



Contractor Health & Safety Manual (US Operations)



1. PURPOSE & SCOPE

- 1.1. This policy applies to contractors working at any site of *Carmeuse Lime & Stone* in the United States.
- 1.2. This policy is referenced in the General Terms and Conditions issued with the Contract or Purchase Order.
- 1.3. Carmeuse is committed to ZERO INJURIES – to protecting the health and safety of its employees, visitors and Contractors. As such, Carmeuse expects the same demonstrated commitment from its Contractors.
- 1.4. This policy manual has been written as an easy reference for Contractors and Project Managers.
- 1.5. More detailed information can be obtained by referring to the site's *Emergency Action Plan*.
 - 1.5.1. Copies of Carmeuse policies are available for review – contact the Project Manager.
- 1.6. Contractors are expected to comply with all applicable legislative requirements and accepted industry standards, such as, but not limited to MSHA 30 CFR
<http://www.msha.gov/30CFR/CFRINTRO.HTM>
- 1.7. Carmeuse understands that the contractor may have adopted safety policies and procedures covering many of the same topics that are addressed in this Contractor Safety Policy. The expectations and standards set forth in this Policy are intended to serve as minimum standards and are not intended to replace comprehensive safety policies and procedures adopted by the Contractor. In the event that there is a conflict between the Contractor's safety policies and procedures and these minimum standards, the more stringent standards shall apply.
- 1.8. Where there is a discrepancy between a Carmeuse policy, an accepted standard, or a legislated requirement, the more stringent requirement shall apply.
- 1.9. The site where work is actually performed may have rules that vary from those described herein. Those will be covered during site specific orientations and pre-construction meetings.

2. DEFINITIONS

- 2.1. **Project Manager:**
 - 2.1.1. The Carmeuse employee responsible for the completion of the project.
- 2.2. **Hot Work:**
 - 2.2.1. Any activity that creates a source of ignition. This includes:
 - 2.2.1.1. Welding, cutting, burning, or brazing,
 - 2.2.1.2. Grinding or other spark-generating tasks,
 - 2.2.1.3. Use of any device that contains a flame, such as propane torches, kerosene heaters, tar heaters for roof repair, torch soldering irons, etc,
 - 2.2.1.4. Explosive-actuated fastening tools

2.3. Confined Space:

2.3.1. A fully or partially enclosed space

2.3.1.1. that is not intended for continuous human occupancy and

2.3.1.2. Has potential for a hazardous atmosphere because of its construction, location, contents, or work activity within it.

2.3.2. A confined space is designated assuming no controls are in place. Prior to entry, it may NOT be considered a confined space if the atmospheric hazard is eliminated.

2.3.3. Confined space designation re-occurs if the potential for a hazardous atmosphere returns

3. REQUIRED DOCUMENTS TO BE SUBMITTED

3.1. Each Contractor must provide to Carmeuse (prior to receiving Purchase Order):

3.1.1. Insurance certificate, naming Carmeuse Lime & Stone as additionally insured, with the following minimum limits

3.1.2. Workers Compensation, with a minimum of \$1 million coverage.

3.1.3. Liability Insurance, with a minimum of \$2 million liability

3.1.4. A signed copy of the Commitment Agreement from this manual

3.1.5. A completed MSHA Identification Number

3.1.6. MSHA Training Plan

3.1.7. Pre-Qualification form.

3.2. Contractors working on part 48 regulated sites (with underground mines), must also submit:

3.2.1. Trainer's MSHA approved certification card.

3.2.2. Training Plan Approval Letter From MSHA

3.3. Contractors working on OSHA regulated sites must also submit:

3.3.1. OSHA 300 and 300A Logs

3.4. There is documentation the contractor must have readily available while working on site.

3.4.1. For Contractors working on MSHA Regulated Sites:

3.4.1.1. MSHA training certificates (500023 forms) for all employees on Carmeuse property. (including task training)

3.4.2. For Contractors working on OSHA regulated sites:

3.4.2.1. 10 hour OSHA cards (hourly personnel)

3.4.2.2. 30 hour OSHA cards (supervisory personnel)

3.5. Contractors that will use combustion engines while underground, must also complete the "*Temporary Underground Combustion Engine Equipment*" form prior to arriving on site.

