above 85 dB).
 - Hand Protection - Protective gloves, appropriate for the hazard (cut resistant, chemical resistant, vibration resistant, etc.) shall be worn where hand hazards exist, and in accordance with site requirements. Cut level 4 shall be the minimum standard for general all-purpose gloves and for tasks where cut hazards are present. Other hazards should be specifically addressed with an appropriate specialty glove. (i.e., high heat, chemical, etc.) Impact level 1 shall be the minimum standard for tasks where impact hazards exist. Elevated hazards identified during the risk assessment process may determine that higher protection levels are needed.
 - Respiratory Protection (also see Section 23) - dust masks, respirators and other respiratory protection may be required for certain tasks or where certain chemicals, or conditions exist. It is the contractor's responsibility to ensure that their personnel meet the requirements (e.g., fit testing, medical release) for the use of respiratory protection equipment.
- 22.6 PPE shall be upgraded when performing tasks that require additional protection or when changes in conditions are noted during monitoring of the site. Specific PPE requirements for handling hazardous substances are available in the SDS.
- 22.7 PPE Free Zones: In areas where there are no operational risks, PPE is not required. These areas are typically limited to parking lots, breakroom and administrative areas. Each site will define such areas. "PPE Free" do not require the use of PPE as defined in this document.

23.0 REGULATORY AGENCY INSPECTIONS

- 23.1 It is company policy to cooperate with authorized regulatory agency inspections. The Contractor is required to ensure regulatory inspections are treated with high priority and with the utmost professionalism.
- 23.2 Upon notification of a regulatory agency audit or when it is apparent an inspection is about to take place, the Contractor shall immediately notify the Company Representative and ask the agency inspector to wait to begin the inspection until the Contractor speaks with the Company Representative.
- 23.3 Where applicable, the Contractor shall ask the regulatory inspector to sign the visitor's register/log.
- 23.4 If the Contractor observes the regulatory inspector not following company safety requirements, procedures and PPE requirements, the Contractor shall inform the inspector of the requirements.
- 23.5 A Company Representative shall accompany any regulatory inspector when on Lhoist property.
- 23.6 The Contractor shall take immediate action to correct violations as requested.
- 23.7 When the inspector collects samples or takes measurements, the Contractor shall verify any readings by having qualified employees perform parallel sampling and/or monitoring.
- 23.8 After the agency inspection exit interview:
- The Contractor shall coordinate with the Company Representative to determine potential violation items, actions for compliance, responsible parties and estimated completion date for actions.
 - The Contractor shall provide a legible copy of their walk-around notes to the Company Representative.
 - The Contractor shall promptly correct all conditions that are in violation of regulations or standards and document the corrections taken.
 - If the Contractor receives a citation, the Contractor shall notify the Company Representative immediately.

24.0 RESPIRATORY PROTECTION

- 24.1 Contractors shall follow an approved written program relating to respirator use during work activities when required per OSHA 29 CFR 1910.134 and applicable MSHA regulations.
- 24.2 Contractors shall supply their employees who are potentially exposed to hazardous materials above permissible exposure limits with all necessary respiratory protection equipment.
- 24.3 Contractor employees shall be certified as medically fit for duty by a medical professional prior to issuance of respiratory protective equipment and shall pass an annual "Fit Test" for the required respirators.
- 24.4 The Contractor's written respiratory protection program, training records and certificates, medical clearance to use respiratory protective equipment and fit test records shall be documented and maintained by the Contractor and made available to the Company upon request. Contractor employees that are required to wear respirators shall be clean-shaven.
- 24.5 The Contractor shall appoint a designated individual to perform air monitoring at the jobsite as needed to ensure compliance with any applicable regulations. This designated individual will inform Contractor employees when respiratory protection is required and will continue to monitor to determine if site conditions change.

25.0 SCAFFOLDS AND LADDERS

Lhoist recognizes the serious risks associated with improper installation and maintenance of scaffolds. As such Lhoist will closely monitor the design and installation of scaffolds to ensure compliance with the requirements in this section.

