

AMAZON SPECIAL SAFETY CONDITIONS
EFFECTIVE: July 2021, VERSION 1

1.0 Purpose

Amazon Special Safety Conditions, is neither a substitute for nor a legal interpretation of the environmental, health and safety regulations that apply to the work that Amazon (henceforth known as the Purchaser), has hired your company (henceforth known as the Supplier) to perform nor do these conditions in any way alleviate Supplier's exclusive responsibility to ensure the safety of its employees, contract workers, sub-contractors, suppliers, visitors, and guests. These special safety conditions are a collection of requirements whose sole intention is to improve the overall Safety performance of the purchaser's suppliers. The Supplier is required to evaluate these special safety conditions and any applicable regulatory requirements for the work to be performed on the Purchaser's sites and have Safety programs in place to meet or exceed these requirements. Lastly, the special safety conditions require that your company refer directly to the laws and regulations, specifications, and exceptions that may be applicable to the scope of your work in addition to these requirements.

- This document applies to the work that the Supplier is performing if it is required by the contractual agreement between the Purchaser and Supplier.
- This document is not all-inclusive and may not address all hazards within your workplace.
- Safety of the Supplier's employees is the responsibility of your company, meaning that workplace safety of your employees and subcontractors is solely your company's responsibility.
- The Supplier is solely responsible for providing its employees and subcontractors with safe means and methods for the work being performed on the Purchaser's sites.
- The Supplier's adoption of the Purchaser's special safety conditions is not intended to diminish your company's knowledge and specialized skills or to be a substitute for your company's knowledge and specialized skill.

Acceptance of these special safety conditions by the Supplier does not indicate that the Purchaser has taken the responsibility for the environmental, health or safety of your employees or processes, nor does it indicate that the Purchaser has set forth means, methods, techniques, procedures, or equipment required for the Supplier to perform the work that the Supplier was hired to perform. The Supplier is exclusively responsible for establishing effective safe work practices and conditions for its employees. By imposing these minimum or core standards, the Purchaser is not warranting them or assuming any responsibility for the safety of the Supplier's employees or sub-contractors or creating any employment or co-employment relationship. Defining means, methods, and manner in which the work will be performed remains the obligation of your company.

Each special safety condition is comprised of general safety conditions, risk mitigation requirements, and also industry and trade-specific practices, risk-specific planning, competency, tools and equipment requirements, and also industry and trade specific practices. The requirements in this document are not all-inclusive and it is the responsibility of the Supplier to determine any additional Safety Controls.

2.0 Scope

The Purchaser's special safety conditions are applicable to all Suppliers and their subcontractors performing work on the Purchaser's owned or leased sites, as called out through the Master Service Agreement (MSA), Master Purchase Agreement (MPA), Master Work Order (MWO), Purchase Agreement, (PA), or Purchase Order (PO) agreed upon between the Purchaser and Supplier, during or post the sourcing process. The Purchaser's special safety conditions are subject to change based on changing business conditions. Changes and updates to the Purchaser's special safety conditions will be provided through the Purchaser's prequalification platform, where the Supplier will be required to acknowledge and accept within 60 days of the change.

Section 4.0, General Safety Conditions below applies to all Suppliers who are performing work on Purchaser's owned or leased sites. Each Supplier must review each sub-section outlined in section 5.0, Risk Mitigation Requirements, to determine applicability based on the supplier's scope of work. Sub-section of 5.0, Risk Mitigation Requirements applies based on the risk exposure based on the Supplier's Scope of Work.

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4.0 General Safety Conditions

4.1 Supplier Prequalification

Supplier must review the Purchaser's special safety conditions document and confirm conformance in order to be considered for selection. The Supplier agrees to submit all qualification documentation to the Purchaser's prequalification process, and agrees to pay all fees associated with the prequalification process. Failure to follow the Purchaser's prequalification process will result in the Supplier being ineligible to provide services on the Purchaser's sites. The Supplier agrees to provide and comply with the following prequalification information:

- Certificates of Insurance that must meet Amazon specifications, including but not limited to;
 - General liability
 - Workers compensation
- Safety performance data that must be within Amazon defined tolerance limits including but not limited to;
 - Premium Rate statement - Provincial
 - Annual TRIF statistics
 - OHS Orders
 - Fatalities
- Safety manuals or procedure documents that must comply with regulations in the Companies areas of operation,
- Regulatory documents (e.g. Federal or Provincial),
- Other business data and Amazon documentation including but not limited to;
 - Safety Plan (formally known as the Job Hazard Analysis (JHA))
 - Contractor Acknowledgement Form
 - Contractor Release of Liability Acknowledgement Form
 - Contractor Equipment Release of Liability Form
- Employee level information for each Company employee entering an Amazon site including but not limited to;
 - Training for orientation and site evacuation
 - Qualifications and licenses for specific job roles being performed by Supplier Employee(s)
 - Evidence of specialized training for specific tasks being performed by Supplier Employee(s)

4.2 Regulatory Compliance

With respect to Supplier's operations, services, and work performed on or directly affecting the Purchaser's property and premises; Supplier's employees, visitors and guests; and, the employees, guests, and visitors of others on the Purchaser's premises including Purchaser's and Supplier's employees, visitors or guests, Supplier is exclusively responsible for its compliance with applicable local, regional or federal laws and must implement a systematic approach to identify safety regulatory requirements applicable to its operations, including the following activities:

- Identify and comply all safety regulatory requirements related to the work to be performed.
- Use a reliable and industry recognized resource or resource(s) to evaluate regulatory requirement changes in relationship to the Supplier's safety programs.
- Review regulatory requirements whenever a change occurs to site processes, activities or hazards to determine whether any new or otherwise relevant regulatory requirements may apply to the change.

4.3 Hazard Identification & Risk Assessment

The Supplier must identify all safety risks associated with each task or activity performed on the Purchaser's sites. The Supplier must conduct a documented Safe Work Plan (Job Hazard Analysis (JHA) or risk assessment)to identify hazards, safe methods/controls, and personal protective equipment (PPE) required to safely perform the work.

The Supplier must provide the Supplier's employees, sub-contractors, vendors or visitors with all personal protective equipment (PPE) based on the Supplier's risk assessment. The Purchaser will not supply PPE to the Supplier. All Supplier employees, sub-contractors, vendors and visitors must wear shoes and shirts at all times when working on the Purchaser's sites. Note: Sandals and open-toed shoes are prohibited at the Purchaser's sites. All Supplier employees, sub-contractors, vendors, or visitors must wear a high visibility vest when working in the truck yard (class II) and when working outside the green mile walkways in the Purchaser's Facilities.

4.4 Purchaser Equipment Release of Liability

It is expected that the Supplier will use its own tools and equipment to perform Supplier's obligations under contract. If agreed upon between both the Purchaser and the Supplier, the Supplier may use the Purchaser's equipment. An Equipment Release a Liability form must be completed and provided during the sourcing process, and to each site the Supplier will be providing services on Purchaser sites. The following are the key acknowledgement requirements:

- Statement that the Supplier is accountable for using the equipment safely, by following the manufacturer's requirements, Purchaser's requirements, and any local regulatory requirements.
- Statement that the Supplier is accountable for performing pre-operational inspections and to not use equipment deemed unsafe.
- Statement of which party is responsible for the preventative maintenance.
- Risk to overall Safety of the people involved or in proximity of the area where this equipment will be used.
- Tasks to be performed with this equipment.
- Issues and solutions to responsiveness.
- Issues and solutions involving Cost.
- Issues and solutions involving Schedule.

4.5 Training and Safety Orientation

The Supplier is responsible for identifying all safety training required by law and Purchaser's Special Safety Condition requirements. The Supplier is solely responsible for conducting all safety training, and maintaining training records. The Supplier will provide training records upon request.

The Supplier must provide the Purchaser's Virtual Contractor Safety Orientation training to all of the Supplier's employees, sub-contractor employees, vendors or visitors prior to them entering the site and at least annually. Contractor Orientation is available virtually through the online learning management system. All suppliers employees, sub-contractor employees, vendors or visitors must display course completion certificates at time of entry. See Appendix B for link to the controlled version of Virtual Contractor Safety Orientation instructions.

4.6 Emergency Response and Medical Treatment

The Supplier must develop a documented Emergency Response plan for any applicable disaster that may occur on the Purchaser's sites. The Supplier must consider the following elements:

- Emergency Evacuation
- Emergency Procedures including Shelter-in-place (Tornado, Hurricane, or inclement weather)
- Fire Protection Equipment
- Medical response / Local Medical facilities/Hospitals
- Workplace Violence

The Supplier may only use the Purchaser's medical facilities (aka. AMCARE), for emergency medical situations in which the Purchaser's associates will stabilize until local medical authorities arrive. For all other non-emergency medical needs, the Supplier may not utilize the Purchaser's medical facilities, and must establish their medical response procedures.

