

Issued Date: July 2026



STANDARD OPERATING GUIDELINES

US Standard Version

Navigating this Manual



BLASTING



CONFINED SPACE



CONTRACTORS AND VISITORS



ELECTRICAL SAFETY



EMERGENCY PREPAREDNESS



ERGONOMICS



GENERAL DEPARTMENT SAFETY



HAND AND POWERED TOOLS



HAZARD IDENTIFICATION



HAZCOM



HOT WORK



HOUSEKEEPING



INCIDENT INVESTIGATION



INDUSTRIAL HYGIENE



LIFTING AND RIGGING



LOCKOUT/TAGOUT/TRYOUT



MOBILE EQUIPMENT



PERSONAL PROTECTIVE EQUIPMENT



RESPIRATORY PROTECTION



HEARING PROTECTION



TRAFFIC MANAGEMENT



WORKING AT HEIGHTS



SITE SPECIFIC - HIRA

Reference Programs

A quick guide to the Standard Operating Guideline (SOG) programs included in this handbook.

BLASTING

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- SOG - Confined Space
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- SOG - Excavations
- SOG - Lifting, Rigging & Suspended Loads

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HAZCOM

- SOG - HAZCOM

HOT WORK

- SOG - Hot Work
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- SOG - Housekeeping

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- SOG - Hearing Conservation
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- SOG - Lifting, Rigging and Suspended Loads
- SOG - Safety Barriers, Fencing and Taping

LOCKOUT/TAGOUT/TRYOUT (LOTOTO)

- SOG - Lockout/Tagout/Tryout
- SOG - Guarding

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- SOG - Pre-use Inspection of Mobile Equipment
- SOG - Mobile Equipment
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- SOG - PPE

RESPIRATORY PROTECTION

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HEARING PROTECTION

- SOG - Hearing Conservation

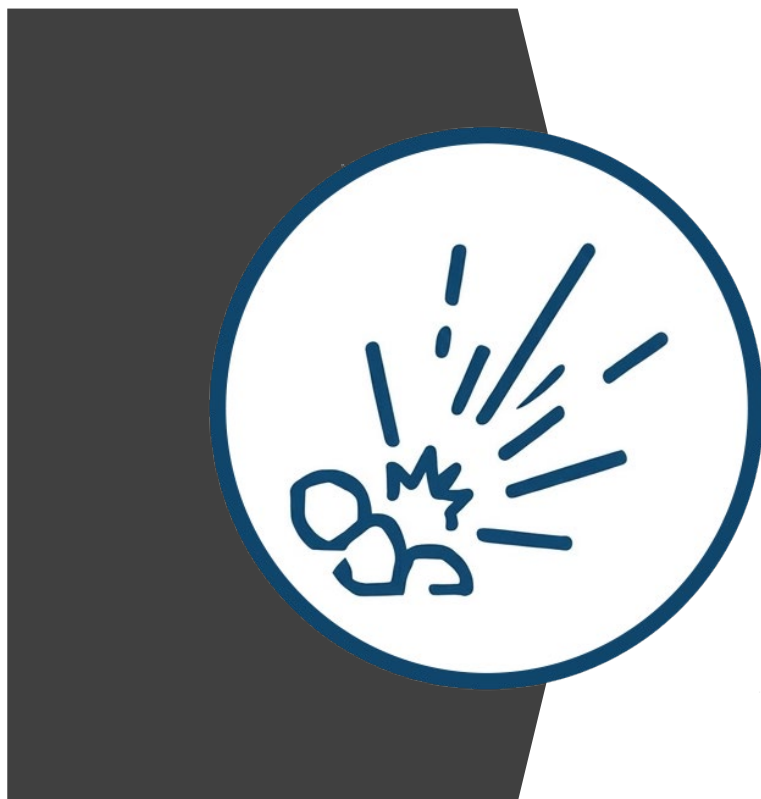
TRAFFIC MANAGEMENT

- SOG - Quarry Access
- SOG - Housekeeping
- SOG - Mobile Equipment

WORKING AT HEIGHTS

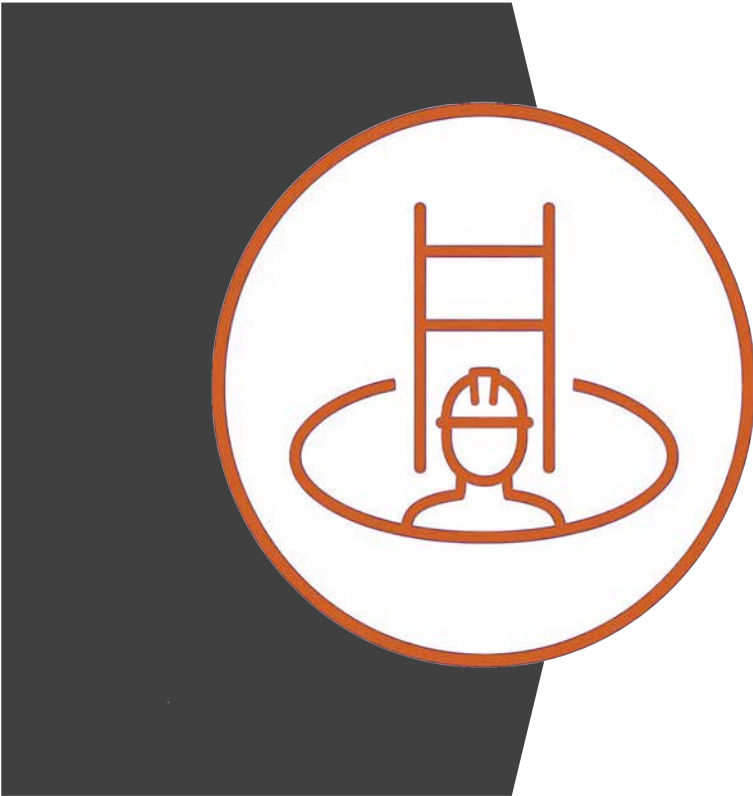
- SOG - Improvised Anchor Point
- SOG - Portable Ladders
- SOG - Working at Heights
- SOG - Working on Roofs

SITE SPECIFIC - HIRA



Standard Operating Guidelines

BLASTING



Standard Operating Guidelines

- **CONFINED SPACE**

CONFINED SPACE

Owner	Safety	Location	Master	Applicability	North America
Date	Feb 2018	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to confined space entry.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	Confined Space is a fully or partially enclosed space - That is not intended for continuous human occupancy and - Has potential for a hazardous atmosphere because of its construction, location, contents, or work activity within it. <i>A confined space is designated assuming no controls are in place. If no atmospheric hazard exists it is not considered a confined space. If the potential for a hazardous atmosphere is introduced testing must reoccur.</i> Examples of Hazardous Atmosphere - - Flammable gas (> 10% lower explosive limit) - Combustible dust (vision obscured at 5') - Oxygen deficiency (below 19.5 %) - Oxygen enrichment (O₂ concentration greater than 23%) - Atmospheric concentration of any substance that exceeds its allowable exposure level, (PEL, TLV or TWAEV) Entry occurs when any part of a person's body passes the plane of the entry point.	

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6.	Procedure - General	1. Confined spaces shall be identified with signage. 2. Prior to entry: a. Conduct a hazard assessment. b. The space must be isolated following LOTOTO procedures. c. An atmospheric test must be conducted. Additional testing must be conducted whenever the space is abandoned. d. A permit must be completed 3. Entrants and attendants must be trained in confined space entry and aware of the inherent hazards of the particular entry. 4. Emergency rescue procedures must be established prior to entry. However, the level of preparation depends on the inherent risks of the space and the work to be performed. <i>It is not necessary to consider scenarios that are highly unlikely and improbable.</i>	
7.	Procedure – Permit Issuer	1. Responsible for issuing a permit, which involves: identifying hazards; establishing control measures and emergency procedures; and reviewing the permit with entrants and attendants.	
8.	Procedure - Attendant	1. Conducting and recording atmospheric testing. 2. An attendant is required for all entries a. If the inherent risk of the space and the work being performed is assessed low, then that attendant may perform other duties providing they can adequately monitor the entrants.	
9.	Important Information	The confined spaces on this site are: []	



Standard Operating Guidelines

- EXCAVATIONS
- LIFTING, RIGGING & SUSPENDED LOADS



CONTRACTORS AND VISITORS



Standard Operating Guideline

Excavations

Reference Program: Contractors & Visitors

Owner	Safety	Location	Master	Applicability	North America
Date	Jun 2018	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities:	1. Site Operations Manager - o Ensure all aspects of this SOG are implemented and adhered to. 2. Supervisor - o Ensure employees are fully trained in the requirements of this SOG - o Ensure employees work in accordance with this SOG 3. Employee - o Work in accordance with this SOG. 4. Immediately report to their supervisor, any concerns or unsafe conditions.	
2.	Scope & Applicability	1. The requirements of this SOG apply to all Carmeuse employees and contractors involved with excavations on Carmeuse property.	
3.	Procedure - Specific	• Each site will perform a full underground utility survey and have diagrams available for reference. • Diagrams must be reviewed with contractor, third-party utility locators, and/or employees involved in excavating. • Prior to excavating, a third-party utility locator must perform utility locates in the areas to be excavated. • The Pre-Excavation Checklist must be completed and approved prior to excavations of any depth. • Machine-excavating is prohibited within 24" of any buried utility (hand-digging required.)	

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- Consider utility depth in future installations. If not installed deeper than 24" a risk assessment will be performed to determine the need for concrete encasement of utility.
- A secured ladder, ramp or other means of egress shall be provided within 25 feet of all workers in a trench that exceeds four feet in depth.
- Each job specification will determine what atmospheric monitoring (e.g., O₂, LEL, H₂S, CO), will be conducted before an employee entering an excavation that exceeds 4 feet in depth and has the potential to contain a hazardous atmosphere.
- Excavated material shall be placed at least two feet away from the edge of the excavation. (i.e. tools, spoil pile, rocks, broken concrete or other debris).
- If walkways are provided over excavations, they shall be capable of supporting the weight of the traffic, guardrails and toe boards if employees will be working below the walkway.
- After dark, excavations shall be secured to keep vehicles and unauthorized personnel out. All excavations in high profile/traffic areas must utilize high visibility fencing material placed 6 feet from the edge of the excavation when possible.



4.	Important Information		
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Standard Operating Guideline

Lifting, Rigging and Suspended Loads

Reference Program: Lifting and Rigging

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a suspended load.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	- Suspended load – anything not directly supported from the ground by mechanical or structural means. Examples - o Cranes - o Conveyor gravity take ups - o Chain-falls / come-a-longs - o Forklifts & telehandlers (<i>including when forks left in raised position i.e. adhoc work table</i>) - o Hydraulic jacks (when the cylinder is not at its base) - Lifting Zone – the area below the suspended load that could be impacted if the load were to fall. Includes the swing path.	

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6. Procedure

1. No suspended load may be left unattended, unless physical barriers are installed below it.
 - a. For example – the guarding around the bottom of a gravity take-up
2. If the person performing the lift cannot observe the load along the entire path of travel / lift, they must obtain assistance.
3. Access to Lifting Zone must be controlled.
 - a. The level of control depends on the inherent risk of the lift. Factors to consider include the amount of time the load is suspended, the amount of vehicle and pedestrian traffic, and how easily a pedestrian will observe the lift. An example of minimal risk is when a forklift or telehandler completes a single lift i.e. bricks to the firing floor
4. Required Lifting Zone control procedures
 - a. High Risk – Red Danger tape* with communication posting and a watch person
 - b. Moderate risk – Red Danger tape with communication posting or a watch person
 - c. Minimal risk – operator diligence

*physical barriers are preferred – tape is a minimum. Rope or chain is also acceptable.
5. Always keep your whole body (including hands and feet) clear of a suspended load.
6. Note: during normal operations, forklifts operating in the warehouse are exempt from these requirements, as those areas should have established procedures.





Standard Operating Guideline

Lifting, Rigging and Suspended Loads

Reference Program: Lifting and Rigging

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7.	Lifting and Rigging	1. Only 1 person (who must be identified) is permitted to give signals to a crane operator. The signal person must have completed a recognized hoisting and rigging course, or be a qualified signal person. 2. Lifting plans will be developed as per generally accepted industry guidelines for Routine (non critical) and Non-Routine (Critical) lifts. 3. A pre-use inspection of lifting, lifting & rigging equipment shall be performed by the operator prior to its initial use each shift, including slings, rigging hardware, etc. 4. Deficient equipment shall be tagged "out of service" until repairs are completed and it passes inspection. 5. All lifts shall be executed based on the plan developed and agreed to by all individuals involved, and the Lift Leader, if any. 6. Complete the appropriate pre-use inspection checklist to identify that the load attachment / lift points, hardware and accessories are adequate. 7. Identify the intended path of travel and the final load placement area and ensure that barricade tape, barrier fencing or other suitable measures are implemented. 8. If the load must be touched to make fine positional adjustments, only qualified / authorized person may do so. 9. Non-conductive tag lines must be used whenever possible. Tag lines must never be attached or wrapped around your body. Tag lines need to be of sufficient length to make lift and keep personal from under suspended load. In addition, when needed poles with hooks can be used to reach tag lines and keep personal out of the Danger Zone.	
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Standard Operating Guideline

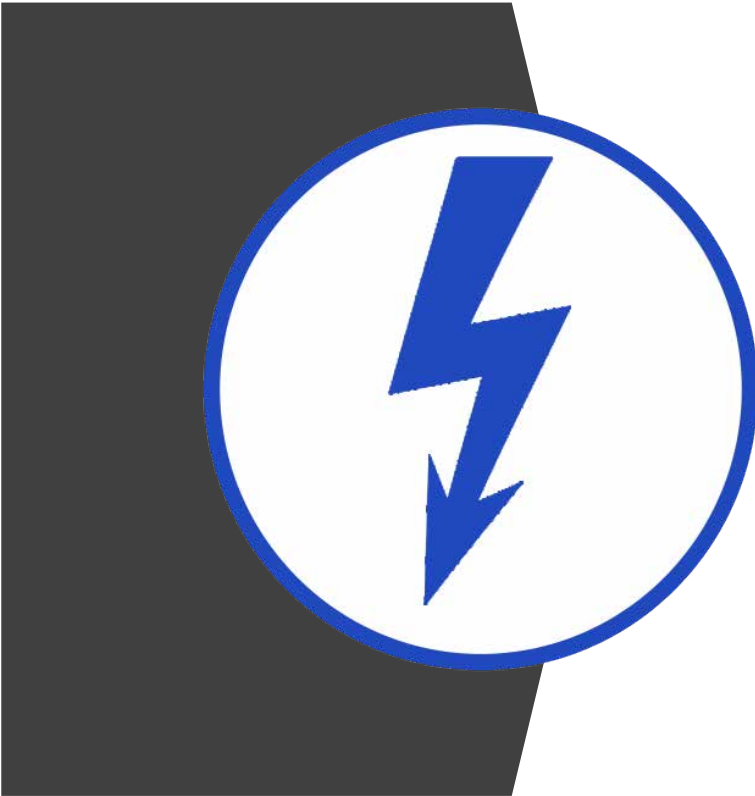
Lifting, Rigging and Suspended Loads

Reference Program: Lifting and Rigging

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8.	Critical Lift	1. The Lift Leader ensures that a. Resources including safety, engineering and qualified personnel has been consulted, b. A documented Lift Plan is completed and reviewed with all individuals involved prior to the execution of the Critical Lift. c. A Safety Officer has been identified. 2. The Safety Officer confirms that the lift plan is being followed, and that safety precautions are adequate (i.e. safety fencing). 3. The Safety Officer, Lift Leader or crane operator has authority to suspend any lift if, in their opinion, rigging and/or attachment / lift points are not appropriate to allow the lift to be executed safely.	
9.	Don't forget.....	4. Lifting Plan Checklist 5. Pre job checklist 6. Guidelines for Creating Lifting Plan for Lifting Operations In Workplaces	
10.	Important Information		



Standard Operating Guidelines

- **ELECTRICAL SAFETY (GENERAL)**
- **TROUBLESHOOTING AND ADDRESSING
“NOT NORMAL CONDITIONS”**

ELECTRICAL SAFETY



Standard Operating Guideline

Electrical Safety - General

Reference Program: Electrical Safety

Owner	Safety	Location	Master	Applicability	North America
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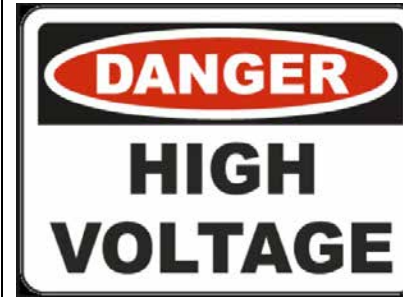


No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	Myth #12: Path of Least Resistance Exchange 2012 New Challenges, Innovative Solutions “Electric current always travels along the path of least resistance” — This is perhaps the most widely embraced of the electrical myths, but that doesn't mean it's true — <u>In fact, electric current travels along all available paths</u> ▪ The amount of current traveling along any given path is related inversely to the impedance of that path relative to that of all other possible paths ▪ Current flow paths include conventional wires, metallic structure and pipelines, metallic fences, the earth, and even people ▪ <u>People should avoid becoming one of the available current flow paths</u> PIONEER NATURAL RESOURCES
2.	Responsibilities: Supervisor	- Ensure all employees are fully trained in the requirements of this SOG - Ensure all employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to electricity or electrical controls. - Be aware of these guidelines while working in the plant production areas	
4.	Scope & Applicability	The requirements of this SOG applies to all Carmeuse employees	

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5.	Procedure and guidelines	1. Report all electrical problems to a qualified electrician or supervisor. 2. Never touch exposed, loose or fallen electric wires. 3. Never reach into or touch open electrical enclosures, panels or conduits. Report any removed covers or doors on electrical equipment, junction boxes or conduits immediately to a qualified electrician or supervisor. 4. Never operate any electrical equipment, electrical switches, or push buttons unless authorized to do so by qualified plant personnel. 5. Never enter an area labeled “Danger High Voltage” unless accompanied by qualified plant personnel. 6. Always use “stand aside” rule when operating electrical disconnects. Use left hand when disconnect handle is on the right of the panel and use the right hand when the handle is on the left. When wearing a face shield, do not turn away as potential flash will enter the side of shield. 7. Never leave a light socket empty. Replace the bulb at once. 8. Never reset a tripped circuit breaker. Notify a qualified person to determine the cause. 9. Never use flammable materials near electrical equipment. 10. Be aware of overhead power lines and the proper approach distances to be maintained. Most overhead power lines are not insulated and all precautions must be made to avoid contact with them. 11. Inspect and properly dispose damaged extension cords. Never pull on extension cords to remove them from a receptacle. Disconnect them by gripping the plug itself.
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(check that annual grounding conductor testing has been done and tagged.)

12. All plant extension cords shall be protected by Ground Fault Circuit Interrupter (GFCI) circuit breakers or receptacles or portable "pig tail" style GFCI.
13. Keep electrical and MCC rooms as clean and dust free as possible. Never store material of any kind inside electrical and MCC rooms.
14. Never store material on top of or around electrical panels and equipment. Maintain clear access (1m or 3') in front of electrical panels.
15. All electrical power panels, switchgear, MCC's, etc. shall either have non-conductive mats or grounded metal plates place in front of the operating panels. Concrete and/or earth (outdoors) is not allowed.
16. Report obsolete/unused electrical boxes, conduit and cable that are not tagged to qualified plant personnel.
17. Be aware of what the signs of impending failure of electrical equipment may be. This could be physical damage, broken mechanisms, standing water, smoke or burned devices and cables. Do not remain near electrical equipment where there is evidence of impending failure.
18. Signs warning of electrical hazards must be located in areas limiting access to unauthorized personnel and must be maintained legible.
19. Barricades must be erected to prevent unauthorized access to open cabinets. Non-qualified personnel shall not cross barricades under any circumstances.





**Standard
Operating
Guideline**

Electrical Safety - General

Reference Program: Electrical Safety

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6.	Important Information	Ensure ground fault circuit interrupters (GFCI) are available and used in wet locations.		
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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to this SOG.	
4.	Scope & Applicability	- The requirements of this SOG apply to all Carmeuse employees and contractors. - This SOG is in place to protect all workers who may be exposed to electrical hazards resulting from electric shock and arc flash. This program is also intended to protect those workers who are responsible for shutting down, and/or troubleshooting energized equipment where potentially significant hazards associated with the work activity involving electrical energy may exist. - This SOG does not allow for the performing of repairs of electrically energized equipment.	
5.	Not Normal conditions	5.1 The following are NOT Normal conditions 5.1.1 Equipment or system is not properly installed or maintained. 5.1.2 There is no documentation and drawings of the equipment as installed for reference to correct and safe operation. 5.1.3 Equipment or system is not operated in accordance with manufacturer’s instructions and precautions. 5.1.4 There are attempts to defeat safety features or control “jumpers” are evident.	

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		5.1.5 The equipment doors are not closed and secured. 5.1.6 The equipment covers are not in place and secured. 5.1.7 There is evidence of impending failure. 5.1.8 Someone has a suspicion, questions or uncertainty regarding the operation of the equipment.
6.	Qualified Person	6.1 Those permitted to work on or near exposed energized parts. One who has demonstrated skills and knowledge related to the construction and operation of electrical equipment and installations and has received safety training to identify the hazards and reduce the associated risk, 6.2 Whether an employee is considered to be a "qualified person" will depend upon various circumstances in the workplace. It is possible and, in fact, likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "not qualified" as to other equipment
7.	De-energizing	7.1 De-energize parts to which you may be exposed before working on or near them (as defined as minimum approach distance, section 21). 7.2 Except when it is demonstrated that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations 7.3 Prior to work on or near energized parts, an Energized Electrical Work Permit (EEWP) must be completed and approved.
8.	Testing & Troubleshooting	8.1 Only qualified persons may perform testing or troubleshooting work on electric circuits or equipment.