25.1 Scaffolds and ladders shall be installed and used in accordance with the requirements in OSHA Regulations 1926.451 and MSHA guidelines.

25.2 Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design.

All contractor employees who are involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold shall be trained by a Competent person to recognize any hazards associated with the work in question.

All contractor employees that use the scaffolding shall be trained by a Competent person to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards.

All certifications and training records described above will be maintained by the contractor and made available to the Company upon request.

25.3 The Contractor shall ensure that Scaffolding design and construction provides:

- A fall arrest system in place for employees installing the scaffolding.
- Level footing capable of supporting the loaded scaffold without settling.
- Components that can support at least 4 times the maximum intended load.
- Scaffolds shall not be altered from their original design.
- Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load.
- An access ladder or equivalent form of safe access shall be provided.
- All scaffolding is required to have guardrails and toe boards. The rails shall be 2" x 4" or the equivalent.
- All platforms shall overlap at least 12 inches and be secured from movement.
- Overhead protection shall be provided to all employees working on or near scaffolding.
- Pole scaffolds shall be tied to the building or structure at intervals of no more than 25 feet.
- Scaffolds shall be inspected by a competent person before each work shift and after any occurrence that could affect the structural integrity. This inspection documentation shall be attached to each scaffold.

25.4 The Company onsite representative shall review each scaffolding inspection form for accuracy and completion daily.

25.5 The Contractor shall ensure ladders are:

- Inspected before each use.
- Extend 3 feet above the upper landing surface.

- Secured at the top and bottom to prevent slippage and workers use the three-point contact rule while working or climbing on a ladder.
- The Contractor shall not allow ladders to project into passageways or doorways where they could be struck by personnel, moving equipment, or materials being handled without protection by barricades or guards.

26.0 TRAINING REQUIREMENTS

- 26.1 The Contractor is obligated to perform the requisite safety training (OSHA or MSHA) for its personnel relative to the scope of the subject work activities. Training and documentation for the proper use and care of applicable safety equipment shall be provided by the Contractor. If applicable, copies of MSHA training certificates (5000-23) and MSHA Training Plan (Part 46/48A/48B) shall be provided to the Company representative or plant safety supervisor.
- 26.2 The Contractor shall conduct daily safety meetings to instruct their personnel in the recognition and avoidance of hazards in the workplace. Company Representatives/Inspectors may attend these meetings to evaluate their value and improve communications.
- 26.3 Training shall be documented by the Contractor or each employee involved in the subject work activities. The documentation shall include each training topic discussed, content, attendees, dates and the name(s) of instructors or persons presiding.
- 26.4 Safety meetings shall focus on topics related to the scope of work to be conducted to ensure all contract employees understand the safety requirements.