4.7 Reporting of Incidents and Incident Investigations

The Supplier must report all environmental, health and safety incidents and events that occur on the Purchaser's sites to include the following:

- Safety Incidents (Injuries, Illness, Fatality, Potentially Serious Incidents (PSI) or Near Miss incidents)
- Environmental Incidents
- Regulatory activity (e.g. Federal and Provincial)
- Security issues including theft, threats, or acts of violence to any uniformed Security officer or the Purchaser's project manager.
- Report all fire, medical emergencies or motor vehicle accidents to 911.

The Supplier must report all incidents prior to the end of the shift, or within 8 hours, and within 2 hours for occupational fatalities. The Supplier must notify the Purchaser's local EHS Team and local Sr. Operations Leader on site at the time of the incident.

The Supplier must complete a documented incident investigation, including the following requirements:

- Incident Description
- Root Cause Analysis
- Corrective Action Plans
- Final report must be submitted to the Purchaser within 7 days (30 days for an occupational fatality)

4.8 Purchaser's Safety Standards of Conduct

The Supplier agrees to ensure all of the Supplier's employees, sub-contractors, vendors or visitors will follow the Purchaser's Safety Standards of Conduct, while on the Purchaser's site. A copy of the Safety Standards of Conduct will be provided to the Supplier as part of the sourcing process. See Appendix B for a link to the controlled version of this document.

4.9 Preventative Maintenance of Safety Equipment

The Supplier must have a preventative maintenance program for all safety-related equipment used on the Purchaser's sites. This preventative maintenance program must include both regulatory requirements and OEM requirements the safety equipment used. Preventative maintenance documentation must be made available to the Purchaser's upon request. Examples of safety equipment include, but are not limited to:

- Blocking or chains used for PIT maintenance control of hazardous energy
- Electrical PPE and electrical testing devices
- Jack Stands
- Lifting and Rigging equipment
- Personal Fall Arrest Systems (PFAS)
- Personal Monitoring Devices (e.g. confined space monitors, CO monitors, etc.)
- Personal Protective Equipment (if applicable)
- Portable Ladders
- Powered Industrial Trucks (PIT)

4.10 Planned Inspections

The Supplier must develop and implement a planned inspections process to monitor the effectiveness of their safety programs related to work performed on the Purchaser's sites. These inspections must occur on an on-going basis in order to identify and correct any unsafe acts, behaviors or conditions as related to the Supplier's safety programs and Purchaser's requirements. All inspections must be documented by the Supplier and provided to the Purchaser upon request. The Supplier must invite the Purchaser to participate on planned inspections; however, Purchaser participation is not required. The following are the minimum types of planned inspections that must be part of this process:

- Evaluation of High Risk work (e.g. Hazardous Energy Control, Electrical work, work from heights, roof work, yard work, work involving conveyance, on the Amazon Robotics' field, or involving Powered Industrial Equipment).
- Safety Equipment inspections
- Employee Observation inspections to identify and correct at-risk acts or behaviors
- Job Hazard Analysis monitoring
- Sub-contractor monitoring

The Purchaser may audit the work at any time. The purchaser will require formal audit/inspections to be completed by 3rd Party Health Safety & Environmental Quality Assurance service provider for suppliers who register fatalities, serious/willful citations requiring variance request, or onsite safety violations or incidents deemed significant or systemic. Cost of 3P HSE QA inspections will be responsibility of supplier. Violation of Amazon policies may result in dismissal of Supplier's personnel from the Purchaser's sites. Repeated violations may result in termination of supplier's relationship with Amazon.

4.11 Sub-contractor Management

If the Supplier sub-contracts to other parties any or all portions of the work to be performed under the contract with the Purchaser, the Supplier must have a sub-contractor management process that meets the following minimum requirements:

- All sub-contractors must meet the Purchaser's prequalification requirements outlined in section 4.1 of this document.
- The Supplier must ensure that all sub-contractors meet all requirements outlined in this document, if the sub-contractor will be performing work on the Purchaser's sites.
- The Supplier must ensure that all sub-contractors complete the Purchaser's Safety Orientation training, outlined in section 4.5 of this document.
- The Supplier must have a planned inspection process in place to monitor or audit the safety performance and adherence to the Purchaser's Special Safety Conditions document.

For Supplier's under contract with the Purchaser, you must use the Purchaser's prequalification platform. For Suppliers not under direct contract with the Purchaser (e.g. buildings not under direct occupancy of the Purchaser, or vendor flex or landlords, etc.), it is also mandated for them to be part of the Purchaser's prequalification platform.

4.12 Stop Work Authority

Stop Work Authority (SWA) – provides employees and 3PCs with the responsibility and obligation to stop work when a perceived unsafe condition or behavior may result in harm to any person, the environment or equipment. In order to stop work any person raising the concern shall bring the concern to the attention of the manager in charge of the work, identifying the hazard(s) which require controls to eliminate/mitigate the associated risk(s).

5.0 Risk Mitigation Requirements

The following requirements only apply to Supplier, if the Supplier's employees, sub-contractors, vendors or visitors will be performing any of the following activities:

5.1 Aerial Lifts and Scissor Lifts

The Supplier agrees to meet the following requirements:

Aerial Lifts (with an articulating boom):

- Follow the manufacturer's operating, maintenance and repair instructions.
- Only qualified operators may operate aerial lifts. The Supplier must furnish proof of competency.
- Ensure safe job plan is completed; including overhead hazard assessment before use of aerial or scissor lift equipment
- Daily pre-operation inspections are a requirement to make sure all controls and functions are working correctly. Never use a lift if issues are encountered during the pre-operation inspection.
- Operators must use appropriate PPE based on the OEM's requirements. The Supplier must require that all operators use a Full body safety harnesses with the self-retracting life line secured to the platform's manufacturer's designated anchor point to be used at all times. The use of a hard hat is required.
- Operators must work while standing on the platform floor, never on the top rail, mid-rails or toe board, if there is a need to climb out of the platform, continuous fall protection must be maintained and included on the Supplier's safety plan.
- Check job site for: ditches, drop-offs or holes, bumps and obstructions, debris, untampered earth fills, overhead obstructions electrical wires, bus ducts, charged utility lines, sprinkler lines, conveyors, and other hazards.
- No Pedestrians will be allowed within range of moving loads or moving parts of elevated PIT.
- Ensure a physical barrier is in place that separate pedestrians from elevated PIT/Aerial Lifts.
- Do not allow more people to occupy the aerial lift than the manufacturer recommends.
- A spotter must be used at all times while transporting the aerial lift throughout the facility, and during its operation.
- The spotter must understand and be trained on how to lower the aerial lift in the event of an emergency.
- When the aerial lift is in operation, the spotter's primary responsibility is to monitor the work location to prevent people from walking within the work area of the aerial lift. The spotter must also communicate hazards that the aerial lift operator may not see.
- Never exceed the load rated weight capacity of the equipment being used.
- The use of danger tape, snow fencing or other barricade must be used 20 foot around the aerial lift while performing overhead work.

Scissors lifts (e.g. up/down functionality with no articulating booms):

- Follow the manufacturer's operating, maintenance and repair instructions.
- Only qualified operators may operate scissors lifts. The Supplier must furnish proof of competency.
- Daily pre-operation inspections are a requirement to make sure all controls and functions are working correctly. Never use a lift if issues are encountered during the pre-operation inspection.
- Operators must use appropriate PPE based on the OEM's requirements. In addition, the use of a hard hat is required.
- If work will be performed above 4 feet, then Supplier must follow all requirements outlined in the Fall Hazard Control section 5.6.
- No Pedestrians will be allowed within range of moving loads or moving parts of elevated PIT.
- Ensure a physical barrier is in place that separates pedestrians from elevated PIT/Aerial Lifts.
- Operators must work while standing on the platform floor, never on the top rail, mid-rails or toe board, if there is a need to climb out of the platform, continuous fall protection must be maintained and included on the Supplier's safety plan.
- Check job site for: ditches, drop-offs or holes, bumps and obstructions, debris, untampered earth fills, overhead obstructions electrical wires, bus ducts, charged utility lines, sprinkler lines, conveyors, and other hazards.
- Do not allow more people to occupy the aerial lift than the manufacturer recommends.
- A spotter must be used at all times while transporting the aerial lift throughout the facility, and during its operation.
- The spotter must understand and be trained on how to lower the scissors lift in the event of an emergency.
- When the scissors lift is in operation, the spotter's primary responsibility is to monitor the work location to prevent people from walking within the work area of the scissors lift. The spotter must also communicate hazards that the aerial lift operator may not see.
- Never exceed the load rated weight capacity of the equipment being used.
- The use of danger tape, snow fencing or other barricades must be used around the scissors lift while performing overhead work.

