CALHOUN
CONSTRUCTION SERVICES

CALHOUN CONSTRUCTION SERVICES
CONSTRUCTION CO., INC.

CORPORATE
SAFETY PROGRAM

September 18th, 2025

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Section 1: President's Statement

Calhoun Construction Services, Inc. is firmly committed to operating all of its projects in a safe and efficient manner. In order to achieve and maintain this goal, the ideas of safety, quality and production must be inseparable. Safety, loss prevention and quality control procedures must be integrated in to all phases of our operation.

Each and every employee has the responsibility to follow these policies and procedures and incorporate them into their daily activities. Working together as a team we can provide high quality work in a safe and cost effective manner. Your cooperation is sincerely appreciated and fully expected. Anything less is unacceptable.

John Hinshaw, President

Section 2: Safety Director's Statement

If we look at the decisions that we make daily, we will find that we have a higher level of risk that we are willing to take for ourselves as opposed to what we will allow our children, spouse, friends, and employees to be exposed to. More times than not our level of Acceptable Risk is higher than the rules established by OSHA, company policy, or owner's requirements. This is where the problem lies.

The biggest challenge for a Safety Professional is to get each employee to accept and agree with the Risk Level established by the company Safety Program. To do that, the employee must increase the value that he or she puts on their own safety and health by following the Safety Program which in turn will decrease their exposure to hazards that can cause serious injury or death.

It is our goal to provide you with the knowledge, equipment and training, so that you may safely work today to provide for your families tomorrow.

Thomas Elmore
Safety Director

Section 3: Roles & Responsibilities

POLICY

To be effective, our Safety Program must become an integral part of Calhoun's every-day operation. Each employee, whether a member of management, supervision, tradesman, or office staff, share in the responsibility for the implementation of this program.

ORGANIZATION

Calhoun's Safety Program is basic and contains duties and responsibilities for each level of employment. Our program will work only if each member carries out his/her duties. There are six major levels of management in Calhoun Safety Organization. These areas and their responsibilities are as follows:

PRESIDENT

John Hinshaw, Calhoun's President, supports the Safety Program. He will appropriate the funds necessary to support the safety requirements. He expects the Superintendents, Foremen, and Project Managers to control accident hazards on the jobs and will audit their results through the activities of Mike Williams, Operations Manager.

SAFETY DIRECTOR

This position will be responsible and accountable to Corporate Management for the planning, organizing, coordinating, and administration of the safety and accident prevention program. The Safety Director will provide direction, guidance, and motivation for the development and implementation of plans and education programs and will coordinate the efforts of site managers to meet safety and accident prevention needs.

1. Conducts random periodic job-site inspections to evaluate conditions and employee compliance with sound safety and accident prevention procedures.

2. Provides topics for the Weekly Training Meetings.

3. Reviews results of documented safety inspections with the appropriate management and supervisory staff in order to formulate corrections for any noted deficiencies.

4. Alerts all managers to all changes in safety requirements and recommendations arising from changes in corporate policy.

5. Evaluates all safety and accident prevention educational requirements. Has obtained OSHA 10-hour training and kept current the OSHA 500 Construction Industry Outreach training certification and attends training session to enable training of specific safety topics such as Confined Space Entry, Respirators, Fall Protection, etc.

6. Plans and coordinating all educational programs with appropriate supervisory personnel.

7. Utilizes the expertise of project and shop staff specialists, and outside safety and health consultants to implement educational programs.

8. Plans and maintains safety and accident prevention program communications.

9. Reviews data on losses and lost time for both personnel and equipment accidents in order to develop summaries of accident cases and experience rates.

10. Ensures that the supervisory staff conducts all required employee on-the-job safety meetings.

11. The Safety Director is the ultimate authority pertaining to Calhoun's safety matters. He has the responsibility to make every effort to safeguard the human capital of Calhoun. The Safety Director reports directly to the Operations Manager.

12. The Safety Director has the power to remove any individual who has aggressively or repeatedly violated OSHA, owner or Calhoun safety rules. Updated

13. The Safety Director will have his performance reviewed annually by the Operations Manager. The review will entail overall job performance as well as progress towards goals.

14. Work with Superintendent and Project Manager to create mitigation plans for High-Risk Activities.

SAFETY MANAGER

This position will be responsible and accountable to the Safety Director. Safety Managers are senior safety professionals that will be assigned to one or more projects. They assist the Safety Director and the Management teams with implementation and enforcement of safety programs and policies on the projects.

1. Conducts random periodic job-site inspections to evaluate conditions and employee compliance with sound safety and accident prevention procedures.

2. Alerts all managers to all changes in safety requirements and recommendations arising from changes in corporate policy.

3. Utilizes the expertise of project and shop staff specialists, to implement educational programs.

4. Plans and maintains safety and accident prevention program communications.

5. Ensures that the supervisory staff conducts all required employee on-the-job safety meetings.

6. The Safety Manager will have his performance reviewed annually by the Safety Director. The review will entail overall job performance as well as progress towards goals.

7. Review Calhoun project compliance with Company Safety Programs, the Owner Specifications, and State, Federal, and Local Regulations.

8. Identify hazardous conditions and take prompt actions to eliminate them.

9. Conduct project safety audits and report documented results with corrective actions.

10. Investigate injuries and safety-related incidents. Maintain adequate records. Manage injury cases.

11. Develop and initiate site-specific safety and health procedures in conjunction with project controls in order to translate policies and regulations into effective work practices.

12. Conduct site specific safety training.

13. Review subcontractor project specific safety plans.

14. Report on known subcontractor non-compliance with Project Safety Program, Owner, State, Federal, and Local Regulations.

15. Safety Managers have the power to stop any hazardous work activities and to make necessary changes to ensure the safety of individuals. He also retains the power to remove any individual who has aggressively or repeatedly violated OSHA, owner or Calhoun safety rules.

16. Work with Superintendent and Project Manager to create mitigation plans for High-Risk Activities.

SITE SAFETY COORDINATORS

Site Safety Coordinators are safety professionals that are assigned to certain projects. They assist the Project Superintendent with enforcement of safety on the project. Their responsibilities are as follows:

1. Review Calhoun project compliance with Company Safety Programs, the Owner Specifications, and State, Federal, and Local Regulations.

2. Identify hazardous conditions and take prompt actions to eliminate them.

3. Conduct daily project safety audits and report documented results with corrective actions.

4. Investigate injuries and safety-related incidents. Maintain adequate records. Manage injury cases.

5. Develop and initiate site-specific safety and health procedures in conjunction with project controls in order to translate policies and regulations into effective work practices.

6. Conduct site specific safety training.

7. Review subcontractor project specific safety plans.

8. Report on known subcontractor non-compliance with Project Safety Program, Owner, State, Federal, and Local Regulations.

9. Site Safety Coordinators will have his performance reviewed annually by the Safety Director. The review will entail overall job performance as well as progress towards goals.

10. Work with Superintendent and Project Manager to create mitigation plans for High-Risk Activities.

PROJECT MANAGERS

The Project Manager's safety role is as follows:

1. Review Job Planning Analysis with the Estimating Department and Project Team at the project turnover meeting.

2. Review site-specific safety requirements.

3. Procure materials and subcontracts that are in compliance with project safety requirements.

4. Require subcontractors to submit the "Subcontractor Site Safety Plan" (SSSP) form during the subcontracting process.

5. Procure information from the owner or controlling contractor concerning the location of any overhead or underground installations, delivery routes, material storage areas, and flammable storage areas.

6. Review safety issues at project progress meetings.

7. Relay site-specific information to any Calhoun subcontractors.

8. Discuss safety during project "kickoff meeting."

9. Identify High Risk Activities leading the planning and risk mitigation strategies for these items.

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SUPERINTENDENT / FOREMAN

The Superintendent is the one who controls the activities of the employees on the job site and has the direct responsibility to set the standard for safety with his workers. The

Company will provide him with the necessary knowledge and resources to administer our Safety Program on the jobsite. The Superintendent's responsibilities are as follows:

1. Coordinate with the Project Manager to establish routes for material deliveries and storage, proper storage areas for flammable liquids, and the location of overhead electric or underground installations.

2. Correct safety deficiencies as soon as they are discovered. For deficiencies that are beyond the control of Calhoun, the Superintendent will notify the responsible party of the deficiency and notify all Calhoun employees of the hazard and instruct them to stay clear until the hazard is eliminated.

3. Notify the Insurance Coordinator of all job-related injuries or illnesses.

4. All incidents, including near misses, accidents, property damage, vehicle accidents, etc. will be analyzed. The injury report or property damage report will be submitted (may be faxed, e-mail, etc.) to the Insurance Coordinator within 24 hours of the incident.

5. Conduct Site Safety Orientation for all new workers.

6. Every Monday, at the start of the work shift, the Superintendent or designated Foreman will conduct a Weekly Safety Training Meeting. Subjects discussed will be distributed by the Safety Director and can be adjusted to include any site-specific hazards.

7. Contact the Safety Director or Site Safety Coordinator prior to working in a suspended personnel platform (i.e., man basket).

8. Perform a documented audit of the jobsite each week.

9. Ensure "Daily Task Analysis" are completed at the start of each shift. Each Foreman meets with their designated crew members to discuss the day's activities, the hazards involved with those activities, and the ways to eliminate or minimize those hazards. Also discussed are the hazards involved with the work going on around them and how to eliminate or minimize those hazards.

10. Identify High Risk Activities and leading the planning and risk mitigation strategies for these items.

ALL EMPLOYEES

1. An Employee assumes his/her share of responsibility for thoughtless or deliberate acts to themselves or fellow employees. They are to refrain from unsafe acts that might endanger themselves or their fellow employees.

2. Immediately report all incidents, accidents, and near misses to your supervisor. Do not wait until the end of the day. Do not wait until the next day. Report it immediately.

3. Do not allow yourself to work near or around unsafe conditions.

4. Report all unsafe acts or conditions to your supervisor immediately.

5. Responsible to fix or eliminate any unsafe condition that you or a member of your crew may create. For example, if a member of your crew removes or has removed a floor hole cover, then you must ensure the floor hole is protected when you leave the area. That means covering the hole if you are qualified or getting someone who is qualified to do so.

6. You have the authority to stop any task that you know to be unsafe.

7. Do not perform tasks that you are not qualified to perform.

8. If you are asked to work in an unsafe manner or in an unsafe condition, you are to refuse to perform that work and contact the Corporate Safety Director.

9. You have the responsibility to adhere to all Calhoun, OSHA, and/or Owner's safety policies.

10. Attend and participate in the Weekly Safety Meetings and other required company training programs.

11. Employees are encouraged to suggest improvements to the safety program to their superintendent/foreman or Safety Director.

SUBCONTRACTORS

1. A Subcontractor shall comply with the requirements of the State, Local and Federal Safety Regulations applicable to their operations and the Safety Regulations established by the Owner in the contract documents and/or adopted by Calhoun for each specific jobsite.

2. Subcontractor must turn in a Site Safety Plan (SSSP)to Calhoun Project Manager prior to beginning work, including the Job Hazard Analysis of the scope of work to be performed and list of chemicals to be used.

3. Designate a safety representative that has received OSHA 10-hour training.

4. Subcontractors are required to perform weekly toolbox talks and maintain documentation of the training.

Incident Reporting Procedures

In the event of an incident resulting in injury, property damage, company vehicle Incident, utility strike, near-miss or sub-contractor injury the following procedures **MUST** be followed:

Calhoun Injury Procedures:

Call the necessary emergency responders/begin first aid/take to first aid.

1) Contact your projects Safety Manager.
2) Send brief descriptive email to CCS_Safety@CalhounConstructs.com within 60 minutes.
3) Contact the Project Executive within 60 minutes.
4) The Superintendent/Foreman starts the Incident Report in Procore. Photos of the incident location should be uploaded into Procore the day the incident occurred.
5) If the injured employee is taken to a designated medical facility, he/she is not allowed to drive themselves.
6) A copy of all medical provider's paperwork and Incident Report Form must be forwarded to Human Resources immediately.

NOTE: Employees involved in incidents/injuries will be required to submit to a Post-Incident Drug/Alcohol Screen.

Non-Life threatening | Non-Emergency injuries – Greater Louisville Area
Mon-Fri 8AM-5PM
Concentra
901 W. Broadway
Louisville, KY 40203

24/7
Concentra Fern Valley Road
100 High Rose Drive Suite 100
Louisville, KY 40213

Non-Life threatening | Non-Emergency injuries – Greater Lexington Area

Concentra
1722 Sharkey Way
Lexington, KY 40511
Mon-Fri 7AM-5PM

Life Threatening Injuries | Emergency Injuries
Contact 911 or transport the injured employee to the nearest Emergency Medical Facility.

Property Damage Procedures:

A field incident report is required for any of the following that may have become damaged: materials that are in place/installed, materials stored on site, owned or rented equipment, any roadways, buildings, or permanent structures.

1) Contact your projects Safety Manager.
2) Photos *MUST* be taken of the damage and the surrounding area.
3) Send brief descriptive email to CCS_Safety@CalhounConstructs.com within 60 minutes.
4) Contact the Project Executive within 60 minutes.
5) The Superintendent/Foreman starts the Incident Report in Procore. Photos of the incident location should be uploaded into Procore the day the incident occurred.

Company Vehicle Incident Procedures:

Non-Life threatening | Non-Emergency

1) If another vehicle is involved, notify the police of the vehicle incident. If police opt to not create a report, document license plate numbers, insurance information, and state identification for all parties involved.
2) Contact your projects Safety Manager. If he/she does not answer, contact Human Resources.
3) Photos *MUST* be taken of the damage and the surrounding area.
4) Send brief descriptive email to CCS_Safety@CalhounConstructs.com within 60 minutes.
5) Contact Project Executive within 60 minutes.
6) The Superintendent/Foreman starts the Incident Report in Procore. Photos of the incident location should be uploaded into Procore the day the incident occurred.
7) A copy of any medical provider's paperwork, police report numbers, and photos must be uploaded to the Procore incident report.
   NOTE: Employees involved in incidents/injuries may be required to submit to a Post-Incident Drug Screen.