4. TRAINING REQUIREMENTS

- 4.1. Contractor employees that may be exposed to hazards in the operational area require the formal MSHA training appropriate for the type of site, as per MSHA 30 CFR
 - 4.1.1. Part 46 – Sites with no underground mines
 - 4.1.2. Part 48 A – Underground mine
 - 4.1.3. Part 48 B – Surface portion of a site with an underground mine
- 4.2. Other than Site-specific Safety Training, Carmeuse Lime & Stone does not provide training for Contractor's employees. Upon request, Carmeuse Lime & Stone representatives may be able to provide information of a third-party training vendor.
- 4.3. Workers must have "task" training, and the contractor must have records that demonstrate the task training has been completed. Examples of situations where task training is required include, but is not limited to:
 - 4.3.1. Mobile equipment
 - 4.3.2. Aerial work platforms
 - 4.3.3. Forklifts
 - 4.3.4. Power tools such as cut off wheels on angle grinders
- 4.4. The contractor must have an MSHA Training Plan. For further information on MSHA training requirements, some links are provided below:

<http://www.msha.gov/TRAINING/PART46/PT46TRAIN.HTM>

<http://www.msha.gov/TRAINING/PART46/FORMS/MENU.HTM>

5. TRAINING RECORDS

- 5.1. Contractors must have all applicable training records available for review, and provide them to Carmeuse when requested.

6. ACCOUNTABILITY

- 6.1. Carmeuse representatives regularly audit the work practices of its contractors.
- 6.2. Non-compliance with health, safety or environmental regulations, standards, or Carmeuse policies, may result in work stoppage and removal of the supervisor and/or employee from the site.
- 6.3. Repeated non-compliance or egregious unsafe conduct may result in dismissal of the Contractor and contract termination.
- 6.4. Unsatisfactory safety performance that does not result in contract termination, may result in no future work bidding opportunities.
- 6.5. Temporary or permanent removal from the site may occur if the Contractor's supervisor requires, allows or condones its employees to work in or around unsafe acts or conditions or

violates health, safety or environmental regulations, standards or Carmeuse policies.

- 6.6.** Immediate and permanent dismissal from all Carmeuse sites may occur if the Contractor's supervisor or employee engages in any of the following activities:
- 6.6.1.** Openly exhibits disregard, defiance or disrespect for health, safety or environmental regulations, standards or Carmeuse policies.
 - 6.6.2.** Falsifies investigative documents or testimony involving an incident or any other required document
 - 6.6.3.** Fighting, violence, threats of violence, theft or destruction of property.
 - 6.6.4.** Violates any health, safety or environmental regulations, standards or a Carmeuse policy that endangers themselves, others, or the environment.

7. CONTRACTOR SUPPLIED HEALTH & SAFETY MANAGER

- 7.1.** The Contractor is required to have a full time on-site safety manager when the Contractor has, collectively, 20 or more employees on any on Carmeuse Lime site at a given time. The employee count must include any subcontractors within the 20 limit.

8. PRECONSTRUCTION MEETING

- 8.1.** Prior to the beginning of the work, a meeting should be held that includes all supervisory personnel of the each Contractor and the Project Manager, to ensure that all relevant safety information is communicated.
- 8.2.** Additional meetings may be required depending on the size and length of the project.
- 8.3.** This policy may be used as the agenda. For each category – determine requirements that are unique for that project.

9. SITE SPECIFIC ORIENTATION

- 9.1.** Although there are common processes practices between Carmeuse sites, there are site specific procedures and hazards that every Contractor must be aware.
- 9.2.** Each employee of the Contractor must complete a site specific orientation.
- 9.3.** Each employee must be given a hard hat sticker. The hard hat sticker is good for one calendar year. When a new calendar year begins, all contractors must attend site specific again regardless of previous completion date.

10. VEHICLES -MOBILE EQUIPMENT

- 10.1.** All mobile equipment (including pick up and service trucks) must be inspected at the beginning of each shift. The inspection must be documented. Any defects that may affect safety must be immediately corrected, or the vehicle tagged and taken out of service.
- 10.2.** Any vehicle that is left unattended in an operational area, must have its parking brake set, and must be chocked.
- 10.3.** Vehicles that operate around large, heavy equipment must be equipped with a “whip flag” or other visible beacon on the roof of the vehicle.