5.2 Amazon Robotics

The Supplier agrees to the following requirements:

- All of the Supplier's employees, sub-contractors, vendors or visitors must obey the following Amazon Robotics floor requirements:
 - Never cross the AR safeguarding perimeter or walk on an AR floor unless you have been trained and authorized for AR floor access.
 - Always observe and follow all warning and caution signs.
 - Never place any part of your body between a drive unit and another drive unit, a pod, any workstation structure, a conveyor or the safety perimeter fencing.
 - Never stand, ride, lean, or climb on any AR drive units or pods.
 - Do not reach onto the AR floor with a stick, your hands, broom, Jam pole or any other similar item.
 - If there is an emergency on the AR floor immediately press one of the emergency stop pushbuttons (red mushroom-head switches). These are located at all entry gates and the workstations. Immediately notify your Project Manager, any of the Purchaser's Manager, EHS Team, or Facilities. The drive units will not stop immediately. Once the drives have come to a complete stop, the gate light stack will display a solid Yellow light. Once the floor is safe to enter, the gate light stack will change to a solid RED light. Do not enter the floor until the solid RED light is illuminated.
- If AR Floor access is required for the Supplier to perform work, then approval must be granted by the Purchaser's site facilities, EHS Team, or Learning Leadership. Each person must be escorted by a trained personnel and must remain with the trained person at all times. No more than 3 untrained persons shall be escorted at any given time. Each time an escort is occurring a safety briefing must occur. The following items must be addressed and acknowledged by each person prior to entering the AR floor:
 - Remain with escort at all times.
 - Where applicable, wear a SRBRS vest at all times.
 - Do not leave prohibited zone for any reason.
 - In the event of an emergency, follow the escort via safe passage to nearest exit.
 - If you have any questions or concerns throughout, please ask immediately.

5.3 Work Area Housekeeping, Barricading, Perimeter and Opening Protection

The Supplier agrees to the following requirements:

- Housekeeping: The Supplier will maintain a safe and organized work area that is free of trash, debris, slip trip or fall hazards, and the following requirements:
 - Temporary cords or hoses must not cross equipment or pedestrian green mile, and be properly stored when not in use.
 - Place scrap and waste, such as cardboard or metal, in proper Supplier provided containers, unless agreed to in the Master Work order.
 - Remove combustible scrap, waste materials, and debris daily (or more frequently if required to maintain safety). Burning of rubbish is prohibited.
 - Do not block emergency exits, aisles, doors, stairs, ladder ways, emergency equipment, or electrical panels. These areas are typically marked with red or black/yellow tape.
 - Remove nails, sharp objects protruding from boards and pick up loose nails and screws.
 - Do not leave materials in plenum spaces.
 - Suppliers are encouraged to recycle discarded materials, such as wood, cardboard, steel copper, wire, etc. Contact Purchaser's project manager or site EHS Team for proper disposition of these recyclable materials.
 - All materials stored outside must be covered, including waste containers such as metal open-top dumpsters, and all debris must be cleaned up on a daily basis or more frequent if required.
- Barricading, Perimeter and Opening Protection: The Supplier will maintain a safe work area and when hazards exist to others, will use barricading.

5.4 Confined Spaces

The Supplier agrees to the following requirements:

- Follow all requirements outlined in CSA Standard Z1006-16 for the general industry.
- Obey all posted confined spaces signs.
- If performing confined space entry on the Purchaser's sites, then the Supplier will complete a confined space entry permit and follow all regulations for monitoring, entry and rescue.
 - The Supplier is responsible for maintaining all confined space entry and rescue equipment.
 - The Supplier is responsible for having a dedicated confined space rescue plan and team on site.

5.5 Electrical Safety

The Supplier agrees to the following requirements:

- Inspect portable cord-and-plug connected equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Replace damaged equipment immediately.

- Extension cords must never represent a tripping hazard and must be taped down in walkways.
- When working on live electrical systems, with exposure to electrical shock or arc flash hazards, the Supplier must meet all requirements outlined in CSA-Z462, latest edition.
- Prior to any qualified electrical Supplier performing any energized electrical work, ensure that a safety plan is developed by the Supplier, and use the Electrical Work Permit, that addresses identifying hazards, hazard reduction, appropriate tools, safe work practices, and appropriate PPE. •
- If performing live electrical work, the Supplier must complete the Purchaser's Electrical Work Permit, obtained through the site's EHS or Maintenance department.
- Always use ladders made with non-conductive side rails such as fiberglass, when working with or near electricity or power lines.
- Ground Fault Circuit Interrupters and grounding systems must be put in place and in compliance of local regulations.
- Panels and circuit breakers must be accessible and their location communicated to interrupt the power in case of an emergency.
- Ensure tools are properly grounded or double-insulated. The grounded equipment must have at least an approved 3-wire cord with a 3-prong plug. This plug should be plugged in a properly grounded 3-pole outlet.
- All work 12 cal/cm² incident energy or above, must be performed by a licensed electrician in the local jurisdiction.
- For electrical systems with incident energy potential greater than 40 cal/cm² (e.g. Main Switch Boards), the supplier must isolate energy upstream through the local utility or use a Remote Actuation Device (RAD).

5.6 Fall Hazard Control – Working at Heights

The Supplier agrees to the following requirements:

- If work will be performed above 3 m or more then personal fall protection risk mitigation must be used.
- All Personal Fall Arrest Systems (PFAS) must meet regulatory requirements and consensus standards such as ANSI Z359.1-2007 or CAN/CSA Z259 and include the following elements:
 - Full-body harness. (Body belts, and chest or waist only harnesses are prohibited)
 - Have an approved lanyard with an integrated shock absorber (double lanyard is required when there is a need to move from one anchor point to another).
 - Hooks must be equipped with auto-close and self-lock mechanisms.
 - Approved anchorage points and connectors with D rings.
 - PFAS components must be designed to provide with a maximum arrest force of 6 KN (1349lbs)
 - PFAS must be designed to limit the free-fall distance to prevent a person from hitting the ground, or other surfaces such as pit bottoms, structures, tanks, or equipment when engaged.
 - Free fall distance must be equal or less than 1.2 meters (4 feet). Selecting a higher anchorage location or using self-retracting lanyards must be considered in those instances where traditional lanyards are inadequate to prevent the person from hitting the ground.
 - All fall arrest systems must be connected to the Dorsal (Back) D ring. Front D Rings (if equipped) must only be used to connect to ladder safety climbing devices and rescue systems. Side D-ring must only be used to connect to travel restraint or positioning systems.
 - Lanyards must be connected to approved anchorage connectors with D rings, never connect a hook to another hook.
 - Equipment must be inspected, maintained and stored in accordance to manufacturer instructions.
 - Equipment must be inspected by the user before each use.
 - Equipment must be inspected by a competent person other than the user at intervals of no more than one year.
 - Horizontal and vertical lifelines must be designed and installed only by qualified persons, under the supervision of a registered structural engineer. A lifeline must be wire rope of at least 1/2-inch (1.27-centimeter) diameter, or its equivalent, and it must be capable of supporting a minimum dead weight of 5,000 pounds (2,268 kilograms) per attached person. Vertical lifelines extend from an overhead independent anchorage and must be maintained in a vertical position while in use.
 - An anchorage point must be capable of sustaining a minimum static load of at least 3,600 pounds (16 kN). The following are some examples of structures that are never to be used as anchorages (the list is not all-inclusive):
 - i. Guardrail or handrail systems;
 - ii. Conduit, cable tray, electrical buss systems;
 - iii. Utility piping systems;
 - iv. Ventilation ducts;
 - v. Screen guards;
 - vi. Equipment or machinery components not designed for that purpose.
- Supplier must have a site and task-specific fall rescue plan that meets the following minimum conditions:
 - a) Any environmental and site-specific factors which may affect rescue and evacuation operations and how these factors are to be controlled.
 - b) The roles and responsibilities of each team member in an emergency.