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9.	Alerting Techniques	9.1 Use signs and barricades where it is necessary to prevent or limit employee access to work areas with un-insulated energized conductors, circuit parts or arc-flash hazards. 9.2 Station an attendant if signs and barricades do not provide sufficient warning and protection.	
10.	Standardized Work Practices on Energized Equipment.	10.1 Use standardized electrical work practices whenever working near or on equipment or circuits which are or may be energized. 10.2 Only qualified persons may work on near electric circuit parts or equipment that have not been de-energized.	
11.	De-energizing	11.1 Live parts that operate at less than 50 volts to ground, need not be de-energized if there will be no increased exposure to electrical burns or to explosion due to electric arcs. 11.1.1 However, extra caution must be exercised when working on mobile heavy equipment DC circuits due to the high storage capacity of the batteries for both 12 and 24 volt systems. 11.2 Verify that de-energization has occurred is required, usually with a test meter or light. 11.2.1 Indicating devices on the door or panel of the equipment being de-energized can be used to verify without further testing. 11.3 Equipment or system in <i>normal</i> operation does not require Arc-Flash PPE for de-energizing or verification. 11.4 Equipment or system in <i>not normal</i> operations require appropriate Arc-Flash PPE (refer to the site’s ESRA) for de-energizing and verification.	
12.	Conductive items.	12.1 Do not wear conductive apparel, jewelry or clothing (such as watch bands, bracelets, rings, key chains, necklaces, eyewear, or	



Standard Operating Guideline

Troubleshooting and Addressing “Not Normal Conditions”

Reference Program: Electrical Safety

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		metal headgear) while working on or near exposed energized circuits	
13.	Handling Energized Cables:	13.1 Do not move power cables energized to potentials in excess of 150 volts with equipment unless sleds or slings, insulated from such equipment, are used. 13.2 When such energized cables are moved manually, insulated hooks, tongs, ropes, or slings shall be used unless suitable protection for persons is provided by other means. 13.3 This does not prohibit pulling or dragging of cable by the equipment it powers when the cable is physically attached to the equipment by suitable mechanical devices, and the cable is insulated from the equipment.	
14.	Draw out of an MCC bucket	14.1 Should be done when the MCC is de-energized. 14.2 If this operation must be performed while the MCC is energized then arc-flash PPE is required. Bucket draw out while energized will require an EEWP.	

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15.	Older MCC's	15.1 Older MCC's do not have modern safety design features as newer ones. Watch for the following old MCC designs: 15.1.1 MCC bucket doors that expose the adjacent wireways when opened. (No separate wireway covers). If the MCC is energized then arc-flash PPE will be required regardless of the individual bucket being de-energized. 15.1.2 Bucket disconnects are mounted on an MCC door (not on the MCC structure flange). If the MCC is energized, then arc-flash PPE must be worn at all times when working on or near an open bucket. These buckets cannot be locked out since the locking mechanism is physically separated from the circuit breaker or disconnect device. 15.1.3 Disconnect devices in a bucket may not have the line conductors covered or shielded. In this case, arc-flash PPE must be worn when working or near an energized MCC even when the bucket itself is locked out.	
16.	MCC Absence of Voltage Tester	16.1 If the equipment has an Absence of Voltage Tester (AVT) mounted on it's door or cover, arc-flash PPE is not required when opening the door or cover to do work. 16.2 Otherwise, when verifying absence of voltage after opening the disconnect, arc-flash PPE is required while testing inside the enclosure until it is verified that voltage has been removed.	

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17.	Tools Testing Equipment	17.1 Visually inspect test instruments and equipment and all associated test leads, cables, power cords, probes, and connectors for defects and damage before use. 17.1.1 If there is a defect or damage remove from service until repairs are made. 17.2 Ensure test instruments and their accessories are rated for the circuits to which they will be connected and are designed for the work environment. 17.3 Test voltage testing equipment before use.	
18.	PPE	18.1 Wear protective equipment (clothing, face shield, ear plugs, balaclava, gloves) appropriate for the potential arc flash hazards. 18.2 Inspect your protective equipment before each use. 18.3 Ensure your rubber and leather gloves are tested every 6 months. 18.4 Ensure 8 cal clothing has not exceeded 1000 washes	
19.	Routine Opening & Closing of Circuits	19.1 Use cable connectors of the load break type or properly rated equipment for the purpose. 19.2 When using circuit-opening devices, keep your body clear from the face of the equipment, stand aside when opening/closing, and open/close the device in a quick and deliberate manner.	
20.	Re-closing circuits after protective device operation	20.1 After a circuit is de-energized by a circuit protective device, the circuit may not be manually reenergized until it has been	

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		determined that the equipment and circuit can be safely energized. 20.2 The repetitive manual re-closing of circuit breakers or reenergizing circuits through replaced fuses is prohibited.	
21.	Minimum Approach Boundaries	Limited Approach 21.1 This is the distance from an exposed live part where an unqualified person must stay back unless escorted by a qualified person. Restricted Approach 21.2 This is the distance from an exposed live part where only qualified persons may enter. They must use appropriate shock protection techniques and equipment. This includes voltage rated gloves and insulated tools and instruments. Prohibited Approach 21.3 This is the distance from an exposed live part where the hazard is the same as making contact with the part. Qualified personnel should avoid entering this boundary.	
22.	Important Information		



Standard Operating Guidelines

- INCIDENT MANAGEMENT
- EMERGENCY SHOWERS & EYE WASH STATIONS

EMERGENCY PREPAREDNESS



Standard Operating Guideline

Incident (Emergency) Management

Reference Program: Emergency Preparedness Program

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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to responding to injuries or property damage.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	- An “incident” is an unforeseen, unplanned event that results in injury or property damage (does not include near misses). - An “emergency” is a situation that causes - serious adverse effects on the health & safety of persons in the workplace or community, or - significant disruptions in normal operations, property damage or environmental impact. - A “disaster” is an event that overwhelms emergency response resources and causes great damage, loss or destruction	



Standard Operating Guideline

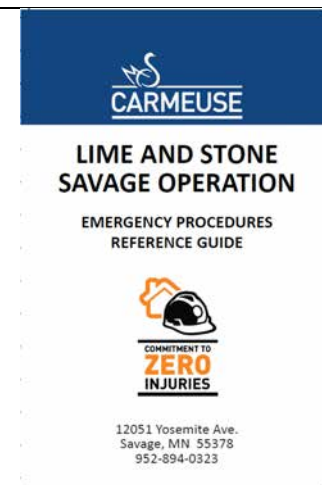
Incident (Emergency) Management

Reference Program: Emergency Preparedness Program

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6.	Preparation – Training	- Review local “flip cards” and other emergency response procedures. - Conduct two drills per year to identify areas for improved planning. Examples of drills are: - MARSEC drill or exercise. - Evacuation of all or part of facility. - Emergency responder tour of facility. - Severe weather – report to shelters. - Hands-on fire extinguisher/other fire equipment training. - Mock emergency - Table top crisis exercise
7.	Preparation – Planning	- Establish clear lines of communication. - Establish clear responsibilities for probably scenarios. Someone must be the Incident Commander. - Typically, a department manager - Somebody not “hands-on” responding to emergency - May depend on location and shift - Assumes command of entire site and its resources. - Determines strategies, allocates resources, assigns actions - Incident command is relinquished to Emergency Services when they arrive. - Establish command center(s) - A place away from the emergency, so planning may occur.
8.	Procedure – During Emergency	- Identify Incident Command - Identify resources available. - Utilize any available reference guides. - All information must flow to the Incident Command, who will assign tasks to persons and allocate resources. - Persons managing the incident should utilize the Emergency Response Tactical Worksheet, available on SharePoint.



EMERGENCY RESPONSE TACTICAL WORKSHEET

Industrial Incident Date: Time of Alarm: V/C Arrival (EOC): Refer to Emergency Flip Chart and Phone List for Contact Numbers Command Terminated: PARS 1 2 3 4 5 6

EMERGENCY SERVICE MUST BE NOTIFIED IF BUILDING EVACUATION REQUIRED OR UPON REQUEST OF V/C

Initial Contacts External IMT Members ☐ ACDP ☐ Director Internal IMT Members ☐ Name ☐ Name ☐ Name ☐ Name ☐ Name ☐ Name ☐ Safety: Name ☐ Enrich: Name ☐ Legal: David Switzer ☐ HR: Name ☐ Financial (if > \$10k needed) Outside Agencies In Incident ☐ Fire ☐ Police ☐ EMS ☐ Utilities, Gas, Hydro ☐ MCL, MCEEC, Safety, MSHA	Incident Task SOM/Designate ☐ Worker Member Notified ☐ Scribe established ☐ Media area established Local Production Tasks ☐ Initiate evacuation to assembly point ☐ Verify headcount ☐ Transportation dept. notified ☐ Process equipment safety shutdown ☐ Onsite leaders notified ☐ Truck gate traffic diverted to one lane or stopped ☐ Truck gate lane open for EMS vehicle ☐ Vehicle escort set up Maintenance Tasks ☐ Waste Management Setup ☐ Entry and ring roads clear ☐ Incident barricades set up Maintenance Utility Isolation ☐ Impacted storm, septic process recovery ☐ Impacted hydro secured ☐ Impacted gas lines secured ☐ Tank farm supply secured	SOM to Verify – Emergency Response Personnel ☐ Incident Safety Officer assigned ☐ Radio Channels Established Staging ☐ Staging Officer Assigned ☐ Staging Area Established ☐ Personnel Staging Established ☐ Equipment Staging Established ☐ Rehab Established Specialized Operations – Automatic Call to Outside Agencies ☐ Specialized rescue ☐ Flammables > 300L ☐ Compresses > 250 L ☐ Highly toxic materials ☐ High voltage failure ☐ Fire Protection Support Activated Medical Sector ☐ Triage Area Established ☐ Medical/Landing Area Established ☐ Rehab Established	Notes PAB check every 20 minutes Benchmarks ☐ All IMT advised ☐ All sectors established ☐ Evaluation complete ☐ Utilities secured ☐ Headcount complete ☐ Primary search ☐ Building secured ☐ Loss under control ☐ Secondary search ☐ Loss Stopped ☐ Post incident meeting ☐ Business resumption
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Revision date: February 11, 2018

Owner	Safety	Location	Master	Applicability	North America
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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of emergency showers and eyewash stations.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	Prevention of eye injuries is of utmost importance. The above information is to be used as part of the training of this guideline.	
6.	Training	Employees will be trained / provided a review regularly on the following: - The different use and applications of an emergency shower or eye wash - The effects of prolonged exposure to common contaminants (i.e. lime) on the eyes and skin. - The expected time to flush the eye after exposure (15 minutes minimum) - Demonstration on the correct use cleaning, storage and application of an emergency shower or eyewash used at the site. - Reporting requirements following exposure to a chemical which may have included the use of an eye wash station or shower.	



**Standard
Operating
Guideline**

Emergency Showers & Eyewash Stations

Reference Program: Emergency Preparedness Program

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7.		All eyewash stations and showers will be inspected monthly for: • The eyewash station is free of obstruction. • The eyewash is easily activated. • The water temperature is tepid • The nozzles are equipped with protective covers. • The covers are removed by eyewash activation • The water is flowing from both eyepieces. • The flow of water is of equal height. • The flow of water is clear after flushing. • The eyewash delivers a steady stream of water	
8.	Important Information	• Supplemental eyewashes are available for locations primary stations are not practical. These stations do not provide 15 minutes of flushing but will aid the injured in reaching a primary station. • Eyewash stations can be found here... - o Location 1 - o Location 2	



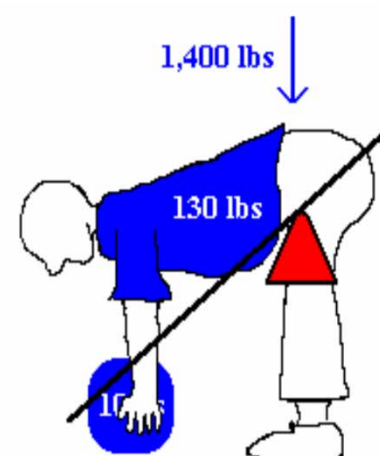
Standard Operating Guidelines

- SAFE LIFTING (MANUAL HANDLING)

ERGONOMICS

Owner	Safety	Location	Master	Applicability	North America
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No.	STEP	STEP DETAIL	ADDITIONAL INFORMATION
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to lifting/manual handling.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	The Myth & the Danger	- The old adage "Bend your knees, lift with your legs" – doesn't work. Results in poor balance. - Most people bend over from the waist – which puts tremendous stress on the lower back. - Twisting while holding a load is hazardous.	
6.	Wide Stance	- Stand with your feet wider than shoulder width. - Allows you to get over the load. - Increases balance - Opens the hips allowing for freer movement - Greatly reduces the knee bend	

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7.	Tip the Load	1. When lifting from the floor, step over it and stand it up on end utilizing good wide stance. 2. Then, while still standing over the load, tip the load. Tipping the load creates a handle out of the bottom of the load so that you can more easily lift it.	 
8.	Tripod Lift	Get down on one knee, placing yourself over the load. Tip the load and lift it up, setting it on your leg. Let the load rest on your leg as you begin to rise. You can even push down on the load, which tends to help push you up from the tripod position.	

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9.	Other tips	1. Use mechanical assists to lift/lower loads - such as hoists, pallet trucks, pump trucks ladder hoists, or chain falls 2. Move objects as close to the body as possible 3. Ensure there are no obstacles between you and the load 4. Organize the starting and ending location of the lifts to limit the overall vertical travel distance a load has to be lifted 5. Avoid lifts below knuckle level and above shoulder level 6. Improve grip/handles on objects being lifted 7. Split the overall weight of a load into smaller loads 8. Avoid uneven, unbalanced loads 9. Use gravity as an assist whenever possible (lower rather than lift) 10. Use carts, conveyors, gravity feed conveyors - to transport loads rather than carrying	
10.	Important Information		



Standard Operating Guidelines

- LAB SAFETY
- WAREHOUSE SAFETY

GENERAL DEPARTMENT SAFETY

Owner	Safety	Location	Master	Applicability	North America
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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to lab safety.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	General	- Acids stored in proper cabinet at lower levels– separate from solvents. - Review lab SDS prior to first time use. - Use caution cleaning glassware - Conduct hot plate work, and acid handling, in fume hood - Always add acid to water (not water to the acid) - If acid may splash, wear goggles and/or face shield - Keep counters, cupboards and shelves clean and organized. Put equipment in its proper place.	
6.	Stone Sizing	- Handle buckets of samples following good lifting (PowerLift) principles. Consider good ergonomics – body position. - Ensure dust collection systems are running. Wear respiratory and hearing protection if required. - Ensure crushers have guards in place.	
7.	Leco operation	- Preparing lime sample – avoid skin and eye contact. Wear proper gloves and safety glasses. - Use tongs to handle hot crucibles. Wear heat resistant gloves.	
8.	Emergency Preparedness	- Check that emergency shower and eye wash stations have unobstructed access and are tested monthly. - If splashed on the skin or eyes with acid or lime, flush with copious amounts of water. - Ensure spill cleanup materials readily available.	

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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to warehouse safety	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	- There must be adequate clearances where hand carts or forklifts are operated - Doors, aisles, walk ways, electrical panels, fire extinguishers, etc. shall be kept clear and clearly marked (if feasible). - Items stored on top of other items should be limited in height and stocked so that they are blocked / interlocked to ensure they are stable and secure against movement - Shelves should be marked with their load capacity and shall not be loaded beyond its load rating. - Clearance warning signs should be posted when appropriate - Chemicals / flammable liquids must be stored in appropriate cabinets - Waste materials must be discarded in properly labeled containers. - Utilize mechanical assistance to lift/handle items whenever possible. - When handling items, remember safe lifting (PowerLift) principles	 Wide Stance

Owner	Safety	Location	Master	Applicability	North America
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		10. When loading/unloading trucks, ensure wheels are blocked from movement 11. Use proper cutting tools to open boxes. Wear cut resistant gloves and cut away from your body/hands. 12. Ensure there is adequate lighting – address/report burnt out lights 13. Only authorized persons may operate forklifts. When operating a forklift - o Keep pedestrians away from the spill zone. - o Honk horn when turning corners and entering/exiting buildings - o Drive in reverse when load obstructs front view	
6.	Important Information		



Standard Operating Guidelines



- AIR COMPRESSOR
- ANGLE GRINDER
- ANGLE GRINDER – CUT OFF WHEELS
- BAND SAW
- BENCH GRINDER
- CHOP SAW
- COMPRESSED GAS CYLINDER HANDLING
- DRILL PRESS
- GAS POWERED HAND TOOLS
- HYDRAULIC IRON WORKER
- INDUSTRIAL RING BLASTER
- PORTABLE GAS TORCH
- PRESSURE WASHER
- MILLING MACHINE

HAND AND POWERED TOOLS

Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2019	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	   
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of an air compressor	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure - General	Review the SOG for Workshop Safety.	
6.	Procedure - Specific	- Prior to initial use, review owner's manual. - Review the corporate procedure – especially if new to the task. - Do not spray combustible or flammable liquid or paint with a confined area. Spray area must be well ventilated. - Do not smoke while spraying or spray where spark or flame is present. - Keep compressor at least 12' from spraying area and all explosive vapors - Disconnect compressor from electrical supply before servicing - Do not expose compressor to rain or operate in a wet area. - Ensure electrical connection is properly grounded with adequate voltage and fuse protection - Drain tank daily. Condensed water can cause rusting and risk of tank rupture or explosion - Do not repair, modify or weld tank. Return to authorized service center if replacement is required.	

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11. Adjust pressure regulator such that output is less level marked on attachment
12. Pressure switch is set at the factory for optimal performance. Never bypass or remove pressure switch.
13. Before starting compressor, pull safety valve ring to make sure the valve moves feely.
 - o The safety valve is factory set and installed to prevent the air receiver from damage and must never be tampered with.
14. Do not touch metal surfaces during or immediately after operation – may be hot.
15. Do not use compressed air for breathing.
16. When spraying, respiratory protection may be required.
17. Do not direct air stream at your body or another person.
18. Always place compressor in a stable position to prevent accidental movement.
19. For reciprocating type compressors:
 - Inspect compressor discharge pipe for carbon build up
 - Verify inspection tag is current - within 24 months
20. Inspect hose for:
 - Bulges
 - Excessive Cuts & Nicks
 - Excessive Cracking
 - Delamination
21. Inspect fittings for
 - No Worm Gear Clamps
 - Fitted Clamp is snug and in good condition
 - No smooth pipe nipple sleeves, only barbed fittings



7. Important Information

Air compressors and receivers are part of the pressure vessel inspection program and are to be inspected on a regular scheduled basis by a 3rd party



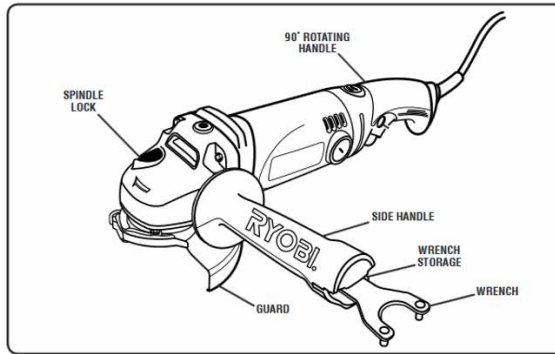
Standard Operating Guideline

Angle Grinders

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Mgr.	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of angle grinders	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure - General	Review the SOG: Workshop Safety	

Angle Grinders

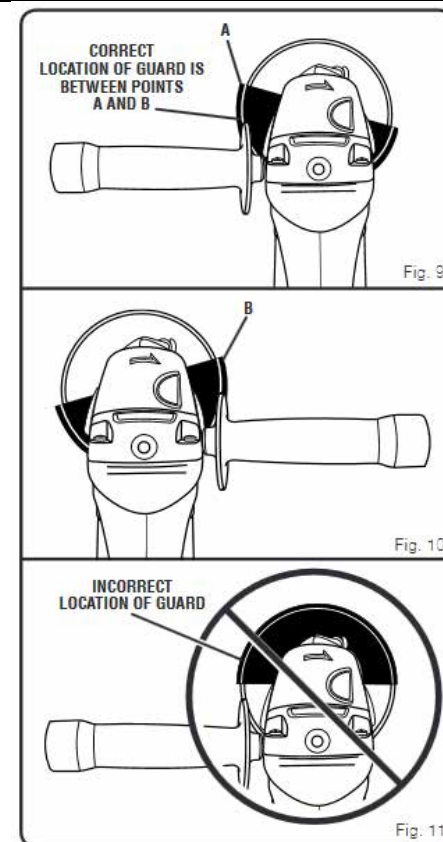
Reference Program: Hand and Power Tools

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6. Procedure - Specific

- Prior to initial use, review owner's manual.
- Angle grinders shall NOT have the ability to be "locked" in the on position.
- Always use proper guard with grinding wheel. A guard protects operator from broken wheel fragments.
- Accessories (ie. Discs) must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated speed can fly apart and cause injury.
- Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.
- Use side handles supplied with the tool. Loss of control can cause personal injury.
- Know your power tool. Read operator's manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this tool.
- A face shield is used when operating (in addition to safety glasses)
- Protect your lungs. Wear the appropriate respiratory protection if the operation is dusty. (i.e. N95)
- Protect your hearing. Wear hearing protection during extended periods of operation.
- Inspect tool cords periodically and, if damaged, have repaired at your nearest Authorized Service Center.
- Constantly stay aware of cord location.



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		- Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced. - Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. A wire gauge size (A.W.G.) of at least 14 is recommended for an extension cord 50 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. - Inspect for and remove all nails from lumber before using this tool. - If the power supply cord is damaged, it must be replaced only by the manufacturer or by an authorized service center to avoid risk.	
7.	Important Information	Operators Manual can be found in the Maint. Supervisor's Office	

Cut-off Wheels on Angle Grinders

Reference Program: Hand and Power Tools

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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of this equipment.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – General	Review the SOG for Workshop Safety	
6.	Procedure	- Prior to initial use, review owner's manual. - Inspect equipment prior to use. - Angle grinders shall be provided with Anti-Kick Back clutch, - All handles and guards must be in place - When using, keep one hand on the trigger and the other hand on the handle.	
7.	Training	- Be documented using the site's task training protocols. - Only employees that have completed the required training, including a review of this guideline, shall use cut-off wheels with angle grinders	
8.	Procedure	- Wear required PPE – safety glasses, face shield and hand protection - Follow manufactures instruction for the safe use of cut wheels, and angle grinders.	 