Life Threatening Injuries | Emergency Injuries

Contact 911 or transport the injured employee to the nearest Emergency Medical Facility. Then follow 1-7 above.

Near-Miss Procedures:

1) Contact your projects Safety Manager.
2) Photos *MUST* be taken of the area, and everything involved.
3) Send brief descriptive email to CCS_Safety@CalhounConstructs.com within 60 minutes.
4) Contact the Project Executive within 60 minutes.
5) The Superintendent/Foreman starts the Incident Report in Procore. Photos of the incident location should be uploaded into Procore the day the incident occurred.

Sub-Contractor Injury:

Call the necessary emergency responders/begin first aid/take to first aid.

1) Contact your projects Safety Manager.
2) Notify the sub-contractor that we need an incident report within 24 hours.
3) Send brief descriptive email to CCS_Safety@CalhounConstructs.com within 60 minutes.
4) Contact the Project Executive within 60 minutes.
5) The Superintendent/Foreman starts the Incident Report in Procore. Photos of the incident location should be uploaded into Procore the day the incident occurred.

NOTE: We do NOT transport injured sub-contractors to the hospital. Ambulance or sub-contractor representative MUST transport the injured worker.

Post Incident Investigation:

Site leadership team will schedule a post incident investigation team within 48 hours of the incident. The meeting will include a representative of the safety department, the site leadership team, and anyone with direct knowledge of the situation.

The date, time and people in attendance will be recorded on the incident report form.

Root Cause and Contributing Factors must be identified.

Corrective action & responsibilities will be agreed upon.

Section 5: Emergency Action Plan

POLICY

The Emergency Action Plan (EAP) is designed to teach every Calhoun employee what their responsibility is during an emergency event and list the proper steps to follow to ensure every employee gets to the designated safe place.

The Safety Director and Superintendent will develop the EAP prior to the commencement of the job. This plan will include all of the necessary equipment, evacuation routes and designated rally points.

RESPONSIBILITIES

1. Safety Director

    A. Provide training to all Calhoun Superintendents and Foremen for the EAP.
    B. Review and update the EAP annually at a minimum.
    C. Periodically test throughout the year as to their knowledge of the EAP and the site-specific requirements (i.e. - tornado shelter, rally points, locations of fire extinguishers, etc.).
    D. Provide training for proper use of fire extinguishers.

2. Superintendent/Foreman

    A. Review site-specific EAP with employees on site.
    B. Ensure the job-site is equipped with an adequate amount of fire extinguishers.
    C. Designate a Rally Point for the project and post a sign in the area.
    D. Designate a shelter area for inclement weather and post a sign in the area.
    E. Communicate evacuation routes to employees.
    F. Ensure that all employees are accounted for.
    G. Sound the Emergency Signal System in the event he/she discovers the emergency.
    H. Provide First-Aid treatment to injured Calhoun employees.

3. Employees

    A. Become knowledgeable with the EAP.
    B. Know the rules for using a fire extinguisher.
    C. Sound the Emergency Signal System in the event he/she discovers the emergency.

D. Obey and respond to the Emergency Signal Systems.
E. Follow the EAP rules.

TRAINING

Every employee of Calhoun will complete EAP training as a part of their New-Hire Orientation Training and as follows

1. When there are changes made in the EAP
2. When the employee's responsibility within the EAP changes
3. When the employee arrives on a new project site

EMERGENCIES

The following is a list of emergencies that the EAP will cover

1. Fire
2. Tornado
3. Inclement Weather (Severe Storms)

EMERGENCY SIGNAL SYSTEM

An air-horn will be used as the primary means of signaling an emergency. Verbal and radio communications can and will be used as supplemental means to notify employees as well.

1. **Evacuation = One long continuous horn blast**
   Once sounded, all employees are to stop work immediately and proceed directly to the designated Rally Point.

   Employees are to remain at the Rally Point until the Superintendent/Foreman gives them further direction or informs them that it is safe for them to return to the work area.

2. **Seek Shelter = A series of short blasts**
   Once sounded, employees are to stop work and proceed directly to the designated shelter.

   Employees are to remain in the shelter until the Superintendent/Foreman has determined that the threatening weather has passed.

Calhoun Crisis Plan – ACTION STEPS
CRISIS = any situation that requires *FIRE, POLICE, or MEDICAL response.*

1. Call 911 or site designated emergency number.
2. Assign an individual to secure the area and stay with any injured personnel.
3. Ensure there is a clear path for emergency vehicles.
4. Assign select employee(s) to every jobsite gate/entrance. They will:
    a. Direct emergency vehicles to correct location/area.
    b. Keep all unauthorized persons (including the media) off the project site and out of the emergency area.
    c. If the media asks anyone questions let them know you are not authorized to speak on behalf of the Company then direct them to the main office and tell them to ask for John Hinshaw.
5. Call Calhoun's Main Office (502) 493-1332:
    a. Identify yourself to the switchboard operator; advise them that you have an ongoing emergency.
    b. Ask to speak to Risk Manager. They will contact the rest of Calhoun Management and Safety personnel.
    c. If the Risk Manager is unavailable, ask for Safety, Human Resources, or John Hinshaw. After normal business hours contact:
        i. Safety Director – Thomas Elmore (502) 649-5627 *(Cell)*
        ii. John Hinshaw (502) 377-4194 *(Cell)*
6. Calhoun Management and/or Safety personnel will come to your site. They will update other Calhoun Management/Head office with information regarding the ongoing situation.
7. **DO NOT** move anything or clean-up the area until all investigations have completed.
8. **DO NOT** allow anyone to leave the site until specifically directed by Calhoun management to do so.
9. **DO NOT make any statements to the media.**
10. **DO NOT** let any unauthorized personnel on site.
11. Calhoun Management will determine who will contact injured employee's family members.
12. In the event of a **BUILDING EVACUATION:**
    a. Direct employees to designated rally point(s).
    b. Assign select employees at each rally point to get a head count and report back to you any individuals that are unaccounted for.

Crisis Plan

A crisis is any situation requiring fire, police or medical response. The following plan is a simple guide for quick and accurate reporting in the event of a crisis. It is designed primarily for a construction site accident where a crisis command post can be set up on the spot.

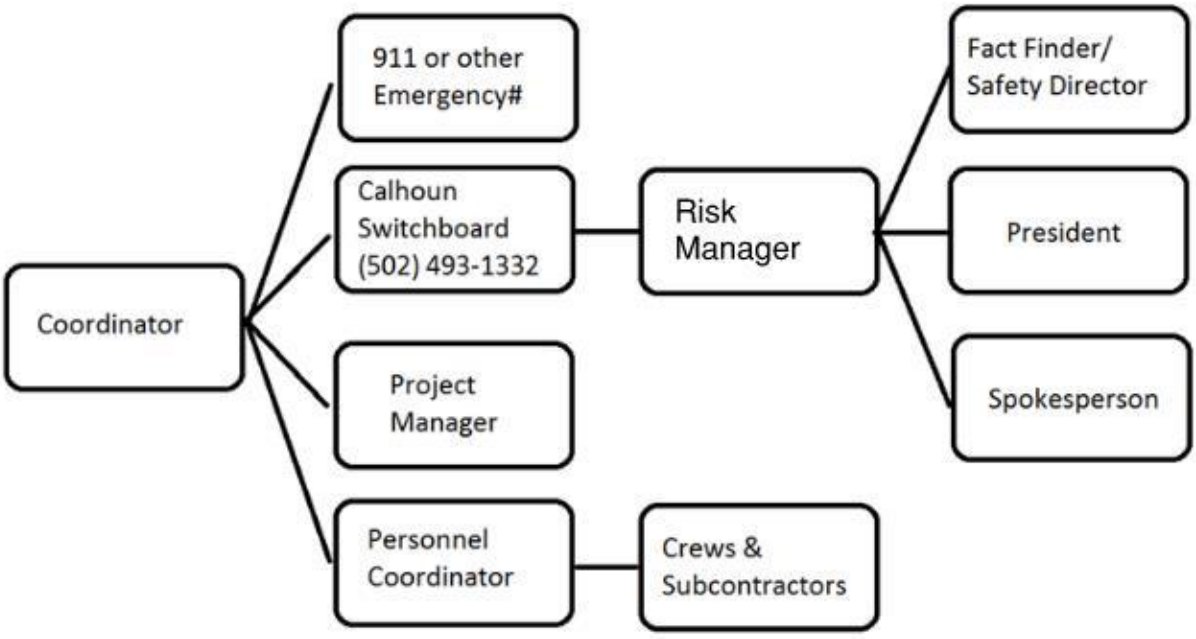
CRISIS TEAM

- Coordinator — Project Superintendent, Project Manager, Lead Foreman, or Site Safety
- Project Manager
- Personnel Coordinator — Assigned by Coordinator
- Switchboard — Calhoun's Main Office (502) 493-1332
- Fact Finder — Thomas Elmore, Safety Director
- Spokesperson — John Hinshaw or Designee

COMMUNICATION

The key to a successful crisis plan is making sure that all the key players are notified promptly. If there is a break in the communication chain, the crisis plan will fail.

Below is a flow chart of the telephone or in-person communication that is to take place in the event of a crisis. If the person that you are to contact is not available, contact the next person on the chart so that there is not a break in the line of communication.



1. COORDINATOR – Who is the coordinator?
    i. 1st – Project Superintendent
    ii. 2nd – Project Manager
    iii. 3rd – Lead Project Foreman
    iv. 4th – Site Safety Engineer

A. Call 911 or other emergency numbers, as applicable.
B. Cut off electricity and other utilities or equipment that might be a hazard.
C. Make sure the Calhoun switchboard (502-493-1332) and Risk Manager are notified of crisis.
D. If the Switchboard and Risk Manger are not available, contact the Safety Director, or President. Use the emergency number sheet to get the respective numbers.
E. Coordinate emergency teams at the site.
F. Assign Personnel Coordinator.
G. Secure site from any hazardous conditions.
H. Secure site from unauthorized personnel.
I. Report to Fact Finder.

2. PROJECT MANAGER
    a. Go immediately to site.
    b. Assist Coordinator or take on role of Coordinator, depending on situation.
    c. Assist Fact Finder.
    d. Assist Spokesperson.
    e. Contact site ownership to notify them of situation.

3. PERSONNEL COORDINATOR / ASSIGNED BY COORDINATOR
    a. Find out if anyone is injured, the extent of the injuries, and where treatment is taking place.
    b. Advise all contractors working on project of where their crews are to assemble.
    c. Advise all contractors working on project that no one is to leave until accounted for and directed to do so.
    d. Advise Fact Finder of the status of all personnel on scene, including injuries and where treatment is taking place.

4. SWITCHBOARD (502-493-1332)
    a. Refer Coordinator calling about a crisis to the Risk Manager.
    b. Refer all incoming calls regarding the crisis (other than those received from Fact Finder and Coordinator when appropriate) to the Spokesperson.

5. RISK MANAGER
    a. Notify Fact Finder/Safety Director, President, and Spokesperson.

b. Remind Switchboard to refer incoming calls regarding the crisis to the Designated Spokesperson.
c. Assist, when requested, in coordination of any actions necessary.
d. Keep records needed for insurance claims, workers' compensation claims, etc.

6. FACT FINDER / SAFETY DIRECTOR
    a. Keep Risk Manager advised of how to contact you. Go immediately to site.
    b. Confer with Coordinator, Personnel Coordinator, Project Manager, and any other appropriate people to gather information.
    c. Gather Accurate Information
        1. What happened?
        2. Where did it happen?
        3. Witness names and contact information.
        4. Extent of casualties and damage?
        5. What specific action is underway to handle the situation (i.e., rescue operations, rubble removal)?
    d. Report to Spokesperson.
    e. Advise Spokesperson whether he/she should be at site or office.
    f. Determine who should contact families of injured workers.

7. SPOKESPERSON
    a. Direct and coordinate all communications with the news media.
    b. Evaluate the situation and determine what the corporate response should be.
    c. Make a statement to the media (if appropriate) saying that Calhoun officials are on the scene, working with the emergency personnel (if this is the case) and gather information.
    d. Let the media know specific times for receiving updates.

8. ALL OTHER PERSONNEL
    a. Go to appointed assembly area. Do not leave until directed to do so.
    b. Make no statements to the media. Refer all calls and questions to the Spokesperson at the Calhoun Office.

Everyone should defer all statements to John Hinshaw.

Section 7: Training Requirements

POLICY

Calhoun understands the many dangers that are involved with construction. We also understand our responsibility to train our employees to recognize hazards in the workplace and give them the knowledge to eliminate those hazards. Each training session is presented in a forum where employees are able to ask questions, give and receive feedback. Visual aids are also utilized to increase the interests of the participants.

1. President, & Operations Manager

    A. Calhoun Corporate Safety Policies
    B. OSHA 30 Hour Course

2. Safety Director, Safety Managers and Safety Coordinators

    A. Calhoun Corporate Safety Policies
    B. OSHA 510
    C. OSHA 500
    D. First Aid/CPR (every 2 years)

3. Project Managers & Project Engineers

    A. Calhoun Corporate Safety Policies
    B. OSHA 30 Hour Course
    C. First Aid/CPR (every 2 years)
    D. Safety Policy Refresher (every 2 years)

4. Superintendents

    A. Calhoun Corporate Safety Policies
    B. OSHA 30-Hour Course
    C. First Aid/CPR (every 2 years)
    D. Safety Policy Refresher (every 2 years)
    E. Scaffold Training (every 2 years)
    F. Aerial Lift (every 2 years)
    G. Telescopic Forklift/Vertical Mast Forklift (every 3 years)
    H. Incident Reporting Procedures
    I. OSHA Inspection Procedures

5. Foremen

    A. Calhoun Corporate Safety Policies
    B. OSHA 30-Hour Course
    C. First Aid/CPR (every 2 years)
    D. Safety Policy Refresher (every 2 years)
    E. Scaffold Training (every 2 years)
    F. Aerial Lift (every 2 years)
    G. Telescopic Forklift/Vertical Mast Forklift (every 3 years)
    H. Incident Reporting Procedures
    I. OSHA Inspection Procedures

6. Tradesmen

    A. Calhoun Corporate Safety Policies
    B. OSHA 10-Hour Course (within 18 months of employment)
    C. Aerial Lifts
    D. Incident Reporting Procedures

7. New Hire Orientation

    A. Each newly hired employee will be required to complete Orientation Training on the first day of their employment with Calhoun. Orientation is conducted by HR.
    B. This orientation consists of the following:
        1) New Hire Safety Orientation Video
        2) Calhoun Corporate Safety Policies
        3) General Safety
        4) Personal Protective Equipment
    C. The employee will acknowledge receipt of the safety requirements.