27.0 VEHICLE/MOBILE EQUIPMENT POLICY

- 27.1 Contractor personnel shall have the proper commercial driver's licenses to operate equipment on public roadways.
- 27.2 Permission is required for vehicular entry into all Company facilities. Special permission is needed for vehicles to enter restricted areas such as dike areas.
- 27.3 The Contractor shall comply with all applicable state laws. All persons shall be transported to and from the job site in a safe manner. Each passenger shall have adequate seating. Standing up in a moving vehicle is strictly prohibited. While on Company property or right of ways, riding in the back of a pick-up or similar truck that has not been equipped with adequate seating is not allowed. Seat belts must always be worn.
- 27.4 All posted speed limits and traffic regulating signs shall be observed. Persons shall only drive on designated roads or right of ways.
- 27.5 Reckless driving and horseplay is prohibited.
- 27.6 Only properly trained, qualified personnel shall be permitted to operate equipment or machinery. The Contractor shall keep records of training and qualifications on file and made available to the Company upon request.
- 27.7 Contractors are prohibited from operating Company owned equipment or machinery, except under specific written authorization by Lhoist management.
- 27.8 All operators of cranes, boom trucks, or mobile cranes (in excess of 5 tons) shall meet NCCCO/SCCHP certified crane operator requirements with valid documentation. The use of all cranes, boom trucks and mobile cranes shall comply with Federal, State or local requirements. Crane certifications and associated hoisting apparatus (such as lifting beams, spreader bars or reengineered lifting devices) shall be furnished to the Contractor representative before cranes arrive on site. All cranes shall be inspected prior to operation and documentation retained with the equipment and made available upon request.
- 27.9 Forklifts, telehandlers and power telescoping materials handler operators shall follow all applicable OSHA 29 CFR 1917.43 and 1910.178 requirements for the safe operations of the equipment. Manlifts shall include all fall protection requirements and include training for both auto, manual and emergency descend.
- 27.10 Contractor shall ensure all warning signs, rated load capacity charts, recommended operating speeds and other information is available for all mobile heavy equipment.
- 27.11 Equipment operators shall not:
- Operate equipment outside of the manufacturer's recommended limits.
 - Modify equipment in such a way as to render the equipment unsafe or exceed the equipment's rated load or working capacity.
 - Allow anyone within the operating radius of a crane or backhoe.
 - Allow passengers on industrial equipment designed for one person.
 - Allow anyone to ride on equipment or in a bucket on a backhoe.

- 27.12 The use of cell phones, mp3 players, etc. is prohibited while operating mobile equipment on LNA property unless the vehicle is pulled to the side of the road or away from the active work area and the vehicle is placed in "park".
- 27.13 Prior to using a crane or hoist, ensure that it has been certified and is in safe operating condition. The controls, lines, slings and other accessories shall be inspected per an established inspection program and show no sign of disrepair.
- Comply with the manufacturer's specifications and limitations applicable to the operation of the equipment.
 - Establish and follow safe operating procedures for lifting and moving loads.
 - Develop a written critical lift procedure for lifts that the Company deems critical due to the scope of work, hazards or costs associated with the lift.
- 27.14 All Mobile equipment shall be inspected prior to operation and documentation retained with the equipment and made available upon request.
- 27.15 All contractors operating mobile equipment on site must have a mobile equipment safety program in place. This program shall address hazards associated with operating mobile equipment, training of employees, safety technology implementation and routine/non-routine repairs to mobile equipment.

28.0 WATER/DOCK OPERATIONS

- 28.1 Contractors who perform work on marine docks or who are at risk of falling into water shall be protected from the fall utilizing the proper fall protection equipment and/or shall use personal floatation devices approved by the United States Coast Guard.

29.0 WELDING SAFETY

- 29.1 The Contractor shall comply with all OSHA/MSHA requirements as it relates to welding safety and compressed gas cylinders. All gas cylinders will be stored properly; all gas cylinders will have protective covers when not in use. All gas cylinders will have appropriate gauge protection.

When not in use or under direct control of the operator, cylinder valves shall be closed.

- 29.2 Persons welding and cutting shall be qualified and trained in accordance with applicable codes and shall be thoroughly familiar with potential hazards of the operation and precautions necessary to ensure safety.
- 29.3 Grinder guards shall be required on all abrasive grinding wheels. Grinders shall be equipped with a mechanical safety clutch. These devices reduce the chance of kick-back during jams. Additionally, they greatly reduce the likelihood of shattered cutting wheels and gear damage.

30.0 WORK CLOTHING

- 30.1 Normal Work Attire: Sleeved shirts and long pants are required at all times. Sleeveless shirts, tank top-type shirts, or shirtless attire are not allowed. Long pants shall cover the top (at a minimum) of the Person's safety boots. Shorts are not acceptable body protection. Shirts shall cover the Person from the belt/pant line to the neck and at a minimum cover to the shoulders. Long-sleeved shirts are recommended when performing tasks that may expose the worker to lime.

Where hazards exist due to moving parts on machinery or equipment, clothing shall be maintained to avoid entanglement and jewelry (rings, necklaces, bracelets, and dangling earrings) shall not be allowed.