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9.	Procedure	Always consider alternatives such as: • portable band saw, • hydraulic shears, • reciprocating saw • hand filing • portable cutting torches For additional information, refer to the training information available. A Hot Work Permit may be required prior to using a grinder. For further information, refer to corporate program.	
10.	Other Important Information	Operators Manuals can be found in the Maint. Supervisors Office.	

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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of band saws.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure - General	Review SOG for General Shop Rules	
6.	Procedure – Specific	- Prior to initial use, review owner's manual. - Use the correct size and style of blade. - Make sure the blade teeth point down and toward the table. - Blade guide, supports, bearings, and blade tension must be properly adjusted to avoid accidental blade contact and to minimize blade breakage. To maximize blade support, always adjust the upper blade guide and blade guard so that it barely clears the workpiece. - Table TILT lock handle should be tight. - Use extra supports to prevent workpieces from sliding off the tabletop. - Workpieces should be secured so they don't twist, rock, or slip while being cut. - Plan intricate or small work carefully to avoid pinching the blade. Avoid awkward operations and hand positions to prevent accidental contact with the blade.	

Band Saw

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
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9. Support round work properly (use a V block or press it against the miter gauge) to prevent the piece from rolling and the blade from biting.
10. Cut only one workpiece at a time. Make sure the table is clear of everything except the workpiece and its guides before turning on the saw.
11. Always watch the saw run before each use. If there is excessive vibration or unusual noise, stop immediately. Turn the saw off. Unplug it immediately. Do not start the saw again until the problem has been located and corrected.
12. To free any jammed material, turn the switch off. Remove the switch key and unplug the saw. Wait for all moving parts to stop before removing the jammed material.
13. Don't leave work area until all moving parts have stopped. Shut off the power to master switches.
14. Follow the 3" rule from the blade; always keep fingers 3" from the blade.
15. Don't cut stock that is not flat on the bottom without a jig.
16. Never clear small pieces while the blade is moving.
17. The blade should be 1/32" from the rear roller bearing behind the blade.



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7.	Procedure - Specific	18. The blade alignment tracking should be at the center of the wheels. 19. Make sure that the upper and lower wheel guard doors are closed when running. 20. To control the stock, use push sticks, feather boards, or any other safety device when cutting small or short stock. 21. Cut at a moderate feed rate into the blade. Do not force a cut. 22. Cut relief cuts prior to cutting long or tight curves. The relief cuts will free the blade of the tension of the tight curve and the wood will fall away. The blade size will dictate the radius of the cut. 23. If you need to back out of a cut, shut the machine off, after blade stops, and then back out. 24. If a blade breaks, shut the machine off and stand clear until everything stops. 25. If the work is too large for one person to handle, get help holding the stock. 26. When cutting with the table at an angle, clamp a block to the table to prevent your stock from slipping off the table. 27. Always disconnect the power before changing the blade or performing any other maintenance operation. 28. Never stick an object into the blade to stop the machine quicker. Let it stop on its own.	
8.	Important Information	Operators Manual can be found at	

Bench Grinder

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Jan 2018	Revision	2026	Version	1



No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a Bench Grinder.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Procedure – General	Review SOG for General Shop Rules	
6.	Procedure - Specific	- Prior to initial use, review owner's manual - Ensure - The space between the tool rest and the grinding wheel does not exceed 3 mm ($\frac{1}{8}$" - The space between the tongue guard and the grinding wheel is less than $\frac{1}{4}$" - Inspect equipment, including grinding wheel, prior to use. - Proper guards are in place. - The grinder is de-energized and/or locked out prior to any adjustments - The grinding wheel is rated for the grinder's maximum rpm. Wheels and other accessories running over rated speed can fly apart and cause injury. - Manufacturer's washers are used when installing wheels. - A face shield is used when operating (in addition to safety glasses)	
3.	Important Information		

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No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	 
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a Chop Saw.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Procedure – General	Review SOG for General Shop Rules	
6.	Procedure - Specific	- Prior to initial use, review owner's manual - Wear safety glasses and a full-face shield. Wear gloves when handling materials. - Loose clothing, jewelry, or any dangling objects should not be worn and long hair tied up as they may catch in the rotating parts of the saw. - All guards must be in place and operating. If a guard seems slow to return to its normal position or hangs up, adjust it or repair it immediately. Unplug or lockout power when making repairs. - Clean the lower guard frequently to help visibility and movement. Unplug before adjusting or cleaning. - Use only the recommended RPM and sizes of blades. - Regularly check and tighten the blade and the blade-attachment mechanism. - Prior to installing or changing a blade, be sure to lockout or unplug equipment. Ensure that the blade and its related washers and fasteners are correctly positioned and secured on the saw's arbor.	



Standard Operating Guideline

Chop Saw

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
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		9. To avoid losing control or placing hands in the blade path, hold or clamp all material securely against the fence when cutting. Do not perform operations freehand. 10. Never re-cut small pieces. Long material should be supported at the same height as the saw table. 11. Never place hands or fingers in the path of the blade or reach in back of the fence. 12. Use the brake if one is provided. To avoid contact with a coasting blade, do not reach into the cutting area until the blade comes to a full stop. 13. After completing a cut, release the trigger switch and allow the blade to come to a complete stop, then raise the blade from the workpiece. If the blade stays in the cutting area after the cutting is complete, injury can result from accidental contact.	
7.	Important Information	Operators Manual can be found at Maintenance Supervisor's Office	

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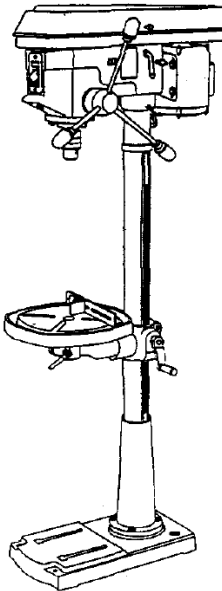


No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related storing or handling compressed gas cylinders.	
4.	Scope & Applicability	- Although this SOG specifically highlights oxygen and acetylene, the requirements apply to all compressed gas cylinders. - This SOG applies to all Carmeuse employees.	
5.	Acetylene	- Filled with a porous material to allow the acetone to dissolve the acetylene, which makes it stable. Never allow a tank to go empty - Must always be stored upright.	
6.	Oxygen	- Oxygen bottles shall be protected against physical damage and heat. - Never allow a tank to go empty.	
7.	Storage	- Cylinders must be secured and should be stored at least 20' (6m) from combustible buildings - Oxygen must be stored separate from acetylene and other flammable gases. They must be stored at least 20' (6m) apart, or separated by a 5' (1.5m) high, 1 hour rated fire wall. - Store empty and full bottles separately. Post legible "No Smoking or Open Flame" and "Danger – Flammable Material" signs - Valves must be closed with caps in place. - When cylinders are in use, valves/gauges must be protected	
8.	Handling / Transportation	- Get assistance or use mechanical lift assist when lifting or carrying. Use handcarts. Secure from moving. - If acetylene bottles are transported laying down, they must be allowed to sit upright for as many minutes as it was on its side, before use (to allow contents to settle).	
9.	Important Information		

Drill Press

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of Drill Press	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure - General	1. Review SOG for General Shop Rules	
6.	Procedure - Specific	2. Prior to initial use, review owner's manual. 3. Drill press must be secured to a workbench. In addition, if there is any tendency for the drill press to move during certain operations, bolt to the work bench or the floor. 4. Drill presses are intended for use in dry conditions. 5. Wear eye protection. Use face and respiratory protection along with safety goggles if drilling operation is dusty. Use hearing protection, especially during extended periods of operation. 6. Do not wear gloves or loose clothing 7. Do not try to drill material too small to be securely held. 8. Always keep hands out of the path of a drill bit. Avoid awkward hand positions where a sudden slip could cause your hand to move into the drill bit. 9. Do not install or use any drill bit that exceeds manufacturer guidance for the chuck jaws. They can suddenly bend outward or	



Drill Press

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

break

10. Do not use wire wheels, router bits, shaper cutters, circle (fly) cutters, or rotary planers.
11. When cutting a large piece of material make sure it is fully supported at the table height
12. Do not perform any operation freehand. Always secure the work piece firmly against the table so it will not twist. Use clamps or a vise for unstable work piece.
13. Make sure there are no nails or foreign objects in the part of the work piece to be drilled.
14. Clamp or brace workpiece against the left side of the column to prevent rotation. If it is too short or the table is tilted, clamp solidly to the table and use the fence provided.
15. If the workpiece overhangs the table such that it will fall or tip if not held, clamp it to the table or provide auxiliary support.
16. When using a drill press vise, always fasten to the table.
17. Securely lock the head and table before operating the drill press.
18. Never turn your drill press on before clearing the table of all objects (tools, scraps of wood, etc.)
19. Before starting the operation, jog the motor Switch to make sure the drill bit does not wobble or vibrate.
20. Let the spindle reach full speed before starting to drill. If your drill press makes an unfamiliar noise or if it vibrates excessively, stop immediately, turn the drill press off and unplug. Do not restart until



Drill Press

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		the problem is corrected. 21. Do not perform layout assembly or set up work on the table while the drill press is in operation. 22. Use recommended speed for drill accessory and workpiece material. 23. When drilling large diameter holes, clamp the workpiece firmly to the table. Otherwise, the bit may grab and spin the workpiece at high speed. Do not use fly cutters or multiple-part hole cutters, as they can come apart or become unbalanced in use. 24. Make sure the spindle has come to a complete stop before touching the workpiece. 25. Always turn the switch "OFF" before installing or removing any accessory or attachment or making any adjustment 26. Keep guards in place and in working order. 27. It's recommended to use self-ejecting type chuck key.	
7.	Important Information	Operators Manual can be found at Maintenance Supervisor's Office	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Ops. Mgr.	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a Gas-Powered Hand Tool such as Partner saw, Weed whacker, Chain saw, etc.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Procedure - General	Review SOG for General Shop Rules	
6.	Procedure - Specific	- Prior to initial use, review owner's manual. Wear all PPE as required by owner's manual. - PPE might include items not typical to a mine site such as but not limited to chaps. - Loose clothing, jewelry, or any dangling objects should not be worn and long hair tied up as they may catch in rotating parts. - All guards must be in place. <u>Tools with blades</u> - Use only the recommended RPM and sizes of blades. - Regularly check and tighten the blade and the blade-attachment mechanism. - Prior to installing or changing a blade, ensure the equipment is powered off, and that the blade and its related washers and fasteners are correctly positioned and secured on the saw's arbor. - Never place hands or fingers in the path of the blade or reach in back of a guard. - Use the brake if one is provided. To avoid contact with a coasting blade, do not reach into the cutting area until the blade comes to a full stop.	





Standard
Operating
Guideline

Gas Powered Hand Tools

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		10. Refuel gas powered tools in a well-ventilated area and ensure there is no smoking or open flames in the vicinity. 11. Bystanders shall remain clear of the work area.	
7.	List Important Information	Operators Manual can be found at Maintenance Supervisor’s Office	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a hydraulic iron worker	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – General	Review the SOG for General Shop Rules	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

6.	Procedure – Specific	1. Prior to Initial Use Review Owner’s manual 2. Any person changing tools, settings and blades on this machine will need more detailed instructions. 3. Do not leave the machine running unattended. 4. Machine should be positioned so operator has sufficient room to work having regard for the long lengths of material 5. Additional equipment, or personnel may be required to safely handle long or heavy items to be processed. 6. Machine is supplied with various guard and barriers to provide adequate guarding when the machine is used for the purpose which it was designed. 7. Never use materials other than mild steel. 8. Always use the material hold downs properly 9. Never punch, crop or punch small items (this would require you to put fingers or hands in danger area) 10. Do not attempt to punch material thicker than the punch diameter. 11. Any time additional tooling or equipment is fitted to the machine, adequate guarding shall be installed. 12. All maintenance shall be carried out by suitably qualified personnel 13. The machine must be locked out prior to making any tooling changes or adjustments.	
7.	Important Information	Operators Manual can be found at Maintenance Supervisor’s Office	



Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of an industrial ring blaster/kiln gun.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Training	- Periodic training should be provided by the Supplier. - Where this task is performed infrequently, this SOG should be reviewed.	
6.	PPE	- Employee operating tool must wear dual hearing protection, a face shield and gloves. - Specialized PPE requirements identified above apply to any employee assisting with shooting process inside the barricaded perimeter.	
7.	Procedure – Before shooting	- Prior to initial use, review operator's manual. - Perform full LOTOTO of solid fuel system(s). - Perform full LOTOTO of natural gas systems (if system has a BMS in operation, natural gas flame may be left burning while shooting.) - All personnel inside the barricaded area must apply a personal lock to lockout points designated above. - Barrel extensions must be used – they minimize tumbling of slugs	

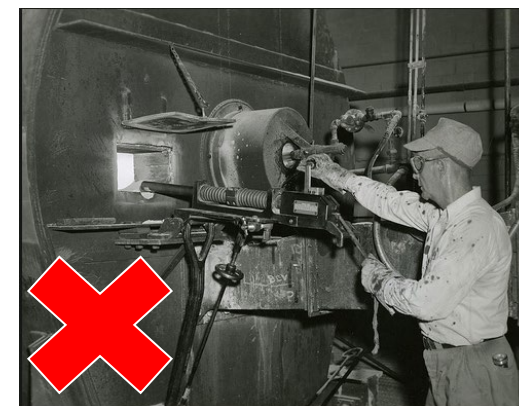


Industrial Ring Blaster (Kiln Gun)

Reference Program: Hand and Power Tools

Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2018	Revision	2026	Version	1

6. Inspect the tool before starting task. Check chamber.
7. Remove all dust from tool.
8. Check barrel for obstructions - clean barrel with wire brush and brake cleaner.
9. Ensure guards are in place. Guarding must be large enough to protect the entire hood opening.
10. Make sure the work area is free of tripping hazards.
11. Notify affected personnel that shooting will be taking place.
12. Establish a kiln turning plan with the kiln burner. Be sure to communicate with maintenance personnel if they are working on the kiln.
13. Install barricades and signage to prevent access at stone feed end of kiln.
14. Install barricades and signage to prevent unauthorized access into shooting area around kiln hood.
15. Check condition of shells. Ensure they are free of dust. Only open boxes as needed.
16. Secure access to work area – post signs that shooting is underway
17. Avoid heat stress while shooting.
18. Set up a small bucket with water for shells that do not fire – water neutralizes the powder in the round.
19. Before loading rounds, dry fire the tool to ensure it is functioning properly.



Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2018	Revision	2026	Version	1

8.	Procedure – during shooting	1. While shooting aim at scale ring - do not shoot kiln refractory or length of the kiln. 2. In the event the shell starts to stick in the chamber, clean the barrel with the wire brush and brake cleaner. 3. During shooting, if a shell does not fire, or if you experience an “off sound”, do not eject the shell immediately. Wait 30 seconds and then eject the shell. If an obstruction is found, remove it from the barrel and clean the barrel using the wire brush & brake cleaner. 4. In the event that a shell will not eject or a misfire - contact your supervisor immediately. 5. Misfired shells shall be saved and contact the manufacture of the shelf for removal.
9.	Procedure – after shooting	1. Inspect the chamber to ensure the tool is not loaded 2. Clean-up all discharged shell casings for proper disposal. 3. Clean the barrel using the wire brush and brake cleaner. 4. Store in designated location. 5. Cover the gun to minimize dust infiltration. 6. Lock the breaching mechanism. 7. Return unused rounds to locked cabinet.



Picture of a locked breaching mechanism



Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2018	Revision	2026	Version	1

10.	Procedure – Storage	1. Rounds should be stored at room temperature, in a locked container, and covered to protect against dust. 2. If stored in cold temperature, bring rounds indoors for several hours before use. 3. Keep rounds dry – if they appear water damaged, they should be destroyed.	
11.	Procedure - General	1. Never use petroleum based lubricants on the tool	
12.	Important Information	Operators Manual can be found at Maintenance Supervisor's Office	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a portable gas torch	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – General	Review the SOG for General Shop Rules	
6.	Procedure – If you smell gas	- Shut off gas to the device. - Extinguish any open flame. - Check the device for leaks using soapy water. - Do not attempt to relight the device until leaks are repaired and there is no gas smell.	
7.	Procedure - Inspection	- Visually inspect all parts of the torch equipment for damage and wear. If the hose is evident of excessive abrasion or wear, or if the hose is cut, the hose must be replaced before operating the torch. Replace torch hose assembly with CSA or UL listed LP-Hose, 350 P.S.I. working pressure. - Do not use a match or open flame to test for leaks. - Check cylinders for dents, damage to collar, damage to valve, or corroded foot ring. Do not use damaged cylinder. - When extinguishing a torch, shut off cylinder valve first and allow gas to burn out of lines.	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

8.	Procedure – Specific	9. Prior to Initial Use Review Owner’s manual 10. Ensure propane bottle is upright. 11. Do not use this device in areas where gasoline or other liquids having flammable vapors are stored or used. 12. Propane is heavier than air which can cause it to accumulate in low areas. Only use outdoors or in well ventilated areas 13. Always use a flint striker to ignite the torch. Do not use matches or cigarette lighter to ignite the torch. 14. Do not use lubricants on any part of the torch. 15. Never direct torch flame toward any person 16. Never leave a burning torch unattended for any period of time. 17. Torches must have “dead man” handles. Wiring a dead man switch open is prohibited. 18. Hot Work permit may be required for particular situations – refer to Hot Work SOG.	
9.	Important Information	Operators Manual can be found at Maintenance Supervisor’s Office	

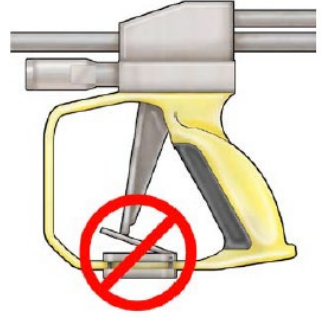


Owner	Safety	Location	Master	Applicability	North America
Date	Sep 2019	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a Pressure Washer	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	- Pressure washing refers to a system <u>not</u> capable of generating more than 5,000 psi. - High Pressure Water Blasting: 5,000 to 30,000 psi - Ultra-high pressure jetting: > 30,000 psi	
6.	Procedure – General	Review the SOG for General Shop Rules	
7.	General Info	- Pressure washing can be grouped in 4 general levels of hazard < 5,000 psi Moderate risk 5,000 – 10,000 psi High Risk 10,000 – 30,000 psi Very High Risk > 30,000 psi Extremely High Risk (allowed for contractors only) - The improper use of pressure washers can result in serious injury. - Skin penetration can occur at 100 psi. - Large quantities of water may puncture skin, flesh and	



Owner	Safety	Location	Master	Applicability	North America
Date	Sep 2019	Revision	2026	Version	1

		organs, and may not result in bleeding.	
8.	Procedure	1. Prior to Initial Use Review Owner's manual 2. Inspect the equipment. 3. Always be aware where the nozzle is pointed. Never point the nozzle at anybody or yourself, regardless of PPE worn 4. Inspect the area and control trip hazards and remove items that can become projectiles 5. SLAM the task. 6. Do not operate the pressure washer from the steps of a ladder. 7. Avoid operating the nozzle over your shoulders as this can result in shoulder/back strain, and reduces your balance. 8. Control access around areas where pressure washing is occurring. 9. Only 1 unit may be used in any work area. 10. Do not wash any item that is being held by another person. 11. Never use a trigger assist device (something that holds the trigger) 12. Wear a face shield 13. Do not operate pressure washer if someone is within 50 ft. of equipment in order to mitigate someone being sprayed indirectly due to an equipment failure.	
9.	Training	1. Any person assigned to use a pressure washer must be task trained. 2. The extent of the training must be appropriate for the level of pressure.	