TRAINING RECORDS

Safety training records will be logged into the Viewpoint software, for tracking purposes.

Section 8: Disciplinary Program

POLICY

The primary purpose of this Disciplinary Program is not to punish employees but rather to control the work environment so that the workforce is protected, and incidents do not occur. Disciplinary action informs contractors that Calhoun is serious about its Safety and Health Program, and unsafe behavior will not be tolerated.

1. The Safety Department, Project Managers, Project Superintendents and Foremen are all responsible and given authority for enforcement of this disciplinary program.

2. Supervision is required to incorporate training and corrective action in promoting an incident free workplace. Workers and supervision are encouraged to openly communicate and respond promptly to hazardous conditions. When such conditions are discovered, they should be brought to the attention of exposed workers and discussed.

3. When disciplinary action is necessary, the action taken must be appropriate to the seriousness of the violation or the frequency with which it occurs. All workers subject to disciplinary action shall be treated equally and must be given an opportunity to correct the problem and/or their behavior.

4. The level of severity will be determined by the Superintendent, in conjunction with safety personnel.

LEVEL OF SEVERITY		ACTION TAKEN
Level One	=	Verbal Warning
Level Two	=	Written Warning – Retraining Required
Level Three	=	Written Warning & 3-day suspension (minimum)
Level Four	=	Written Warning & 1-year suspension (minimum)

5. Any disciplinary action above level 2 must be documented and reviewed with the workers supervisor. The workers supervisor must provide a corrective action plan to ensure the situation does not reoccur. Documentation consists of written communication with the contractor and noted in daily log.

Pre-Planning

Pre-planning for temporary heaters:

- Budget for the right size and output of the heater in advance of when the heater will be needed.
- Site Management team request and review manufacturer specifications and manage the placement of heaters, based on the manufacturer's specifications.
- Review clearance distances, securement, ducting, and location of gas lines (if necessary) to achieve the proper placement of the heater.
- Plan to protect gas lines if they interfere with high traffic areas within a construction site.
- Review the temporary heating plan with subcontractors, which should outline approved heaters and designated locations that can be utilized on the jobsite.

Temporary Heat Layout Plan

Before temporary heat is turned on, a layout plan must be documented on the site floorplan and submitted for approval to the assigned Safety Manager.

Choosing the Right Heater and Using It Safely

Manufacturers' guidelines and safety requirements should be reviewed as well as any placard or safety label on the heater unit. Temporary heat procedures should be included in site safety plans.

Indirect Fired

Indirect fired heaters are commonly placed outside the building and may be fueled by diesel, propane or natural gas. The flame is contained in a burn chamber where cool air passes over and around a heat exchanger and warm air is ducted into the building. Some advantages of indirect fired heaters include elimination of the heat source from inside the building and venting of carbon monoxide directly into the outside atmosphere. These types of heaters also have the ability to distribute even temperatures and humidity over larger areas. Disadvantages include lower efficiency, longer duct runs and bulk fuel supplies,

Tips for safely using indirect fired heaters include, but are not limited to:

- Units should be located on stable ground outside the building.

- For gas—fired units, all fuel line piping should be flexible, American Gas Association (AGA) rated, and protected from physical damage.

- Fuel tanks should be secured and protected with bollards or jersey barricades.

- Flue stacks should be located away from combustibles, and to prevent fumes from entering the structure/building.

- Units, including all hoses and fuel tanks, should be inspected and maintained regularly by a qualified vendor/service company through a written agreement.

Direct Fire

Direct fired heaters are temporary heating units that create heat via a direct flame generated by propane or other type of compressed type fuel. Although common, these heaters may not be the best choice when considering protection against fire potential on your jobsite. There are two types of direct fired heaters: open flame and enclosed flame styles.

Open Flame Style:

Direct fired heaters can be common on construction projects due to their maneuverability, fuel efficiency, and cost considerations. These types of heaters present an inherent risk of a visible flame that can be seen within the unit when in operation. When using an open flame heater, the level of management oversight must be increased and outlined in your temporary heating plan, if there are not safe distances between heaters and combustibles, this can create a fire hazard. For this reason, these units should never be considered or used inside a wood frame structure.

These units can be easily moved and may be more prone to being relocated by unauthorized persons. This can impact on the overall ability to manage the location of heaters and consistently ensuring safe distances of combustible materials. There is also the potential for carbon monoxide accumulation. Air monitoring and ensuring adequate ventilation will help mitigate air quality risks.

Enclosed Flame Style:

There are commercially available direct fired units that are designed with the flame enclosed within the unit (cannot directly see the flame or burner). Though these units offer some improvement from a control standpoint, they also come with specific manufacturer guidelines that must be strictly adhered to on your job site.

Tips for safely using direct fired heaters include, but are not limited to:

- Identify authorized individuals who are trained in manufacturers' recommendations specific to the units chosen. Only these individuals should be allowed to configure and operate them.

- Place heaters on a non-combustible surface that extends in front of the unit — safe distances may vary based on the specific unit so be sure to consult and adhere to manufacturers guidelines and specifications.

- Be sure the units are mechanically secured to prevent movement.

- Ensure electronic flame sensors or pilot safety valves are in place.

- Verify the unit is shut off and has cooled down before refueling.

- Maintain proper safety clearances on all sides from combustible materials. This includes monitoring the proximity of scheduled work in the area where they are located.

- Carbon monoxide detection, alarms and make—up air systems should be used.

- Consider using technology to assist with monitoring while in use.

Portable Electric

Portable electric heaters may meet the need for temporarily heating smaller areas. Advantages include a reduced risk to employee health and safety from carbon monoxide. Disadvantages include a need for electrical power, and perhaps the need for multiple heating units.

Tips for safely using portable electric heaters include, but are not limited to:

- Units should only be used in a dry environment and connected to GFCI outlet /breaker

- Units should be equipped with a thermostat, overheat protection, and automatic tip—over shutoff protection.

- Ensure the electrical circuit is rated for the size and number of heaters to be run

off the same breaker.

- Place heaters on a solid, flat, non—combustible surface to prevent tip over.

- Locate heaters away from combustible material in accordance with the manufacturers operating manual.

Temporary Heat Evaluation Grid

ISO Building Classification	Indirect Fired	Direct Fired Enclosed Flame (*see note 1)	Direct Fired	Portable Electric (*see note 2)
1 – Frame	ACCEPTABLE	BORDERLINE	POOR	POOR
2 – Joisted Masonry	ACCEPTABLE	BORDERLINE	POOR	POOR
3- Non-Combustible	ACCEPTABLE	BORDERLINE	POOR	POOR
4- Masonry Non-Combustible	ACCEPTABLE	ACCEPTABLE	BORDERLINE	POOR
5 – Modified or Emi-Fire Resistive	ACCEPTABLE	ACCEPTABLE	BORDERLINE	POOR
6- Fire Resistive	ACCEPTABLE	ACCEPTABLE	BORDERLINE	POOR

ACCEPTABLE: Means that the likelihood of loss is reduced, but manufacturer's specifications should still be utilized for clearance distances and usage.

BORDERLINE: Means that extra precautions should be considered if you utilize this heater. Precautions can include removal of combustible materials in the area, utilizing manufacturer specified ducting, securement to a flat/level non-combustible surface, regular inspections to verify air intake and discharge are clear of debris/material. Follow manufacturer specifications for supervision requirements of the unit.

POOR: Means that this heater is not recommended for use based on the construction classification.

*NOTE1: This is a specialized heater that includes a completely enclosed flame within the unit, built-in temperature controls, airflow safety devices, and enclosed electronics. The flame in these units will not touch or react with exhaust air. Follow manufacturer's specifications for clearance distances and usage.

*NOTE2: Specific written approval must be met by site leadership for use of portable electric heaters (typically used in small spaces, oftentimes by trade personnel). These heaters must be shut off and secured in the off position when left unattended.

Section 10: Return To Work Policy

POLICY

This program is designed to provide policies and procedures for managing the return to work of injured company employees with minimum time lost.

It is the policy of Calhoun to provide a place of employment that is free from recognized hazards that cause or are likely to cause death or serious physical harm to employees or the public. Calhoun is also committed to the effective return to work of injured employees while enhancing their recovery.

BACKGROUND

1. Returning employees to work who have been injured in the performance of their jobs is an important component of Calhoun's loss control program. Benefits of a return to work program include:

    A. Faster, more effective healing
    B. Safer work environment
    C. Direct and indirect savings in lost wages, medical costs and productivity
    D. Improved morale by providing support to employees with alternate assignments during recuperation

2. Statistics have shown that without a return to work program employees have little incentive to return to work and are less likely to return to work the longer they are out of work. This safety policy and procedure includes provisions for supervisory training, a discussion of the return to work process, presents details on Calhoun's preferred medical provider network and presents information on transitional work assignments, permanent job modifications and new position assignment requirements.

RESPONSIBILITIES

1. Management

    A. Provide resources and support to supervisors in the return to work program
    B. Assist in employee placement designs
    C. Encourage proper and ethical practices

2. Superintendents

    A. Complete accident and other report forms in the event of an injury
    B. Suggest alternate duty options for the positions under their control

C. Obtain, review, and forward to the Insurance Coordinator Return to Work forms upon the return to work of the injured employee

3. Employees

   A. Employees are responsible for promptly reporting any injuries to their supervisor and going to the preferred provider as directed by their supervisor.
   B. They must also cooperate with the Workers' Compensation Administrator, Safety, and Human Resources Departments.

4. Insurance Coordinator

   A. Administer the Return to Work Program.
   B. Coordinate with preferred providers and supervisors in the placement of employees into transitional work assignments, permanently modified jobs or new positions.
   C. Maintain a central list of all preferred providers.
   D. Provide information regarding wage and salary grade equity issues.
   E. Meet with injured employees to explain alternate duty position(s).

5. Corporate Safety Director / Safety Director

   A. Provide prompt assistance to managers, supervisors, and others as necessary on any matter concerning this safety policy and procedure.
   B. Assist in and develop the Return to Work Program training.
   C. Provide consultative and audit assistance to ensure effective implementation of this safety policy and procedure.

RETURN TO WORK PROCESS

When an employee who has been injured on the job and has been released to return to work by the preferred provider, there are three possible returns to work options:

1. **Option 1:** An employee has reached maximum medical improvement and has been released to return to work by the treating physician with no restrictions.

2. **Option 2 (Transitional Work Assignment):** An employee has not reached maximum medical improvement and is ready to return to a transitional work assignment (limited or modified work duty) with approval of the preferred provider but retains some disability which prevents successful performance in the original position. The company will attempt to provide available work reassignment suitable to the employee's capacity which is meaningful, productive and advantageous to the employee and the company.

3. **Option 3 (Permanent):** An employee has reached maximum medical improvement and has been released to return to work by the preferred provider but has received a disability which prohibits employment in his/her previous position. The company will attempt to place the employee in another available position suitable to the employee's capacity which is meaningful, productive and advantageous to the employee and the company.

PREFERRED MEDICAL PROVIDER

The preferred provider network is a list of physicians who have agreed to treat injured company employees when such injuries arise out of the performance of their job duties. This list shall be maintained by the Insurance Coordinator. The preferred provider list is to be updated annually.

Section 11: Drug & Alcohol Policy

POLICY

It is the policy of Calhoun to have a drug and alcohol free work site. The use of intoxicating alcohols, controlled substances or illegal drugs shall not be permitted on the work site. Contractors shall not be under the influence or suffering from the after-effects of using these items when reporting to the work site.

Contractors who violate this policy shall be removed from the work site immediately.

Reasonable Suspicion

When a worker is suspected of being under the influence, firsthand observation should be made immediately by more than one member of Calhoun site leadership. Some examples of the signs that may be considered as suspicion are:

Physical Signs

- Bloodshot eyes/dilated pupils
- Slurred speech
- Unsteady walk/uncoordinated movements
- Shakes and tremors
- Unexplained sweating or shivering
- Fidgeting/inability to sit still.
- Sleeping at work or difficulty staying awake
- Unusual body or breath odor

If signs of intoxication are observed by more than one member of Calhoun site leadership, the worker must be escorted out of the work site and their employer notified of the issue.

Documentation

The following information MUST be documented in the event more than one member of Calhoun site leadership suspect a worker is under the influence.

- Worker Name and Employer
- Date and Time of observation
- Calhoun site leadership team members that observed signs of intoxication
- The signs of intoxication observed
- How employer was notified of situation

Return to Work Site

If a worker is removed from the work site due to suspicion, the employer must provide proof of a negative drug/alcohol test before the worker will be allowed back at the work site.

Section 12: Weekly Training Meetings

POLICY

The following items detail the activity performed to complete the weekly safety meetings for Calhoun:

1. The Safety Director will establish a training topic on a weekly basis.

2. The training meeting will cover a specific topic and/or various written company policies and procedures as well as having a section for site specific documentation developed by the jobsite Superintendent/Foreman.

3. The training topic document will go out on a weekly basis, with a sign in sheet attached.

4. The Jobsite Superintendent/Foreman will present the training topic to all company employees on site on a weekly basis.

5. Before beginning the training topic, the employees will be required to sign the attendance sheet.

6. The training document will be sent back to the office to the attention of the Safety Director.

7. The document will be given to the administrative assistant and logged into the Viewpoint Training Database software, for tracking purposes, thus notating as to what Superintendent/Foreman conducted the meeting. This information is used during the review of the Superintendent to ensure this activity is being completed.