11. LOCKOUT-TAGOUT-TRYOUT

- 11.1.** All employees must be trained in Lockout-Tagout-Tryout.
- 11.2.** Contractors must not stop or start Carmeuse equipment unless there has been clear authorization from Carmeuse.
- 11.3.** Carmeuse employees will identify all relevant lockout point.
- 11.4.** Each employee must apply his own lock to each lockout point. The lock must be identified with a tag that states the employee’s name, the date, his/her company, the reason for the lockout.
- 11.5.** During initial lockout, a “verification” must be completed to verify that the lockout has been successful before work begins
- 11.6.** Group Lockout
 - 11.6.1.** Group lockout procedures are typically used for processes with multiple lockout points
 - 11.6.2.** A checklist must be completed and posted at the lock box. This checklist will document the lockout points, and that “verification” was completed.
 - 11.6.3.** Each employee must review the checklist prior to applying to their lock to the lock box.
 - 11.6.4.** Any employee may request to review the lockout point locations.

12. ELECTRICAL SAFETY

- 12.1.** The Contractor shall be responsible for implementing all electrical safety requirements in accordance with OSHA and MSHA Regulations.
- 12.2.** Work on “live” electrical components at 50v (ac or dc) or higher is prohibited. Requests for exceptions must be submitted in writing to the Project Manager and approved before beginning any “electrical hot work”. (Project Manager should consult with Corporate Electrical Engineering).
- 12.3.** The Contractor shall identify all overhead power lines with signage. When it is determined that electrical lines may be affected, the Contractor shall take steps to elevate, cover or otherwise protect such cables from incidental contact. The Contractor shall advise their employees of the location of any power lines, the hazards involved and the protective measures to be taken. This also includes power cords located on the ground.
- 12.4.** The Contractor shall contact the local utility company and be aware of any special requirements.
- 12.5.** Contractor shall maintain the clearance to the power line facilities in accordance with 29 CFR 1926.550(a) (15).
- 12.6.** Contractor shall clearly mark all lifting or boom type equipment to show the maximum height or extension possible as measured from the ground level. If the work cannot be performed while maintaining the proper working clearances, a detailed work planning meeting shall be held with the Project Manager, Contractor and utility company.
- 12.7.** In addition to federal, state and local laws, regulations and requirements, where applicable the Contractor shall meet the following general guidelines: National Electric Safety Code – NESC, National Association of Corrosion Engineers – NACE – Standard RP-01-77, National Fire Protection Association – NFPA – 70E (Latest Edition)
- 12.8.** The contractor will conduct a locate of all utilities prior to any excavation
- 12.9.** The Contractor shall protect employees from electric shock while using power tools, appliances and related equipment. The Contractor shall install a Ground Fault Interrupter (“GFI”) on all power outlets/sources used during construction and maintenance or receive a variance from the Project Manager before the project starting.
- 12.10.** Only qualified and authorized employees shall work on electrical equipment.
- 12.11.** All electrical equipment shall be properly grounded and/or bonded.
- 12.12.** Reconnect all grounding/bonding cables that were removed before energizing the equipment.
- 12.13.** All electrical equipment will be treated as if it were energized.

13. CONFINED SPACE

- 13.1. A “confined space entry permit” must be completed prior to entry. The Contractor should use their own permit.
- 13.2. Emergency response procedures must be established prior to entry. The level of preparation will depend on the inherent hazards of the confined space.
- 13.3. Contractors must provide their own equipment, including atmospheric monitors.
- 13.4. All employees must have been trained in confined spaces and be fully aware of the hazards, and safe work procedures.
- 13.5. Copies of completed permits must be submitted to Carmeuse.

14. CRANES & RIGGING

- 14.1. Ensure all lifting chains, wire ropes and slings are inspected for defects before use. If defects are found, remove the unit from service.
- 14.2. Never turn your back on any lift.
- 14.3. Use a control rope (tag line) on any load which may swing or rotate due to its design or rigging configuration.
- 14.4. Never walk or stand under a suspended load.
- 14.5. Establish barriers in the area of the lift to identify the hazard and control traffic.
- 14.6. During the lift, utilize a “ground man” to control traffic.
- 14.7. Only crane operators and riggers that are certified, or qualified through a certification program, are permitted to perform those functions.
- 14.8. A lifting plan must be prepared prior to any lift.
- 14.9. All slings, wire ropes, (rigging equipment) must have tags that clearly indicate their rated capacities.

15. EMERGENCY RESPONSE

- 15.1. Inform all employees on the locations of first aid kits, fire extinguishers, telephones, washrooms, and emergency eye-wash and showers.
- 15.2. Some projects may require portable eye wash bottles/stations to be located at the work site.
- 15.3. Report all emergencies to the site Carmeuse contact.
- 15.4. Review all site specific emergency procedures prior to beginning work.
- 15.5. Report the use of any fire extinguisher or emergency eyewash or shower.