- c) The designated personnel for rescue and a means of contact must be identified.
- d) Potential rescue paths must be identified.
- e) The identification of emergency rescue equipment.
- f) The proper inspection and validation of rescue equipment.
- g) Site personnel and equipment must be readily accessible and the primary means for rescue, although provisions may include assistance from outside agencies.
- The following must be taken into consideration when using portable ladders:
 - The ladder selection for the task must be properly sized, properly rated, constructed of approved material for the task and be the proper style (extension or step). Makeshift ladders are prohibited.
 - Pre-inspection and proper handling must be conducted prior to use.
 - Maintain 3 points of contact (2 feet and 1 hand, or 2 hands and 1 foot) when climbing a ladder and while at the work position. Where 3-point contact cannot be maintained, a task-specific Job Hazard Analysis (JHA) must be conducted to determine if a ladder is appropriate to use, following these requirements:
 - No awkward or excessive lifting
 - No excessive turning of body.
 - Body must be centered
 - Do not lose balance by over-reaching
 - Never let your belt buckle pass beyond the top of the ladder.
 - For any tasks that deviate from these requirements, alternative working at height equipment must be used, based on the hazards involved, such as portable platforms, man lifts or scaffolds. Where the use of alternative equipment is not possible due to space restrictions, additional administrative controls such as fall arrest system with self-retracting lifelines must be used.
- The following must be taken into consideration when working on the roof:
 - Supplier must follow all regulatory requirements for working on the roof.
 - Supplier is responsible for conducting a full risk assessment and providing a Job Hazard Analysis for the work to be performed on the roof.
 - Supplier must complete the Purchaser's Roof Permit
 - For all work within 2 metres from the roof's edge, unprotected skylight, or other fall hazard risk, the Supplier must follow all requirements outlined in the Control zone section.
 - When working near or around floor openings greater than 30 centimeters (12 inches), these openings must be barricaded, guarded, or covered to prevent potential for a fall.
 - Contractor Employees must not work or access the roof alone, unsupervised or out of the regular working hours.
 - All personal tools and equipment must be removed from the roof each and every day.
 - Materials left on the roof must be secured so that they cannot be blown by the wind.

5.6.1 Roof Access/Work

- The following must be taken into consideration when working on the roof:
 - Supplier must follow all regulatory requirements for working on the roof.
 - Supplier is responsible for conducting a full risk assessment and providing a Job Safety Analysis for the work to be performed on the roof.
 - Supplier must complete the Purchaser's Roof Permit & Roof Access Log
 - Work performed outside of daylight hours, Supplier must supply adequate lighting to provide illumination of roof work.
 - For all work within 15 foot from the roof's edge, unprotected skylight, or other fall hazard risk, the Supplier must follow all requirements outlined in the Fall Hazard Control section 5.6.
 - When working near or around floor openings greater than 30 centimeters (12 inches), these openings must be barricaded, guarded, or covered to prevent potential for a fall.
 - ⊖ Contractor Employees must not work or access the roof alone or unsupervised.
 - All personal tools and equipment must be removed from the roof each and every day.
 - Materials left on the roof must be secured so that they cannot be blown by the wind.
 - No work during adverse (example: Lighting, Rain, High Winds) weather conditions as identified in Roof Access Permit

5.7 Hazardous Energy Control

The Supplier agrees to the following requirements:

- To follow all Regulatory requirements for Hazardous Energy Control requirements.
- Hazardous Energy Control or Lockout/Tagout (LOTO) must be used to control hazardous energy or hazardous motion for all applications, unless for electrical troubleshooting purposes and all requirements outlined in SOR/86-304 Part 13 section 8.13 for Electrical Safety have been followed.

- The Supplier will ensure only authorized persons are performing LOTO, and will provide authorized person training records to the Purchaser upon request.
- The Supplier will ensure that all authorized persons have RED personal lockout locks and tags that have the authorized person's name, employee ID and picture. (note: identification information can be on the lock, tag or both).
- The supplier will have a lockout/tagout procedure established, where the authorized worker(s):
 1. Notify the Purchaser's local management and affected personal (Both Supplier's or Purchasers) on the Supplier's intent to lockout the equipment.
 2. Identify the hazardous energy or hazardous motion sources as part of a hazard assessment.
 3. Properly shut down the affected equipment.
 4. Use appropriate energy isolation devices to isolate the source, dissipate stored energy, or control gravity hazards (e.g. use of chains, blocking or pins).
 5. Apply RED personal lockout locks and tags for every worker exposed
 6. Verification of isolation steps are taken to ensure adequate isolation of each source prior to work.
 7. Perform the work.
 8. Once the work is completed, conduct a visual inspection to ensure all tools, parts, trash or other items are removed and equipment components/guards are in place, check that all affected personnel (Both Suppliers and Purchasers) are clear of any potentially dangerous areas, and notify the Purchaser's local management and affected personnel on the Supplier's intent to remove lockout, and start up the machine.
- If more than one authorized person will be performing LOTO, then the Supplier agrees to use a group LOTO, captive key or scissors/hasp or similar device that allows all members to safely LOTO.
- The Supplier will ensure that all authorized persons complete at least an annual LOTO audit, which must be provided upon request.

5.8 Hazardous Materials/Chemicals

The Supplier agrees to the following requirements:

- The Supplier must provide the Purchaser's local EHS Team with a list of hazardous chemicals to be used on site, and provide a copy of the most recent Safety Data Sheet (SDS) prior to using the chemical on site.
- All chemical containers must be properly labeled, closed and stored when not in use as required under the Global Harmonization and Classification of Chemicals (GHS).
- All Flammable chemicals must be kept in an approved flammable storage area/cabinet when not in use. Cabinets must be labeled in conspicuous lettering "Flammable-Keep Away from Open Flames."
- The Supplier is responsible to properly dispose of all waste on the Purchaser's property.
- The Supplier must remove all waste daily, and all waste must be removed from the site once the Supplier has finished its work. No waste can be left behind.
- Any spills must be reported immediately to the Purchaser's Site EHS Team.

5.9 Hot Work

The Supplier agrees to the following requirements:

- Suppliers are responsible for all safety matters affecting their work
- The Supplier must obtain a copy of the Purchaser's Hot Work permit on the form specified by the Purchaser's insurance carrier. See your Purchaser Project Manager for details if you will be performing hot work.
- All Hot work must be performed by qualified personnel
- The Hot work location must be inspected to ensure all combustible materials are removed Or if it is not feasible, shall be covered with a non-combustible protective covering.
- The area must be appropriately barricaded (e.g. caution tape, snow fencing, etc.) to block unwarranted access to the work area.
- All Welding equipment must be inspection as required by the OEM.
- All Welding hazardous materials must be kept in minimum quantities on site, and kept in approved flammable storage (as needed).

5.10 Lifting and Rigging

The Supplier agrees to the following requirements:

- Must meet all regulatory requirements for lifting and rigging.
- All lifting and rigging activities must have a Safe Lift Plan (Appendix C). The Safe Lift Plan can be obtained from the Purchaser's local WHS or RME teams. The following are the minimum items to be included in the Safe Lift Plan:
 - a) Nature, timing, location and characteristics of the rigging and lifting task.
 - b) Personnel Training records review.
 - c) Necessary personnel, load weights, equipment, capacity charts and rigging hardware for the task.

- d) Determining the optimum rigging configuration to properly support and maneuver the load into place.
- e) Adequate anchorage points for the lift equipment.
- f) The plan must be communicated in a manner that ensures the commitment and understanding of all individuals involved or who can be affected by the lift.
- g) Barricading the lift area to ensure that unexpected traffic will become aware of the lift in progress is mandatory.
- All rigging equipment and attachments must be inspected prior to each use, any defective items must be tagged and removed from service immediately.
- Safety latch hooks are required for all hoists

5.11 Powered Industrial Truck Maintenance

Powered Industrial Truck Maintenance Suppliers agree to the following minimum requirements:

- All general safety requirements outlined in section 4.0 of this document.
- As outlined in section 4.3, the Supplier must provide their employees with standard work for all routine tasks, (e.g. Job Safety Analysis or Job Hazard Analysis), which outlines the task steps, hazards, controls and PPE required for the task.
- As outlined in section 4.3, the Supplier must have a company-specific pre-task safety checklist to be completed prior to completing all tasks on Purchaser's sites.
- All Supplier PIT maintenance employees must be trained in the following:
 - Amazon's contractor orientation safety training as outlined in section 4.5, upon initial assignment and at least annually.
 - Hazardous Energy Control, including how to safely work on PIT equipment, and the use of blocking for crush hazards.
 - Standard work for the tasks they will be performed by a competent person.
 - Pre-Task Safety Plan checklist process requirements.
 - Reporting of safety incidents.
- As outlined in section 4.10 of this document, the Supplier must have an audit program in place to audit the Job Hazard Analysis (JHA), control of hazardous energy, safety equipment inspections, and other safety requirements to ensure compliance to these requirements. The results of the audits must be used to identify trends and be available upon request to the Purchaser.
- All control of hazardous energy requirements required by regulations, the Purchaser's requirements outlined in section 5.7 of this document, and their own Supplier procedures.
- Evidence of PIT training must be readily accessible (rosters or license will suffice)

5.12 Yard Work

The Supplier agrees to the following requirements:

- Work that occurs inside active Purchaser's trailer yards requires a detailed safe work plan (JHA or other risk assessment) to be completed prior to initiating work and must receive approval from the Purchaser's site WHS Team.
- The Supplier must provide a physical barrier such as a vehicle or traffic barricades to separate their hands-on work area from yard traffic.
- If it is not feasible to use a physical barrier, Supplier may use a spotter system to observe yard traffic for the workers engaged in hands-on work inside the yard.
- Supplier must wear ANSI Class II or equivalent reflective clothing when inside the yard.
- The Supplier must have a communication device to enter the yard.
- The Supplier must ensure all Supplier's employees, sub-contractor, vendors or visitors report any and all yard safety incidents immediately to the Purchaser's project manager, TOM team, or site WHS Team.