Section 13: Jobsite Cell Phone Use Policy

POLICY

The purpose of this policy is to outline the use of cell phones (including texting) on Calhoun Construction jobsites.

1. **Use Of Communication Devices**
    a. Inappropriate use of communication devices at work can cause injuries because it's distracting and may prevent workers from focusing on the task at hand or interfere with their proper and safe use of equipment and machinery. Devices and headphones or wireless earpieces may also become tangled in machinery or interfere with the proper use of personal protective equipment.
    b. CCS prohibits the non-emergency use of mobile phones (including text messaging) on the job site, while operating equipment, while driving, while using tools, while in an excavation, while working around equipment and while exposed to any fall hazard, etc.

2. **Acceptable usage**
    a. Conducting work related business in a safe area.

Section 14: Subcontractor General Requirements

POLICY

The subcontractor's safety program shall be submitted to Calhoun's Project Manager prior to the subcontractor starting its work. Subcontractors must be competent and capable to perform their assigned duties in a safe and environmentally sound manner. Subcontractors must have the appropriate licenses, registrations, and insurance to complete their work.

RESPONSIBILITIES

Calhoun Superintendent:
Must monitor each subcontractor onsite. Must verify that each subcontractor is completing their assigned duties in a safe and environmentally sound manner.

PROCEDURE

Before the start of work, Calhoun Construction and all subcontractors must establish clear lines of communication to facilitate the construction process and each subcontractor must define clear roles and responsibilities for their staff on site.
The subcontractor's safety program shall, at a minimum, contain the following:

1. The subcontractor will provide Calhoun a copy of the list of all chemicals that are specific for the jobsite. This list will be kept in the Calhoun jobsite office. SDS sheets are to be kept in the subcontractor's possession onsite.

2. Each subcontractor will provide the Calhoun Project Manager with a Subcontractor Site Safety Plan ("SSSP") prior to the commencement of the subcontractor's work, and shall update the SSSP as project circumstances deem necessary. The SSSP must include the contractor's emergency action plan.

3. Each subcontractor will designate a Competent Person. It is at the discretion of the Calhoun Site leadership team to determine if the safety representative is working or non-working.

4. The Competent Person of each subcontractor will be responsible for the implementation of the subcontractor's safety program. The subcontractor's safety representative shall:

    A. Attend every project safety meeting.

B. Inspect the project for safety hazards related to the subcontractor's work and for exposure to the employees of the subcontractor and its sub-subcontractors.
C. Follow up on correction of safety hazards.
D. Report any discovered safety hazards to the Calhoun Superintendent that are left uncorrected, regardless of who is responsible for the hazard.
E. Monitor the subcontractor's "Tool Box" meetings.
F. Promote "safety awareness" in all subcontractor tradesmen and supervision and maintain communications between the two regarding safety.
G. Make sure that the subcontractor has adequate safety equipment on the jobsite as necessary to perform the various portions of its work.

5. The Calhoun Site Team may require non-working site safety personnel depending on the contractor's scope of work, the contractor's ability to manage their own safety program, or total number of workers on the site. Site safety personnel must be vetted by Calhoun Construction.

6. Subcontractors are responsible for compliance with OSHA and KYOSH and any site specific safety requirements.

7. All subcontractor supervisors and foremen are responsible to plan and accomplish their work with due regard for the safety of all individuals (including the public) on, or adjacent to, the jobsite. They will be expected to eliminate all foreseeable accident hazards when planning the work under their control. Supervisors and foremen will ensure that weekly "Tool Box" meetings are held to implement and further develop the subcontractor's safety program.

8. All subcontractor supervisors, foremen and workmen are required to observe all local, state and federal safety regulations.

9. If an incident occurs, the subcontractor involved will take the following action:

   A. Administer first aid and see to the immediate needs of the injured.
   B. Notify the Calhoun Superintendent as soon as reasonably possible of the accident, its location, who was involved, what the injured was doing and the known extent of the injuries.
   C. No later than 24 hours after the incident, the subcontractor will submit a copy of its incident report to the Calhoun Superintendent.

Section 15: Mobile Elevated Work Platforms

GENERAL REQUIREMENTS

1. Only authorized employees will be allowed to operate aerial lifts.
2. No "field modifications" are allowed to be made to the aerial lift.
3. Aerial lifts are to be used as they were intended by the manufacturer.
4. Aerial lifts are intended to carry personnel.
5. Aerial lifts are not to be used as a crane for lifting equipment. Materials may be moved with equipment manufacturer approved attachments.
6. Boom and basket load limits shall not be exceeded.
7. Employees shall always stand on the floor of the basket or platform.
8. No one is allowed to stand on the toeboard, midrail, or toprail.
9. A visual inspection must be completed and documented at the start of the work shift before the lift can be used. Any deficiencies that affect the safe operation of the lift shall be repaired before it can be used. The lift shall be tagged "Out of Service" until the repairs are completed.
10. All controls must be tested before use.
11. Backup alarms must be in working order before use.
12. If at any time the operator does not have full view of the area, a spotter must be used before the equipment is moved.
13. The surface where the lift will be operated shall be stable enough to support the weight of the lift and its maximum intended load.
14. The lift must have operational upper and lower controls. Lower controls are to be used only to maneuver the lift in the event that the upper controls are non-functional or the employee in the basket becomes incapacitated. If the lift uses a key to switch between upper and lower, the key must remain while the lift is in use.
15. Employees working from boom lifts must be tied off. Fall restraint must be

attached before the basket or lift is moved. Fall restraint shall consist of a type 2 retractable life-line. Shock absorbing lanyards and positioning lanyards are not acceptable for this application.

16. If employees use the boom lift to gain access to an elevated work area, 100% tie-off must be used during the transition.

17. A minimum distance of 10 feet must be maintained between overhead power lines and any portion of the boom or basket. If the minimum distance is not obtainable, you must contact the Safety Department before working in close proximity to the power line.

18. To prevent injuries from falling objects, no workers are allowed in the area under the basket.

TRAINING

1. Contractors must provide training prior to their workers using the equipment.

2. Training records may be requested as proof of training.

3. Training shall include:

    A. Safe Operating Procedures
    B. Common Hazards Associated with Aerial Lifts
    C. Fall Protection Requirements
    D. Controls and Gauges

Section 16: Asbestos Awareness / Policy

POLICY

Calhoun is committed to providing its employees with an asbestos-free workplace. Employees shall not be permitted to work in areas where airborne concentrations of asbestos may occur. Therefore, the purpose of this program is to establish a procedure to identify asbestos containing areas and implement control measures to prevent employee exposure to those areas.

DEFINITIONS

1. **Asbestos** – That unique group of naturally occurring minerals that separate into fibers of high tensile strength, resistant to heat, wear and chemicals, described as the following types: chrysotile, amosite, crocidolite, tremolite, anthophyllite, and materials that have been chemically treated and/or altered which, after manufacture, are used for such products and end uses as insulation, textiles, paper, cement sheets, floor tile, wall covering, decorations, coatings, sealants, cement pipe, reinforced plastics and other compounds.

2. **Asbestos-Containing Material (ACM)** – Any material containing more than one percent asbestos.

3. **Surfacing Material** – Material that was sprayed, troweled-on, or otherwise applied to surfaces.

4. **Thermal System Insulation (TSI)** – ACM applied to pipes, fittings, boilers, breeching, tanks, masonry block cavity insulation fillers, ducts or other structural components to prevent heat loss or gain.

5. **Other Materials -** Floor tiles, mastics, adhesives, felts, gaskets, fire stopping, plaster, etc.

6. **Presumed Asbestos Containing Material (PACM) –** Thermal system insulation and surfacing material that may be found in buildings constructed prior to 1982.

PROCEDURE – Ensure exposure does not exceed occupational exposure limits

Buildings built before 1982 may contain PACM/ACM and therefore, shall be tested through a certified laboratory with confirmed results and/or have documentation through a certified inspection prior to beginning work.

In addition, Buildings built before 1982 and even though have been renovated or remodeled since then, may also still contain PACM/ACM. These buildings may not have been completely

abated and/or new materials could have been applied over existing PACM/ACM, and therefore shall also be tested through a certified laboratory with confirmed results and/or have documentation through a certified inspection prior to beginning work.

Buildings built after 1982 are considered not to contain presumed asbestos containing materials (PACM). Calhoun shall partner with the Building Coordinator if PACM/ACM is believed to be present.

RESPONSIBILITIES

1. **Corporate Safety Director** is the CIA Asbestos Awareness Program Manager and bares the overall responsibility of maintaining this program.

2. **Calhoun Project Managers and/or Superintendents and/or Foremen** shall perform an initial survey of work areas where ACM or PACM is suspected in buildings built prior to 1982. In such areas where ACM and/or PACM are identified, supervision must ensure work does not begin until the suspect material is tested confirming positive or negative results or abated mitigating the hazard.

3. **All Calhoun Employees** who suspect the presence of ACM in their work areas must stop work and report to their Supervisor immediately. If the material has already been disturbed, access to the area shall be restricted. All Calhoun employees must also comply with the policies set forth in this program as well as those of the building owner/customer.

4. **Calhoun Specific Training** Employees working in areas where exposure to ACM and/or PACM exists are required to participate in asbestos-awareness training. The training shall be provided prior to or at the time of initial assignment and at least annually thereafter.

5. Calhoun Potential Exposure Procedure If a potential exposure to ACM/PACM occurs; the following guidelines shall be followed:

    A. Area where exposure occurs shall be isolated and demarcated, work stopped and the area evacuated.
    B. Full Investigation including all facts and statements will be completed by the end of the business day of occurrence.

HEALTH HAZARDS

The human health effects from long-term unsafe asbestos exposure are well documented. Asbestos fibres are easily inhaled and carried into the lower regions of the lung where they can cause fibrotic lung disease (asbestosis) and changes in the lining of the chest cavity (pleura). These diseases can lead to reduced respiratory function and death. Long-term inhalation of asbestos fibres also increases the risk of lung cancer and mesothelioma.

Enlargement of the heart can also occur as an indirect effect from the increased resistance of blood flow through the lungs.

People are more likely to experience asbestos-related disorders if they:

- are exposed to high concentrations of asbestos,
- are exposed for longer periods of time, and/or
- are exposed to asbestos more frequently.

ASBESTOS ABATEMENT ACTIVITIES

Calhoun Construction does not self-perform asbestos abatement. Calhoun Construction does hire asbestos abatement contractors to perform these tasks. Calhoun Construction site leadership team must ensure the following:

- All areas currently undergoing abatement activities must be secured with red barricade tape and signage (Asbestos Abatement, DO NOT ENTER) to restrict non-asbestos worker entry.
- Contractors are using engineering controls and work practices to reduce exposure below the permissible exposure limit.
- Respirators are provided to the workers conducting asbestos abatement activities.
- Proper Personal Protective Equipment (PPE) are in use by workers conducting asbestos abatement activities.
    - Disposable coverall
    - Disposable head cover
    - Disposable foot cover
    - Half or Full-face Respirators – negative pressure / powered air purifying – with high-efficiency filters.

Section 17: Bloodborne Pathogens

DEFINITIONS

Blood:	Human blood, human blood components and products made from human blood.
Bloodborne Pathogens:	Pathogenic microorganisms present in human blood that can cause disease in humans.
Disinfect:	To inactivate virtually all recognized pathogenic microorganisms but not necessarily all microbial forms on inanimate objects.
Engineering Controls:	Controls that isolate or remove the hazard from the workplace.
Exposure Incident:	A specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
Infectious Waste:	Blood and blood products, contaminated sharps, pathological wastes, and microbiological wastes.
Occupational Exposure:	Reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties.
Parenteral:	Exposure occurring as a result of piercing of the skin barrier
Sharps:	Any object that penetrates the skin including, but not limited to the following: - Needles - Scalpels - Broken capillary tubes
Sterilize:	To chemically destroy all securable life including highly resistant bacterial endospores.
EXCEPTION:	*Incidental exposures that may occur, neither reasonably nor routinely expected to occur to an employee in his/her normal employment.*

OTHER POTENTIALLY INFECTIOUS MATERIALS

1. Body Fluids:

    A. Semen
    B. Vaginal secretions
    C. Cerebrospinal fluid
    D. Synovial fluid

E. Pleural fluid
F. Pericardia fluid
G. Peritoneal fluid
H. Amniotic fluid
I. Saliva
J. Body fluids visibly contaminated with blood
K. Unfixed tissue or organ from a human - living or dead
L. HIV or HBV containing cell or tissue cultures, organ cultures, and culture mediums or other solutions; and blood, organs or other tissues from experimental animals infected with HIV or HBV.

EXPOSURE CONTROL DETERMINATION

1. OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment. This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency.

2. The following job classifications are in this category:

    A. First Aid Trained Personnel
    B. Safety Personnel
    C. Supervisory Personnel

3. Task and/or procedures:

    A. Treatment of personnel resulting from industrial accidents
    B. Emergency first aid treatment of personnel in the field
    C. Application of mouth-to-mouth resuscitation
    D. Handling of all medical sharps

4. In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure.

5. Tasks and/or procedures:

    A. Rescue operations where the victim has external injuries.

B. The removal of protective equipment and clothing after performing any of the above tasks.

C. The exposure control plan will be accessible to any employee who would like a copy.

INFECTION CONTROL PLAN (Engineering and Work Practices)

1. Universal precautions will be observed in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual. Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized.

2. Hand washing facilities shall be available to the employees who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after incurring exposure. After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water. If any employee incurs exposure to their skin or mucous membranes, then those areas shall be washed or flushed with water as soon as feasible following contact. If there are no wash facilities available, then the employer will provide either an appropriate antiseptic hand cleaner in conjunction with cloth/paper towels or antiseptic towelettes.

3. All personal protective equipment contaminated with blood or other potentially infectious materials shall be removed immediately upon leaving the area and placed in a sealed bag or containers clearly marked "Bio-Hazard" for decontamination and/or disposal.

SPECIMENS

1. Specimens of blood or other potentially infectious materials will be placed in a Bio-Hazard Container, which prevents leakage during the collection, handling, processing, storage, and transport of contaminated materials.