16. FALL PROTECTION

- 16.1. An employee must use fall protection when there is the potential of falling.
- 16.2. Areas of concern must be identified during the pre-construction meeting.
- 16.3. Fall protection equipment must be inspected prior to use and in good condition.
- 16.4. Harnesses must be worn snugly.
- 16.5. Shock absorbing lanyard may only be used when there is sufficient clearance to protect the worker. (For example, a 6' person, wearing a 6' lanyard, with 3.5' shock absorber, and assuming a 1.5' safety factor, requires at least 17' of clearance.)
- 16.6. Rope grabs, self-retracting lanyards, fall restraint, or other fall protection measures may be required.
- 16.7. Written rescue procedures must be established.
- 16.8. Fall protection must be used in aerial platforms (i.e. man lifts, zoom booms)

17. HOT WORK PERMITTING

- 17.1. A hot work permit is required if any hot work (i.e. welding, cutting, brazing, grinding) is to be done in an area where there is any combustible material (i.e. wood, conveyor belts, oil, coal, paper)
- 17.2. The initial hot work permit is typically issued by the Project Manager or other Carmeuse employee. In some cases, the Contractor may be permitted to issue the initial permit.
- 17.3. The Contractor may use a Carmeuse permit or its own permit.
- 17.4. When a hot work permit has been issued a fire watch is required.
- 17.5. The area of the hot work must be continue to be watched, or re-inspected, 30 minutes after the completion of the work, to ensure there are no smoldering fires, as dictated by the permit.
- 17.6. Copies of completed hot work permits must be provided to the Project Manager.

18. HOUSEKEEPING

- 18.1. Housekeeping sets the standard. It reflects the safety commitment of those involved.
- 18.2. Work areas are expected to be kept as clean and organized as possible.
- 18.3. Trip hazards must be eliminated. Waste bins are to be used when appropriate.
- 18.4. Contractor will remove/clean up all construction debris, spare parts, trash hoppers, etc. prior to de-mobilization.

19. PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 19.1.** Each Carmeuse site may have specific PPE requirements. Typical requirements are described here.
- 19.2.** As a minimum, all employees must wear ANSI approved:
 - 19.2.1.** hard hats,
 - 19.2.2.** over the ankle (6") safety boots,
 - 19.2.3.** safety glasses (prescription glasses must have side shields designed specifically for them – no slip ons). Carmeuse encourages the use of “gasketed” safety glasses.
 - 19.2.4.** long pants,
 - 19.2.5.** high visibility clothing (i.e. traffic vests)
- 19.3.** Respiratory protection may be required in certain areas where airborne dust or lime is present. In those areas, all employees will be required to wear the appropriate respirator. The Contractor would be responsible for providing respirators to its workers, and ensuring its employees have been properly fit tested.
- 19.4.** Employees must wear any other PPE as required by the specific job.

20. SCAFFOLDS

- 20.1.** Scaffolds must be erected under the supervision of a qualified person.
- 20.2.** Scaffolds must be designed to support at least four (4) times the anticipated weight of people and materials that will use them.
- 20.3.** Selection of components, training in erection and use, and disassembly of scaffolds must comply with standards and industry best practices.
- 20.4.** Before using scaffolding, check to ensure that:
 - 20.4.1.** Base is sound, level and adjusted and legs are plumb
 - 20.4.2.** All braces are in place
 - 20.4.3.** Locking devices and ties are secured and cross members are level
 - 20.4.4.** Planks, decks and guardrails are in good condition, installed and secure
 - 20.4.5.** Remove snow and ice from scaffold platforms, ladders and access areas
- 20.5.** Use an access ladder to climb on or off a scaffold, not the scaffold frame, unless it is specifically designed to be climbed.
- 20.6.** Ensure that the scaffold is securely attached to the building structure. The effects from winds increase when scaffolds are covered.
- 20.7.** Protect all planked or working levels with proper guardrails, mid-rails and toe boards along all open sides and at the ends of scaffold platforms.
- 20.8.** Scaffolding must be designed by a professional engineer if the scaffold is:

20.8.1. Fifteen (15) meters (49 feet) in height above its base support; or

20.8.2. Ten (10) meters (32 feet) in height above its base support if the scaffold is constructed of a tube and clamp system

20.9. Comply with requirements for fall protection, including top rails, mid rails and/or personal fall arrest systems.

21. HAZCOM

21.1. Lime & limestone products contain small amounts of crystalline silica. Up to 1% for lime, and 2% for limestone.

21.1.1. Silica has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Prolonged or repeated inhalation of respirable crystalline silica can also cause a lung disorder, silicosis.