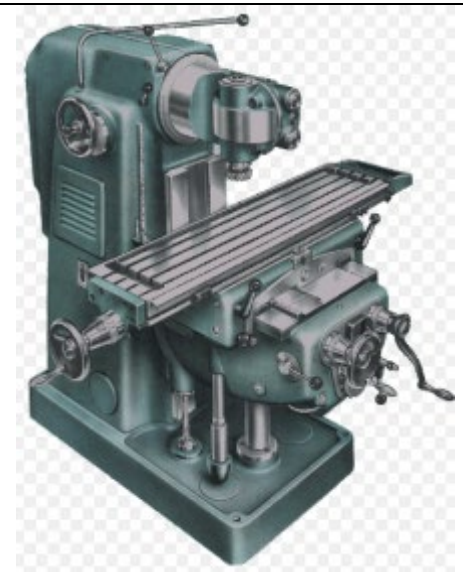


Owner	Safety	Location	Master	Applicability	North America
Date	Sep 2019	Revision	2026	Version	1

10.	Training: Systems Over 5000 psi	Systems over 5,000 psi require 1. Formalized training must be provided (3 rd party) 2. A thorough review to ensure that the level of pressure is warranted. If possible, a lower pressure system should be used. 3. 2 ways of stopping the flow of water: one controlled by the operator, the other by the attendant. 4. A minimum distance from the trigger to the nozzle must be 36” 5. A double action trigger 6. Preventative Maintenance programs as per manufacturer. 7. Controlling access to the work area, with safety tape or equivalent					
11.	List Important Information	Operators Manual can be found at Maintenance Supervisor’s Office The Pressure Wash systems at this site are: <table><tr><td><u>Location</u></td><td><u>Max. Operating Pressure</u></td></tr><tr><td> </td><td> </td></tr></table>	<u>Location</u>	<u>Max. Operating Pressure</u>			
<u>Location</u>	<u>Max. Operating Pressure</u>						



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of the milling machine	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure - General	Review SOG for General Shop Rules	
6.	Procedure – Specific	- Prior to initial use, review owner's manual. - Do not make contact with the revolving cutter. - Place a wooden pad or suitable cover over the table surface to protect it from possible damage. - Get assistance when moving heavy attachments. - Do not attempt to tighten arbor nuts using machine power. - When installing or removing milling cutters, wear appropriate level of hand protection (i.e. protect against cuts, grease/oil) - While setting up work, install the cutter last to avoid being cut. - Never adjust the workpiece or work mounting devices when the machine is operating. - Chips should be removed from the workpiece with an appropriate rake and a brush. - Note: Chip rake should be fabricated to the size of the T-slots.	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		11. Shut the machine off before making any adjustments or measurements. 12. When using cutting oil, prevent splashing by using appropriate splash guards. Cutting oil on the floor can cause a slippery condition that could result in operator injury.	
7.	Important Information	Operators Manual can be found in the Maintenance Supervisor's Office	





Standard Operating Guidelines

- PRE-USE INSPECTION OF MOBILE EQUIPMENT
 - SLAM
 - GUARDING
- WORK AREA EXAMS

HAZARD IDENTIFICATION

Owner	Safety	Location	Master	Applicability	North America
Date	Nov 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the pre-use inspections	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Training	- Conducting a pre-use inspection must be included in the training for any person newly assigned a piece of equipment. - For new equipment, refer to the owner's manual.	
6.	Procedure – Requirements	- Prior to initial use each shift, the mobile equipment will be inspected. The inspection will be documented on the appropriate form. Subsequent operators on same shift, verify inspection was completed by initialing the form. - If there are defects that affect the safe operation, the equipment will be tagged and taken out of service, until repairs are made. - Items to inspect are equipment specific, including but not limited to: - Fluid levels and leaks - Tire tread and lug nuts - Horn operation - Backup alarm / Backup camera and sensors - Seat belt - Windows and mirrors - Lights (backup, head, turning) - Parking brake - Tested according to procedure and/or able to hold on maximum grade	



Standard
Operating
Guideline

Pre-Use Inspection of Mobile Equipment

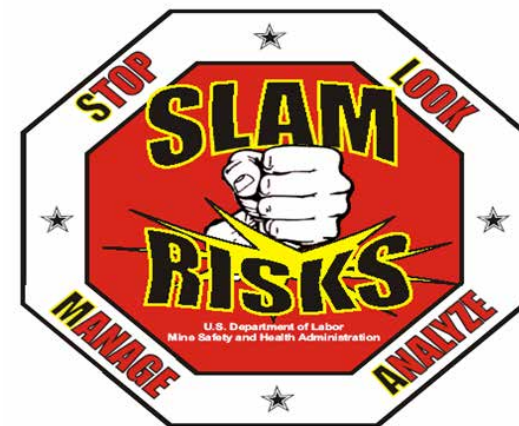
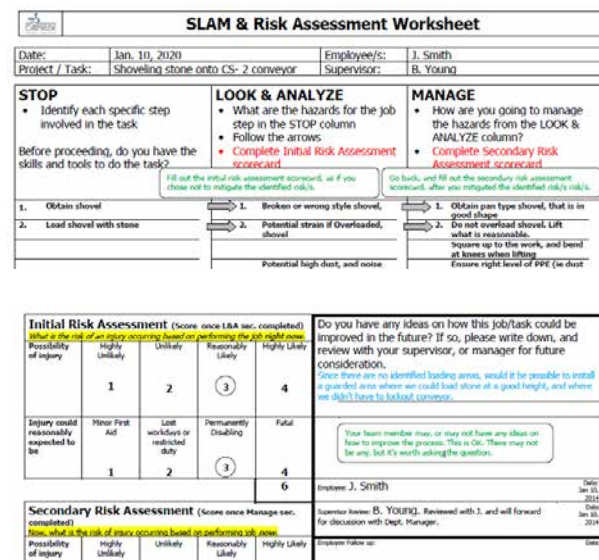
Reference Programs: Hazard Identification, Mobile Equipment

Owner	Safety	Location	Master	Applicability	North America
Date	Nov 2018	Revision	2026	Version	1

		i. Whip flags are in good condition / beacons are functioning j. Radio is functioning k. Fire extinguisher / suppression gauges	
7.	Important Information	1.	

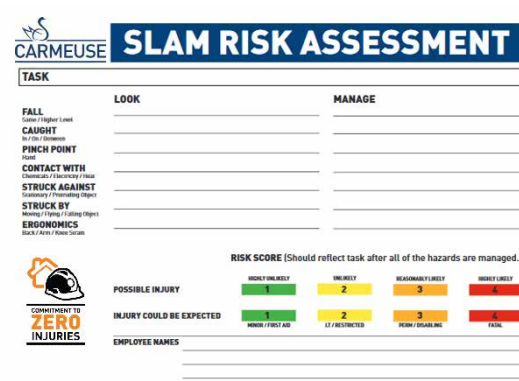
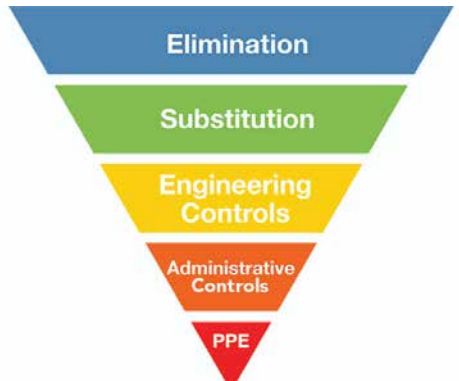


Owner	Safety	Location	Master	Applicability	United States
Date	May 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related conducting a SLAM.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Definitions	- Hazard – is a condition that can result in injury or damage - Risk – is the combination of the likelihood that an injury will happen, and the severity of that injury - SLAM – an acronym of Stop, Look, Analyze, and Manage	
6.	Concept	SLAM is a thought process and tool that is designed to identify risk, and control measures used to support the pre-task plan. SLAM is NOT a workplace examination. There are multiple forms available to help facilitate a SLAM, such as wall mounted white boards, and Maintenance specific. However, conducting a SLAM is not limited to the time you write it down – SLAMs are intended to be a mental exercise.	



Owner	Safety	Location	Master	Applicability	United States
Date	May 2018	Revision	2026	Version	1

7.	Procedure - SLAM	Before you start a task. • Stop and take a moment. Don't rush ahead. Break the task into steps. • Look for the hazards within each step. Ask yourself – how can I be injured? • Analyze those hazards. What's the likelihood that you might be affected by the hazard (i.e. something goes wrong). And if it happens – how serious is the probable injury? • Manage the hazards and minimize the risk. • Hazards often appear after a job has started. It is critical to do SLAMs continually.	 The form is titled 'SLAM RISK ASSESSMENT' and includes a 'TASK' section with a list of hazards: FALL, CAUGHT, PINCH POINT, CONTACT WITH, STRUCK AGAINST, STRUCK BY, and ERGONOMICS. It has columns for 'LOOK' and 'MANAGE' with lines for notes. At the bottom, there is a 'RISK SCORE' section with a color-coded scale from 1 (green) to 4 (red) and a 'POSSIBLE INJURY' section with corresponding descriptions. The form also includes a 'COMMITMENT TO ZERO INJURIES' logo and a section for 'EMPLOYEE NAMES'.
8.	Procedure – Controlling Hazards	• When it comes to managing hazards, there is a preferred order – called the hierarchy of control. In order of decreasing effectiveness • Eliminate the hazard • Substitute the hazard • Engineering controls. • Administrative controls (i.e. safe work procedures). • PPE. • PPE is typically used as a final line of defense should one of the other control measures fail.	 The diagram is an inverted pyramid representing the hierarchy of control. From top to bottom, the levels are: Elimination (blue), Substitution (green), Engineering Controls (yellow), Administrative Controls (orange), and PPE (red).
9.	Important Information	NA	NA



STANDARD OPERATING GUIDELINE

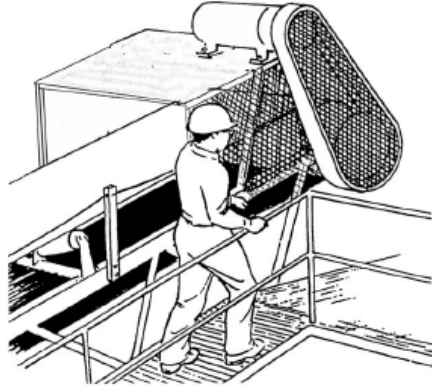
REFERENCE Procedure: Hazard Identification & Control

PREPARED BY: Safety Dept.

Date: Sept 2019

DESCRIPTION: **SOG for Guarding**

SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	1. Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to guarding	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – All Employees	- Ensure all guards are used and maintained as required by H&S regulations this SOG and guarding program. - Inspect guards and equipment before use; - Has authority to stop any machine or devise, or provide recognized temporary protective measures (i.e. barricade) where guarding is missing, or in need of repair and poses a hazard).	



STANDARD OPERATING GUIDELINE

REFERENCE Procedure: Hazard Identification & Control

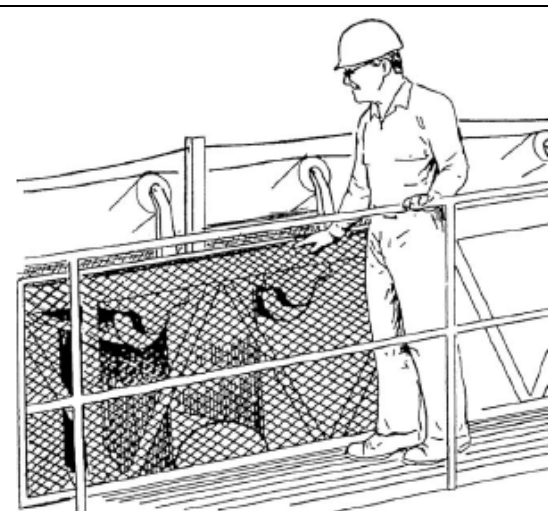
PREPARED BY: Safety Dept.

Date: Sept 2019

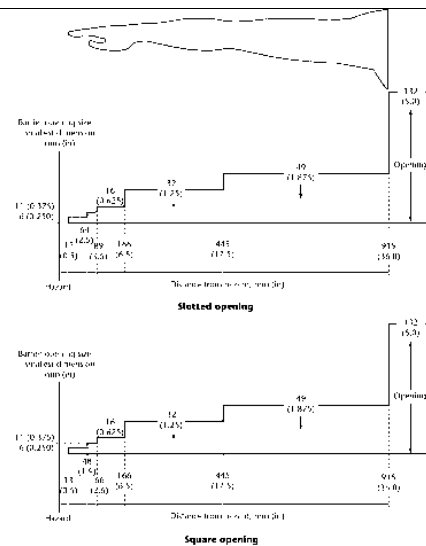
DESCRIPTION: **SOG for Guarding**

SITE: Master

6.	Procedure – Guard design	All guards and safeguarding devices will be designed; - Control reliable and fail-safe and not to create additional hazards. - Not to be easily defeated by a person reaching through around over or under the guard and constructed with materials and strengths to contain any broken parts or air born hazards. - With ergonomic principals in mind. Considering the size and weight of the guard. - All new or relocated machines, equipment, things or processes will be assessed for guarding requirements prior to being used for the first time. - Cross-functional teams including engineering, maintenance, production and plant safety will participate in the sites guarding assessment. - Pre-Start Safety Reviews will be conducted on all new or relocated machines, equipment, things or processes.
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7.	Procedure – Guard Removal	- Affected employees will participate in the Maint. SLAM/Pre task plan prior to the removal of any machine guard for the purpose of running PM, or troubleshooting and where the machine or devise must be left in the on position. - The established perimeter must provide at least 3' of separation from the hazard. Employee must be capable of seeing the entire unguarded portion of equipment at all times it is being operated and have a means of immediate communication to the individual operating the equipment. - A barricade or warning device must be installed around the entire perimeter of the unguarded location. "Danger" tape is a suitable warning device, provided it is appropriately labeled. - Full lockout-tagout-tryout must be re-implemented prior to employee entry into the perimeter established above.
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STANDARD OPERATING GUIDELINE

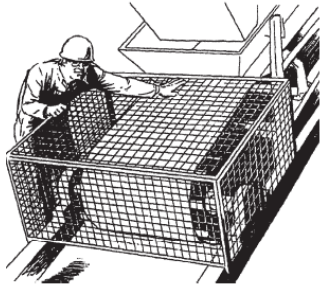
REFERENCE Procedure: Hazard Identification & Control

PREPARED BY: Safety Dept.

Date: Sept 2019

DESCRIPTION: **SOG for Guarding**

SITE: Master

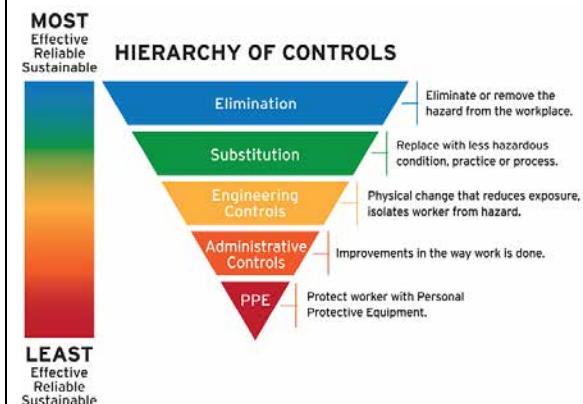
8.	Training	1. Personnel involved in the design or commissioning of guarding will become familiar with local regulations and guidelines with respect to guarding principles.	
9.	Maintenance of Guarding	1. Each site is required to inspect all guards and safeguarding devices at regular intervals (i.e. WPI's) and in any case at least once per year.	
10.	Important Information	Refer to the Engineering Guarding standards.	



Owner	Safety	Location	Master	Applicability	North America
Date	Jun 2019	Revision	2026	Version	1

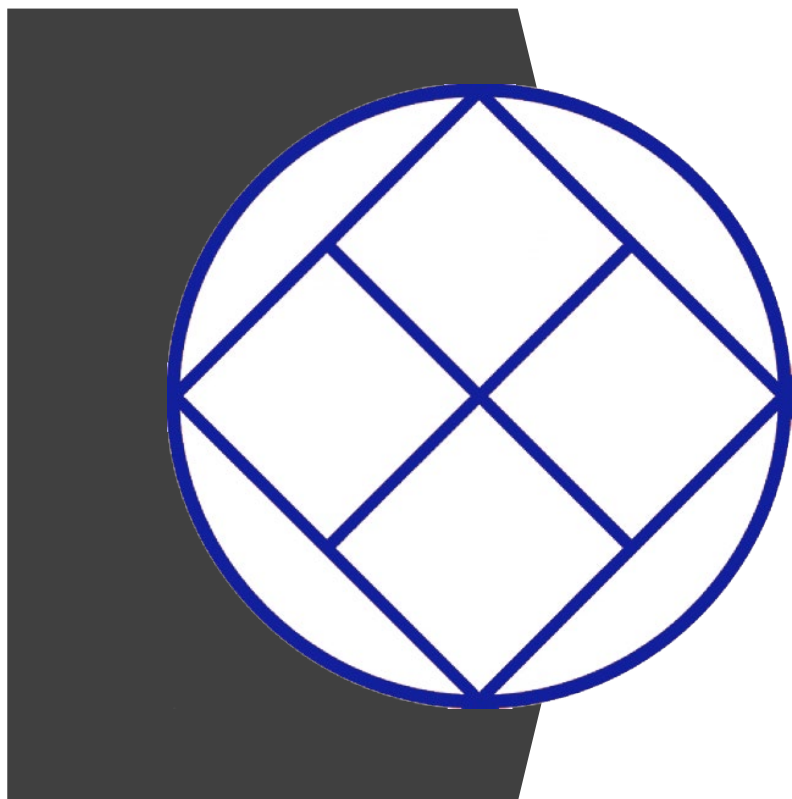
No.	STEP	STEP DETAIL
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related work area examinations. - All employees are required to examine their work area(s) before beginning work. - Work area examination documentation must: - Include all hazards; - List the date of hazard correction if not completed immediately; - If a hazard is identified, <i>Correct the hazard if you are able to</i> - If you are not able to, - barricade and tag the hazard to prevent exposure by other miners. - Notify affected miners in the area of the hazard and your supervisor.
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees
5.	Documentation	- The inspection must be documented on the site's work area inspection form and submitted to their supervisor at the end of their shift. - All deficiencies must be noted even if corrected right way. This documentation should be completed as soon as the issue is corrected or after notification.

ADDITIONAL INFORMATION



Owner	Safety	Location	Master	Applicability	North America
Date	Jun 2019	Revision	2026	Version	1

		3. Documentation shall be retained for 1 year or until hazard correction, which is later.	
6.	Typical Hazards	1. Damaged electrical conduit / cables 2. Missing / damaged electrical junction box covers 3. Guards missing, damaged, or not secured 4. Walkways not kept clean and clear (material build up) 5. Control buttons not labelled 6. Hand tools with defects 7. Electrical cords not ground tested 8. Loose rock on ribs (underground) 9. Elevated walkways or platforms without hand rails 10. Gas cylinders not secured 11. Oil leaks not cleaned up 12. Breakers not labelled 13. Not putting up signage or safety tape at hazard 14. Hose connections missing Chicago fitting or safety whip 15. Gas cylinder not secured 16. Safety Equipment (ie Fire Extinguishers) not inspected 17. Combustible waste not in proper container <i>**This list is not all inclusive</i>	
7.	Important Information		



Standard Operating Guidelines

- HAZCOM

HAZCOM

STANDARD OPERATING GUIDELINE

REFERENCE Procedure: CSP-EHS-08: Hazcom and WHMIS

PREPARED BY: Safety Dept.

DESCRIPTION: **SOG for Hazcom**

Rev: Sep 2023

SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to HAZCOM.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Definitions	- Hazcom programs were modified to meet the United Nation's Globally Harmonized System. - These new rules did NOT change the placards for Transportation of Dangerous Goods	
6.	Training	All employees will be trained in Hazcom upon initial hiring, and will receive annual refresher training thereafter.	
7.	Signal Words	Safety Data Sheets (SDS) and Labels state either WARNING or DANGER, depending on potential hazard	
8.	Labels	- All containers require labels, even when transferring content from one container to another smaller container. - Labels provide basic information. Refer to the SDS for more detail. - Have Signal words, hazard statements, and precautionary statements.	
9.	Safety Data Sheets (SDS)	- When first using a product, review it's SDS. It will describe the hazards and recommended procedures related to handling, storage, disposal, and what to do in emergency. - An SDS describes the hazards that are inherent to the product – the actual risk a product presents depends on how they are used. - An SDS for any product used in a Carmeuse facility can be found online. It is managed by INFOTRAC and can be found online at https://secureweb.infotrac.net/msds/carmeuse.aspx	



STANDARD OPERATING GUIDELINE

REFERENCE Procedure: CSP-EHS-08: Hazcom and WHMIS

PREPARED BY: Safety Dept.

DESCRIPTION: **SOG for Hazcom**

Rev: Sep 2023

SITE: Master

10.	Symbols	Symbol	Possible Hazard		
			Carcinogenicity Mutagen Reproductive toxicity	Respiratory Sensitivity Target Organ Toxicity Aspiration Toxicity	
			Flammable Pyrophoric Self-heating	Emits flammable gas Self-reactive Organic Peroxide	
			Irritant (skin, eye) Irritant (respiratory) Acutely toxic (not fatal)	Narcotic effect Skin Sensitizer	
			Gas under pressure		
			Corrosive to skin Corrosive to metal Eye damage		
			Explosive Self-reactive Organic peroxides		
			Oxidizer		



STANDARD OPERATING GUIDELINE

REFERENCE Procedure: CSP-EHS-08: Hazcom and WHMIS

PREPARED BY: Safety Dept.

DESCRIPTION: **SOG for Hazcom**

Rev: Sep 2023

SITE: Master

			Acutely toxic	
11.	List Important Information	Safety Data Sheets can be found here: Carmeuse Lime and Stone SDS Search (infotrac.net) Carmeuse Products - All Documents (sharepoint.com)		





Standard Operating Guidelines

- HOT WORK
- WELDING AND CUTTING EQUIPMENT AND PRACTICES

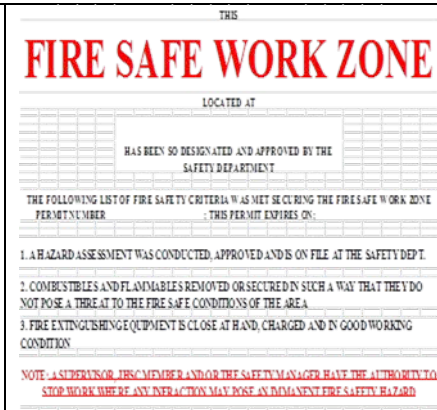
HOT WORK

Owner	Safety	Location	Master	Applicability	United States
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
	Hazard Assessment (H/A)	- The plant has adopted a hazard assessment (H/A) tool intended to meet the requirement of 3.2 and 5.2 of the procedure. - H/A's shall be conducted, to identify Low Hazard, or "Fire Safe" work zone/s, where a permit is not required, and "high hazard" areas - Each area will be clearly identified with approved signage.	
	Permits	- Permit issuers must ensure they properly assess the hot work area and fulfill the requirements of the permit. - Affix the permit to a visible place in the work area. I.e. structural steel or heat source equipment. - The permit shall remain in place until the hot work is completed, then returned to the supervisor.	
	Procedure	- The Fire watch must be aware of all the work that is to be done, and must know the location of the nearest emergency exit, telephones. This individual shall be trained in the use of fire extinguishers and how to report a fire if necessary. - The fire watch will also warn the individual doing the work if any conditions change which affect the safety of the job.	