PERSONAL PROTECTIVE EQUIPMENT

1. All personal protective equipment used will be provided at no cost to the employee. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth, or

other mucous membranes under normal conditions of use and for the duration of time in which the protective equipment will be used.

2. Personal protective equipment shall be worn whenever there is any possibility of exposure to blood or other potentially infectious materials.

3. An adequate supply of the following equipment, including but not limited to, shall be available:

    A. Gloves
    B. Pocket Mask
    C. Protective Eyewear

4. All personal protective equipment will be cleaned, laundered, or disposed of by the company at no cost to the employee. Subject to the findings of the incident investigation, all repairs and replacements will be made by the company without cost to the employee.

5. All garments penetrated by blood shall be removed immediately, or as soon as feasible. All personal protective equipment will be removed prior to leaving the work area.

6. Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes.

7. Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated, or as soon as feasible if they are torn, punctured, or their ability to function as a barrier is compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration, or when their ability to function as a barrier is compromised.

8. Masks, in combination with eye protection devices, such as goggles or glasses with solid side shield, or chin length face shields, are required to be worn whenever splashes, spray, splatter or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth contamination can reasonably be anticipated.

HOUSEKEEPING

1. All first aid units shall be kept in a clean and sanitary condition at all times. This shall include scheduled cleaning and disinfecting as indicated below:

A. All infectious waste generated shall be kept in leak proof bags or containers with appropriate Bio-Hazard signs and labels, and disposed of in accordance with regulations.
B. Decontamination shall be accomplished by a 10 to 1 solution of bleach and water or an EPA registered germicide.
C. All exposed work surfaces will be decontaminated as soon as feasible, after any spill of blood or other potentially infectious materials.
D. Any broken glassware, which may be contaminated, will not be picked up directly with the hands. This task shall be performed by mechanical means only.
E. Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked bags at the location where it was used. Such laundry will not be sorted or rinsed in the area of use.

HEPATITIS B VACCINE

1. All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine, at no cost to the employee. The vaccine will be offered within 10 working days of their initial assignment to work involving the potential for occupational exposure to blood or other potentially infectious materials, unless the employee has previously had the vaccine or wishes to submit to antibody testing which shows the employee to have sufficient immunity. Employees who decline the Hepatitis B vaccine will sign a waiver, which uses the wording in Appendix (A) of CFR 1910.1030.

2. Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost.

POST-EXPOSURE EVALUATION AND FOLLOW-UP

1. All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up.

2. When an employee incurs an exposure incident, it should be reported to site supervision and the Safety Director.

3. Post-exposure follow-up will include the following:

    A. Documentation of the route of exposure and the circumstances related to the incident.

B. If possible, the identification of the source individual and also the status of the source individual. The blood of the source individual will be tested (after consent is obtained for HIV/HBV infectivity).
C. Results of testing of the source individual will be made available to the exposed employee, with the exposed employee informed about the applicable or federal laws and regulations concerning disclosure of the identity and infectivity of the source individual.
D. The employee will be offered the option of having their blood collected for testing of the employee's HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV/HBV serological status. However, if the employee decides prior to that time that testing will or will not be conducted, then the appropriate action can be taken and the blood sample discarded.

INTERACTION WITH HEALTH CARE PROFESSIONALS

1. A written opinion shall be obtained from the health care professional who evaluates employees of this corporation. Written opinions will be obtained in the following instances:

    A. When the employee is sent to obtain the Hepatitis B vaccine.
    B. Whenever the employee is sent to a health care professional following an exposure incident.

2. Health care professionals shall be instructed to limit their opinions to:

    A. Whether the Hepatitis B vaccine is indicated, if the employee has received the vaccine, or an evaluation following an incident.
    B. That the employee has been informed of the results of the evaluation.
    C. That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials.

TRAINING

1. Training for all employees will be conducted prior to assignment to task where occupational exposure may occur. Training for employees will include the following and an explanation of:

    A. The OSHA standard for bloodborne pathogens.
    B. Epidemiology and symptomatology of bloodborne diseases.
    C. Modes of transmission of bloodborne diseases.
    D. This "Exposure Control Plan" i.e., points of the plan, lines of responsibility, how the plan will be implemented, etc.

E. Procedures which might cause exposure to blood or other potentially infectious materials.
F. Control methods which will be used to control exposure to blood or other potentially infectious materials.
G. Personal protective equipment available and who should be contacted.
H. Post exposure evaluation and follow-up.
I. Sign and labels used.
J. Hepatitis B vaccine program.
K. Employees will be trained on an annual basis.

RECORDKEEPING

1. Medical Records

   A. Medical records, including a copy of all testing results, physical examinations, follow-up procedures, physician's written opinion, information provided to the physician and any other related medical information, shall be kept for the duration of the employee's employment plus thirty (30) years.

2. Training Records

   A. Date of training, contents of training, names of person or persons conducting the training and names of personnel attending the training shall be kept on file for five (5) years.
   B. Availability of Records
      1) The medical and training records shall be made available to:
         a) Employee
         b) OSHA
         c) Anyone with written consent of the subject employee
         d) Insurance Coordinator
   C. Transfer of records
      1) If Calhoun ceases to do business, Calhoun will transfer all records subject to this section to the successor employer. The successor employer shall receive and maintain these records.
      2) If Calhoun ceases to do business and there is no successor employer to receive and maintain the records, Calhoun will notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of Calhoun's business.
      3) If Calhoun ceases to do business and there is no successor employer to receive and maintain the records, or if Calhoun

intends to dispose of any records required to be preserved for at least thirty (30) years, Calhoun will:

a) Transfer the records to the Director of the National Institute for Occupational Safety and Health (NIOSH) if so required by a specific occupational safety and health standard; or
b) Notify the Director of NIOSH in writing of the impending disposal of records at least three (3) months prior to the disposal of the records.

3. Where Calhoun regularly disposes of records required to be preserved for at least thirty (30) years, Calhoun may, with at least (3) months' notice, notify the Director of NIOSH on an annual basis of the records intended to be disposed of in the coming year.

BLOODBORNE PATHOGENS LESSON PLAN

1. INTRODUCTION

A. Purpose - To establish safety and health procedures for employees exposed to blood or other potentially infectious body fluids through the use of personal protective equipment or engineering controls.

2. EXPOSURE DETERMINATION

A. Job Classification
B. Job Tasks

3. INFECTION CONTROL PLAN (Engineering and Work Practices)

A. Universal Precautions
   1) Hand Washing Facility
   2) Decontamination, Bio-hazard, Disposal

4. PPE

A. Chosen based on the anticipated exposure
B. All garments penetrated by blood shall be removed immediately
C. Gloves

5. HOUSEKEEPING

A. Infectious waste generated shall be kept in leak proof bags or containers with appropriate labels.
B. Decontamination by a 10 to 1 solution of water and bleach or an EPA registered germicide.

6. HEPATITIS B VACCINE

A. All employees who have been identified as having exposure to blood or other potentially infectious materials will be offered the Hepatitis B vaccine within 10 working days of their initial assignment.
   1) Interaction with health care professionals
   2) Post exposure evaluation program

7. TRAINING

A. Epidemiology and symptomology of bloodborne disease
B. Modes of transmission of bloodborne diseases
C. The original version of the bloodborne pathogens exposure control plan
D. Procedures
E. Control Methods
F. PPE
G. Post exposure evaluation
H. Signs and labels used
I. Hepatitis B vaccine program

APPENDIX A TO SECTION 1910.1030
HEPATITIS B VACCINE DELINEATION (MANDATORY)

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccine at this time. I understand that with my declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

_____ _____

EMPLOYEE NAME DATE

_____

WITNESS

BLOODBORNE PATHOGENS REVIEW

NAME: _____ DATE: _____

Answer the following questions "T" for True and "F" for False:

_____ The risk of becoming infected with the human immunodeficiency virus (HIV) is relatively rare.

_____ Potentially infectious materials include blood, semen, vaginal secretions, saliva, fluid found around the heart, lungs, and abdomen, and any fluid you can't identify.

_____ Using "universal precautions" means that all workers who are exposed to bloodborne pathogens follow the same set of work procedures.

_____ One-time use gloves can be reused if they have not been contaminated.

_____ Hepatitis B vaccine must be provided to all employees who have occupational exposure within ten (10) days of a job assignment.

_____ An exposure incident is defined as specific eye, mouth, mucous membrane, or parenteral skin contact with blood or potentially infected body fluids.

_____ Medical records must be maintained on all employees with occupational exposure for thirty (30) years.

_____ Warning labels must be printed in fluorescent orange.

Section 18: Compressed Gas Cylinders

POLICY

All local, state, municipal, federal and owner regulations shall be closely observed relative to the storage of Compressed Gas Cylinders.

STORAGE AND USE OF CYLINDERS

1. Valve protection caps shall be in place and secured.

2. When cylinders are hoisted, they shall be secured on a cradle, sling board, or pallet. They shall not be hoisted or transported by means of magnets or choker slings.

3. Cylinders shall be moved by tilting and rolling them on their bottom edges. They shall not be intentionally dropped, struck, or permitted to strike each other violently.

4. When cylinders are transported by powered vehicles, they shall be secured in a vertical position.

5. Valve protection caps shall not be used for lifting cylinders from one vertical position to another.

6. Unless cylinders are firmly secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved.

7. A suitable cylinder truck, chain, or other steadying device shall be used to keep cylinders from being knocked over while in use.

8. When work is finished, when cylinders are empty, or when cylinders are moved at any time, the cylinder valve shall be closed.

9. Compressed gas cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried.

10. Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour.

11. Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet from highly combustible materials. Cylinders should be stored in assigned places away from elevators, stairs, or gangways. Assigned

storage places shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards.

12. Flash back arrestors shall be used.

PLACING CYLINDERS

1. Cylinders shall be kept far enough away from hot work operations so that sparks, hot slag, heat, or flame will not reach them. When this is impractical, fire resistant shields shall be provided.

2. Cylinders shall be placed where they cannot become part of an electrical circuit. Electrodes shall not be struck against a cylinder to strike an arc.

3. Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.

TREATMENT OF CYLINDERS

1. Cylinders, whether full or empty, shall not be used as rollers or supports.

2. No person other than the gas supplier shall attempt to mix gases in a cylinder. No one except the owner of the cylinder or person authorized by him shall refill a cylinder. No one shall use a cylinder's contents for purposes other than those intended by the supplier. All cylinders used shall meet the Department of Transportation requirements published in 49 CFR Part 178, Subpart C, and Specification for Cylinders.

3. No damaged or defective cylinder shall be used.

USE OF FUEL GAS

1. The employer shall thoroughly instruct employees in the safe use of fuel gas including the proper procedure for cracking the valve.

TRANSPORTING OF CYLINDERS

1. When hoisting cylinders:

    A. **Do not**
        1) Choke the cylinder
        2) Choke the cylinder cart
        3) Put shake out hooks inside slots of cap
        4) Use magnets
        5) Set on forks of fork trucks
        6) Lay on top of other materials being hoisted

7) Lay in the back of a truck
8) Move in any way that may cause damage to person or property

B. **Do**

1) Use only approved cylinder carts or cradle

LABELING OF CYLINDERS

1. The contents of any compressed gas cylinder must be clearly identified.

2. If the labeling on a cylinder becomes unclear or an attached tag is defaced to the point the contents cannot be identified, the cylinder should be marked "contents unknown" and returned directly to the manufacturer.

GAUGES

1. Before a regulator is removed from a cylinder valve, the cylinder valve shall always be closed and the gas released from the regulator.

2. Leaking cylinders must be tagged out and safely removed from the work area.

HOSE

1. All hoses in use, carrying acetylene, oxygen, natural or manufactured fuel gas, or any gas or substance which may ignite or enter into combustion, or be in any way harmful to employees, shall be inspected at the beginning of each working shift. Defective hoses shall be removed from service.

2. Hose which has been subject to flashback, or which shows evidence of severe wear or damage, shall be removed from service.

3. Hose couplings shall be of the type that cannot be unlocked or disconnected by means of a straight pull without rotary motion.

4. Boxes used for the storage of gas hoses shall be ventilated.

5. Hoses, cables, and other equipment shall be kept clear of passageways, ladders and stairs.

TORCHES

1. Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purpose.

2. Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall be taken out of service.

3. Torches shall be ignited by friction lighters or other approved devices.

Section 19: Concrete Placement & Shoring

POLICY

It is the policy of Calhoun Construction Services that all concrete placement and shoring operations be conducted under the direct supervision of a competent supervisor.

RESPOSIBILITY

1. Management

    A. Ensure all equipment is routinely serviced and maintained in a safe condition.
    B. Conduct periodic on-site inspection of operations.
    C. Provide operation and safety training for affected employees.
    D. Ensure access to operation areas are controlled.

2. Supervisors

    A. Provide continuous operation safety observation and control.
    B. Provide immediate corrective training for all unsafe acts.
    C. Conduct pre-pour inspections.

3. Employees

    A. Follow all safety and operational procedures.
    B. Immediately notify supervisor of all unsafe conditions.

HAZARD CONTROL

1. Hazards

    A. Engulfment
    B. Skin Irritant
    C. Form Blowout
    D. Eye Hazards
    E. Impact & Pinch Points

2. Engineering Controls

    A. Structural forms
    B. Designed bracing and supports

3. Administrative Controls

A. Employee training
B. Operational procedures
C. Continuous supervision
D. Inspections and audits
E. Assignment and use of PPE
F. Eyewash stations per KY state law.

OPERATIONAL SAFETY

1. Formwork shall be designed, fabricated, erected, supported, braced and maintained so that it will be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the formwork.

2. Drawings or plans, including all revisions for the jack layout, formwork (including shoring equipment), working decks, and scaffolds shall be available at the jobsite.