21.2. Lime is a corrosive irritant. Exposure to the eyes and lungs may cause irritation.

21.3. Lime reacts vigorously with water and generates heat. As such, lime may react with sweat to cause a skin burn. Baby powder is effective at reducing this possibility.

21.4. Wet lime is very slippery.

21.5. In the event of lime in the eye – rinse the eye with copious amounts of water. Do not hesitate to seek medical attention.

21.6. In the event of a lime burn on the skin -rinse the area with copious amounts of water, diluted vinegar, or olive oil.

21.7. Vinegar is very effective at removing lime from surfaces.

21.8. For further information about Carmeuse products, refer to our website:

<http://www.carmeusena.com>

21.9. Contractors must have SDS's for all products they bring on site.

21.10. Contractors must have a copy of the SDS's for all the products they will use, prior to bringing them to the site.

21.11. All employees must be trained in HAZCOM and must know how to safely handle the products they use.

22. JOB SAFETY ANALYSIS

- 22.1. The purpose of a job safety analysis (task safety analysis) is to identify the hazards associated with the specific jobs or tasks assigned for the day, so that appropriate control measures can be taken.
- 22.2. The Contractor foreman must review the specific jobs with each of his employees, and identify the required safety precautions.
- 22.3. Carmeuse promotes the use of the SLAM process. (SLAM stands for Stop, Look, Analyze and Manage). Prior to each job, each employee must Stop, Look around and identify the hazards, Analyze those hazards, and then Manage those hazards.

23. ASBESTOS

- 23.1. Some sites may have asbestos containing materials present. Discuss with the Project Manager to determine if asbestos containing material is likely to be encountered.
- 23.2. Asbestos is a naturally occurring fibrous material that looks similar to fiberglass. It is composed of tiny fibers that can easily separate into small bundles or individual fibers.
- 23.3. Asbestos fibers are only a health concern when “friable” -small pieces of the materials become airborne and are inhaled into the lower portions of the lungs.
- 23.4. Conversely, non-friable asbestos, where the fibers do not easily become airborne, are not a health concern unless the fibers are mechanically disturbed.

24. HEAT STRESS

- 24.1. Precautions – Encourage workers to drink plenty of water. Thirst is not a good indicator of how much water your body needs – you should drink more than you “think” you need. About 1 cup every 20 minutes.
- 24.2. Encourage workers to take a break in a cool area if they start to “feel the heat”.
- 24.3. Avoid alcoholic beverages and caffeine -these contribute to dehydration
- 24.4. Dress in light weight fabrics that breathe and wear light colors instead of dark
- 24.5. Educate workers. They must know their susceptibility. Certain medical conditions increase your risk of heat stress – such as heart disease, diabetes, and obesity.
- 24.6. The key to working in hot conditions is acclimatization – a person needs time to adjust to the hotter temperatures.
- 24.7. Observe workers. Treat heat stress seriously. If a worker exhibits signs of heat stress, do not hesitate to call an ambulance.