Owner	Safety	Location	Master	Applicability	United States
Date	Dec 2017	Revision	2026	Version	1

Fire Safe Work Zones	1. Fire Safe Work Zone: It will be the responsibility of the supervisor to perform an H/A to ensure the area meets the fire safe requirements expected for a "Low Hazard" work area. 2. Resources such as maintenance manager/supervisor, Safety Committee members or the safety department can be contacted to provide assistance. 3. A "Fire Safe Work Area" sign will be posted in the area with information to allow the local supervision to monitor conditions, and to ensure the area remains in a fire safe condition.	
Important Reminders	1. REMEMBER: A permit is required for all "Hotwork" activity unless a 'Fire Safe Work Zone' has been established. 2. Always consider non-hotwork alternatives before proceeding: bolts or clamps vs welding, 3. hydraulic shears vs. cutting torches, a. reciprocating saw vs cutting torches, b. Bring item to the mechanical shop vs. the production areas, threaded pipe vs. welding, or soldered, c. hand filing vs. mechanical grinding. 4. For further information, refer to Hotwork Permitting and training information found on LimeNet.	
Locations	The following locations have been identified as: <u>Fire Safe Work Zones (Low Hazard)</u> <u>High Hazard locations</u>	





Standard
Operating
Guideline

Hot Work

Reference Program: Hot Work

Owner	Safety	Location	Master	Applicability	United States
Date	Dec 2017	Revision	2026	Version	1

		•	• Chemical storage, • compressed gas storage • Stores, • Office areas, • Coal storage & conveyance, • and Coal Mill area • Vexor Fuel storage & conveyance system	
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STANDARD OPERATING GUIDELINE

REFERENCE Procedure: CSP-EHS-11: Hot Work

PREPARED BY: Safety Dept.

Date: Dec. 2017

DESCRIPTION: **SOG for Welding / Cutting Equipment and Practices**

SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to welding or cutting.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – Arc Welder	- Prior to Initial Use, Review owner's manual. - Inspect the equipment. Document the inspection. Ensure - All connections are tight. - Output terminals are insulated (rubber boots) - Electrode holder and welding cable well insulated and in good condition - Settings are correct	
6.	Procedure – Diesel Powered Welder	- Prior to Initial Use, Review owner's manual - Inspect the equipment. Document the inspection. Ensure - Engine is running good - Hoses and fuel cap on tight – no leaks - Fire extinguisher available - Fan guarding in place - Operate in open, well ventilated areas - Do not add fuel near open flames, or when engine is running.	



STANDARD OPERATING GUIDELINE

REFERENCE Procedure: CSP-EHS-11: Hot Work

PREPARED BY: Safety Dept.

Date: Dec. 2017

DESCRIPTION: **SOG for Welding / Cutting Equipment and Practices**

SITE: Master

- | | |
|--|---|
| <p>7. Good Welding & Cutting Practices</p> | <ol style="list-style-type: none"> 1. Only qualified, authorized personnel shall use welding and cutting equipment. 2. Refer to Hot Work and Handling Compressed Gas Cylinder SOGs 3. Cutting torches must have flash back arrestors. 4. All required PPE and clothing shall be used. <ol style="list-style-type: none"> a) When cutting, wear protective jackets / sleeves 5. Only approved equipment in good condition shall be used. Any defect must be reported immediately. Inspect equipment frequently. 6. Adequate ventilation must be provided. 7. Equipment for cutting, burning, and welding shall be protected against physical damage and from damage by heat, fire, and sparks. To protect hoses and cables, it may be necessary to suspend them. 8. Special precautions must be taken prior to welding or cutting in dusty or gaseous locations. 9. The area in which welding is being done should be clear of combustibles, screened off with proper screens, and provided with suitable fire extinguishers. 10. Special care must be taken when working in confined spaces. 11. Welding or cutting must not be done near containers that have held flammable or poisonous substances until they have been thoroughly cleaned and safeguarded. 12. Never allow oil or grease to come in contact with oxygen or oxyacetylene equipment or hoses. 13. Valves shall be closed and lines purged when cylinders left unattended |
|--|---|



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|---------------------------------|--|
| <p>8. Important Information</p> | <p>Operators Manual can be found in the supervisors office</p> |
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Standard Operating Guidelines

- HOUSEKEEPING

HOUSEKEEPING

STANDARD OPERATING GUIDELINE

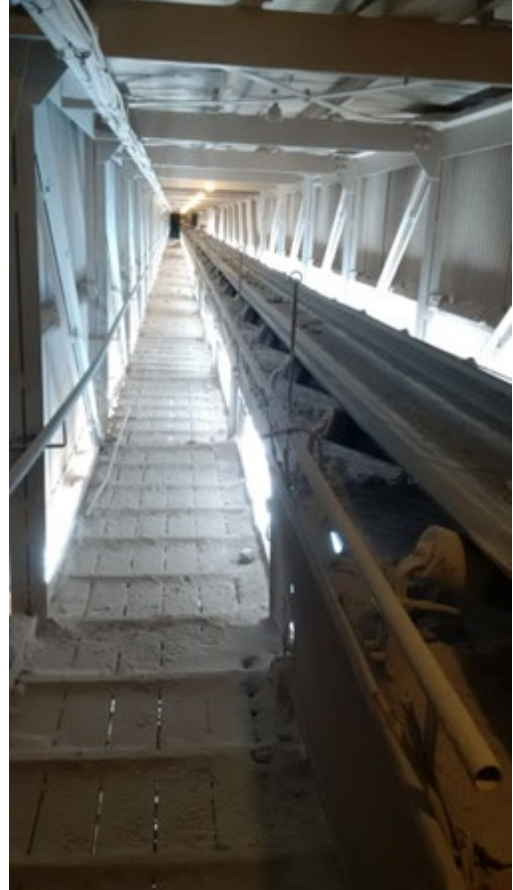
REFERENCE: Housekeeping Program	PREPARED BY: Safety Dept.	Date: Dec. 2017
DESCRIPTION: SOG for Housekeeping		Revision 2026
		SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to housekeeping	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Lighting	Appropriate lighting is required so that hazards (i.e. tripping, low head clearance) can be identified.	
6.	Roof leaks	Potential slip hazards and need to be addressed in a timely manner. The person finding the leak must ensure the area is marked with Wet Floor signs (or safety barrier tape) and report to the issue to supervision.	
7.	Snow & Ice removal	Walkways need to be cleared – when snow has been removed, salt or sand must be laid down.	
8.	Mobile Equipment (Large)	- Must be cleaned regularly including: rims, wheels, undercarriage, brake lines, suspension, radiator, windows, pre-use inspection points (i.e. fluid level indicators), ladders and steps - Interiors must be kept as clean. Obstructions removed from the floor. Surfaces should be wiped down to minimize dust levels.	
9.	Pickup Trucks (including utility vehicles)	Similarly to large mobile equipment, exterior and interior should be washed and cleaned regularly, including boxes.	



STANDARD OPERATING GUIDELINE

REFERENCE: Housekeeping Program	PREPARED BY: Safety Dept.	Date: Dec. 2017
DESCRIPTION: SOG for Housekeeping		Revision 2026
		SITE: Master

10.	Walking / Climbing surfaces	• Must be maintained clean and dry. Material accumulation must be removed and controlled so that it does not present a tripping hazard. • Sources of accumulations (spillage, leaks) should be identified and corrected. • Particular attention must be paid to wet lime, snow and ice. • The adequacy of housekeeping will be reviewed during daily work area examinations and other site inspection tours. • When excessive accumulation has been identified and can't be immediately cleaned, the hazard shall be clearly identified for others (i.e. safety barrier tape) and reported to the supervisor. • Where wet processes are used, drainage must be kept clear.	
11.	General	• Pulverized coal must not be allowed to accumulate more than 1/8" • Waste receptacles with lids will be provided for the disposal of food and other waste products. In underground mines, these receptacles will be metal. • Chemical products (i.e. oils, acids) and combustible materials (i.e. oily rags) will be discarded in proper containers. • 55 gallon drums will be stored and utilized in manner that minimizes uncontrolled spillage	
12.	Important Information		





Standard Operating Guidelines

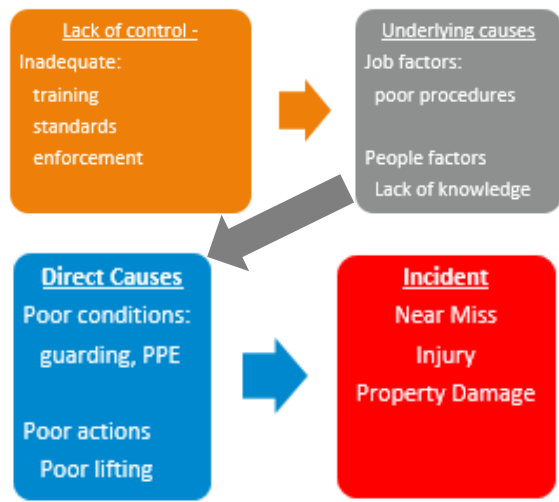
- INCIDENT INVESTIGATIONS
- INCIDENT REPORTING

INCIDENT INVESTIGATION

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	1. Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	1. The supervisor is responsible for the completion of an investigation and shall be trained on how to properly conduct an investigation. 2. Ensure employees are fully trained in the requirements of this SOG 3. Ensure employees work in accordance with this SOG	
3.	Responsibilities: Employees	4. Work in accordance with this SOG. 5. Immediately report to their supervisor, any concerns or unsafe conditions related to an investigation	
4.	Scope & Applicability	1. The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	1. An incident is any unforeseen, unplanned event including: - o Near Miss/Close call - o Property / Mobile Equipment Damage - o Injury	
6.	Procedure	1. The goal of an investigation is to identify TRUE root causes, and determine corrective actions that will prevent a re-occurrence. 2. The goal is NOT to find blame or fault. 3. Supervisors can rely on others (i.e. JHSC) when appropriate. 4. Other persons (injured, witnesses) are expected to support the investigation. 5. The level of effort (amount of resources) dedicated to an investigation depends on the risk presented by a reoccurrence.	

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

7.	The Investigation	1. Isolate the scene. Take photos. Gather facts. 2. Document as much as possible. 3. Separate witnesses and interview them. Get written statements. - o Remain calm – not accusatory - o Ask open ended questions (i.e. tell me a story) - o What did you see/hear? - o Do not ask for opinions (Why did this happen?) - o Avoid yes or no questions unless clarifying	
8.	Root Causes	1. Root causes can be categorized into 2 main categories - o Employee actions/decisions - o Physical conditions. ▪ The categories – interrelate. That is – a condition may exist because of an employee(s) actions. 2. It is usually easy to identify the immediate or primary causes. However, the key is to identify the underlying root causes. - o What was the program / system that allowed the condition / action? 3. An unsafe action – was it an error? Induced by the “system”? Or a knowing violation? - o If a “violation” – would it be considered a “violation” if no incident occurred? ▪ Violations should be addressed no different if an injury resulted or not and are a separate process to the incident root cause analysis. - o Was the action “intentional”?	
9.	Corrective Actions	Assigned to appropriate persons and tracked until completion.	

Owner	Safety	Location	Master	Applicability	United States
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	1. Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	1. Ensure employees are fully trained in the requirements of this SOG 2. Ensure employees work in accordance with this SOG	
3.	Responsibilities: Employees	1. Work in accordance with this SOG. 2. Immediately report to their supervisor, any concerns or unsafe conditions related to the reporting of an incident	
4.	Scope & Applicability	1. The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	1. An incident is any unforeseen, unplanned event including: - o Near Miss / Close call - o Property / Mobile Equipment Damage - o Injury 2. Serious incident is one that results in, or could have resulted in: - o A reportable injury - o Property damage greater than \$10,000	
6.	Procedure	1. Report all incidents to your supervisor – regardless of how minor. 2. Enter all incidents into the online reporting system by the end of their shift. 3. Department Manager report all serious incidents immediately to your SOM and Area H&S Manager. o If an injury requires professional health care, the AHSM will notify the third party claims administrator. 4. SOM report all serious incidents to your AOM.	



Owner	Safety	Location	Master	Applicability	United States
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7.	MSHA – Immediately Reportable Incidents	Management must notify MSHA within 15 minutes when there is: • A death of an individual at a mine; • An injury to an individual at a mine which has a reasonable potential to cause death; • An entrapment of an individual for more than 30 minutes or which has a reasonable potential to cause death; • An unplanned ignition or explosion of gas or dust; • An event at a mine which causes death or bodily injury to an individual not at the mine at the time the event occurs. • An unplanned ignition or explosion of a blasting agent or an explosive; • An unplanned inundation of a mine by a liquid or gas; • in surface mines and surface areas of underground mines, an unplanned fire not extinguished within 30 minutes of discovery; • A rock outburst that causes withdrawal of miners or which disrupts regular mining activity for more than one hour; • An unstable condition at an impoundment, refuse pile, or culm bank which requires emergency action in order to prevent failure, or which causes individuals to evacuate an area; or, failure of an impoundment, refuse pile, or culm bank; In underground mines, • an unplanned fire not extinguished within 10 minutes of discovery; • An unplanned roof fall at or above the anchorage zone in active workings where roof bolts are in use; or, an unplanned roof or rib fall in active workings that impairs ventilation or impedes passage; • Damage to hoisting equipment in a shaft or slope which endangers an individual or which interferes with use of the equipment for more than thirty minutes;	
8.	Important Information		



Standard Operating Guidelines

- HEARING CONSERVATION
- RESPIRATORY PROTECTION
 - HEAT STRESS
 - ERGONOMICS

INDUSTRIAL HYGIENE

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to hearing conservation.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	- All persons shall wear HPDs in areas where noise exceeds 85 dBA - Employees shall wear dual hearing protection where noise exceeds 105 dBA. - No person may be exposed to noise levels that exceed 115 dBA even with hearing protection.	
6.	Noise Mapping & Monitoring	- An ambient noise survey of each site will be conducted in consultation with the local safety committees and the results mapped and provided in the site program or SOG. - These are updated when there is a significant change in the process. - Personal exposure monitoring will be conducted every 3 years, using a personal dosimeter and a selection of employees that are representative in the workforce. - Areas with ambient noise greater than 85 dBA require signs indicating that hearing protection is required. - Areas with ambient noise greater than 105 dBA requires signs indicated that dual hearing protection is required. - Areas with greater than 115 dBA will have signs indicating that	

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		entrance is prohibited while equipment is running.																																	
7.	Training Requirements	A hearing conservation training program shall be developed to include: 1. The definition of noise 2. The effects of noise 3. Selection, use, cleaning and storage of hearing protection devices (HPD) 4. Explanation of the NRR (noise reduction rating) 5. Regular audiometric testing																																	
8.	Permissible Exposure Limits	PEL and Allowed Exposure Times Without HPD <table> <thead> <tr> <th colspan="2">US</th> <th colspan="2">Canada</th> </tr> <tr> <th>dBA</th> <th>Hours</th> <th>dBA</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>90</td> <td>8</td> <td>85</td> <td>8</td> </tr> <tr> <td>95</td> <td>4</td> <td>88</td> <td>4</td> </tr> <tr> <td>100</td> <td>2</td> <td>92</td> <td>2</td> </tr> <tr> <td>105</td> <td>1</td> <td>95</td> <td>1</td> </tr> <tr> <td>110</td> <td>½</td> <td></td> <td></td> </tr> <tr> <td>115</td> <td>¼</td> <td></td> <td></td> </tr> </tbody> </table>	US		Canada		dBA	Hours	dBA	Hours	90	8	85	8	95	4	88	4	100	2	92	2	105	1	95	1	110	½			115	¼			
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105	1	95	1																																
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115	¼																																		
9.	Important Information	Areas and/or tasks designated as mandatory hearing protection. • Areas and/or tasks designated as DUAL hearing protection. •																																	

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to respiratory protection.	
4.	Scope & Applicability	- The requirements of this SOG apply to all Carmeuse employees - The manufacturer's information pertaining to use, scope, and limitations of each respirator shall be available.	
5.	Hazard Assessments / IH surveys	A hazard assessment (industrial hygiene survey) will be conducted as per the Industrial Hygiene Program, at regular intervals, or following significant process changes.	
6.	Procedure	- Respirators will be worn in designated areas, or when performing designated tasks. - Areas or tasks that require mandatory respirator usage will be identified.	
7.	Fit Testing	- Employees that are required to wear ½ face, or full face, negative pressure respirators, will have fit testing prior to being issued, and annually thereafter - Records of the fit test shall be maintained.	

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

8.	Medical evaluation	1. Employees that are required to wear ½ face, or full face, negative pressure respirators, will have a medical evaluation prior to being issued, and annually thereafter.	
9.	Training	1. An employee will be trained on the selection, care, storage and use of the respirator, prior to being issued the equipment.	
10.	Storage	1. Respirators shall be stored in a manner that will protect them against physical and chemical agents such as a. vibration, b. shocks, c. sunlight, d. heat, e. extreme cold, f. excessive moisture, or g. damaging chemicals.	
11.	Replacement	Respirator filters, cartridges or canister shall be replaced whenever there is a detectable increase in breathing resistance or when the End of Service Life Indicator (ESLI) shows a change.	
12.	Important Information	Areas that required mandatory respirator usage. • Tasks that require mandatory respirator usage. • Respirators available for usage at this site. •	

Owner	Safety	Location	Master	Applicability	North America
Date	Sep 2019	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to heat stress.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Definitions	Heat Stress –the various illnesses the body can experience when it has trouble cooling itself. Heat exhaustion - The body’s cooling system is beginning to break down. Heat Stroke – The body’s cooling system has stopped - the body stops sweating. Acclimatization – The process of getting “used” to the heat. Humidex – (aka heat index) is a number the combines the effect of heat and humidity Elevated Humidex – is relative to the region and its prevailing climate and typical acclimatization of its citizens.	

Owner	Safety	Location	Master	Applicability	North America
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6.	Training	1. There should be education / awareness provided to all employees every year, prior to the summer months, and again during periods of elevated humidex. 2. Training should include the effects of heat stress, and practices to manage heat stress, on and off the job.	HEAT INDEX CHART <table><tr><td>Air Temp.</td><td>70°</td><td>75°</td><td>80°</td><td>85°</td><td>90°</td><td>95°</td><td>100°</td><td>105°</td><td>110°</td></tr><tr><td>Relative Humidity ↓</td><td colspan="9">Apparent Temperature (Degrees Fahrenheit) →</td></tr><tr><td>0%</td><td>64°</td><td>69°</td><td>73°</td><td>78°</td><td>83°</td><td>87°</td><td>91°</td><td>95°</td><td>99°</td></tr><tr><td>10%</td><td>65°</td><td>70°</td><td>75°</td><td>80°</td><td>85°</td><td>90°</td><td>95°</td><td>100°</td><td>105°</td></tr><tr><td>20%</td><td>66°</td><td>72°</td><td>77°</td><td>82°</td><td>87°</td><td>93°</td><td>99°</td><td>105°</td><td>112°</td></tr><tr><td>30%</td><td>67°</td><td>73°</td><td>78°</td><td>84°</td><td>90°</td><td>96°</td><td>104°</td><td>113°</td><td>123°</td></tr><tr><td>40%</td><td>68°</td><td>74°</td><td>79°</td><td>86°</td><td>93°</td><td>101°</td><td>110°</td><td>122°</td><td>137°</td></tr><tr><td>50%</td><td>69°</td><td>75°</td><td>81°</td><td>88°</td><td>96°</td><td>107°</td><td>120°</td><td>135°</td><td>150°</td></tr><tr><td>60%</td><td>70°</td><td>76°</td><td>82°</td><td>90°</td><td>100°</td><td>114°</td><td>132°</td><td>149°</td><td></td></tr><tr><td>70%</td><td>70°</td><td>77°</td><td>85°</td><td>93°</td><td>106°</td><td>124°</td><td>144°</td><td></td><td></td></tr><tr><td>80%</td><td>71°</td><td>78°</td><td>86°</td><td>97°</td><td>113°</td><td>136°</td><td>157°</td><td></td><td></td></tr><tr><td>90%</td><td>71°</td><td>79°</td><td>88°</td><td>102°</td><td>122°</td><td>150°</td><td>170°</td><td></td><td></td></tr><tr><td>100%</td><td>72°</td><td>80°</td><td>91°</td><td>108°</td><td>133°</td><td>166°</td><td></td><td></td><td></td></tr></table>	Air Temp.	70°	75°	80°	85°	90°	95°	100°	105°	110°	Relative Humidity ↓	Apparent Temperature (Degrees Fahrenheit) →									0%	64°	69°	73°	78°	83°	87°	91°	95°	99°	10%	65°	70°	75°	80°	85°	90°	95°	100°	105°	20%	66°	72°	77°	82°	87°	93°	99°	105°	112°	30%	67°	73°	78°	84°	90°	96°	104°	113°	123°	40%	68°	74°	79°	86°	93°	101°	110°	122°	137°	50%	69°	75°	81°	88°	96°	107°	120°	135°	150°	60%	70°	76°	82°	90°	100°	114°	132°	149°		70%	70°	77°	85°	93°	106°	124°	144°			80%	71°	78°	86°	97°	113°	136°	157°			90%	71°	79°	88°	102°	122°	150°	170°			100%	72°	80°	91°	108°	133°	166°			
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7.	Procedure	1. Sites should monitor local humidex readings and forecasts during summer months. 2. Drinking water and “cool down” rooms (i.e. control rooms, lunch rooms) should be readily accessible. 3. During periods of elevated humidex a. Take it easy. Take frequent, short breaks b. Drink plenty of water i. Thirst is not a good indicator of how much fluid your body needs – drink more than your thirst tells you ii. 1 cup every 20 minutes c. Avoid alcoholic beverages and caffeine. These contribute to dehydration d. Dress in light weight fabrics that breath e. Wear light colors instead of dark	<table><tr><td></td><td>Not acclimatized worker</td><td>Acclimatized worker</td><td>Risk</td></tr><tr><td rowspan="5">Humidex F</td><td>86-99</td><td>97-108</td><td>Low</td></tr><tr><td>100-102</td><td>109-111</td><td>Medium</td></tr><tr><td>103-106</td><td>112-116</td><td>Moderate</td></tr><tr><td>107-111</td><td>117-120</td><td>High</td></tr><tr><td>112+</td><td>121+</td><td>Extreme</td></tr></table><table><tr><td></td><td>Not acclimatized worker</td><td>Acclimatized worker</td><td>Risk</td></tr><tr><td rowspan="5">Humidex C</td><td>30-37</td><td>36-42</td><td>Low</td></tr><tr><td>38-39</td><td>43-44</td><td>Medium</td></tr><tr><td>40-41</td><td>45-46</td><td>Moderate</td></tr><tr><td>42-44</td><td>47-49</td><td>High</td></tr><tr><td>45+</td><td>50+</td><td>Extreme</td></tr></table>		Not acclimatized worker	Acclimatized worker	Risk	Humidex F	86-99	97-108	Low	100-102	109-111	Medium	103-106	112-116	Moderate	107-111	117-120	High	112+	121+	Extreme		Not acclimatized worker	Acclimatized worker	Risk	Humidex C	30-37	36-42	Low	38-39	43-44	Medium	40-41	45-46	Moderate	42-44	47-49	High	45+	50+	Extreme																																																																																										
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8.	Procedure	1. The body will adapt to working in hot environment – but it takes time. a. It can take 1-2 weeks to get acclimatized.	Urine Color and Hydration Guide																																																																																																																																		



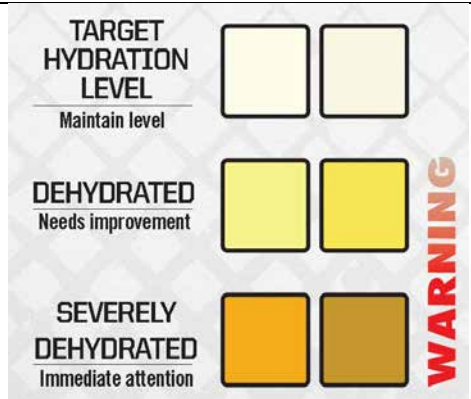


Standard
Operating
Guideline

Heat Stress

Reference Program: Industrial Hygiene Program

Owner	Safety	Location	Master	Applicability	North America
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		b. Take extra precautions when the hot weather first arrives 2. Know your susceptibility. a. Medical conditions can contribute to your susceptibility to heat illness, such as i. Overweight ii. Poor general health iii. Poor physical condition iv. Heart disease v. Diabetes		
9.	Important Information			



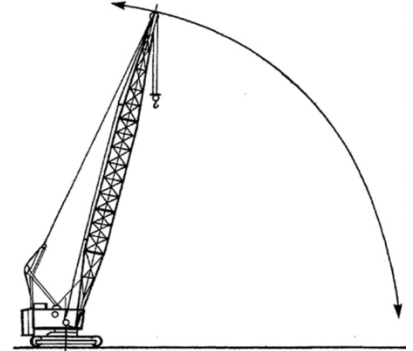


Standard Operating Guidelines

- LIFTING, RIGGING AND SUSPENDED LOADS
- SAFETY BARRIERS, FENCING AND TAPING

LIFTING AND RIGGING

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a suspended load.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	- Suspended load – anything not directly supported from the ground by mechanical or structural means. Examples - o Cranes - o Conveyor gravity take ups - o Chain-falls / come-a-longs - o Forklifts & telehandlers (<i>including when forks left in raised position i.e. adhoc work table</i>) - o Hydraulic jacks (when the cylinder is not at its base) - Lifting Zone – the area below the suspended load that could be impacted if the load were to fall. Includes the swing path.	