- 30.2 Special Work Clothing: Appropriate work clothing shall be worn where exposure to fire, extreme heat or cold, corrosive chemicals, electrical hazards, body impacts, cuts from handled materials or other specialized hazards are possible. See the facility or business unit's site-specific procedures for any additional requirements such as Flame Resistant Clothing ("FRC"). When FRC is required, the Contractor shall supply it to their employees and ensure it is in good condition. FRC is required when working with energized electrical equipment.

31.0 WORKSITE SAFETY

- 31.1 It is the responsibility of each Contractor to inspect each work area at the beginning of each shift, and periodically thereafter, to ensure safe working conditions exist.
- 31.2 The Contractor shall inform each of its affected employees of any concealed dangers or changes in work conditions. The Contractor shall comply with all applicable regulations.
- 31.3 The Contractor shall provide illumination bright enough for work to proceed without risking personal injury or affecting the quality of work.
- 31.4 All tools shall be used, maintained, and inspected.
- 31.5 The Contractor shall clean their work areas at the end of each work shift. Debris shall be placed in appropriate containers and properly disposed. All tools and equipment remaining at the job site shall be properly stored.
- 31.6 The Contractor shall provide an adequate supply of fresh drinking water for its employees. Portable restroom facilities shall be required and provided and maintained by the Contractor.
- 31.7 Pets are not allowed on Company property.
- 31.8 Hazard associated with red and yellow tape must be identified with the following:
- Red Tape – Do not cross without permission from person identified on tag and without knowing the hazard.
 - Yellow Tape – You may cross if you sufficiently understand the hazard as identified on the tag.
 - All tape should have a tag with company name, associated person and contact telephone number.

APPENDIX A – TASK RISK ASSESSMENT

Company's Task Risk Assessment for Contractors:

L HOIST NORTH AMERICA TASK RISK ASSESSMENT	
Name(s) of Employee(s) Involved:	Date/Time:
Work Area:	Job Scope/Work to be Performed:
Hazards Present (✓ ALL that apply)	Hazards Controls (Circle <u>ONLY</u> Mitigation Activities for <u>THIS</u> task)
<input type="radio"/> ASPHYXIAATION	(Ventilation, air monitoring, supplied air)
<input type="radio"/> CHEMICAL EXPOSURE	(Containers Labeled, SDS review, special PPE, notification of employees, chemical gloves)
<input type="radio"/> COMBUSTIBLE MATERIAL	(Relocate material or work, cover material, fire extinguisher)
<input type="radio"/> CUTS/SHARP OBJECTS	(Cut resistant gloves, guarding, body position, Self Retract Knives)
<input type="radio"/> DUST	(Housekeeping, PPE, ventilation, vacuum truck, water)
<input type="radio"/> ELECTRICAL SHOCK	(LOTOTO, guarding, insulation, grounding, GFCI, tool / cord inspection, Insulated tools, arc flash equipment)
<input type="radio"/> WORKING AT HEIGHTS	(Guardrails, use scaffold or ladder, harness & self-retracting lanyard, double Self-retracting lanyard, Body position, man-lift, rescue plan)
<input type="radio"/> ERGONOMICS	(Use of mechanical means, body position, proper lifting, use of ergonomic Tools to reduce force, posture or repetitive motion, improve access, help lifting > 50lbs)
<input type="radio"/> FALLING OBJECTS	(Secure objects, barricades, use netting, tool tethers, spotter)
<input type="radio"/> FIRE	(Monitoring, hot work permit, fire watch, material removal, fire extinguisher)
<input type="radio"/> GAS	(LOTOTO, Monitor, Ventilation, PPE: _____)
<input type="radio"/> HEAT STRESS	(Ventilation, hydration, employee rotation, cooling vest, break schedule)
<input type="radio"/> HAZARDOUS ENERGY CONTROL	(LOTOTO, contact control room, release of stored energy, blocking)
<input type="radio"/> HIGH NOISE	(Hearing protection, double hearing protection, stop equipment, move work)
<input type="radio"/> HOISTING/RIGGING	(Qualified Operator, Critical Lift, Minimum approach boundaries, barricades, Rigging Type: _____)
<input type="radio"/> ILLUMINATION	(Portable lights/flashlights, relocate work, light replacement)
<input type="radio"/> INSECT/WASP/SPIDER	(Gloves, insecticides, sprays; protective boots/sleeves)
<input type="radio"/> LINE OF FIRE	(Position of hands, body, equipment, mechanical handling)
<input type="radio"/> MOBILE EQUIPMENT	(Inspections, qualified operator, chocks, barricades, signal person, utilize spotter, forward motion first)
<input type="radio"/> PINCH POINTS	(Guarding, body position, barricades, de-energize, impact gloves, no touch tools)
<input type="radio"/> RESTRICTED ACCESS	(Signs in place, scaffold inspected, ladder secured, barricades in place)
<input type="radio"/> ROTATING EQUIPMENT	(Isolation, LOTOTO, guarding, no rings or loose clothing/jewelry)
<input type="radio"/> SLIPS/FALLS	(Housekeeping, barricades, clear path, floor coverings)
<input type="radio"/> STRUCK BY	(Stay out of line of fire, barricades, guard contact points, impact gloves)
<input type="radio"/> TOOLS	(In good condition, proper tool for the job, use as intended)
<input type="radio"/> TRAFFIC HAZARDS	(Communication, spotter, barricade, pedestrian separation, inspections, road conditions)
<input type="radio"/> WELDING/CUTTING	(Back flash arrestor, regulator in good condition, curtains, fire blankets, cylinders secured, check valves in place, check for leaks, hot work gloves)
<input type="radio"/> WATER (ponds, rivers)	(Life vest, ring buoy with rope)
JOB COMPLETION AND CLOSEOUT (Job is not complete until closed out)	
① HAS THE JOB BEEN COMPLETED?	YES / NO / NA
② HAS A POST-JOB WALKTHROUGH BEEN PERFORMED?	YES / NO / NA
③ HAS THE AREA BEEN CLEANED OF WORK MATERIAL, TRASH AND TOOLS?	YES / NO / NA
④ HAVE BARRICADES, SIGNS AND TAGS BEEN REMOVED?	YES / NO / NA
JOB CLOSE-OUT NOTES: _____	
Employee Signature: _____ Date: _____	
Employee Signature: _____ Date: _____	
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LHOIST NORTH AMERICA TASK RISK ASSESSMENT	
Name(s) of Employee(s) Involved: _____	Date/Time: _____
Work Area: _____	Job Scope/Work to be Performed: _____
Weather/Climate Conditions	
How can the weather conditions affect your work today? _____	
Today's Forecast: _____ Heat Index: _____ Cold Weather Hazards? _____	
Actions Taken: _____	
Is this A High Risk Task? (Any Check Below Requires Supervisor Signature)	
<input type="checkbox"/> Is this a Non-routine task (> 6 months)? <input type="checkbox"/> Does this task involve the use of a crane? <input type="checkbox"/> Does this task involve confined space entry? <input type="checkbox"/> Does this task require complex LOTOTO Isolation? <input type="checkbox"/> Task involves two or more employees to lift (>50lbs.)? <input type="checkbox"/> Does this task require use of BRADY procedures? <div style="text-align: right; font-size: small;">(Were BRADY procedures followed? Yes NO)</div>	
Lhoist Supervisor Signature: _____ Date: _____	
Additional PPE (Check all that apply to this task)	
<input type="checkbox"/> High temp clothing <input type="checkbox"/> Respirator; Type: _____ <input type="checkbox"/> Gas Monitoring Equipment <input type="checkbox"/> Chemical resistant clothing <input type="checkbox"/> Dual Hearing Protection <input type="checkbox"/> Face shield <input type="checkbox"/> Rescue Equipment <input type="checkbox"/> Other: _____	
Required Permits: (Have the following permits/examinations been completed, if applicable)	
LOTOTO (Complex Isolation Permit)	YES / NO Person Completing: _____
Confined Space Permit	YES / NO Person Completing: _____
Hot Work Permit	YES / NO Person Completing: _____
Critical Lift Plan	YES / NO Person Completing: _____
Workplace Examination	YES / NO Person Completing: _____
Contractors: My Lhoist Sponsor is: _____ Have I made contact with Sponsor? <input type="radio"/> Yes <input type="radio"/> NO	
Additional Hazards for this task:	
HAZARDS :	MITIGATION :
A. _____	A. _____
B. _____	B. _____
C. _____	C. _____
D. _____	D. _____
E. _____	E. _____
F. _____	F. _____
G. _____	G. _____
H. _____	H. _____
For Non-Routine Tasks (>6 months since last performed) list the steps for safe task completion	
1. _____	5. _____
2. _____	6. _____
3. _____	7. _____
4. _____	8. _____
JOB COMPLETION AND CLOSE OUT (Job is not complete until closed out)	
⑤ HAS ENERGY ISOLATION BEEN RETURNED TO NORMAL STATE? YES / NO / NA ⑥ HAVE SAFETY DEVICES BEEN RE-INSTALLED? YES / NO / NA ⑦ ALL PERMITS COMPLETED, SIGNED AND TURNED IN? YES / NO / NA ⑧ HAVE ALL SIGNS/LABELS BEEN RE-INSTALLED? YES / NO / NA ANY SAFETY INCIDENTS/NEAR MISSES/ISSUES: _____ _____	
Employee Signature: _____ Date: _____	
Employee Signature: _____ Date: _____	