25. DRUGS & ALCOHOL

- 25.1. Contractors are expected to ensure that their representatives remain free from any adverse performance effects of alcohol or other drugs in compliance with the standards below when on Carmeuse business whether on or off of Carmeuse premises, including when operating Carmeuse vehicles and equipment.
- 25.2. Contractor's employees are expected to:
 - 25.2.1. Report fit for duty, and remain fit throughout their work day or shift,
 - 25.2.2. Adhere to the fitness for duty standards that have been set out below,
 - 25.2.3. Maintain a valid driver's license if it is a condition of work and report any loss of license immediately (no later than 24 hours after losing the license),
 - 25.2.4. Conduct themselves in an appropriate manner while on Carmeuse business and premises; and
 - 25.2.5. Co-operate with an investigation into a violation including any testing requirements.
 - 25.2.6. If unexpected circumstances arise where a contractor is requested to perform services while under the influence of alcohol or medications which could impact safe operations, it is the responsibility of that individual to inform the Contractor or a Carmeuse representative that he or she cannot accept that assignment.
- 25.3. Illicit Drugs: The following are prohibited on Carmeuse business and premises:
 - 25.3.1. The use, possession, distribution, offering or sale of illicit drugs;
 - 25.3.2. Reporting for duty or remaining on duty under the influence of illicit drugs; and
 - 25.3.3. Presence in the body of illicit drugs as determined through the testing program
- 25.4. Alcohol: The following are prohibited when on Carmeuse business and premises:
 - 25.4.1. The use, possession, distribution, offering or sale of beverage alcohol;
 - 25.4.2. Reporting for duty or remaining on duty under the influence of alcohol from any source,
 - 25.4.3. Use of any product containing alcohol (including beverage alcohol) during the workday including during meals and breaks;
 - 25.4.4. An alcohol test result of .02% BAC (Blood Alcohol Content) or greater;
 - 25.4.5. Use of alcohol within the first eight hours after an accident or until tested or advised a test is not required.
- 25.5. Medications: Contract workers are expected to responsibly use prescribed and over the counter medications.
 - 25.5.1. They should investigate (through their doctor or pharmacist) whether a medication can affect safe operation
 - 25.5.2. take appropriate steps to minimize associated risk, which would include notifying their company or a Carmeuse representative of any need for modified work under the circumstances.

25.5.3. The following are prohibited while on Carmeuse business and premises:

- 25.5.3.1.** The possession of prescribed medications without a legally obtained prescription, and distribution, offering or sale of prescription medications (trafficking); and
- 25.5.3.2.** The intentional misuse of medications (e.g. using the medication not as it has been prescribed, using someone else's prescription medication, combining medication and alcohol use against direction).
- 25.5.3.3.** The use, possession or under the influence of narcotics

25.6. Investigations: Carmeuse representatives will trigger an investigation where there are grounds to believe a contract worker is in violation of this policy. This may include:

25.6.1. The requirement for a reasonable cause alcohol and drug test if a contract worker appears to be under the influence of drugs or alcohol;

25.6.2. The requirement for an alcohol and drug test as part of an investigation into a significant incident;

25.6.3. An investigation if there are grounds to believe a contract worker is in possession of substances banned under this policy.

25.7. Consequences: Failure of a Contract worker to abide by these provisions may result in permanent removal from the site. Failure of the Contractor or the Contractor's representatives to meet these expectations may be considered a breach of the contract, and may result in triggering penalty clauses under the contract, or suspension or termination of the contract.

25.8. Positive Alcohol test: will be one in which the blood alcohol concentration is at or above .02% BAC.

25.9. Positive Drug test: is determined by the medical review officer, in accordance with DOT (department of transportation) standards.

26. BARRIERS & SIGNAGE

26.1. "Projects" must have signs posted in prominent locations and in sufficient numbers to warn workers of a hazard on a project.

26.2. The signs shall contain the word "DANGER" written in legible letters that are at least 150 millimetres in height and shall state that entry by any unauthorized person to the area where the hazard exists is forbidden

26.3. In addition to the typical definitions of "projects", signs are required in the following situations: adjacent to a hoisting area;

26.3.1. under a boatswain's chair, a suspended scaffold or a suspended platform;

26.3.2. at the outlet from a chute;

26.3.3. at a means of access to a place where there may be a noxious gas, vapour dust or fume, noxious substance or a lack of oxygen; and

26.3.4. where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts

- 26.4.** Barriers must be erected to identify work areas, and control access to the work area. The type of barrier that is appropriate depends upon the hazards associated with the work being completed.
- 26.5.** Safety tape (yellow “caution” tape, red “danger” or red “do not enter” tape) can be used when access to the area does not present a significant risk to the worker.
- 26.6.** Safety Fencing (or other physical barriers are required) when access to the area presents a significant risk to the worker. Examples include excavation, demolition, crane lifting, or fall hazards.
- 26.7.** All barricades, caution tape, or other warning devices to be affixed with a tag or sign indicating the specific hazard, appropriate protective measures, and the time and date placed.

27. RADIATION & NUCLEAR SOURCES

- 27.1.** Some sites use nuclear sources for level and/or flow detection. Consult your project manager.
- 27.2.** All employees must receive general awareness training prior to working in these areas.

28. TRAILERS

- 28.1.** Trailers, sea containers and electrical panels used by contractors must comply with applicable codes and standards.
- 28.2.** Carmeuse will facilitate the connection of power to the trailers. All power cables must be protected from damage or elevated off the ground.