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6. Procedure
- No suspended load may be left unattended, unless physical barriers are installed below it.
 - For example – the guarding around the bottom of a gravity take-up
 - If the person performing the lift cannot observe the load along the entire path of travel / lift, they must obtain assistance.
 - Access to Lifting Zone must be controlled.
 - The level of control depends on the inherent risk of the lift. Factors to consider include the amount of time the load is suspended, the amount of vehicle and pedestrian traffic, and how easily a pedestrian will observe the lift. An example of minimal risk is when a forklift or telehandler completes a single lift i.e. bricks to the firing floor
 - Required Lifting Zone control procedures
 - High Risk – Red Danger tape* with communication posting and a watch person
 - Moderate risk – Red Danger tape with communication posting or a watch person
 - Minimal risk – operator diligence

*physical barriers are preferred – tape is a minimum. Rope or chain is also acceptable.
 - Always keep your whole body (including hands and feet) clear of a suspended load.
 - Note: during normal operations, forklifts operating in the warehouse are exempt from these requirements, as those areas should have established procedures.



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7.	Lifting and Rigging	- Only 1 person (who must be identified) is permitted to give signals to a crane operator. The signal person must have completed a recognized hoisting and rigging course, or be a qualified signal person. - Lifting plans will be developed as per generally accepted industry guidelines for Routine (non critical) and Non-Routine (Critical) lifts. - A pre-use inspection of lifting, lifting & rigging equipment shall be performed by the operator prior to its initial use each shift, including slings, rigging hardware, etc. - Deficient equipment shall be tagged "out of service" until repairs are completed and it passes inspection. - All lifts shall be executed based on the plan developed and agreed to by all individuals involved, and the Lift Leader, if any. - Complete the appropriate pre-use inspection checklist to identify that the load attachment / lift points, hardware and accessories are adequate. - Identify the intended path of travel and the final load placement area and ensure that barricade tape, barrier fencing or other suitable measures are implemented. - If the load must be touched to make fine positional adjustments, only qualified / authorized person may do so. - Non-conductive tag lines must be used whenever possible. Tag lines must never be attached or wrapped around your body. Tag lines need to be of sufficient length to make lift and keep personal from under suspended load. In addition, when needed poles with hooks can be used to reach tag lines and keep personal out of the Danger Zone.	
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Owner	Safety	Location	Master	Applicability	North America
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8.	Critical Lift	- The Lift Leader ensures that - Resources including safety, engineering and qualified personnel has been consulted, - A documented Lift Plan is completed and reviewed with all individuals involved prior to the execution of the Critical Lift. - A Safety Officer has been identified. - The Safety Officer confirms that the lift plan is being followed, and that safety precautions are adequate (i.e. safety fencing). - The Safety Officer, Lift Leader or crane operator has authority to suspend any lift if, in their opinion, rigging and/or attachment / lift points are not appropriate to allow the lift to be executed safely.	
9.	Don't forget.....	- Lifting Plan Checklist - Pre job checklist - Guidelines for Creating Lifting Plan for Lifting Operations In Workplaces	
10.	Important Information		

Owner	Safety	Location	Master	Applicability	North America
Date	Apr 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	 
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the use of safety barriers	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	- When a hazard is identified, and is not corrected at the time of the recognition, or a hazard is being created as a result of the work being performed, secure area by - Safety rope - Yellow Barricade Tape, - Red Barricade Tape, or - Examples of physical barriers: Construction / Snow type fencing - Ensure all tape and barriers are immediately removed and properly disposed of once the hazard has been addressed.	
6.	Procedure	- Attach a tag identifying the hazard on unattended barricades - Tag must state nature of the hazard and protective measures required - Attach an adequate number of tags to account for all possible approaches - Where a tag has been used, communicate directly to the effected employee or team the status of the tag.	

Owner	Safety	Location	Master	Applicability	North America
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7.	Procedure	- Yellow barricade tape indicates CAUTION and potential hazard. It is appropriate when a hazard presents a moderate risk. Examples include - Excavations, less than 1.2 meters (4 feet) in depth - Identification of trip hazards, and/or low hanging objects - Temporary material storage on the site where mobile equipment may come into contact. - Red Barricade Tape indicates a hazard presents a higher risk. - It should only be used for short term – immediate notification. Physical barriers should be erected as soon as practicable. Examples include: - Overhead work (i.e. where potential for tools, and equipment could fall from an upper level) - Scaffold under construction - Around swing radius of equipment with a rotating structure (i.e. aerial work platforms, cranes) - Excavation more than 1.2 m (4') and the tape is placed at least 2 m (6.5') away. - Physical barriers are required when a hazard presents a serious, imminent risk. Examples include - Broken, or missing guards, or - Removal of any hand rails or flooring - Significant Structural damage. - Exposed live electrical components - Excavation > 1.2 m (4') and barrier is within 2m (6.5')	
8.	Important Information		



Standard Operating Guidelines

- LOCKOUT/TAGOUT/TRYOUT
 - GUARDING

LOCKOUT/TAGOUT/TRYOUT

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities:	1. Site Operations Manager - o Ensure all aspects of this SOG are implemented and adhered to. 2. Supervisor - o Ensure employees are fully trained in the requirements of this SOG - o Ensure employees work in accordance with this SOG 3. Employee - o Work in accordance with this SOG. - o Immediately report to their supervisor, any concerns or unsafe conditions.	
2.	Scope & Applicability	1. LOTOTO requirements apply to all persons working on site. 2. These requirements apply whenever a person removes a guard, has part of their body exposed to a hazard such as uncontrolled, unplanned release of energy (movement of equipment or materials; electrical, hydraulic or pneumatic), or toxic materials.	
3.	Training	1. Any employee that may have to perform a lockout, must have adequate training. Initial training must include theory and practical (hands-on) and there must be annual refresher training thereafter.	



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4. Procedure – Lock and Tag

1. Lockout identification and Tagging requirements:
 - a) Personal safety locks issued to a team member will be individually keyed with a single key and identified with the employee's name.
 - b) A Tag is NOT required when applying personal safety locks to a lockout point, providing the above criteria has been met. Or when using a Department/Supervisor lock.

Department/Supervisor Locks:

2. These locks will be keyed alike, identified accordingly, and are only to be used for the purpose of isolating a machine or piece of equipment, and are NOT to be used for the purpose of personal lockout. Locks may be color coded to represent a dept.

Tagging Requirements:

3. Where a Department or Supervisor lock is placed on a machine or piece of equipment, a Tag shall be used to supplement the lock for notification purposes only.
4. All contractors, visitors and non-Carmeuse persons will be required to use a tag to supplement their personal lockout lock.
5. The tag shall include the person's name, the date, and the reason for the machine, or piece of equipment to be locked out.



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5.	Procedure – Basic Steps	There are 7 basic steps in LOTOTO 1) Notify affected individuals 2) Identify lockout points 3) Shutdown Equipment 4) Neutralize Energy Sources 5) Apply Lock and Tag 6) Release Stored Energy 7) Tryout (Verify Zero Energy State) 1. Zero Energy State: the neutral state, or the lack of energy a piece of equipment (or process) must possess for maintenance or servicing – it is the end result when proper lockout has been implemented. 2. All line utilities such as compressed air, gas, steam, coolant, water, etc. are shut/bleed off 3. All pressure in accumulators, receivers, tanks or hydraulic systems neutralized to ambient pressure 4. All mechanical components that might fall or may be free to move are blocked, pinned, chained, or otherwise secured. 5. When two or more employees work on the same equipment, each is responsible for attaching his or her own personal lock. 6. Interlocks and emergency stops shall not be used for the purpose of lockout. 7. The last employee to remove a personal lock is responsible to ensure all guards have been replaced and informing affected employees. 8. Only the individual may remove their personal lock. In the event that a person has left the site and forgot to remove their personal lock, the lock may be removed only after following an established procedure. The attempts to contact the individual and verify that it is safe to remove the lock, must be documented.	 Lock-Out is a shared responsibility. Communication when multiple workers are involved in a lock out condition is essential to ensure everyone stays safe. • Last lock off is responsible to inspect the equipment prior to powering up the equipment. • If during a lockout where multiple people are involved, you take off a guard or make ineffective a safety device, you are responsible to replace that guard or device, or you MUST put in place the <u>equivalency</u> of that guard or device to protect workers from the hazard. • If you plan on leaving a guard or safety device removed or non operational you MUST tell your supervisor of your action and all others involved with the lock out. DO NOT just assume someone else will know or see what you did !
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Owner	Safety	Location	Master	Applicability	North America
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6.	Procedure	Before any work is done on a process or piece of equipment, all sources of energy must be made safe (Zero Energy State) and then properly locked out by each person involved in the work. The above rule is that simple.	
7.	Procedure – Group Lockout	- Group lockout allows for simplification of the lockout procedure, for systems or processes that have multiple lockout points. - Examples of group lockout could include but not limited to kilns, precipitators, preheaters, and coal mills. - Each point that is required to isolate the system will be identified and listed on a checklist. A group lock will be assigned to that lockout point. - The assigned person will apply the group locks, and place each key in the group lock box - Any person may apply the group locks, provided that person has the required knowledge for that specific system. - The person performing the initial lockout must ensure that the “tryout” step has been completed and documented on the checklist. - The group lock box will be locked with a department or shift supervisor lock. - The checklist must be completed and posted at the group lock box. - Each person may then lockout at the group lock box. - Each person must review the checklist and verify the keys are in the lock box. - Any person may request to review the individual lockout points.	



**Standard
Operating
Guideline**

Lockout – Tagout – Tryout

Reference Program: Lockout – Tagout – Tryout

Owner	Safety	Location	Master	Applicability	North America
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8.	Important Information	Group Lockout Locations:	
		Color Coded Department Locks: a) Supervisor / Production Locks b) Mechanical c) Mobile Mechanic d) Electrical	



STANDARD OPERATING GUIDELINE

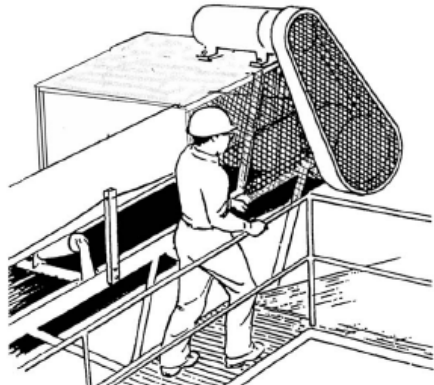
REFERENCE Procedure: Hazard Identification & Control

PREPARED BY: Safety Dept.

Date: Sept 2019

DESCRIPTION: **SOG for Guarding**

SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	1. Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to guarding	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – All Employees	- Ensure all guards are used and maintained as required by H&S regulations this SOG and guarding program. - Inspect guards and equipment before use; - Has authority to stop any machine or devise, or provide recognized temporary protective measures (i.e. barricade) where guarding is missing, or in need of repair and poses a hazard).	



STANDARD OPERATING GUIDELINE

REFERENCE Procedure: Hazard Identification & Control

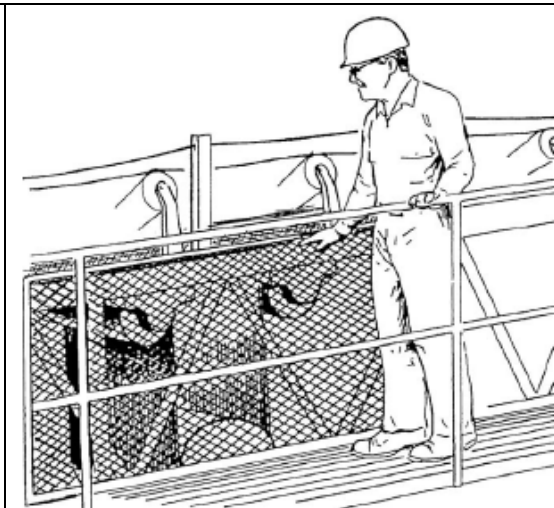
PREPARED BY: Safety Dept.

Date: Sept 2019

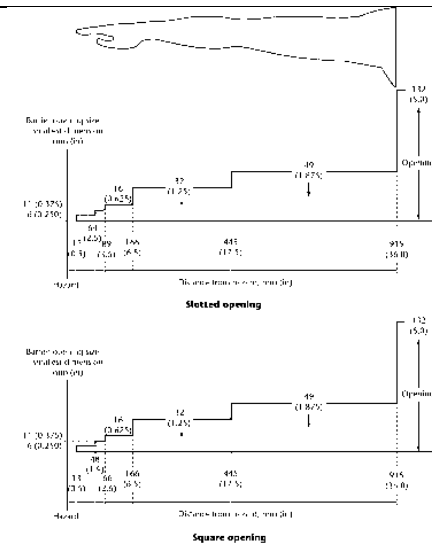
DESCRIPTION: **SOG for Guarding**

SITE: Master

6.	Procedure – Guard design	All guards and safeguarding devices will be designed; 1. Control reliable and fail-safe and not to create additional hazards. 2. Not to be easily defeated by a person reaching through around over or under the guard and constructed with materials and strengths to contain any broken parts or air born hazards. 3. With ergonomic principals in mind. Considering the size and weight of the guard. 4. All new or relocated machines, equipment, things or processes will be assessed for guarding requirements prior to being used for the first time. 5. Cross-functional teams including engineering, maintenance, production and plant safety will participate in the sites guarding assessment. 6. Pre-Start Safety Reviews will be conducted on all new or relocated machines, equipment, things or processes.
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7.	Procedure – Guard Removal	1. Affected employees will participate in the Maint. SLAM/Pre task plan prior to the removal of any machine guard for the purpose of running PM, or troubleshooting and where the machine or devise must be left in the on position. 2. The established perimeter must provide at least 3' of separation from the hazard. Employee must be capable of seeing the entire unguarded portion of equipment at all times it is being operated and have a means of immediate communication to the individual operating the equipment. 3. A barricade or warning device must be installed around the entire perimeter of the unguarded location. "Danger" tape is a suitable warning device, provided it is appropriately labeled. 4. Full lockout-tagout-tryout must be re-implemented prior to employee entry into the perimeter established above.
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STANDARD OPERATING GUIDELINE

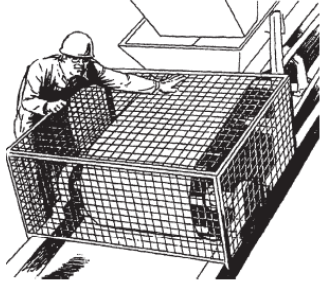
REFERENCE Procedure: Hazard Identification & Control

PREPARED BY: Safety Dept.

Date: Sept 2019

DESCRIPTION: **SOG for Guarding**

SITE: Master

8.	Training	1. Personnel involved in the design or commissioning of guarding will become familiar with local regulations and guidelines with respect to guarding principles.	
9.	Maintenance of Guarding	1. Each site is required to inspect all guards and safeguarding devices at regular intervals (i.e. WPI's) and in any case at least once per year.	
10.	Important Information	Refer to the Engineering Guarding standards.	





Standard Operating Guidelines

- AERIAL WORK PLATFORMS
- PRE-USE INSPECTION OF MOBILE EQUIPMENT
 - MOBILE EQUIPMENT
 - TELEHANDLER
 - WHEEL CHOCKING
 - RAILCAR MOVEMENT

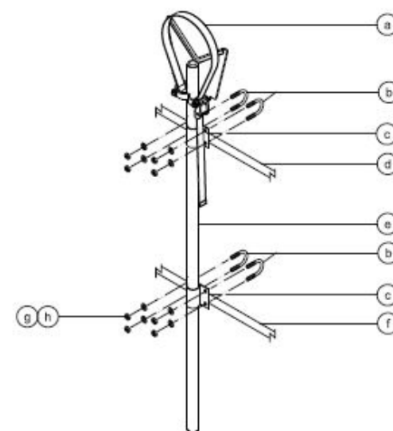
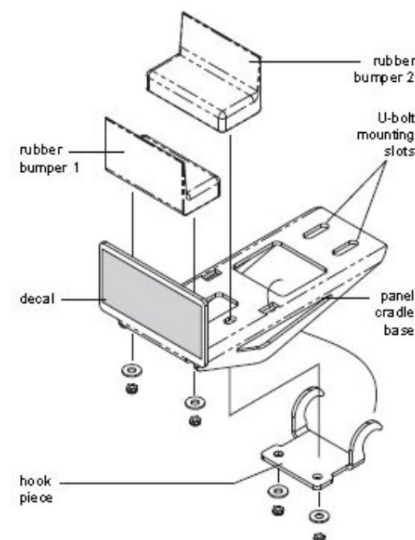
MOBILE EQUIPMENT

Owner	Safety	Location	Master	Applicability	North America
Date	Aug 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any defects, concerns or unsafe conditions related to the operation of an AWP.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees involved with operation of an AWP.	
5.	Procedure - Specific	- Prior to initial use, operators must be trained with both theory and hands-on practical training. This includes reviewing operator's manual and safety signs and labels on the machine. Rental Companies are obligated to provide training on rented equipment. - Perform an inspection before each shift. If there is anything apparently wrong with the machine or a malfunction is discovered, make sure the machine is immediately tagged and removed from service. - Ensure all grading in operating areas, are within the safe operating limits of the equipment. - Assess the work area and task prior to operating. Be aware of and avoid hazards such as drop-offs and holes, slopes, slippery or unstable surfaces, overhead obstacles, power lines and any other hazards.	

Owner	Safety	Location	Master	Applicability	North America
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5. Never sit, stand or climb on guardrails or toe boards for any reason.
6. Wear fall protection when operating an AWP. This means a full body harness and non-shock absorbing lanyard (adjusted so that you remain within the basket), or self-retracting lifeline rated for horizontal use(recommended.)
7. Only exit an elevated basket if absolutely necessary. If exiting basket, 100% tie-off must be maintained.
8. Have a rescue plan, in case you cannot lower the AWP. Ensure that you are familiar with the operation of the auxiliary power system which allows the basket to be lowered to the ground in the event of an engine failure.
9. Keep the platform clear of all debris. Remove any item that is not necessary to do your work.
10. Close the entry gate before operating the AWP.
11. Always maintain sufficient clearance from overhead wires, stationary and moving equipment, and structures.
12. Always follow the manufacturer's capacity limit. Include tools, clothing, parts and materials in calculation.
13. Note that attachments exist for safely lifting parts, materials or equipment (such as pipe and panel cradles) that should be considered.
14. Control access around the equipment while platform is elevated. For example, in potentially high traffic areas, use barricade tape. In areas of low traffic, pylons or a spotter may be acceptable (refer to the Safety Barricade Fencing and Tape SOG)



Owner	Safety	Location	Master	Applicability	North America
Date	Nov 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	- Ensure employees are fully trained in the requirements of this SOG - Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the pre-use inspections	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Training	- Conducting a pre-use inspection must be included in the training for any person newly assigned a piece of equipment. - For new equipment, refer to the owner's manual.	
6.	Procedure – Requirements	- Prior to initial use each shift, the mobile equipment will be inspected. The inspection will be documented on the appropriate form. Subsequent operators on same shift, verify inspection was completed by initialing the form. - If there are defects that affect the safe operation, the equipment will be tagged and taken out of service, until repairs are made. - Items to inspect are equipment specific, including but not limited to: - Fluid levels and leaks - Tire tread and lug nuts - Horn operation - Backup alarm / Backup camera and sensors - Seat belt - Windows and mirrors - Lights (backup, head, turning) - Parking brake - Tested according to procedure and/or able to hold on maximum grade	



Standard
Operating
Guideline

Pre-Use Inspection of Mobile Equipment

Reference Programs: Hazard Identification, Mobile Equipment

Owner	Safety	Location	Master	Applicability	North America
Date	Nov 2018	Revision	2026	Version	1

		i. Whip flags are in good condition / beacons are functioning j. Radio is functioning k. Fire extinguisher / suppression gauges	
7.	Important Information	1.	