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APPENDIX B – PPE REQUIREMENTS

Company's PPE Requirements for Contractors:



Personal Protective Equipment Policy

The following Personal Protective Equipment (PPE) shall be worn at all times, except in identified PPE-Free Zones.



Hard Hat
Casco

- ☐ Meet ANSI Standard Z89.1-2014
- ☐ Classified as Type I or Type II hard hat



Eye Protection
Protección Ocular

- ☐ Meet ANSI Standard Z87.1-2014
- ☐ Safety glasses must have affixed side shields
- ☐ Sealed eyewear required for high winds and high dust areas/tasks



Reflective Vest
Chaleco Reflectante

- ☐ All employees, contractors, and visitors must have high-visibility and reflective clothing on torso
- ☐ Yellow/green for those familiar with daily site changes (e.g., plant personnel) and orange for all others (e.g., visitors, contractors and LNA staff from other sites)



Steel-Toe Boots
Botas Puntera Metal

- ☐ Meet ANSI Z41.1 or ASTM F2413 Standards
- ☐ Composite or steel toe
- ☐ Pronounced heel
- ☐ Minimum of 6 inches in height from bottom of the heel to top of the boot



Gloves
Guantes

- ☐ Protective gloves, appropriate for the hazard, shall be worn when performing tasks
- ☐ Cut level 4 is the minimum standard for general all-purpose gloves and where cut hazards exist
- ☐ Impact level 1 is the minimum standard when impact hazards exist

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REVISIONS

Date	Section	Added Requirements
04/2020	Introduction	Cardinal Safety Rules
04/2020	3 - Incident Rptg	Drug and alcohol screening
04/2020	6 - Confined Space	Air monitoring and rescue plans
04/2020	7 – Alcohol and Drugs	Testing for “reasonable suspicion”
04/2020	8 - Electrical Work	LNA approval of Hot Work
04/2020	13 - Fall Protection	Competent person oversight, and written hazard assessments and protection at more than 4 ft
04/2020	16 -Haz Energy Control	Provide equipment and follow Forced Lock Removal Process
04/2020	25 - Scaffolding	Designed by Qualified Person, training by Competent person
04/2020	30 – Work Clothes	Limits on jewelry
01/2023	All sections	Formatting
06/2023	20 – PPE	Inclusion of updated glove requirements
06/2024	19 – TRA	JHA changed to TRA, updated references throughout, added to Appendix A
06/2024	22 - PPE	Updated TRA info and added Appendix B