The following activities are covered by Federal OSHA standard 1926.
1. Shoring and Re-shoring: 1926.703(b)
2. Vertical Slip Forms: 1926.703(c)
3. Reinforcing Steel: 1926.703(d)
4. Removal of Formwork: 1926.703(e)

REQUIRED PERSONAL PROTECTIVE EQUIPMENT

Working with wet concrete: Rubber Boots, Face shields while pumping & operating vibrators, gloves, plus Calhoun standard PPE required per Section 38: Personal Protective Equipment

SUPERVISOR OVERSITE REQUIREMENTS

1. Inspect all tools and equipment at least daily before use.

2. Workers mixing dry contents of concrete or making saw cuts or other dust raising actions must follow Calhoun's section 53: Crystaline Silica Protection Program.

3. Ensure backup alarms work on all equipment and/or require all equipment to be escorted into position. Keep workers out of the backing-up path of mixing trucks.

4. Be aware of the swing radius of the concrete chutes, pinch points and the handling of chutes. Fingers caught in chute pinch points may be amputated.

5. Permit ONE person trained with standard crane hand signals to signal the crane operator swinging the concrete bucket. Ensure the swing path of the concrete bucket is NOT over any personnel.

6. Check for overhead power lines and avoid contact with float handles, pump booms and other tools and equipment.

7. If electrical lines are too close for safe float and finish work, the concrete pour should be reconfigured to avoid potential contact hazards.

8. Protect all moving parts of batch plants, mixers, portable mixers and other equipment with the appropriate safety guards or barriers. Keep fingers, hands, loose clothing and hair away from pinch and catch points.

9. Inspect all hand-held electrically powered tools and cords before use and keep them in good repair. Plug the tools into Ground-Fault Circuit Interrupters (GFCIs).

10. Provide and require the use of approved fall protection when workers are exposed to a fall greater than 6 feet or more.

11. Use approved tied-off ladders and stairs to access all excavations and elevated heights.

12. Review Safety Data Sheets (SDS) with the employees concerning the ingredients of the concrete, both the basic and additive ingredients, and other items such as curing compounds and sealants.

13. Secure the work area to keep the curious members of the public and other untrained personnel out. The risk of injury increases dramatically when your workers are distracted by outside hazards.

14. Make sure employees keep an extra set of clothes with you on pour days.

15. Maintain appropriate eyewash that meets ANSI Standard Z-358-1-2014. Controlled flow of flushing fluid to both eyes simultaneously, nozzles and flushing fluid units shall be protected from airborne contaminants, designed in such a manner that once activated they can be used without requiring the use of the operator's hands, and provide flushing fluid at 1.5 liters a minute for 15 minutes (approx. 6 gallons)

16. Keep & maintain first aid kits with concrete neutralizer (vinegar is sufficient).

PUMP TRUCK OPERATIONAL SAFETY

1. Never stand between the pump and ready-mix truck.
2. Use a spotter when the boom is in a confined area or near obstructions or wires. If the pump becomes energized, evacuate the area.
3. Keep off the hopper grate.
4. Do NOT lift or remove the hopper grate.
5. Use the three-point rule to climb onto or off of the machine!
6. Do NOT operate the machine unless you are a qualified operator.
7. Do NOT let the ready-mix driver dump into the hopper before the operator is ready.
8. Do NOT let the concrete level get below the top of the valve! Hit the emergency stop if air has been sucked into the pump!
9. Try to keep everyone back from the discharge at least 50 feet when first starting, restarting, or anytime there is air in the line!
10. Never stand on, sit on, or straddle pipeline when it is in use. Never jump on a hose to dislodge a plug.
11. Never open a pressurized pipeline!
12. Always use gaskets when assembling or reassembling pipelines. Leaking joints cause plugs!
13. Watch out for the pinch points!
14. Never kink a hose while the pump is running.
15. Do not get near the water box when the machine is stroking!

Section 20: Confined Space Entry

PURPOSE

This program provides the minimum safety requirements and guidelines to be followed while entering, exiting, and working in confined spaces. This section applies to all Calhoun controlled jobsites. Confined Space is defined as a space large enough for a worker to enter, has limited or restricted means of entry or exit, and is not designed for continuous employee occupancy.

CONFINED SPACE PROCEDURES

1. The contractor doing work in the confined space must have a qualified person conduct a survey of the job area and identify confined spaces. Each space must be labeled with a sign stating, "DANGER—PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER."

2. Confined spaces will be evaluated to determine hazards. This evaluation must include the work scheduled for these spaces. This evaluation must be reviewed by the Calhoun Construction Safety Department before work in the area starts.

3. All confined spaces are Permit Required until they are reclassified.

RECLASSIFICATION FROM PERMIT REQUIRED TO NON-PERMIT REQUIRED

A confined space that the only hazard is atmospheric and can be removed by means of forced air ventilation.

1. The confined space poses no actual or potential atmospheric hazards and all hazards within the space are eliminated or isolated without entry into the space.
2. Calhoun's reclassification form documenting the basis for determining that all hazards in the confined space have been eliminated or isolated and displayed at the entrance to the confined space.
3. If the hazards change, the entrants must evacuate the confined space and re-evaluate.

PERMIT REQUIRED

Atmospheric Hazard Only – made safe through forced air ventilation.

All physical Hazards are eliminated or isolated through engineering controls and forced air ventilation is sufficient to maintain the confined space safe for entry.

Items Required:

1. Initial Atmosphere must be tested, with a calibrated direct-reading instrument, for oxygen content, flammable gases, and potential toxic air contaminants by a qualified person.
2. Continuous forced air ventilation directed at the area workers are occupying.
3. Continuous or periodic air monitoring as defined in: 1926.1203(e)(2)(vi).
4. People involved in confined space work must be trained per 1926.1207.

All Other Permit Required Spaces.

Physical hazards cannot be eliminated or isolated through engineering controls and forced air ventilation is not sufficient to maintain the confined space safe for entry.

Items Required:

1. 1926.1204: Permit Required Confined Space
2. 1926.1205: Permitting Process
3. 1926.1206: Entry Permit
4. 1926.1207: Training
5. 1926.1208: Duties of Authorized Entrants
6. 1926.1209: Duties of Attendants
7. 1926.1210: Duties of Entry Supervisors
8. 1926.1211: Rescue & Emergency Service

Section 21: Rigging, Chain/Level Operated Hoist

POLICY

1. Calhoun shall comply with the manufacturer's specifications and limitations applicable are not available, the limitations assigned to the equipment shall be based on the determinations of a qualified engineer competent in this field and such determinations will be appropriately documented and recorded. Where manufacturer's specifications shall not exceed the capacity, rating, or scope recommended by the manufacturer.

RIGGING

1. General Rigging Safety Requirements

    A. Only select rigging equipment that is in good condition. All rigging equipment shall be inspected prior to use; defective equipment is to be removed from service and destroyed to prevent inadvertent reuse. The load capacity limits shall be stamped or affixed to all rigging components.
    B. Calhoun's policy requires a minimum safety factor of 5 to be maintained for wire rope slings. The following types of slings shall be rejected or destroyed:
        1) Nylon slings with:
            a) abnormal wear
            b) torn stitching
            c) broken or cut fibers
            d) discoloration or deterioration
        2) Wire-rope slings with:
            a) crushing, bird-caging, or other distortions
            b) evidence of heat damage
            c) cracks, deformation, or worn end attachments
            d) six randomly broken wires in a single rope lay
            e) three broken wires in one strand of rope
            f) hooks opened more than 15% at the throat
            g) hooks twisted sideways more than 10° from the plane of the unbent hook
        3) Alloy steel chain slings with:
            a) cracked, bent, or elongated links or components
            b) cracked hooks
        4) Shackles, eyebolts, turnbuckles, or other components that are damaged or deformed.
        5) Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or other moving parts or equipment shall be guarded if such parts are exposed to contact by

employees, or otherwise create a hazard. Guarding shall meet the requirements of the American National Standards Institute B 15.1-1958 Rev., Safety Code for Mechanical Power Transmission Apparatus.

CHAIN/LEVER OPERATED HOIST

1. All chain and lever operated hoist must be inspected by a competent person prior to use.
2. All chain and lever operated hoist found to be damaged must be removed from service immediately.
3. Chain and lever operated hoist shall be utilized only in accordance with the operator's manual.
4. Never wrap the load chain around the load hooking it back to itself.
5. Safety latches on the hooks must be allowed to fully close.
6. Hoist anchor point MUST be rated for the weight of the hoist and the load.

Section 22: Electrical

PURPOSE

The Electrical Safety Program is designed to prevent electrically related injuries and property damage. References: NFPA 70E, Electrical Safety Requirements for Employee Workplaces, National Electrical Code (NEC) and OSHA Standard (Electrical Safety) 29 CFR 1910.331 to 1910.339

DEFINITION OF TERMS

Qualified Worker: An employee trained and authorized to conduct electrical work.

Unqualified: Employees who have not been trained or authorized by management to conduct electrical work.

RESPONSIBILITIES

1) Electrical Contractor:
   a) Provide training for qualified and unqualified employees.
   b) Conduct inspections to identify electrical safety deficiencies.
   c) Guard and correct all electrical deficiencies promptly.
   d) Ensure all new electrical installations meet codes and regulations.

2) All Workers on Site:
   a) Report electrical deficiencies immediately.
   b) No work on electrical equipment unless authorized and trained.
   c) Properly inspect all electrical equipment prior to use.

HAZARD CONTROL

1) Engineering Controls
   a) All electrical distribution panels, breakers, disconnects, switches, junction boxes shall be completely enclosed.
   b) Water-tight enclosure shall be used where there is possibility of moisture entry either from operations or weather exposure.
   c) Electrical distribution areas will be guarded against accidental damage by locating in specifically-designed rooms, use of substantial guard posts and rails and other structural means.
   d) A clear approach and 3-foot side clearance shall be maintained for all distribution panels.
   e) All conduits shall be fully supported throughout its length. Non-electrical attachments to conduit are prohibited.
   f) All non-rigid cords shall be provided strain relief where necessary.

2) Administrative Controls
   a) Only trained and authorized workers may conduct repairs to electrical equipment.
   b) Contractors performing electrical work must hold a license for the rated work.
   c) Areas under new installation or repair will be sufficiently guarded with physical barriers and warning signs to prevent unauthorized entry.
   d) Access to electrical distribution rooms is limited to those workers who have permission to enter.
   e) All electrical control devices shall be properly labeled.
   f) Work on energized circuits is prohibited unless specifically authorized by the Calhoun Safety Department.
   g) All qualified employees will follow established electrical safety procedures and precautions.

3) Protective Equipment
   a) Qualified employees will wear electrically-rated safety shoes/boots.
   b) All tools used for electrical work shall be properly insulated.
   c) Electrical rated gloves shall be provided by the employer for work on electrical equipment.

TRAINING

1) Training for Employees
   a) Training for Employees is general electrical safety precautions to provide an awareness and understanding of electrical hazards.
   b) Each employee will be trained to recognize the hazard of working near and with electrical equipment. Elements of basic electrical training will include:
   c) Hazard Awareness
   d) Ground Fault Protection
   e) Inspection of equipment
   f) Proper measures for removing equipment from service.
   g) Safe Work Practices

2) Electrical Safety Rules for Unqualified Workers:
   a) Do not conduct any repairs to electrical equipment.
   b) Report all electrical deficiencies to your supervisor.
   c) Do not operate equipment if you suspect an electrical problem.
   d) Water and electricity do not mix.
   e) Even low voltages can kill or injure you.
   f) Do not use cords or plugs if the ground prong is missing.
   g) Do not overload electrical receptacles.

3) Training for Qualified Employees
   a) Training for Qualified Employees includes specific equipment procedures and requirements of: *Electrical Safety*, 29 CFR 1910.331 to 1910.339

PERSONAL PROTECTIVE EQUIPMENT

1) NFPA 70E outlines requirements for arc flash PPE.
2) Calhoun standard PPE required for all work as a minimum per Chapter 38 of the Calhoun Safety Manual.
3) Selection of Electrical PPE must be done in accordance with NFPA 70E.

ELECTRICAL LOCKOUT & TAGOUT REQUIREMENTS

1) Application of Locks and Tags:
   a) A lock and a tag shall be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed, except as provided for below:
   b) The lock shall be attached to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.
   c) Each tag shall contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.
   d) If a lock cannot be applied, a tag may be used without a lock.
   e) A tag used without a lock must be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.

WORKING UNDER OVERHEAD LINE

1) Lines shall be de-energized and grounded or other protective measures shall be provided before work is started.

GENERAL PROTECTIVE EQUIPMENT AND TOOLS

1) When working on, or in proximity to, exposed energized parts, Qualified workers shall use insulated tools and protective gear rated for the voltages present.

WARNINGS AND BARRICADES

1) Warnings and barricades shall be employed to alert Unqualified workers of the present danger related to exposure of energized parts. The following rules apply:
   a) Safety signs, warning tags, etc. must be used to warn Unqualified workers of the electrical hazards present, even temporarily, that may endanger them.

b) Non-conductive barricades shall be used with safety signs to prevent Unqualified workers access to exposed energized parts or areas.
c) Where barricades and warning signs do not provide adequate protection from electrical hazards, an Attendant shall be stationed to warn and protect workers.
d) Live electrical bus duct must be identified and flagged with red tape every 6 feet.

PORTABLE ELECTRICAL EQUIPMENT (PEE)

1) Examples of portable electrical equipment include: powered hand tools, powered bench tools, fans, radios, etc. The following safety rules apply to portable electrical equipment (PEE):
   a) PEE shall be handled in such a manner as to not cause damage. Power cords may not be stapled or otherwise hung in a way that may cause damage to the outer jacket or insulation.
   b) PEE shall be visually inspected for damage, wear, cracked or spilt outer jackets or insulation, etc., before use or before each shift. PEE that remains connected once put in place need not be inspected until relocated. Any defects such as cracked or split outer jackets or insulation must be repaired, replaced or placed out of service.

   c) Always check the compatibility of cord sets and receptacles for proper use.

   d) Ground type cord sets may only be used with ground type receptacles when used with equipment requiring a ground type conductor.

   e) Attachment plugs and receptacles may not be altered or connected in a way that would prevent the proper continuity of the equipment-grounding conductor. Adapters may not be used if they interrupt the continuity of the grounding conductor.

   f) Only portable electrical equipment that is double insulated or designed for use in areas that are wet or likely to contact conductive liquids may be used.

   g) Workers that are wet or have wet hands may not handle PEE's (plug-in, un-plug, etc.). Personal protective equipment must be used when handling PEE's that are wet or covered with a conductive liquid.

   h) Locking-type connectors shall be properly secured after connection to a power source.

   i) Portable ladders shall have non-conductive side rails.

   j) Conductive items of jewelry or clothing shall not be worn unless they are rendered non-conductive by covering, wrapping or other insulating means.