STANDARD OPERATING GUIDELINE

REFERENCE Program: Mobile Equipment

PREPARED BY: Safety Dept.

Date: APR 2022

DESCRIPTION: **SOG for Mobile Equipment**

Revision: Jun 2026

SITE: Master

tiNo.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a piece of mobile equipment.	
4.	Scope & Applicability	- The requirements of this SOG apply to all Carmeuse employees. - Mobile Equipment is considered non-licensed machinery and equipment primarily designed for off road use. Licensed vehicles for over the road use are excluded from this definition.	
5.	Procedure	- Only operate equipment that you are trained and authorized. - Seat belts shall be worn while operating any vehicle with which it is equipped. - Prior to initial use each shift, the mobile equipment will be inspected. The inspection will be documented on the appropriate form. Subsequent operators on same shift, verify inspection was completed by initialing the form. - If there are defects that affect the safe operation, the equipment will be tagged and taken out of service, until repairs are made. - Operators must maintain care and control of their equipment at all times. Operating speeds shall be consistent with conditions of roadway, grades, clearance, visibility and traffic. Operators must comply with posted signage (i.e. speed limit, direction). - Operators shall sound a horn prior to placing the equipment into forward motion. - Operators shall embrace and practice the "Wait for the Wave" fundamentals.	



STANDARD OPERATING GUIDELINE

REFERENCE Program: Mobile Equipment

PREPARED BY: Safety Dept.

Date: APR 2022

DESCRIPTION: **SOG for Mobile Equipment**

Revision: Jun 2026

SITE: Master

8. Mobile equipment shall have lights on when operating between sunset and sunrise and when reduced visibility conditions exist. If mobile equipment is equipped with additional visual aids such as flags and beacons, they shall be in good condition and functioning.
9. Cell phone use (including hands free) is prohibited while mobile equipment is in motion
10. Operator cabs must be kept orderly and clean as practicable. Windows and mirrors must be kept clean to maximize visibility.
11. Windows not able to be cleaned with the wipers or from within the manufacture approved handrail system shall be cleaned from the ground or while using fall protection.
12. Ear buds or head phones (for entertainment) shall not be worn.
13. Smoking in mobile equipment is prohibited.
14. Mobile equipment operators will have access to a functioning radio communication device.
15. The use of fall protection is required when performing any maintenance, cleaning, or other work that is not from the ground and when not protected by railing.
16. Mobile equipment that is equipped with a Master Switch shall have it disconnected when parked for extended periods.



6. Other Information

Refer to SOGs for Wheel Chocking, Working at Heights, and Pre-Use Inspection

7. Clearances from overhead power lines

Mobile equipment capable of having parts of its structure elevated near energized overhead lines shall be operated such that they come no closer than:

Voltage Range

Distance

< 50k

10' (305 cm)

50k+

An additional 4" (10 cm) for every 10k over 50k



8. Important Information



Owner	Safety	Location	Master	Applicability	North America
Date	Jul 2019	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of the telehandler.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees involved with telehandler operation.	
5.	Procedure - Specific	- Prior to initial use, operators must be trained in both theory and hands-on practical. This includes reviewing operator's manual and safety signs on the machine. Rental Companies are obligated to provide training on rented equipment. - Prior to initial use each shift, the mobile equipment will be inspected. The inspection will be documented on the appropriate form. Subsequent operators on same shift, verify inspection was completed by initialing the form. - If there are defects that affect the safe operation, the equipment will be tagged and taken out of service, until repairs are made. - Assess the work area and task prior to operating. Be aware of and avoid hazards such as drop-offs and holes, slopes, slippery or unstable surfaces, overhead obstacles, power lines and any other hazards.	

Owner	Safety	Location	Master	Applicability	North America
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5. Ensure all grading in operating areas, are within the safe operating limits of the equipment.
6. Do not operate a telehandler without the proper load capacity chart. It is critical that the load chart in the telehandler matches the machine and the attachment you are using before lifting the load.
7. Make sure that the weight and center of gravity of the load does not exceed the telehandler's or attachment's maximum capacity according to the load chart. Evaluate the dimensions of the load to determine proper load handling techniques. Always secure the load to minimize the potential for falling debris.
8. Always wear your seatbelt while operating. Adjust side and cab mirrors to maximize visibility.
9. Recognize the large blind spot that is created by the boom. When operating in areas that are congested or confined, utilize a spotter.
10. Ensure that the combined center of gravity of the telehandler and the load always remains within the stability triangle.
Good operating habits that can help are:
 - a. Make sure the chassis is level before handling a load and never use the sway feature with an elevated load.
 - b. Keep the boom and load as low as possible during travel.
 - c. Operate the machine at speeds that will keep the machine and load under control at all times.
11. Do not jump from the machine if it tips over. Remain in the cab, stay in the seat with your seat belt fastened.



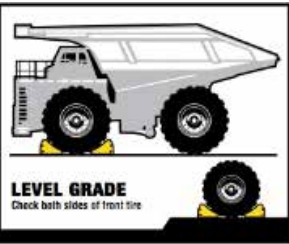
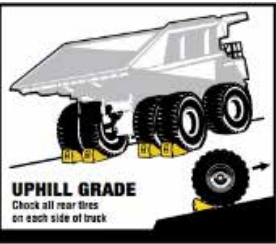
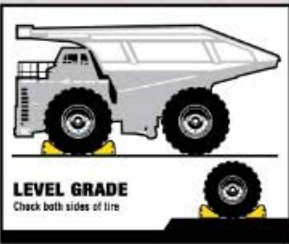
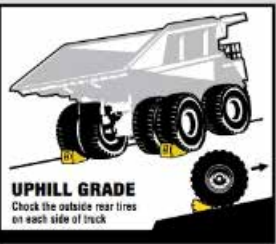
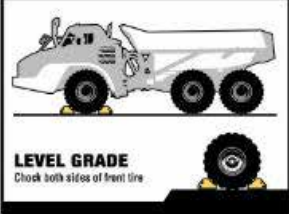
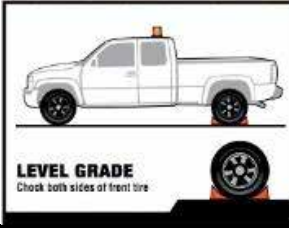
Owner	Safety	Location	Master	Applicability	North America
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		12. Telehandlers shall not be used to lift personnel.	
6.	Important Information	SOG for Mobile Equipment, SOG for Pre-Use Inspection of Mobile Equipment.	

Owner	Safety	Location	Master	Applicability	North America
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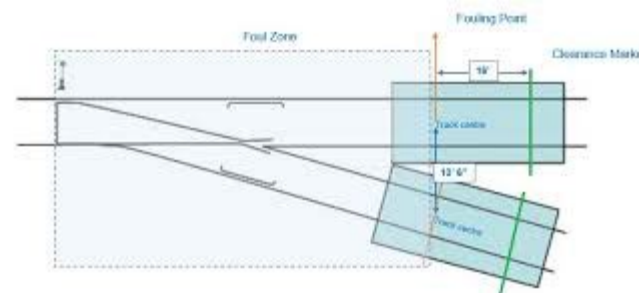
No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure employees are fully trained in the requirements of this SOG. Ensure employees work in accordance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the chocking of wheels	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure – Requirements	- When parked (left unattended) on a level surface, controls must be in parking position, with parking brake applied. - When parked on a grade*, (left unattended), or during vehicle service, wheels MUST be chocked. *Sites may require chocking at all times regardless of grade - Chocking is not required for personal vehicles parked in office parking lots outside of operational areas.	
6.	Procedure – Specific	- The proper method of chocking is to place a “wedge” in front and behind one wheel of the vehicle, or on the downslope side of one wheel. Ensure chocks are placed square to and in the center of the tire; - Remember proper lifting techniques; wheel chocks can be heavy. - Chocks are not required if the equipment is parked in a ditch, over a “bump”, or against a berm with the wheels turned into the berm, - Proper sized chocks shall be either kept with the vehicle or readily available for use.	

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7.	Haul Trucks – Payload <u>over</u> 240 tons	 LEVEL GRADE Check both sides of front tire  DOWNHILL GRADE Chock the rear outer tires first, then the front tires.  UPHILL GRADE Chock all rear tires on each side of truck	
8.	Haul Trucks – Payload <u>under</u> 240 tons	 LEVEL GRADE Check both sides of tire  DOWNHILL GRADE Chock the front tires on each side of the truck.  UPHILL GRADE Chock the outside rear tires on each side of truck	
9.	Articulated Trucks	 LEVEL GRADE Chock both sides of front tire  DOWNHILL GRADE Place one chock on the downhill side of each tire on the carrier axle  UPHILL GRADE Place one chock on the downhill side of each tire on the farthest downhill axle.	
10.	Pickup and Service Trucks	 LEVEL GRADE Chock both sides of front tire  DOWNHILL GRADE Always chock front tires on each side of truck  UPHILL GRADE Chock outside rear tires on each side of truck	
11.	Important Information		



Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	 <u>Fouling Point</u> 
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a piece of mobile equipment.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Procedure	- Prior to initial use, operators must be trained with both theory and hands-on practical training. - When moving railcars, a minimum of 2 people are required (One Spotter and One Operator) - Prior to any railcar movement during a work shift, the employees must complete an inspection of the track along the route for defects, obstructions and potential collision hazards. Structures, track, switches, and crossings must be inspected. - Switches must be inspected and direction of switch must be verified prior to car movement. - Fouling points (the point where physical contact between the two tracks is possible) shall be observed on all switches and should be clearly marked.	

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6. Tracks must be cleared of significant amounts of debris prior to moving cars. Debris includes snow, ice, spilled lime, stone, and other foreign materials.
7. When rail car, rail track, or switch repairs must be performed on an active track, derail (or other locking devices) and warning device (blue flag) must be placed on both approaches to the location to prevent accidental or unauthorized use of the track in that location.
8. Equipment other than rail movers shall not be used to push or pull cars. Exceptions to this must be approved by the Site Manager.
9. The operator must sound the horn: 1) prior to movement, 2) prior to entering a road crossing, 3) prior to entering or exiting a building, or 4) anytime the operator's visibility is impaired.
10. A spotter must be present at the lead car (when pushing) or in a position to assist with visibility and prevent collisions (when pulling.) A spotter is required anytime the cars are in motion.
11. Spotter must be able to communicate clearly with the operator at all times by radio or other appropriate methods (hand signals).
12. If the operator loses communication and/or visibility with the spotter an "all stop" must occur.
13. A rail car hatch opener must be available on site and used as necessary to open rail car hatches. Bars or other improvised tools shall not be used.





Standard Operating Guideline

Railcar Movement

Reference Program: Mobile Equipment

Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2018	Revision	2026	Version	1

		14. At a minimum, the hand brake on the first “downhill” car and every third car in the string after must be set when the cars are parked and unattended. 15. At a minimum, the lead “downhill” railcar of the string must be chocked/wedged on the “downhill” side when parked and unattended. 16. A rail car brake stick must be available on site and used as necessary to tighten and release brakes, align car coupler knuckles, and operate angle locks. 17. Spotter shall not work between or under cars unless they have verified from the operator that they are at a “all stop” and what the spotter intent is. 18. At no time shall any employee be permitted to ride a moving rail car or mount a railcar from ground level.	
6.	List Important Information	SOGs for Wheel Chocking, Pre-Use Inspection, and Mobile Equipment	





Standard Operating Guidelines

- PERSONAL PROTECTIVE EQUIPMENT



PERSONAL PROTECTIVE EQUIPMENT

Owner	Safety	Location	Master	Applicability	North America
Date	Jun 2019	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to your PPE.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	General	- PPE is only effective if it is worn and fits properly. - Inspect your PPE. Ensure it is in good condition. If it is worn or damaged – replace it. - PPE shall be maintained and kept clean. - Conduct periodic audits of PPE.	
6.	Safety Glasses	- Fit is key – choose a style that fits as close to your face as possible - It is recommended that safety eyewear have a fully-surrounding foam or rubber seal between the glasses frame and face and be worn in all operational areas.	
7.	Prescription Safety Glasses	- Prescription glasses are also recommended to have a fully-surrounding foam or rubber seal between the glasses frame and face. - Prescription safety frames are stamped with either Z87 or CSA Z94.	
8.	Goggles	- In extremely dusty or windy conditions, wear goggles. - Where there is the potential to be splashed by hazardous liquid or fine particulate, persons shall wear goggles.	

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9.	Face shield	- Face shields protect the face from impact from flying objects including hot gases - Wear glasses or goggles under the faceshield - Examples of task where a faceshield is required: - grinding, raking kilns, shooting a kiln, blowing down a preheater	 
10.	Gloves	- Hand injuries are one of the most frequent in Carmeuse. - General use gloves (See line 5) are standard issue to all employees and are required to be carried in all operational areas of the site. - Gloves shall be worn when necessary. Choose the best glove for the hazards of the task. - Some gloves are designed to be cut, heat, impact (vibration) or chemical resistant. - General use gloves shall have a minimum cut resistance of A4, and a minimum impact resistance of 2. - Gloves should not be worn when their use creates a hazard – i.e. use of rotating tools. - Gloves used for specialized tasks that may not meet the minimum impact resistance requirement, shall have a documented risk assessment.	 
11.	Footwear	- Heavy duty work boots which cover the ankle are required in operating areas. - The boots must meet current standard ASTM F2413 or CSA Z195 and be rated “slip resistant”. - Boots shall be worn as designed (i.e. fully laced, when provided with laces)	 

Owner	Safety	Location	Master	Applicability	North America
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		- Inspect footwear regularly and replace when badly worn or deteriorated. - Slip on steel toes (aka safety toe caps) are not permitted on site. - During winter months, as designated by sites: - Boots provided with soles specifically designed for traction on snow and ice shall be worn. - Grippers shall be used when required (i.e. following extreme weather events)	
12.	Hearing	- Hearing protection shall be worn in designated areas or when conducting a task with elevated noise levels. - Some areas may require the use of dual hearing protection. - There are numerous types of hearing protection available, including ear plugs and earmuffs. - Hearing protection shall be maintained and kept clean. - Music earbuds are not hearing protection and not permitted.	
13.	Respiratory	- Respirators shall be worn in designated areas, or when performing designated tasks. - Areas or tasks that require mandatory respirator usage will be identified. - There are numerous types of respiratory protection available. - Respirators shall be maintained and kept clean.	

Owner	Safety	Location	Master	Applicability	North America
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14. High Vis Gear

1. Fluorescent colors (i.e. orange, green/yellow) are designed to increase visibility during daylight.
2. Retroreflective stripes (silver stripes) are designed for low-light conditions.
3. Regularly inspect your gear to ensure they have maintained their reflective properties. Gear that has faded must be replaced.
4. There is fire resistant high vis clothing available.
5. Safety vests should be tear away style.



15. Hard hats

1. Hardhats will be Company standard issue to all employees and are required to be worn in all operational areas of the site.
2. Painting, graffiti, or altering hardhats in anyway which could undermine its designed safety features is prohibited.
3. Ballcaps shall not be worn under hardhats, only approved liners or head coverings shall be worn under a hardhat (i.e. balaclava)
4. Hardhats shall be worn with the bill of the hat facing forward, and suspension to the back.
5. In cases where workers must wear a hardhat in reverse
 - a. An approved reversible hardhat shall be worn, and
 - b. The suspension shall also reversed such that it adjusts from the back.
6. Hardhats should be replaced if signs of excessive wear, gouging, discoloration, cracks, warping, or any other signs of deterioration.
7. Suspensions should be replaced annually or more frequently to ensure proper cleanliness and function.
8. A properly adjusted hardhat should not fall off when head tilted forward.



Reversable hardhat symbol



Owner	Safety	Location	Master	Applicability	North America
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16.	Personal Flotation Devices	- PFDs must be worn properly. - PFDs must be worn when working within 6' of water, and there is the risk of falling in the water.	
17.	Clothing	- When lime mixes with water (or sweat) it can generate enough heat to cause burns. - Always keep skin covered when working in dusty environments. Remove dust frequently from skin and clothing using an approved HVLP blower or large quantities of water. - In operational areas the following are required - Long pants - Shirts with sleeves - Long-sleeved shirts, in designated areas. - Barrier cream provides additional protection against lime burns. Common applications are on wrists, necks, and face (especially when goggles are required). - Specialized tasks may require additional clothing such as disposable coveralls - Flame retardant clothing or full cotton clothing shall be work when exposed to open flame conditions.	
18.	Important Information		



Standard Operating Guidelines

- RESPIRATORY PROTECTION

RESPIRATORY PROTECTION

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to respiratory protection.	
4.	Scope & Applicability	- The requirements of this SOG apply to all Carmeuse employees - The manufacturer's information pertaining to use, scope, and limitations of each respirator shall be available.	
5.	Hazard Assessments / IH surveys	A hazard assessment (industrial hygiene survey) will be conducted as per the Industrial Hygiene Program, at regular intervals, or following significant process changes.	
6.	Procedure	- Respirators will be worn in designated areas, or when performing designated tasks. - Areas or tasks that require mandatory respirator usage will be identified.	 
7.	Fit Testing	- Employees that are required to wear ½ face, or full face, negative pressure respirators, will have fit testing prior to being issued, and annually thereafter - Records of the fit test shall be maintained.	

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8.	Medical evaluation	1. Employees that are required to wear ½ face, or full face, negative pressure respirators, will have a medical evaluation prior to being issued, and annually thereafter.	
9.	Training	1. An employee will be trained on the selection, care, storage and use of the respirator, prior to being issued the equipment.	
10.	Storage	1. Respirators shall be stored in a manner that will protect them against physical and chemical agents such as a. vibration, b. shocks, c. sunlight, d. heat, e. extreme cold, f. excessive moisture, or g. damaging chemicals.	
11.	Replacement	Respirator filters, cartridges or canister shall be replaced whenever there is a detectable increase in breathing resistance or when the End of Service Life Indicator (ESLI) shows a change.	
12.	Important Information	Areas that required mandatory respirator usage. • Tasks that require mandatory respirator usage. • Respirators available for usage at this site. •	





Standard Operating Guidelines

- HEARING CONSERVATION

HEARING PROTECTION

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

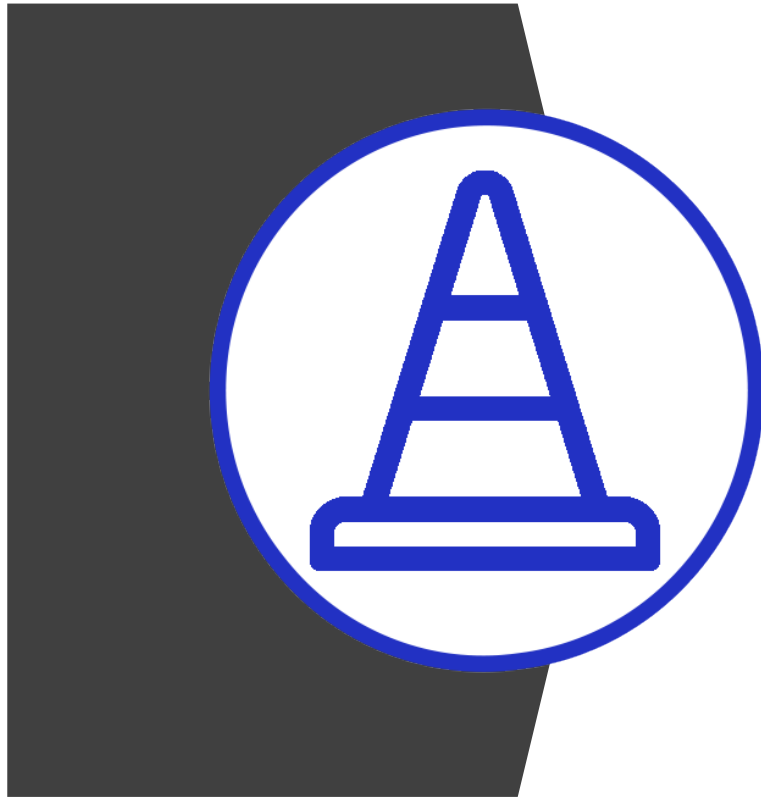
No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to hearing conservation.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	- All persons shall wear HPDs in areas where noise exceeds 85 dBA - Employees shall wear dual hearing protection where noise exceeds 105 dBA. - No person may be exposed to noise levels that exceed 115 dBA even with hearing protection.	
6.	Noise Mapping & Monitoring	- An ambient noise survey of each site will be conducted in consultation with the local safety committees and the results mapped and provided in the site program or SOG. - These are updated when there is a significant change in the process. - Personal exposure monitoring will be conducted every 3 years, using a personal dosimeter and a selection of employees that are representative in the workforce. - Areas with ambient noise greater than 85 dBA require signs indicating that hearing protection is required. - Areas with ambient noise greater than 105 dBA requires signs indicated that dual hearing protection is required. - Areas with greater than 115 dBA will have signs indicating that	



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		entrance is prohibited while equipment is running.																																	
7.	Training Requirements	A hearing conservation training program shall be developed to include: 1. The definition of noise 2. The effects of noise 3. Selection, use, cleaning and storage of hearing protection devices (HPD) 4. Explanation of the NRR (noise reduction rating) 5. Regular audiometric testing																																	
8.	Permissible Exposure Limits	PEL and Allowed Exposure Times Without HPD <table> <thead> <tr> <th colspan="2">US</th> <th colspan="2">Canada</th> </tr> <tr> <th>dBA</th> <th>Hours</th> <th>dBA</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>90</td> <td>8</td> <td>85</td> <td>8</td> </tr> <tr> <td>95</td> <td>4</td> <td>88</td> <td>4</td> </tr> <tr> <td>100</td> <td>2</td> <td>92</td> <td>2</td> </tr> <tr> <td>105</td> <td>1</td> <td>95</td> <td>1</td> </tr> <tr> <td>110</td> <td>½</td> <td></td> <td></td> </tr> <tr> <td>115</td> <td>¼</td> <td></td> <td></td> </tr> </tbody> </table>	US		Canada		dBA	Hours	dBA	Hours	90	8	85	8	95	4	88	4	100	2	92	2	105	1	95	1	110	½			115	¼			
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9.	Important Information	Areas and/or tasks designated as mandatory hearing protection. • Areas and/or tasks designated as DUAL hearing protection. •																																	





Standard Operating Guidelines

- QUARRY ACCESS
- HOUSEKEEPING
- MOBILE EQUIPMENT

TRAFFIC MANAGEMENT

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2019	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to this SOG, including - Any change in equipment, traffic pattern or personnel that could affect the safety of any person in the area - Any deviation in predetermined haulage routes within the quarry of material to be crushed, dumped and/or stored.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees, contractors and visitors.	
5.	Procedure	- The quarry supervisor must be notified prior to any unauthorized vehicles entering the quarry. This includes contractors. - Supervisor will provide detailed description of traffic patterns, and communication protocol within the quarry. - Any plant vehicle entering the quarry is to be equipped with 2 way radio communications. - Any non-production vehicle entering the quarry, including 3rd party vehicles shall be equipped with an operating safety beacon, and/or escorted.	