5.13 Construction Barriers

This specification is to be used as a minimum standard when implementing barriers for the separation of construction from Amazon operations. Amazon will use this specification in combination with local regulatory requirements. In case of conflict, the most stringent requirements shall prevail. Barriers are to be utilized only as a means of physically separating areas in which construction related activity is taking place in facilities under operational Amazon locations.

- Barriers shall be used to separate live operations from any portion of the site undergoing alteration, construction, or demolition when such operations are considered as having a higher level of hazard than the occupied portion of the live operation.
- Fencing is considered the primary means of separating operational and construction activities; however, depending on the nature of the work being performed, additional separation controls may be necessary.
 - Fencing barriers shall be 6'/1.8m tall chain link panels with privacy screens.

- Barriers shall remain in place until all construction work is complete and the area has been released to Operations by a member of the Amazon project team.
- Barriers shall extend around the entire perimeter of the construction zone.

5.14 Internal Combustion Engines/Tools/Equipment

Amazon prohibits the use of internal combustion engines/tools/equipment (diesel fuel powered equipment is excluded from this document) inside its facilities. In certain situations, which must be approved by Purchaser (approval will only be granted where reasonable alternative equipment can't be procured or the capabilities of electrical or pneumatic powered equipment are not sufficient), internal combustion engines may be used by supplier only if the following guidelines are adhered to:

- All equipment (internal combustion engines) must be stored outside the Amazon Owned or leased building when not in-use or the fuel source shall be stored and secured outside in the appropriate storage cage/facility.
- Any spare fuel tanks must be placed in a suitable and securable storage cage/facility 25-feet away from building or other structures.
- All refueling activities are to take place external to the Amazon Building with adequate spill containment and control measures along with an adequately sized fire extinguisher. If a spill or release occurs, immediately control the spill and release and notify the Amazon Point of Contact (POC).
- The Supplier must perform Carbon Monoxide (CO) equipment emissions testing based on manufacture's maintenance guidelines prior to bringing the equipment on Amazon premises to optimize performance and reduce CO emissions.
- Equipment warm-up period (5-10 minutes depending on external temperatures) must be done outside before coming into building and not within 25-feet of any intake exhaust system, door, or other air entry point.
- CO levels shall not exceed the limits established by regional, local or federal regulatory requirements
- The supplier operating an internal combustion engine/equipment/or tool shall monitor CO exposures at all times.
- The supplier will place CO monitors in strategic locations along perimeter of construction zone for continuous CO monitoring of workplace conditions and supervised frequently. The supplier will have four CO monitors at each directional corner of the construction zone, but additional CO monitors may need to be placed in large zones and/or where active Amazonian are working and operating.

5.15 Silica Exposure Control

- Supplier shall comply with local regulatory requirements established to control exposure to Crystalline Silica. including, but not limited to, ensuring silica dust remains below the established regulatory limits
- Where tasks are performed indoors or in an enclosed area, exhaust ventilation shall be provided as needed to minimize the accumulation of airborne dust. If the dust is exhausted inside the building or in an area outside where building occupants or the general public may be exposed, the system must incorporate HEPA-filtration.
- The supplier will keep dust down at all times during performing work, and the supplier will treat with dust suppressant controls on the soil at the site, haul roads, and other areas disturbed by operations.
- Dry power sweeping or the use of compressed air will not be permitted. The Supplier will use vacuuming, wet mopping, wet sweeping or wet power sweeping.
- Indoor work areas shall incorporate dust suppression/control techniques (i.e., vacuum cleaning instead of sweeping, separation of work area from occupied space using plastic barriers, provide construction duct particulate filters, etc.) to minimize and eliminate emission/spread of dust into occupied space.

Regulated and Restricted Areas

- A regulated area will be established where work exposures at a fixed location are known or suspected to be at or above the regulatory required exposure limits.
- A regulated area must be separated from other areas in a way that will minimize the number of suppliers and associate exposed. The following sign will be posted at each entrance to the regulated area:

**DANGER, RESPIRABLE CRYSTALLINE SILICA, MAY CAUSE CANCER,
CAUSES DAMAGE TO LUNGS, WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY**

- Only authorized individuals who have work to perform are allowed to enter a regulated area. All individuals entering the regulated area must wear a respirator, regardless of the amount of time spent in the area. Air from a regulated area shall not be recirculated by the building ventilation system unless it is first cleaned by HEPA filtration.
- A temporary restricted area will be established where the task is identified in the Table 1 (Appendix D) and the task will not be performed regularly in the same area or location.
- Tasks performed where respirators are required for the task shall be performed in a temporary restricted area. A temporary restricted area shall be designated by signs, barriers, or other effective means that will ensure unauthorized persons do not enter.

Where these tasks are performed near areas occupied by the general public, dust barriers shall be installed as needed to prevent dust migrating into those areas. If a building ventilation system provides air to the area where restricted work is being performed, the building air returns from that system shall be blanked or closed while that work is in progress. Supplier must coordinate this with the Amazon POC.

- If the building ventilation system provides air to an area where “restricted work” is being performed, the building air returns shall be blanked or closed while such work is in progress. Suppliers must coordinate this with the Amazon POC.

6.0 Reference Document Examples



Job Hazard Analysis
Form - Template.docx



Amazon Contractor
Orientation.pdf



Amazon Contractor
Management Forms.p

7.0 Definitions (Glossary)

Captive Key Box – A stationary box that contains a single key to the uniquely cored safety locks of a specified machine, equipment or process.

Captive Key System – A system that allows authorized workers to secure multiple energy sources with the use of one personal lock.

Competent Person: one who based on training and experience is capable of identifying existing and predictable hazards in the surrounding, or working conditions which are, and who has the authorization to take prompt corrective measures to eliminate them.

Confined Space (Permit Required) – Is a space that meets all four of the following requirements:

1. Is large enough and so configured that a worker's entire body can enter the space and he/she can perform the assigned work; and
2. Has limited or restricted means for entry or exit (for example, storage tanks and their vaults, silos, storage bins, hoppers, utility vaults, boilers, sewers, tunnels, pipelines, manholes and open-top spaces more than 1.2 meters (4 feet) in depth, such as pits, vaults, and vessels); and
3. Is not designed for continuous worker occupancy; and
4. Contains one or more of the following hazards:
 - Contains or has a potential to contain a hazardous atmosphere; or
 - Contains a substance with the potential for engulfment of an entrant; or
 - Has an internal configuration with the potential to trap or asphyxiate an entrant by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section; or
 - Contains any other recognized serious health or safety hazard.

Note – local regulatory definitions which are more restrictive shall supersede those cited here.
These spaces may also be called Permit Required Confined Space.

Confined Space Authorized Entrant: The person who has received required training and authorization to enter a confined space.

Confined Space Attendant: The person designated to be stationed outside of the confined space and within close proximity. This person monitors the confined space authorized entrant(s) inside the space and they also validate that access points are unobstructed and kept free of any obstructions during work in the confined space.

Confined Space Entry: Entry is the act by which a person passes through an opening into a confined space. The entrant is considered to have entered as soon as any part of his/her body breaks the plane of an opening into the space. This includes all periods of time during which the space is occupied and all ensuing work activities in that space.

Confined Space Entry Supervisor: The person responsible for determining if acceptable entry conditions are present at a confined space, for authorizing entry, ensuring that any person entering a confined space are trained, overseeing entry operations, and for terminating any entry into the space.

Confined Space Rescue Team: Workers who are trained and authorized to conduct confined space rescue operations during emergencies

Supplier: A provider of services under a contract with the Purchaser to perform specific business activities on behalf of the Purchaser at the Purchaser's sites. Sometimes referred to as a Prime Contractor, General Contractor, Service Provider, Contract Production or Spot Buy. For the purpose of this document, all the requirements applicable to contractors will also be applicable to Subcontractors.