29. EXCAVATIONS / TRENCHING / SHORING

- 29.1.** Each site has performed a full underground utility survey and have diagrams available for reference. Diagrams must be reviewed with contractor and third-party utility locators.
- 29.2.** Prior to excavating, a third-party utility locator must perform utility locates in the areas to be excavated.
- 29.3.** The Carmeuse Pre-Excavation Checklist must be completed and approved prior to excavations of any depth.
- 29.4.** Machine-excavating is prohibited within 24” of any buried utility (hand-digging required.)
- 29.5.** 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.
- 29.6.** All projects concerning excavation, including but not limited to trenching and shoring, shall comply with regulatory requirements
- 29.7.** Adequate protective systems such as benching, sloping or shoring are required when the

sides of a trench are more than five feet deep. The use of protective systems is also required if an excavation is less than five feet in depth and the soil is unstable.

- 29.8.** Excavations over 20 feet deep, or that do not meet regulatory requirements, shall be designed by a Professional Engineer. This design shall outline the Contractor's plan for excavation Requirements, such as trenching, sloping and or shielding for the particular project. The Professional Engineer design documentation shall be on site.
- 29.9.** All excavations shall be inspected daily by a competent individual.
- 29.10.** 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.
- 29.11.** 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.
- 29.12.** 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).
- 29.13.** 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.
- 29.14.** 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.

30. REGULATORY INSPECTIONS

- 30.1.** Carmeuse policy is to cooperate with regulatory agency inspections. The Contractor is required to ensure that regulatory inspections are treated with high priority and with the upmost professionalism.
- 30.2.** Upon notification of a regulatory agency inspection, or when it is apparent an inspection is about to take place, the Contractor shall immediately ask the agency inspector for permission to notify the Project Manager, and will ask the agency inspector to wait to begin the inspection until the Contractor speaks with the Project Manager.
- 30.3.** The Contractor shall ask the regulatory inspector to complete site specific orientation and sign the visitor's register.
- 30.4.** The Contractor shall request the regulatory inspector follows all company safety requirements, procedures and PPE requirements.
- 30.5.** The Project Manager may designate a Carmeuse Representative to accompany any regulatory inspector. The inspector may also be accompanied by a miners' representative.
- 30.6.** The Contractor shall take immediate action to correct violations as requested.
- 30.7.** Carmeuse reserves the right to verify any testing or sampling conducted by the regulatory agency by performing parallel sampling and/or monitoring, including sampling or monitoring performed with respect to Contractor employees. In some cases, Carmeuse may wish to impose the duty of parallel sampling on the Contractor.

- 30.8.** After the agency inspection has ended, the Contractor shall coordinate with the Project Manager to determine potential violation items, actions for compliance, responsible parties and estimated completion date for actions.
- 30.9.** The Contractor shall provide a legible copy of his/her notes concerning the inspection and supply these noted to the Project Manager.
- 30.10.** The Contractor shall correct all conditions that are in violation of regulations or standards.
- 30.11.** The Contractor shall document corrections taken.
- 30.12.** If the Contractor receives a citation; the Contractor shall notify the Project Manager immediately.
- 30.13.** Carmeuse reserved the right to seek remedy, if Carmeuse is issued a citation for a violation by the Contractor.

31. WORKING NEAR WATER

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

32. PAINT CONTAINING LEAD

- 32.1.** Due to the age of our facilities, some steel surfaces may be painted or coated with a paint that contains some amount of lead. Some projects may require work activities that could disturb this paint or coating, such the removal of old paint or projects involving the cutting of painted steel surfaces.
- 32.2.** The Contractor must consider the work to be performed, and assess the risk of possible exposure to dusts or fumes that may be created from the disturbance of any painted or coated surfaces – including determining if lead is present in suspect paint, and if planned work methods may disturb the material through the use of tools, equipment, or hot work.
- 32.3.** The contractor must determine if any particular work methods or processes will be required to control potential dust/fume generation and to prevent potential occupational exposures to Contractor or Carmeuse employees and the environment.
- 32.4.** If necessary, Carmeuse may require the Contractor to describe how it will provide appropriate control measures for the protection of employees and the environment.

33. INCIDENT INVESTIGATION

- 33.1.** All incidents, which include personal injury, property damage, and near misses, must be reported to the Project Manager – regardless of severity.
- 33.2.** The scene of any incident must not be disturbed, so that a proper investigation may take place.