LOTO STANDARD OPERATING PROCEDURE

Caution: Treat all electrical circuits as "Live" until they have been "Tagged" and "Locked Out" and tested by the following procedure.

1) Lockout and Tagout all sources of electrical power.
2) Verify de-energized condition before any circuits or equipment are considered and worked as de-energized.
3) A qualified person shall operate the equipment-operating controls or otherwise verify that the equipment cannot be restarted.
4) Verify proper operation of the Voltmeter at a live electrical source of the same rated voltage as the circuit to be worked.
5) Using the Voltmeter, check all exposed circuits phase-to-phase and phase-to-ground for evidence of voltage/current in the circuit.
6) Conduct work on the circuit only after determining that there is no voltage in any of the exposed circuits.
7) If voltage is detected in any exposed circuit, STOP, and determine source and procedure to eliminate voltage.

WORKING ON OR NEAR EXPOSED ENERGIZED CIRCUITS

Caution: Unqualified Employees are prohibited from working on or near exposed, energized circuits.

1) Work on energized electrical circuits requires a safety meeting with Calhoun Site and Safety leadership before work is to start.

TEMPORARY ELECTRICAL

1) Temporary Lighting
   a) Cage Guards
   b) All lamps for general illumination shall be protected from accidental contact or breakage. Shatterproof bulbs are acceptable.
   c) Light strings must be hung by the fixture not the cable to ensure there is no strain put on the conducting wires.
   d) Material used to hang the light strand shall be non-conductive.
   e) The light strand must be wired in to a designated circuit. If light strands are wired with a plug-in termination, the outlet used must not have any other equipment plugged into that circuit.
   f) Exposed Live Parts

g) All sockets in the lighting strand must have a bulb in the socket.

2) Temporary Panels
   a) All electrical panels must use the disconnecting means identified. Main and circuit breakers must be labeled as to what they control (i.e., Lights, Masonry Saw, Outlets, etc.)
   b) Open spaces created from missing breakers and open knockouts are to be covered with approved electrical fittings to prevent contact of live parts (i.e. plastic snap-in blanks for open breaker spaces).
   c) Panels will have covers and/or doors to protect its components from damage and the environment. Covers and doors are also used to prevent unqualified workers from entering the panel.
   d) Temporary covers need to be installed on permanent panels that are being energized during start-up operations. Cardboard and plastic covers are **NOT** to be used.
   e) All flexible cables (Romex and MC Cable) must have fittings at the point of entry of the panel box to prevent strain at the terminals.
   f) Panels must have signage stating "DANGER HIGH VOLTAGE" and "AUTHORIZED EMPLOYEES ONLY."
   g) Isolate panels from unqualified workers.
   h) Measures must be taken to keep unauthorized workers out of panels.
   i) Only authorized or qualified workers are allowed to perform work on panels.
   j) Methods to be used:
      i) Signs
      ii) Panel Covers
      iii) Installing doors at the point of entry into mechanical and electrical rooms
      iv) Training employees

3) Temporary Branch Circuits
   a) All branch circuits carrying 120V/15-20A on a construction site must have Ground Fault Circuit Interrupters (GFCI). Built in or plug-in GFCI is acceptable.

4) Safe Work Practices
   a) Always make certain that live parts are covered.
   b) Do not use worn or frayed cords.
   c) Keep cords & equipment out of water.

Section 23: Excavation & Trenching

POLICY

Each contractor or subcontractor performing trenching or excavating shall employ a Competent Person to oversee the work. The Competent Person must have specific training in and be knowledgeable about soil analysis and the use of protective systems and the requirements of OSHA Subpart P standards. The Competent Person must have the authority to take immediate corrective action if a hazard exists. Calhoun's excavation permit must be filled out by the excavation contractor and approved by the Calhoun leadership team. Before workers enter an excavation, the soil must be classified, the excavation must be inspected, and the hazards must be addressed by the excavation contractor's competent person.

Underground Utility Installations

1 The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation. Refer to chapter 54 Underground Utility Locate Program.
2 When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by the process outlined in chapter 54 Underground Utility Locate Program.
3 While the excavation is open, underground utilities shall be protected, supported, or removed as necessary to safeguard employees.

Access and Egress

1. All excavations 4 feet and deeper must have safe means of entrance/exit. Examples include ladders, stairs, or structural ramps.
2. Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a competent person qualified in structural design and shall be constructed in accordance with the design.
3. Ladders must be secured from displacement and extend above the edge of the excavation 3 feet.
4. Stair must be constructed to the requirements of 1926 Subpart X.
5. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees.

Inspections and Soil Classification

Daily inspections of excavations are only required when employee exposure can be reasonably anticipated. Inspections of the excavation, adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection

shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

1. Classification of Soil and Rock Deposits

   a Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C.
   b The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a competent person using tests described or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials or the U.S. Department of Agriculture textural classification system.

2. Visual and Manual Analysis

   a The Visual and Manual analyses shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.

3. Layered Systems

   a In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

4. Reclassification

   a If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

5. Visual Tests

a Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

b Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of find-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.

c Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

d Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.

e Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures and to identify previously disturbed soil.

f Observe the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.

g Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

h Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

6. Manual Tests

Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

a Plasticity

i Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8” in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a 2-inch length of 1/8” thread can be held on one end without tearing, the soil is cohesive.

b Dry Strength

i If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with

difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

c Thumb Penetration

i The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard Designation D2488 – "Standard Recommended Practice for Description of Soils (Visual – Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to setting influences (rain, flooding), the classification of the soil must be changed accordingly.

7. Other Strength Tests

a Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shear vane.

Barricades

1. Excavations left unattended at the end of the work shift shall have barriers established surrounding the excavation. Refer to chapter 60 Hazard Signage and Barricades.

Protection of Employees in Excavations

1. Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with CFR 1926 Subpart P except when:
    a. Excavations are made entirely in stable rock; or
    b. Excavations are less than 4 feet in depth and examination of the ground by a competent person provides no indication of a potential cave-in.
2. Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

Hazardous Materials

1. If any potentially hazardous materials are found while excavating, contact Calhoun site leadership for direction.

Section 24: Fall Protection

POLICY

Calhoun is committed to the protection of its employees from on-the-job injuries. All employees of Calhoun have the responsibility to work safely on the job. The purpose of the plan is to ensure that every employee who works for Calhoun recognizes workplace fall hazards and takes the appropriate measure to address those hazards. If an employee is exposed to a situation where the possibility for a fall of six feet or more exists, then steps must be taken to eliminate that possibility.

DUTY TO HAVE FALL PROTECTION

1. Contractors MUST evaluate their work environment to determine if a fall hazard exists in their work area. If a fall hazard exists, the contractor must submit a Fall Protection plan to the Calhoun site team for approval.

FALL PROTECTION WORKSHEET

Each contractor working at a height of 6 feet or more must complete the Calhoun Fall Protection Worksheet. This sheet may be found on SharePoint in the Safety and Risk section in the permits folder.

FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES

1. The top edge of guardrails must be between 39 inches and 45 inches high.

2. Mid-rails, screen, mesh, or intermediate vertical members must be installed between the top edge of the guardrail and the walking/working surface when there is no wall or parapet wall at least 21 inches high.

3. Guardrails must be capable of withstanding a force of at least 200 pounds applied within 2 inches of the top edge in any outward or downward direction.

4. With 200 lbs. of downward force, the top edge of the guardrail must not deflect to less than 39 inches.

5. Guardrails must be surfaced in a way that will prevent punctures, lacerations and snags.

6. Cable Guardrails top and mid-rails must be at least 1/4 in. nominal diameter or thickness.

7. When guardrail is used in hoisting area, a chain, gate or removable guardrail section must be placed across access opening when hoisting operations are not taking place.

8. Safety nets may only be used with the approval of the Calhoun Safety Department.

9. Personal fall arrest systems must be rigged so that the worker can neither fall more than 6 ft. nor contact any lower level.

10. Positioning devices must be rigged to prevent free falls more than 2 feet.

11. Warning lines must be erected around all sides of a roof work area.

12. Controlled access zones must be defined by a control line or other means that restrict access.

13. Safety-monitoring systems are not permitted as fall protection on Calhoun Projects.

14. **Note: Ladders, stairways, lifts, and scaffolds are handled under their respected chapters of Calhoun's safety manual.**

15. Jobsite foremen are directly responsible for implementing and maintaining fall protection for their employees. If there are any questions or problems regarding fall protection, contact Safety immediately.

16. Remember, even if a hazard is caused by someone else, Calhoun cannot allow our personnel to be exposed to that hazard. When this type of a situation arises, contact Safety immediately

17. Trades working on low-slope roofs with unprotected sides and edges must be protected from falls by guardrails, nets, personal fall arrest systems or any of the following combinations:

    A. Warning lines and guardrails
    B. Warning lines and safety nets, or
    C. Warning lines and personal fall arrest systems

    - Warning lines must be erected 15 foot back from the leading edge.

USE OF FALL PROTECTION SYSTEMS

1. Each employee shall inspect all components of the fall protection system prior to use each day.

2. Only fall protection equipment that has been UL approved and meet or exceed ANSI and/or ASTM requirements will be used.

3. Any defective component found will be tagged "Out of Service", and will **NOT** be used.

4. Employees will use the fall protection system only in the manner in which the manufacturer has outlined.

5. Lanyards and retractable lifelines will only be attached to anchor points designated by a Competent Person.

6. Guardrails, standpipes, conduit, unistrut, allthread, and similar objects are **NOT** approved anchor points. Do not use them.

7. Personal Fall Arrest Systems are to be rigged so as if the employee falls, the system stops his fall before he reaches the lower level.

8. Lanyards are not to be tied back into it-self, unless it is designed by the manufacturer to do so.

9. Anchor points must be able to withstand a static load of 5,000 lbs.

10. Fall protection equipment that has been subjected to an impact load will be removed from service immediately.

Section 25: Fire Prevention and Protection

POTENTIAL HAZARDS

1) Improper operation or maintenance of combustion equipment.

2) Improper storage or use of flammable liquids and compressed gas.

3) Smoking in prohibited areas.

4) Accumulation of trash.

5) Hot Work operations.

HAZARD CONTROL

1) Combustible scrap and debris shall be kept cleared from work areas, passageways, and stairs, in and around buildings or other structures. Scrap and debris shall be removed at regular intervals, per section 32 Housekeeping.

2) All non-essential ignition sources must be eliminated.

3) Areas around combustible material storage shall be designated no smoking areas and have a sign posted "No Smoking".

4) Hot work operations shall not be performed around combustible material storage, per section 45 Hot work.

5) Only approved intrinsically safe devices may be used in potential explosive atmospheres.

6) No combustible material shall be stored outdoors within 10 feet of a building or structure.

7) Portable fire extinguishing equipment shall be placed at convenient, conspicuously accessible locations. No closer than 25 feet and no farther than 50 feet from the hazard.

8) Indoor Storage

    a) Storage shall not obstruct, or adversely affect, means of exit.
    b) Material shall be piled to minimize the spread of fire internally and to permit convenient access for firefighting.
    c) Clearance of at least 36 inches shall be maintained between the top level of the stored material and the sprinkler deflectors.
    d) Clearance shall be maintained around lights and heating units to prevent ignition of combustible materials.

e) Material shall not be stored within 36 inches of a fire door opening.
f) Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.
g) No more than 25 gallons of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet.
h) Quantities of flammable and combustible liquid more than 25 gallons shall be stored in an acceptable or approved cabinet, outside.

9) Outdoor Storage

a) Temporary above ground fuel tanks must be a minimum of 20 feet from any building, bonded (Using the battery of equipment to power fuel pump is acceptable) or grounded before use and have a fire extinguisher, rated 10ABC, located no closer than 25 feet and no further than 50 feet.

FIRE EXTINGUISHERS

1) Before use, all employees must be trained in proper use of extinguishing equipment.
2) Fire extinguishers are inspected monthly and documented on the inspection form located on the extinguisher. This monthly inspection includes verifying pin is in place, the extinguisher is charged, and the extinguisher shows no signs of damage.
3) A fire extinguisher, 10lb ABC minimum, shall be provided for each 3000 sf of the protected building area, or major fraction thereof. Travel distance from any point of the protected area to the second fire extinguisher shall not exceed 100 feet.
4) Extinguishers will be conspicuously located in a stand and readily accessible for immediate use in the event of fire.
5) Portable extinguishers will be maintained in a fully charged and operable condition. They are only to be used for area fire protection.

SITE SPECIFIC FIRE PROTECTION PLAN

1) Where feasible, a fire extinguisher map shall be generated outlining the location of area fire extinguishers. This map must be posted in the job trailer and reviewed with workers as part of jobsite orientation.
2) Local emergency numbers and emergency evacuation rally point shall be posted on the emergency action plan, per 05 Emergency Action Plan.

Section 26: Forklifts

POLICY

Forklifts are powerful vehicles designed to handle heavy loads. Operating a forklift is serious business and recklessness or carelessness will create dangerous situations, which could lead to accidents, injury, and death.

The safe operation of a forklift is a big responsibility and accidents can be avoided. A professional forklift operator understands how forklifts operate, is familiar with company rules and safe operating procedures, completes the pre-shift inspection form, uses safety equipment (seat belt), and keeps the vehicle under control at all times.