Employee: A person defined as a non-Amazon employee that works directly for a third party from which they receive direct supervision.

Critical Equipment - Equipment, that if not used or maintained correctly, or if fails, has the potential to produce significant loss to people, property, and/or processes. Examples include respirators, mobile equipment and any equipment used for lifting and rigging, personal fall arrest, electrical safe work and confined space rescue.

Energy Source – Any source of electrical, mechanical, pneumatic, thermal, gravity or other source of energy.

Energized – Machines, equipment or processes that are connected to live energy.

Energized Work Tasks (Energized Work) – Any task in which an employee must perform work, inspection, testing on a piece of equipment, where the hazardous energy is not able to be controlled using lockout energy control due to the nature of the task. Examples of Energized work tasks include: Inspection, Testing, photo eye/sensor alignment, hydraulic cylinder adjustment, etc.

Energized Work Safe Operating Practice – A documented procedure to be followed where power remains on and lockout-energy control is not feasible when performing a task.

Energy Isolating Device – A mechanical device that physically prevents the transmission or contact with hazardous energy from a given source to the machine or equipment (e.g. electrical disconnects, pneumatic and hydraulic isolation valves, manually operated switches, a block, etc.). This does not include a push button, selector switch, or other control circuit type devices.

Exposure – A worker performing a task who is in a position to be exposed to one or more hazardous energy sources.

Group Key Box - A portable box where personal lockout locks can be applied, which is used to lock out machinery, equipment and/or processes with multiple energy isolating devices. The box can be locked by authorized employees to secure keys. Group key boxes are utilized on machinery, equipment and/or processes where captive key systems are not available or feasible.

Hazardous Atmosphere: An atmosphere that may expose workers to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a confined space), injury or acute illness from one or more of the following causes:

- Atmospheric oxygen concentration below 19.5% or above 23.5%.
- The concentration of a flammable gas, vapor or mist present in the space at or above 10 percent of its lower flammable limit (LFL).
- Airborne combustible dust concentration at or above 10% of its LFL, as indicated by conditions that obscure vision at a distance of 5 feet (1.5 meters) or less.
- The airborne concentration of any substance exceeds the GM Occupational Exposure Limits.
- The space contains an atmosphere that is immediately dangerous to life or health (IDLH). [An IDLH is any condition which poses an immediate or delayed threat to life, may result in irreversible adverse health effects or would interfere with an individual's ability to escape unaided from a permit space.]

Hazardous Energy – Any source of energy with the potential to cause harm, injury or loss of life to a person, such as, but not limited to: Electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravity and stored energy.

Job Hazard Analysis (JHA): A process that is conducted prior to starting a task to evaluate and document the key steps, hazard(s), and safe method(s)/control(s), and personal protective equipment (PPE) necessary to perform the task. Pre task planning consists of identifying any potential hazards that may exist and developing and documenting specific instructions to eliminate/minimize and control exposure to hazards.

Lockout – The placement of a lockout device on an energy isolating device, in accordance with an established procedure, assuring that the energy isolating device and the equipment being controlled cannot be energized and/or operated until the lockout device is removed.

Lockout Device – A device that utilizes a positive means, such as a lock, to hold an energy isolating device in the safe position and prevent the energizing or operation of a machine, equipment or process.

Near miss Incident: An incident which did not result, but under different circumstances could have resulted, in an injury/illness, property or equipment damage.

Personal Fall Arrest Systems (PFAS): A fall hazard control method designed to meet regulatory requirements to prevent a worker from a fall when working from heights. A PFAS includes a body harness, Layard, and approved anchorage point.

Personal Lockout Lock – A lock which is assigned to an individual specifically for performing Lockout Energy Control. Assigned personal locks must not be utilized by any other individual other than the person to whom they are assigned.

Purchaser: In this document the Purchaser is referred to as Amazon, who has contracted out services to a 3rd party service provider.

Qualified Person: Individual who, by possession of a recognized professional degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter.

Risk: A combination of the likelihood of an occurrence of hazardous event or exposure(s) and the severity of injury/illness that can be caused by the event or exposure(s).

Risk Assessment: Process of evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk is acceptable.

Root Causes: The most basic cause (or causes) that can reasonably be identified that the site has control to fix and, when fixed, will prevent (or significantly reduce the likelihood of) the problem's recurrence.

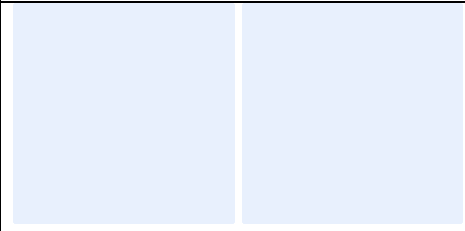
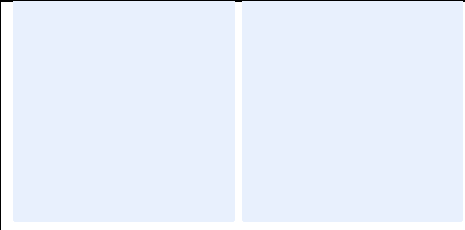

Servicing and/or Maintenance - Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, maintaining, and/or servicing machinery and equipment. Other activities include lubrication, cleaning, un-jamming of machines or equipment, and making adjustments or tool changes.

Special Safety Conditions: Amazon has developed a series of special safety conditions with the hope of clarify our expectations with suppliers. These special safety conditions are meant with the sole purpose of improving workplace safety and in no way limit the Supplier's responsibilities to provide safe means and methods to their employees. If at any time a Supplier feels they have a method that is more safe than any method outlined in this document, they are to notify Amazon of their deviation.

7.0 Appendix

Appendix A: Job Hazard Analysis Template

Job Hazard Analysis

Site Code: Choose or type a location.		Department: Click to enter text.	
Activity or Process: Click to enter text.		Building/Room: Click to enter text.	
Job Title: Click to enter text.		Supervisor: Click to enter text.	
Prepared By: Click to enter text.		Date: Click to enter a date.	
<i>This document is the certification of hazard assessment for PPE for the workplace.</i>			
TASKS/STEPS	HAZARDS	SAFE METHODS / CONTROLS / PPE	PHOTO
1 Click to add first task/step.	<ul style="list-style-type: none"> Click to add a hazard. Click to add a hazard. Click to add a hazard. Click to add a hazard. 	<ul style="list-style-type: none"> Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. 	
2 Click to add second task/step.	<ul style="list-style-type: none"> Click to add a hazard. Click to add a hazard. Click to add a hazard. Click to add a hazard. 	<ul style="list-style-type: none"> Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. 	
3 Click to add third task/step.	<ul style="list-style-type: none"> Click to add a hazard. Click to add a hazard. Click to add a hazard. Click to add a hazard. 	<ul style="list-style-type: none"> Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. 	

4 Click to add fourth task/step.	<ul style="list-style-type: none"> Click to add a hazard. Click to add a hazard. Click to add a hazard. Click to add a hazard. 	<ul style="list-style-type: none"> Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. 		
5 Click to add fifth task/step.	<ul style="list-style-type: none"> Click to add a hazard. Click to add a hazard. Click to add a hazard. Click to add a hazard. 	<ul style="list-style-type: none"> Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. Click to add a control. 		
Required Training		Required PPE		
Click to add required training. Click to add required training. Click to add required training. Click to add required training.		Click to add eye and face protection. Click to add head protection. Click to add body (foot, leg, hand, or arm) protection. Click to add hearing protection. Click to add respiratory protection.		
<i>I have read and understand the contents of the job hazard analysis and the controls required to mitigate the risks from the identified hazards</i>				
Name		Date		
Click to enter text.		Click to enter a date.		
Click to enter text.		Click to enter a date.		
Click to enter text.		Click to enter a date.		
Click to enter text.		Click to enter a date.		
Click to enter text.		Click to enter a date.		
Click to enter text.		Click to enter a date.		

7.1 Appendix B: Virtual Contractor Orientation Instructions:



Amazon Virtual Contractor Orientation User Instructions

Instructions:

1. Go to <https://whsrme.thinkingcap.com> and click register as shown in the picture below
2. Complete the registration form completing all fields and creating a password.
 - a. Email: Use your company email address
 - b. Company Name: Enter your company's name
3. Identify which Amazon site service is being performed: example CMH1
4. Security Check – Click in the box next to “I’m not a robot”.
5. Click Submit
6. **When logging into the system the 1st time you are required to change your password**
7. Once logged in you will see the main page.
8. Choose the appropriate language (English, French and Spanish available) version required and begin training.
9. Once completed, you will receive a digital certificate of completion. Bring a hardcopy or screenshot of the certificate onsite for validation by your Point of Contact.