- 33.3. Contractors must investigate all incidents and provide a written report to the Project Manager.
- 33.4. Contractors must co-operate with the Project Manager in the investigation.
- 33.5. Certain incidents must be reported to MSHA within 15 minutes. Refer to the MSHA website: <http://www.msha.gov/codeaphone/ReportableInjury.asp>

34. OTHER RULES

- 34.1. Smoking is not permitted indoors.
- 34.2. Be aware of uneven ground and loose stone on catwalks.
- 34.3. Obey speed limits. Watch for large mobile equipment such as tanker trucks, haul trucks, and front end loaders.
- 34.4. Check-in with plant operators as required by the site.
- 34.5. Do not operate Carmeuse equipment without formal authorization. An “indemnification” must be signed prior to using any Carmeuse Equipment. [Remember to complete task training]
- 34.6. Do not operate any equipment unless properly trained and licensed (i.e. forklifts, zoom booms, man-lifts).
- 34.7. Do not use compressed air for cleaning clothes. High volume, low pressure blowers are available for removing dust from clothes.
- 34.8. Ensure all equipment, tools, and personal protective equipment is in good working condition.
- 34.9. Finger rings, such as wedding bands, are not to be worn if there is potential for them to be caught in machinery or equipment
- 34.10. All mobile equipment, including pick-up trucks, is required to have their wheels chocked when left unattended in operational areas.
- 34.11. Contractors shall provide as-built drawings to the Carmeuse Project Manager for the completed work.
- 34.12. Firearms are strictly prohibited on Carmeuse property.

35. ENVIRONMENTAL REQUIREMENTS

- 35.1. The Contractor shall comply with all applicable federal, state and local environmental laws, regulations and requirements. The Project Manager will discuss relevant requirements with the Contractor before work commences.
- 35.2. The Contractor shall handle, treat, characterize and dispose of all waste in accordance with the Resource Conservation and Recovery Act (“RCRA”) and any specific contract requirements, such as Company approval of the disposal site. The Contractor shall maintain a clean and safe worksite by properly disposing of trash and debris. Trash and debris shall not

be burned without proper permitting. Waste and hazardous materials shall be secured while on the worksite.

- 35.3.** The Contractor shall not make any un-permitted discharges to water. In the event that the Contractor obtains a discharge permit under the Clean Water Act (“CWA”) or an applicable state law, it shall comply with all permit requirements.
- 35.4.** The Contractor shall perform work in a manner that prevents offsite effects of soil erosion and sedimentation in compliance with the CWA. The Contractor shall stay on approved access roads, working and parking areas. Clear and grade only areas necessary for construction by separating and replacing topsoil in accordance with project requirements. Sediment barriers shall be installed, inspected and maintained to contain spoil on the construction site and away from wetlands and water bodies. Disturbed areas shall be stabilized as soon as possible following construction in compliance with permit conditions or in accordance with the Project Manager’s instructions.
- 35.5.** The Contractor shall not collect or disturb cultural artifacts or human remains in compliance with the National Historic Preservation Act (“NHPA”). If artifacts or remains are discovered, work shall stop immediately in the areas of the discovery and the Project Manager shall be notified. Work in the area may resume only after the Company provides approval.
- 35.6.** The Contractor shall not agitate, take, feed or otherwise harm wildlife or migratory birds or their nests in compliance with the Endangered Species Act (“ESA”) and the Migratory Bird Treaty Act (“MBTA”). If wildlife or migratory birds and/or nests are affected by the construction activity, Contractor shall stop activity in the area and notify the Project Manager. Work in area may resume only after the Company provides approval.
- 35.7.** All Contractors who meet the requirements for needing a Spill Prevention Control and Countermeasure plan (“SPCC”) shall comply with all applicable local, state and federal requirements. A copy of the SPCC, if needed, shall be submitted to the Company.
- 35.8.** Spills and releases resulting from Contractor activity shall be reported to the Project Manager immediately, and reported to regulatory agencies and cleaned-up in accordance with state and federal regulations. Contractors are required to immediately investigate and document all Contractor incidents. Utilize CSM-001 for proper documentation. These types of spills include, but are not limited to: small quantities of hydraulic fluid, motor oil and fuel spilled during equipment refueling operations. For spills of petroleum product, chemicals or other hazardous materials release, also see Identification of Hazardous Materials Section 19.0.
- 35.9.** With respect to dust control and any other requirements related to clean air, the Contractor shall comply with all Federal, State and local regulations, including, but not limited to, the Clean Air Act.