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2019	Revision	2026	Version	1

		- Any vehicle about to cross paths with production vehicles shall communicate their intentions via radio or “Wait for the Wave” protocol, and shall wait for acknowledgement before proceeding. - All vehicle traffic within the quarry shall be restricted to the designated travel routes. - Areas where travel is restricted will be clearly identified by either barrier or signage. - Production vehicles (Haul trucks, Loaders) have the right of way on any haul road within the mine property. - Changes to traffic patterns, equipment or personnel within the quarry requires notification to and approval by the area supervisor. - The area supervisor will then contact everyone affected by these changes - Changes shall be documented by signature of all personnel on a roster that identifies what changes were made and dated.	
	STOP Protocol	- In the event that the word “STOP” is heard over the radio, all equipment operators shall stop their current activity and place transmissions in “Park”. - Operations may only resume once the all clear is given by the area supervisor.	
6.	Important Information	Refer to SOG’s for Mobile Equipment	

STANDARD OPERATING GUIDELINE

REFERENCE: Housekeeping Program	PREPARED BY: Safety Dept.	Date: Dec. 2017
DESCRIPTION: SOG for Housekeeping		Revision 2026
		SITE: Master

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to housekeeping	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Lighting	Appropriate lighting is required so that hazards (i.e. tripping, low head clearance) can be identified.	
6.	Roof leaks	Potential slip hazards and need to be addressed in a timely manner. The person finding the leak must ensure the area is marked with Wet Floor signs (or safety barrier tape) and report to the issue to supervision.	
7.	Snow & Ice removal	Walkways need to be cleared – when snow has been removed, salt or sand must be laid down.	
8.	Mobile Equipment (Large)	- Must be cleaned regularly including: rims, wheels, undercarriage, brake lines, suspension, radiator, windows, pre-use inspection points (i.e. fluid level indicators), ladders and steps - Interiors must be kept as clean. Obstructions removed from the floor. Surfaces should be wiped down to minimize dust levels.	
9.	Pickup Trucks (including utility vehicles)	Similarly to large mobile equipment, exterior and interior should be washed and cleaned regularly, including boxes.	



STANDARD OPERATING GUIDELINE

REFERENCE: Housekeeping Program

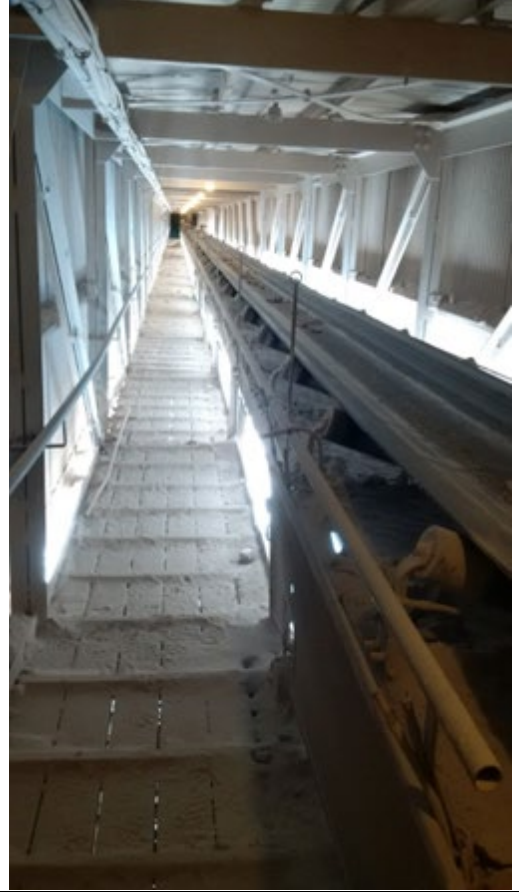
PREPARED BY: Safety Dept.

Date: Dec. 2017

DESCRIPTION: **SOG for Housekeeping**

Revision 2026

SITE: Master

10.	Walking / Climbing surfaces	• Must be maintained clean and dry. Material accumulation must be removed and controlled so that it does not present a tripping hazard. • Sources of accumulations (spillage, leaks) should be identified and corrected. • Particular attention must be paid to wet lime, snow and ice. • The adequacy of housekeeping will be reviewed during daily work area examinations and other site inspection tours. • When excessive accumulation has been identified and can't be immediately cleaned, the hazard shall be clearly identified for others (i.e. safety barrier tape) and reported to the supervisor. • Where wet processes are used, drainage must be kept clear.	
11.	General	• Pulverized coal must not be allowed to accumulate more than 1/8" • Waste receptacles with lids will be provided for the disposal of food and other waste products. In underground mines, these receptacles will be metal. • Chemical products (i.e. oils, acids) and combustible materials (i.e. oily rags) will be discarded in proper containers. • 55 gallon drums will be stored and utilized in manner that minimizes uncontrolled spillage	
12.	Important Information		



STANDARD OPERATING GUIDELINE

REFERENCE Program: Mobile Equipment

PREPARED BY: Safety Dept.

Date: APR 2022

DESCRIPTION: **SOG for Mobile Equipment**

Revision: 2026

SITE: Master

tiNo.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to the operation of a piece of mobile equipment.	
4.	Scope & Applicability	- The requirements of this SOG apply to all Carmeuse employees. - Mobile Equipment is considered non-licensed machinery and equipment primarily designed for off road use. Licensed vehicles for over the road use are excluded from this definition.	
5.	Procedure	- Only operate equipment that you are trained and authorized. - Seat belts shall be worn while operating any vehicle with which it is equipped. - Prior to initial use each shift, the mobile equipment will be inspected. The inspection will be documented on the appropriate form. Subsequent operators on same shift, verify inspection was completed by initialing the form. - If there are defects that affect the safe operation, the equipment will be tagged and taken out of service, until repairs are made. - Operators must maintain care and control of their equipment at all times. Operating speeds shall be consistent with conditions of roadway, grades, clearance, visibility and traffic. Operators must comply with posted signage (i.e. speed limit, direction). - Operators shall sound a horn prior to placing the equipment into forward motion. - Operators shall embrace and practice the "Wait for the Wave" fundamentals.	



STANDARD OPERATING GUIDELINE

REFERENCE Program: Mobile Equipment

PREPARED BY: Safety Dept.

Date: APR 2022

DESCRIPTION: **SOG for Mobile Equipment**

Revision: 2026

SITE: Master

8. Mobile equipment shall have lights on when operating between sunset and sunrise and when reduced visibility conditions exist. If mobile equipment is equipped with additional visual aids such as flags and beacons, they shall be in good condition and functioning.
9. Cell phone use (including hands free) is prohibited while mobile equipment is in motion
10. Operator cabs must be kept orderly and clean as practicable. Windows and mirrors must be kept clean to maximize visibility.
11. Windows not able to be cleaned with the wipers or from within the manufacture approved handrail system shall be cleaned from the ground or while using fall protection.
12. Ear buds or head phones (for entertainment) shall not be worn.
13. Smoking in mobile equipment is prohibited.
14. Mobile equipment operators will have access to a functioning radio communication device.
15. The use of fall protection is required when performing any maintenance, cleaning, or other work that is not from the ground and when not protected by railing.
16. Mobile equipment that is equipped with a Master Switch shall have it disconnected when parked for extended periods.



Refer to SOGs for Wheel Chocking, Working at Heights, and Pre-Use Inspection

Mobile equipment capable of having parts of its structure elevated near energized overhead lines shall be operated such that they come no closer than:

Voltage Range

Distance

< 50k

10' (305 cm)

50k+

An additional 4" (10 cm) for every 10k over 50k



Important Information





Standard Operating Guidelines

- IMPROVISED ANCHOR POINT (CRANE)
 - PORTABLE LADDERS
 - WORKING AT HEIGHTS
 - WORKING ON ROOFS

WORKING AT HEIGHTS



Standard Operating Guideline

Improvised Anchor Point (Crane)

Reference Program: Working at Heights

Owner	Safety	Location	Master	Applicability	North America
Date	Aug 2018	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	• Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	• Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	• Work in accordance with this SOG. • Immediately report to their supervisor, any concerns or unsafe conditions related to using a crane load line as an anchor point.	
4.	Scope & Applicability	• The requirements of this SOG apply to all Carmeuse employees involved with using a crane load line as an anchor point.	
5.	Procedure - Specific	1. Training will be provided for all crane operators, and all employees prior to using crane as an anchor point, using this SOG and following the site's task training protocols. 2. A beam strap rated for fall arrest must be used for each user. 3. Only self-retracting lanyards (SRLs) are allowed. 4. The crane must be rated minimum of 5000 lbs. per user. 5. Controls or cab of the crane must be locked to prevent accidental movement of boom or load line. 6. Establish emergency response protocols in case of a fall (i.e. crane operator with key, or AWP with trained operator nearby). Maximum of 5-minute response time. 7. Crane or load line will not be moved while user is attached.	

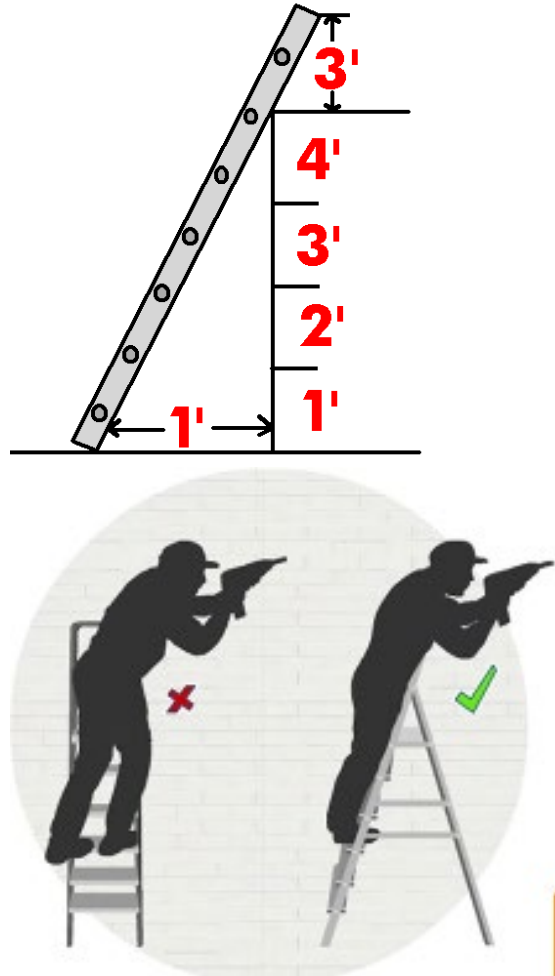


Owner	Safety	Location	Master	Applicability	North America
Date	Aug 2018	Revision	2026	Version	1

		8. Crane will be on all four outriggers when used as anchor point. 9. 100% tie-off required when a fall hazard exists prior to connecting to crane anchor point.	
6.	Important Information		



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to portable ladders.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees.	
5.	Procedure - General	- Prior to using a ladder, an employee will be trained on its safe usage. - Inspect the ladder. If damaged – destroy. - Aluminum ladders are not allowed. - Ensure the ladder has adequate capacity rating for the load - Don't over reach to the side - Keep your belt buckle within side rails - Face the ladder. Maintain 3 points of contact. (2 feet & 1 hand, or if standing and using both hands, lean a knee or thighs against the ladder). - If you can't maintain 3 points of contact or avoid reaching, use fall arrest or consider scaffolding - Each ladder shall be inspected annually at a minimum by a competent person.	
6.	Procedure – Straight ladder	- Set up straight ladders following the 4 to 1 rule. For every 4' vertical height, the base of the ladders should be 1' from the base of the wall. - The top of the ladder should be secured to prevent it from slipping - Have somebody hold the bottom of the ladder	
7.	Procedure – Step Ladder	- Don't use the top step of a step-ladder. - Never use a step ladder as a straight ladder	



Standard Operating Guideline

Working at Heights

Reference Program: Working at Heights Program

Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFORMATION
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related fall protection.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Definitions	Qualified person means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.	
6.	Training	Any employee that may be exposed to the hazards of working at heights, must have adequate training. Initial training must include theory and practical (hands-on) and there must be annual refresher training thereafter.	



Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

- | | | |
|----|-----------|--|
| 7. | Procedure | <ol style="list-style-type: none"> 1. Properly care for equipment including: cleaning, storage, and pre-use inspection of assigned PPE. 2. Notify your supervisor if equipment is damaged and/or unfit for use. 3. Report changes in medical condition that will impact ability to wear fall protection PPE or require a change in size. <ol style="list-style-type: none"> a. Verify the equipment used is rated for the weight of the person (including tools and clothing). 4. Ensure fall protection equipment is adequate for the work/ task being performed. 5. Wear fall protection PPE in accordance with training (proper fit, etc.) |
|----|-----------|--|



Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

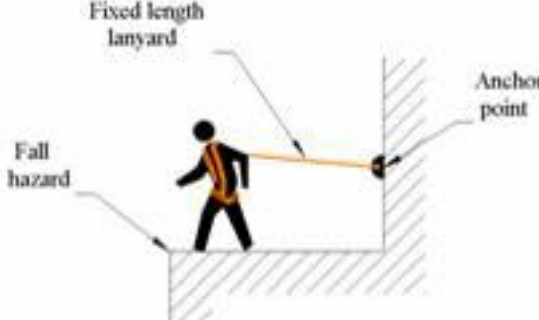
8. Procedure

1. Fall protection must be worn in the following circumstances:
 - a. a fall greater than 6 feet (1.8 meters);
 - b. a fall into operating machinery;
 - c. a fall into or onto hazardous substances or objects
 - d. working within 6 feet (1.8 meters) of an opening in walking or working surface, edge of a quarry face, deck, excavation, or a roof edge which is not guarded, or a location where hand rails are removed;
 - e. working in or moving an aerial work platform (i.e. manlift, scissor lift, etc.)
 - f. moving to, from, or between locations where safe access is not possible. This may require the use of a Double-Legged Lanyard to provide continuous protection.
 - g. Working where a hand rail has been removed
 - h. Performing any maintenance, cleaning, or other work on Mobile Equipment that is not from the ground and when not protected by railing.

If working within 6' of a water edge, on a boat, or on a dock, wear Personal Flotation Device.



Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

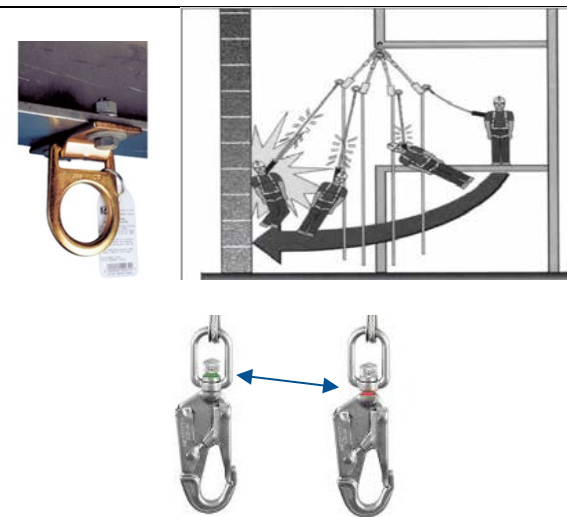
Procedure	- Where fall protection is being used, a rescue plan must be developed prior to use - Suspension Trauma Straps should be attached to the body harness and deployed in the event of an arrested fall. - When fall arrest is utilized, full body harnesses must be worn. Belts are only acceptable for fall restraint.	
Procedure	- Fall protection can be in the form of handrails, personal fall arrest systems or under specific conditions, warning line systems. - Fall prevention is preferred over fall arrest. Fall restraint prevents a fall from occurring. - Workers must be protected from falling when working on a surface that has an unprotected side or edge. - There must be an evaluation of fall hazards to select preferable method to protect the employee. (i.e. lanyard vs SRL) - Whenever possible, tie off at or above the D ring of the harness. - Workers shall be protected from contacting a lower level with a minimum of 3 feet clearance.	

Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

9.	Ladders	1. Always preform a hazard assessment prior to use of a ladder. 2. Face the ladder while ascending & descending and three-points of contact maintained. 3. Don't stand and work on the top three steps (including a step forming the very top of the stepladder) unless there is a suitable handhold; 4. Point of reference is to always keep your belt buckle within the vertical rails. 5. If you cannot perform work within the guidelines above, fall arrest will be required.	
10.	Connecting Devices	1. Self-Retracting Lifelines (SRL) are preferred over lanyards. 2. Approved lanyards are to be used. 3. Shock absorbing lanyards should not be attached to SRLs 4. Only locking snap-hooks may be used. 5. Horizontal lifelines will be designed by a qualified person. 6. Lanyards and vertical lifelines need a minimum breaking strength of 5,000 lbs. 7. Lanyards cannot be clipped back to itself unless designed to do so. 8. Each employee must have their own vertical lifeline. 9. Lifelines will be protected from being cut or abraded. 10. Self-retracting lifelines and fall limiters can be used to reduce fall distance; they can be steel cable or fabric webbing.	
11.	Scaffolding	1. Scaffolding must be erected by a task trained competent person. 2. Any scaffold over 6 feet shall be erected by a qualified person.	

Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

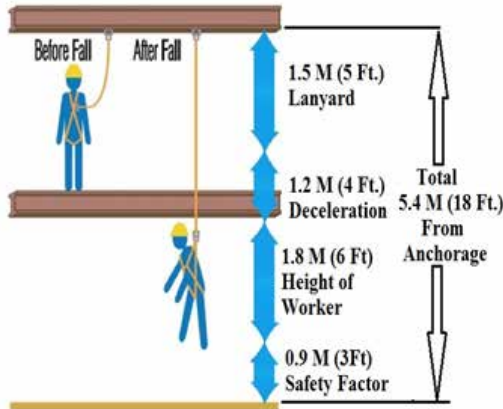
12.	Anchorage	- Non-engineered anchor points must be able to withstand 5,000 lbs static load per person attached. - Must be easily accessible to avoid hazards during set-up. - Engineered anchor points should be clearly marked. - Refrain from tying off around sharp objects unless chafing pads or abrasion resistant straps are used. - Choose structures for anchor points that will prevent swing fall hazards. - Reusable anchors must be installed per manufacturer's installation guidelines, be compatible with fall arrest equipment being used with it, be removed from service following job completion and inspected prior to reuse, be disposed of if subjected to a fall.
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13.	Inspection	- Fall protection equipment, including anchor points and tie off stations must have a documented annual inspection completed by a 3rd party. - Tie off stations must have a documented monthly inspection by a competent person. - Inspect harness: webbing, d-rings & back pads, tongue/grommet, i-buckle, friction & matting buckles for frays, rips, tears, burns, and abrasion. - Inspect lanyards: snaps for cracks, corrosion, pitted surfaces, etc., thimbles: no loose cracks or cut strands. No lanyard should show signs of deployment, frays, cracks, burns, discoloration, stitching should not be frayed. - Equipment that has been subjected to a fall condition (impact load) must be removed from service and either destroyed or re-certified by a 3rd party.
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Owner	Safety	Location	Master	Applicability	North America
Date	Oct 2020	Revision	2026	Version	1

14.	Clearance Distance	1. Ensure you complete the total fall distance calculation and you are using the right equipment to prevent bottoming out or hitting objects below. 2. SRLs are designed to arrest the fall to approximately 18".	
15.	Important Information		



Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

No.	STEP	STEP DETAIL	ADDITIONAL INFO (Photo, Diagram, etc...)
1.	Responsibilities: Site Operations Manager	Ensure all aspects of this SOG are implemented and adhered to.	
2.	Responsibilities: Supervisor	Ensure direct reports have the required training and hold them accountable to work in compliance with this SOG.	
3.	Responsibilities: Employees	- Work in accordance with this SOG. - Immediately report to their supervisor, any concerns or unsafe conditions related to working on a roof.	
4.	Scope & Applicability	The requirements of this SOG apply to all Carmeuse employees	
5.	Procedure	- Structures supporting any roof that a person may be required to access should be listed in the structural inspection program, and shall not have any outstanding P1 or P2 deficiencies at the time access to the roof is required. - Any structure outside of the formal inspection program requires a structural engineer review prior to accessing it. - Prior to accessing any roof – alternatives should be considered. It is always preferable to complete the task using other means such as vehicle mounted water cannons, hose lines, scaffolding, or from an aerial work platform. - Before accessing any roof, the roof and its underlying structure must be inspected for visible signs of deterioration. - If there is any doubt as to the structural integrity of a roof - no person should access it. - Prior to accessing the roof, the person/s must be trained in the safe use and application of a fall protection system. - A hazard assessment (SLAM) shall be completed by those involved	



**Standard
Operating
Guideline**

Working on Roofs

Reference Program: Working at Heights

Owner	Safety	Location	Master	Applicability	North America
Date	Dec 2017	Revision	2026	Version	1

		in accessing the roof – every time. 8. While working on the roof, precautions must be taken to ensure loose material falling over the edge to a lower level is controlled. (i.e. warning systems, barricade tape etc.)	
6.	Important Information		





Standard Operating Guidelines

SITE SPECIFIC - HIRA