Image: Opening Screen for Registration and Login.

The image shows the Amazon Virtual Contractor Orientation registration and login screen. It features the Amazon logo at the top, followed by the text 'Welcome to Amazon's Virtual Contractor Safety Orientation'. Below this, there is a message: 'If you are logging in for the first time, you will be asked to update your password. If you need assistance, please refer to these [instructions](#).' There are two input fields: 'Email' and 'Password'. Below the 'Password' field is a link that says 'Forgot your password?'. At the bottom, there are two buttons: 'Log In' and 'Register'.

Course Selection Screen: Choose from Eng, French, S

The image shows the Amazon Virtual Contractor Orientation course selection screen. It is titled 'Catalog' and has a subtitle 'Welcome to WHSRME and Contract Risk'. Below this, there is a message: 'The Contractor Orientation is available in English, French, and Spanish. Please select the course below in your preferred language.' There are three course options listed, each with an Amazon logo and a description. The first course is 'Contractor Orientation' in English, the second is 'Orientation para contratistas' in Spanish, and the third is 'Orientation de l'entrepreneur' in French. Each course has a 'More Info' button and a 'Select' button.

7.2 Appendix C- Detailed Lift Plan

Title of Lift:			Date of Lift:
Site:	Location:	Date Form is Completed:	

A: Characterize the Load(s)

This Plan Covers: Single load only <input type="checkbox"/> Variety of similar loads (plan for largest) <input type="checkbox"/>				Source of load weight*: (Nameplate, Weighed, Calculated)
Length:	Width:	Height:	Diameter:	Load Weight*: (add 10% if not directly weighed)

B: Crane/Hoist Configuration

Crane and/or Hoisting Equipment to be utilized:	Rated Gross Capacity:
For Hoists using a PIT attachment ONLY: PIT Make/Model: _____ Attachment: _____ Attachment listed on Data Plate: Y or N Boom Length: _____ Max Fork Height for Lift: _____ PIT Capacity with attachment: _____	

C: Characterize the Task (include directions for lifting, rotation, travel)

D: Evaluate the Hazards (sharp corners, nearby equipment, load twisting, PIT, mezzanine load)

E: Plan the Rigging

Sketch or Photo Rigging plan on attached grid. Show the load rigging, lifting device, and the type of gear to be used.



F: Define Rigging Gear Requirements

1. List each piece of rigging gear (such as: load hook, shackles, slings, eye bolts). List weight if component >10 lbs 2. Label the sketch or photo using the corresponding letter for the gear. 3. Draw sling angles and the resulting load reduction factors for slings and eyebolts. 4. Calculate the force on each piece of rigging gear. Show that angles are accounted for in determining forces. 5. Determine the required rigging gear capacity and size. Indicate if this is an exact specification or a minimum.				Total Rigging Weight:
Type	Weight	Force on rigging gear	Capacity/rating/WLL	Size Specification



Plan Approval																																									
Plan Preparer																																									
Signature:										Printed Name:										Date:																					
Plan Approver (FM or FAM)																																									
Signature:										Printed Name:										Date:																					
Pre-Lift Plan Acceptance (all participants prior to lift must sign to acknowledge understanding of plan during pre-lift brief)																																									
Employee					Signature					Date					Employee					Signature					Date																

7.3 Appendix D:

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA**

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA [†]				
Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(i) Stationary masonry saws 	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None	Water Controls: <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzle is working properly to apply water at the point of dust generation; ■ The spray nozzle is not clogged or damaged; and ■ All hoses and connections are intact.
(ii) Handheld power saws (any blade diameter) 	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. <ul style="list-style-type: none"> ■ When used outdoors. ■ When used indoors or in an enclosed area. 	None APF 10	APF 10 APF 10	Water Controls: <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzle is working properly to apply water at the point of dust generation; ■ The spray nozzle is not clogged or damaged; ■ All hoses and connections are intact.



**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)</p> 	<p>For tasks performed <u>outdoors only</u>:</p> <ul style="list-style-type: none"> ■ Use saw equipped with commercially available dust collection system. ■ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. ■ Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency. 	None	None	<p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The shroud or cowl is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions to prevent clogging; and ■ The dust collection bags are emptied to avoid overfilling.
<p>(iv) Walk-behind saws</p> 	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <ul style="list-style-type: none"> ■ When used outdoors. ■ When used indoors or in an enclosed area. 	<p>None</p> <p>APF 10</p>	<p>None</p> <p>APF 10</p>	<p>Water Controls:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles are working properly to apply water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact.

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(v) Drivable saws 	<p>For tasks performed <u>outdoors only</u>:</p> <ul style="list-style-type: none"> ■ Use saw equipped with integrated water delivery system that continuously feeds water to the blade. ■ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None	<p>Water Controls:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact.
(vi) Rig-mounted core saws or drills 	<ul style="list-style-type: none"> ■ Use tool equipped with integrated water delivery system that supplies water to cutting surface. ■ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. 	None	None	<p>Water Controls:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact.

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WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills) 	<ul style="list-style-type: none"> ■ Use drill equipped with commercially available shroud or cowling with dust collection system. ■ Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. ■ Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. ■ Use a HEPA-filtered vacuum when cleaning holes. 	None	None	Dust Collection Systems: <ul style="list-style-type: none"> ■ The shroud or cowling is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and ■ The dust collection bags are emptied to avoid overfilling.
(viii) Dowel drilling rigs for concrete 	For tasks performed <u>outdoors only</u> : <ul style="list-style-type: none"> ■ Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism. ■ Use a HEPA-filtered vacuum when cleaning holes. 	APF 10	APF 10	Dust Collection Systems: <ul style="list-style-type: none"> ■ The shroud is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and The dust collection bags are emptied to avoid overfilling.

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**


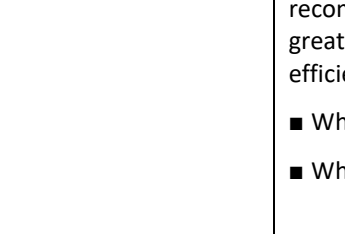
Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(ix) Vehicle-mounted drilling rigs for rock and concrete 	<p>Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector.</p> <p align="center">OR</p> <p>Operate from within an enclosed cab and use water for dust suppression on drill bit.</p>	None	None	<p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The shroud or hood is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and ■ The dust collection bags are emptied to avoid overfilling. <p>Water Controls:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust Suppression is used; ■ The spray nozzles are working properly and produce a pattern that applies water on the discharge point from the dust collector; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact.

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA [†]	
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Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(x) Jackhammers and handheld powered chipping tools</p> 	<p>Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.</p> <ul style="list-style-type: none"> ■ When used outdoors. ■ When used indoors or in an enclosed area. <p style="text-align: center;">OR</p> <p>Use tool equipped with commercially available shroud and dust collection system.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</p> <ul style="list-style-type: none"> ■ When used outdoors. ■ When used indoors or in an enclosed area. 	<p>None APF 10</p> <p>None APF 10</p>	<p>APF 10 APF 10</p> <p>APF 10 APF 10</p>	<p>Water Controls[‡]:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The water sprays are working properly and produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact. <p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The shroud is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and ■ The dust collection bags are emptied to avoid overfilling.

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**


Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(xi) Handheld grinders for mortar removal (i.e., tuckpointing)</p> 	<p>Use grinder equipped with commercially available shroud and dust collection system.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre- separator or filter-cleaning mechanism.</p>	APF 10	APF 25	<p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The shroud is intact, encloses most of the grinding blade, and is installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; ■ The dust collection bags are emptied to avoid overfilling; ■ The blade is kept flush against the surface whenever possible; and ■ The tool is operated against the direction of blade rotation, whenever practical.

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA [†]	
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Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(xii) Handheld grinders for uses other than mortar removal</p> 	<p>For tasks performed <u>outdoors only</u>:</p> <p>Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p style="text-align: center;">OR</p> <p>Use grinder equipped with commercially available shroud and dust collection system.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre- separator or filter-cleaning mechanism.</p> <ul style="list-style-type: none"> ■ When used outdoors. ■ When used indoors or in an enclosed area. 	<p>None</p> <p>None</p>	<p>None</p> <p>None</p> <p>APF 10</p>	<p>Water Controls⁵:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles are working properly and produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact. <p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The shroud is intact and installed in accordance with the manufacturer's instructions; ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and ■ The dust collection bags are emptied to avoid overfilling.


TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA [†]	
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Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
(xiii) Walk-behind milling machines and floor grinders 	<p>Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p style="text-align: center;">OR</p> <p>Use machine equipped with dust collection system recommended by the manufacturer.</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</p> <p>When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.</p>	None	None	<p>Water Controls:</p> <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles are working properly and produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact. <p>Dust Collection Systems:</p> <ul style="list-style-type: none"> ■ The hose connecting the tool to the vacuum is intact and without kinks or tight bends; ■ The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions to prevent clogging; and ■ The dust collection bags are emptied to avoid overfilling.

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(xiv) Small drivable milling machines (less than half- lane) 	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions.	None	None	Water Controls: <ul style="list-style-type: none"> ■ An adequate supply of water for dust suppression is used; ■ The spray nozzles are working properly and produce a pattern that applies water at the point of dust generation; ■ The spray nozzles are not clogged or damaged; and ■ All hoses and connections are intact.

[illegible]

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(xv) Large drivable milling machines (half-lane and larger)</p> 	<p>For cuts of any depth on asphalt only:</p> <p>Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust.</p> <p>Operate and maintain machine to minimize dust emissions.</p> <p>For cuts of four inches in depth or less on any substrate:</p> <p>Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust.</p> <p>Operate and maintain machine to minimize dust emissions.</p> <p>OR</p> <p>Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant.</p> <p>Operate and maintain machine to minimize dust emissions.</p>	<p>None</p> <p>None</p> <p>None</p>	<p>None</p> <p>None</p> <p>None</p>	<p>No additional information provided. Refer to the engineering and work practice control methods outlined.</p>

**TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS
WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA[†]**




Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
(xvi) Crushing machines 	<p>Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points).</p> <p>Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions.</p> <p>Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.</p>	None	None	<p>Water Controls^{††}:</p> <ul style="list-style-type: none"> ■ Nozzles are located upstream of dust generation points and positioned to thoroughly wet the material; ■ The volume and size of droplets is adequate to sufficiently wet the material (optimal droplet size is between 10 and 150 µm); and ■ Spray nozzles are located far enough from the target area to provide complete water coverage but not so far that the water is carried away by wind.
(xvii) Heavy equipment and utility vehicles used to abrade or fracture silica- containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica- containing materials^{**} 	<p>Operate equipment from within an enclosed cab.</p> <p>When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.</p>	None None	None None	<p>No additional information provided. Refer to the engineering and work practice control methods outlined.</p>

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS WHEN WORKING WITH MATERIALS CONTAINING CRYSTALLINE SILICA [†]	
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Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)		Recommended Operating Practices
		≤ 4 hours /shift	> 4 hours /shift	
<p>(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silica-containing materials</p> 	<p>Apply water and/or dust suppressants as necessary to minimize dust emissions.</p> <p style="text-align: center;">OR</p> <p>When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.</p>	<p>None</p> <p>None</p>	<p>None</p> <p>None</p>	<p>The following scenarios are examples of when the employer must use water and/or dust suppressants as necessary to minimize dust emissions:</p> <ul style="list-style-type: none"> ■ Equipment for grading and excavating is not equipped with enclosed, pressurized cabs. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> ■ Employees other than the operator are engaged in the task. If water or dust suppressants are applied as necessary to minimize visible dust, the employer need not provide an enclosed, filtered cab for the operator.

APF 10 (requires fit testing)		APF 25	
 <p>Dust Mask/Half Mask</p>	 <p>Half Mask (Elastomeric)</p>	 <p>Loose-Fitting Powered Air-Purifying Respirator (PAPR)</p>	 <p>Hooded Powered Air-Purifying Respirator (PAPR)</p>

[†] (1) When implementing the control measures specified in Table 1, each contractor shall:

- i. *For tasks performed using wet methods*, apply water at flow rates sufficient to minimize release of visible dust. The appropriate water flow rates for controlling silica dust emissions can vary; therefore, it is necessary to follow manufacturers' instructions when determining the required flow rate for dust suppression systems on a given worksite. Integrated water systems must be developed specifically for the type of tool in use so they will apply water at the appropriate dust emission points based on tool configuration and do not interfere with other tool components or safety devices.

Any slurry generated when using water to suppress dust should be cleaned up to limit secondary exposure to silica dust when the slurry dries following procedures described in the contractor's Safe Work Plan / Job Hazard Analysis (written exposure control plan).

When working in cold temperatures, where there is a risk of water freezing, additional work practices such as insulating drums, wrapping drums with gutter heat tape or adding environmentally friendly antifreeze.

- ii. *For tasks performed using commercially available, dust collection systems (i.e. LEV)*, use equipment that is designed to effectively capture dust generated by the tool being used and does not introduce new hazards such as obstructing or interfering with safety mechanisms. The "commercially available" limitation is meant only to eliminate on-site improvisations of equipment by the employer. When employers use methods other than commercially available systems for dust suppression, they must conduct exposure assessments and comply with the applicable Occupational Exposure Level (Example in USA is OSHA-PEL).

Some Table 1 entries for dust collection systems specify use of cyclonic pre-separators and filter cleaning mechanisms to prevent buildup of debris on filters that result in less dust capture. A cyclonic pre-separator collects large debris before the air reaches the filters. A filter cleaning mechanism prevents the need for manually cleaning filters to prevent buildup of debris (caking). Some vacuums are equipped with a gauge indicating filter pressure or an equivalent device (e.g., timer to periodically pulse the filter) to help employees in determining when it is time to run a filter cleaning cycle.

- iii. *For tasks performed indoors or in enclosed areas*, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust. Indoors or in an enclosed area mean areas where airborne dust can build up unless additional exhaust is used. Sufficient air circulation in enclosed or indoor environments is important to ensure the effectiveness of the control strategies and to prevent the accumulation of airborne dust. The means of exhaust necessary could include: the use of portable fans (box fans, floor fans, and axial fans), portable ventilation systems, or other systems that increase air movement and assist in the removal and dispersion of airborne dust. To be effective, the ventilation must be set up so that movements of employees during work, or the opening of doors and windows, will not negatively affect the airflow.
- iv. *For measures implemented that include an enclosed cab or booth*, ensure that the enclosed cab or booth:
 - a. Is maintained as free as practicable from settled dust;
 - b. Has door seals and closing mechanisms that work properly;
 - c. Has gaskets and seals that are in good condition and working properly;
 - d. Is under positive pressure maintained through continuous delivery of fresh air;
 - e. Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better); and
 - f. Has heating and cooling capabilities.

(2) Where an employee performs more than one task on Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

‡ The water delivery system is not required to be integrated or mounted on the tool; it can be assembled and installed by the contractor. Acceptable water delivery systems include direct connections to fixed water lines or portable water tank systems. These water delivery systems can be operated by one worker or could require a second worker to supply the water at the point of impact.

§ The integrated water delivery system can be a free-flowing water system designed for blade cooling as well as manufacturers' systems designed for dust suppression alone. This option applies only when grinders are used outdoors.

†† The water spray systems can be installed so that they can be activated by remote control.

** NOTE: When the operator exits the enclosed cab and is no longer actively performing the task, the operator is considered to have stopped the task. However, if other abrading, fracturing, or demolition work is performed by other heavy equipment and utility vehicles in the area while an operator is outside the cab, that operator is considered to be an employee "engaged in the task" and must be protected by the application of water and/or dust suppressants.

8.0 Revision History

Date	Rev #	Change Made	Author(s)
June 15 th 2018	0	Initial release of this document.	Ryan Rouse
June 2021	1	Table of contents Numbering corrected and updated	Justin Smith
		4.5 Updated contractor guidance to reflect virtual delivery system; replacing in-person orientation	
		4.10 Updated definition of 3PQA. Updated language on termination of relationship as a result of repeated violations	
		4.12 Addition: Added Authority guidance to stop work.	
		5.1 Add a requirement for aerial hazard assessment for the use of aerial lifts	
		5.5 Updated requirement for energized electrical work permit GFC and grounding language removed. Added QEW ban on the participation of teams of 40 cal or more Aggregate All incident energy work of 12 cal / cm2 or greater must be performed by a licensed electrician in the local jurisdiction. Aggregate For electrical systems with an incident energy potential greater than 40 cal / cm2 (for example, main switch boards), the supplier must isolate the power upstream through the local utility grid or use a remote activation device (RAD)	
		5.6 Updated ladder selection criteria	
		5.6.1 Added Roof Access Guidance Update roof access lighting requirements for work performed outside of daylight hours Updated requirements for adverse weather conditions	

		5.10 Lift plan template, template added to Appendix	
		5.11 Added requirement for availability of PIT training records	
		5.13 Construction Barrier Requirements	
		5.13 Added guide for internal combustion engine equipment.	
		5.14 Added guidance for controlling exposure to silica	