OPERATORS

Note: All operators must be classified as "Competent Person's" will be trained in the following PIT related topics:

1. Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate.
2. Differences between the truck and the automobile.
3. Truck controls and instrumentation: where they are located, what they do, and how they work.
4. Engine or motor operation
5. Steering and maneuvering
6. Visibility (including restrictions due to loading)
7. Fork and attachment adaptation, operation, and use limitations
8. Vehicle capacity
9. Vehicle stability
10. Stability triangle
11. Load charts
12. Any vehicle inspection and maintenance that the operator will be required to perform

13. Refueling and/or charging and recharging of batteries

14. Operating limitations
15. Surface conditions where the vehicle will be operated

16. Composition of loads to be carried and load stability

17. Load manipulation, stacking, and unstacking

18. Pedestrian traffic in areas where the vehicle will be operated

19. Narrow aisles and other restricted places where the vehicle will be operated

20. Hazardous (classified) locations where the vehicle will be operated

21. Ramps and other sloped surfaces that could affect the vehicle's stability

22. Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust

23. Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

TYPES OF FORKLIFTS

There are many different types of forklifts; the most commonly used is the counterbalance and narrow isle. These vehicles are designed for indoor and outdoor use depending on their size, type of tire, load capacities, and working environment.

1. Forklift Balance & Center of Gravity

    A. The stability of a forklift is based on the **principle of balance**. The drive wheels are the balance or pivot of a forklift. An internal combustion forklift uses the engine, transmission, steer axle, counterweight, and frame to help offset or counterbalance a load. An electric powered forklift uses the battery, control panel, motors and pumps, steer axle, counterweight, and frame to help offset or counter-balance a load.
    B. The center of gravity is located within an object at a point around which all weight is evenly distributed. The forklift center of gravity is located within the **"stability triangle"** which is an area contained inside a set of straight lines drawn between the two drive tires and the center point of the steer axle. If the center of gravity remains within the "stability triangle," the forklift will remain counter-balanced. The center of gravity will move as a result of two forces, static and dynamic:

1) *Static Forces* – Static forces are load characteristics; lift height, amount of tilt, and tire condition.
2) *Dynamic Forces* – Dynamic forces are acceleration, travel speeds, braking, and surface conditions.

C. Imbalance occurs when the center of gravity extends beyond the **"stability triangle"** and can result in loss of steering, loss of traction, unstable loads, and potential tip-over. By properly positioning the load on the forks, the forklift becomes balanced. Always put the load as close to the backrest as possible. The amount a forklift can lift is determined by the weight of the vehicle and the position of the load. If the load is too heavy, it will bring the front of the forklift down and the back of the vehicle up. You can find the lifting capacity of your forklift on the identification place. **Do not exceed the weight limit. If you have any questions, consult your supervisor.**

D. Forklift Warning Label & Identification Plate:
All forklifts are required by law to have labels warning that improper operation could result in injury or death. The identification plate also displays certain performance data of the forklift. This information includes:
1) Machine working capacity
2) Gross vehicle weight
3) Rated load center
4) Maximum lift height
5) Attachment identification

E. Tire data:
Forklift Tires: There are two types of forklift tires: cushion or solid tires and pneumatic or air-filled. The type of surface a forklift is operating on will determine the tire best suited for purposes of stability, load sensitivity, and the overall safety of load movement.
1) *Cushion or Solid* – These tires are used mainly indoors because they operate effectively on smooth surfaces.
2) *Pneumatic or Air-Filled* – These tires are used on uneven surfaces because the tire design provides a smooth ride which helps stabilize a load.

F. Types of Forks:
Most of the forklifts used in industry today use one of two general types of forks, half-tapered and full-tapered.
1) ***Half-tapered Forks*** – These forks are preferred for heavier loads. They can be identified by the appearance of the fork with a gradual increase in the width of the tip to its maximum thickness about mid-way back on the fork.
2) ***Full-tapered Forks*** – These forks are usually preferred for lighter duty lifting. They are also more convenient for pallet lifting and stacking.

G. Forklift Power Sources:

1) Diesel Fuel
2) Gasoline
3) Liquid Propane (LP)
4) Battery

PROCEDURE

1. All nameplates and markings shall remain in place and be maintained in a legible condition.

2. Only a trained and authorized operator shall be permitted to operate powered industrial trucks. Operators shall be trained in the safe operation of each powered industrial truck used at the facility or on projects.

3. No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.

4. No person shall ride on the lifting mechanism of a forklift, or use the forklift as a work platform. A manufactured approved personnel basket may be used if all stipulations of the manufacture are met.

5. When a powered industrial truck is unattended, loads shall be fully lowered, controls neutralized, power shut off, and brakes set. Wheels shall be chocked if the truck is parked on an incline.

6. Always use caution and proper positioning when loading, lifting, traveling, and executing turns.

7. If a powered industrial truck is found to be in need of repair, is defective, or is in any way unsafe, the truck shall be taken out of service until it has been restored to safe operation condition. All repairs shall be made by authorized personnel.

SAFE OPERATING RULES

1. Watch out for fellow employees

2. Stay in designed areas

3. Have a clear view of travel

4. Use only for intended purposes

5. Maintain safe distances

6. NO RIDERS!
7. Obey all signs
8. Use horn
9. Use safety equipment (seat belt)
10. Check mirrors
11. Be on the lookout for hazards
12. Call attention to hazards
13. Do not block safety equipment and emergency exits
14. DO NOT LIFT PEOPLE!
15. Never walk or allow anybody under the forks
16. Keep all body parts away from moving parts
17. Be aware of overhead clearance
18. Know the characteristics of your forklift (mast height)
19. **Note**: Tip-over can occur if truck is improperly operated. Injury or death could result. Always fasten seat belt. In case of a tip-over: do not jump, hold on tight, brace feet and lean away from the direction of tip-over.

CHECKLIST FOR LOADING DOCK AREA

1. Check dock plates, boards, and ramps
2. Chock wheels on the trailer and truck
3. Make sure the driver and other employees are out of the way
4. Always drive straight on bridge plates and never accelerate
5. Drive at a slow, steady speed to avoid skidding

CHECKLIST FOR LOADING TRAILERS OR RAIL CARS

1. Make sure the trailer is backed up and square to the loading dock
2. Check the flooring of the trailer
3. Always have the trailer wheels chocked and the deck lock engaged
4. Set the parking brake on truck
5. Use headlights when entering a trailer
6. Check deck capacity
7. Check combined load and vehicle weight
8. Do not over accelerate while inside a trailer

REFUELING

1. Try to refuel when the engine is cold
2. Always shut off the engine
3. Designated areas only with adequate ventilation
4. NO SMOKING!
5. Check for leaks

CHANGING AN LP TANK

1. NO SMOKING!
2. Shut off LP tank
3. Disconnect tank line
4. Remove tank
5. Check mounting
6. Check warning decal condition
7. Inspect replacement tank compatibility and condition

8. Secure position and reconnect tank
9. Slowly open fuel line
10. Inspect for leaks
11. Have fire extinguisher available
12. LP tanks should only be filled from bulk tanks by trained personnel

CHARGING & CHANGING A BATTERY

1. Always maintain voltage consistency between battery and vehicle
2. The battery size will affect vehicle lifting capability, stability, charge life, and work cycle duration.
3. Ensure sufficient charge
4. Ensure proper dissipation
5. Ensure adequate ventilation
6. NO SMOKING!
7. Wear personal protective equipment
8. Designated areas only
9. Have fire extinguisher available

OPERATING ON RAMPS OR GRADES

1. With a load:

    A. Travel forward when moving a load up a ramp or grade.
    B. Travel in reverse when moving a load down a ramp or grade and look over your shoulder.
    C. When maneuvering on a ramp with a full load, use a spotter to help guide the forklift.

2. Without a load:

    A. Travel in reverse when moving up a ramp or grade.

B. Travel forward when moving down a ramp or grade.

3. **Note:** Only one forklift should be used on a ramp or grade at one time. Stay at a slow, steady pace when on a ramp or grade and never try to turn the vehicle.

PARKING PROCEDURE

1. Attended:

    A. With the engine running
    B. Operators stay within 25 ft. and in full view
    C. Park in a safe area
    D. Neutralize controls
    E. Set the parking brake

2. Unattended:

    A. If you are past 25 ft. or out of view
    B. Park in a safe area
    C. Neutralize controls
    D. Set parking brake
    E. Turn the power off and remove key
    F. If the forklift is on an incline, chock the wheels
    G. Disconnect the battery or shut off LP valve

FORKLIFT INSPECTIONS

Powered industrial trucks shall be inspected each day before being placed into service and before each shift. This is required to protect you and your employees, prolong equipment life and assist maintenance personnel in effective replacement of parts and repairs.

1. Visual Checks:

    A. Tire condition (foreign particles, gouges, cuts, pressure)
    B. Fuel system (check for leaks)
    C. Radiator (check level – caution!)
    D. Engine oil (check level)
    E. Head and tail lights (condition)
    F. Mast, fork, carriage or attachment (check for loose or missing bolts, etc.)
    G. Oil and water (check for leaks)
    H. Radiator water level
    I. Fuel level or battery charge
    J. Battery connector (cleanliness, tight)
    K. Hydraulic system (check for leaks)
    L. Safety equipment (back-up alarm/seat belt)

2. Operational Checks:

    A. Horn

B. Steering
C. Service brakes
D. Parking brakes
E. Hydraulic controls
F. Seat
G. Brake
H. Battery load test

3. Removal from Service

   A. When deficiencies are found, the forklift must be removed from service. The employee will tag the machine and remove the key from the ignition then arrange for the service to be performed.

TRAINING & INFORMATION

1. Only trained, authorized, competent, and certified operators shall be permitted to operate powered industrial trucks.

2. Operators shall receive formal instruction, practical training, and a workplace-specific operator evaluation.

3. Training documentation will be kept on file by the Safety Director.

4. A Qualified instructor must provide all training - have the experience and knowledge of the equipment and have attended a train the trainer course.

REFRESHER TRAINING & EVALUATION

1. Observed operation in an unsafe manner

2. Operator has been involved in an incident

3. Operator is assigned to drive a different truck

4. Conditions in the workplace change

5. ONCE EVERY 3 YEARS

FORKLIFT OPERATOR TEST

Company:_____

Name:_____ Date:_____

1. OSHA requires forklift operators to be trained. T F
2. Which is **NOT** a characteristic of a professional forklift operator?
   A. Responsible
   B. Wears personal protection
   C. Capable of unloading a trailer in 15 minutes
   D. Keeps truck under control
3. List three (3) components of a forklift
   A._____
   B._____
   C._____
4. List two sources of fuel used by forklifts.
   A._____
   B._____
5. On what principle is the stability of a forklift based?
   A. Gravity Principle
   B. Stability Principle
   C. Principle of Balance
   D. Principle of Rear-End Swing
6. What is the imaginary point in the load around which all the weight of the load is evenly distributed?
   A. Principle of Balance
   B. Center of Gravity
   C. Stability Triangle
   D. Steer Axle
7. List three (3) factors which affect the center of gravity of a forklift.
   A._____
   B._____
   C._____
8. Forklifts can tip if the center of gravity doesn't remain inside the stability triangle. T F
9. What happens when the vehicle's center of gravity moves outside the stability triangle?
   A. A condition of imbalance occurs.
   B. The steering wheel can be lifted off the ground.
   C. Steering control is lost.
   D. All of the above.
10. A detailed inspection of the forklift is required at the beginning of each shift. T F
11. When moving up a ramp or grade with a load, you travel in what direction? _____
12. During a forklift tip-over, just jump out. T F
13. Unattended parking requires the engine to be shut off and the key removed. T F
14. The wheels must be chocked when moving in and out of a trailer. T F

15. Traveling with a load in the raised position to see ahead is okay. T F
16. Instead of using a ladder, just lift an employee on the forks to change a light bulb. T F
17. Tip-over can occur if truck is improperly operated. Injury or death could result. Always fasten seat belt. In case of a tip-over, do not jump, hold on tight, brace feet, and lean away. T F
18. When refueling a forklift, you should:
    A. Follow company policy
    B. Never smoke
    C. Shut off the engine
    D. All of the above
19. You do not have to maintain consistency between battery voltage and vehicle voltage. T F
20. Personal protective equipment should be worn when servicing a battery. T F
21. Maneuvering a load that is too high or heavy cannot result in a tip-over. T F

I acknowledge that I have received information and training according to OSHA Standard 1910.178 "Industrial Powered Trucks." I understand that licensing certification is not implied by this information or completion of this course. It only represents participation of this course. I will follow and obey all rules, policies, and procedures set forth by the company. If I do not understand any instructions, I will ask questions.

_____
Participant's Name

_____
Participant's Signature

_____
Instructor's Signature

FORKLIFT DRIVER EVALUATION FORM

Company:_____

Driver Name:_____ Date:_____

Procedure:	**Correct**		**Completion/Comments:**
1. Pre-Inspection	Yes	No	_____
2. Engaging the load	Yes	No	_____
3. Preparing the load for travel	Yes	No	_____
4. Traveling with the load	Yes	No	_____
5. Approaching the drop-off area	Yes	No	_____
6. Positioning for drop-off	Yes	No	_____
7. Disengaging the load	Yes	No	_____
8. Safe shutdown	Yes	No	_____

Additional Comments:_____

_____

_____

Instructor Signature:_____ Date:_____

DAILY INSPECTION CHECKLIST
POWERED INDUSTRIAL TRUCK

Project Name: _____ Project #: _____

Equipment Name: _____ Date: _____

Equipment # _____ Inspector: _____

ITEM	OK	FIX	COMMENTS
Engine Oil Level			
Radiator Coolant Level			
Hydraulic Fluid Level			
Hydraulic Hoses and Hose Connections			
Transmission Oil Cooler			
Back – Up Alarm			
Audible Horn			
Forks			
Tire Pressure			
Wheel Lugs			
Service and Park Brakes			
Instruments and Gauges			
Steering			
Control Levers			
Steps, Peddles and Non Skid Surfaces Cleaned			
Doors, Guards and Covers			
Mirrors, Windshield Wipers and Work Lights			
Grease Fittings			
Fuel System			
Electrical System			

ADDITIONAL COMMENTS:

_____

_____

_____

_____

_____

RESERVED

Section 28: Hand & Power Tools

Note: All PPE required by each specific hand and power tool must be used by the operator before handling of tools.

CONDITION OF TOOLS

1. All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.

2. Employees shall notify their Superintendent or Foreman of any defective/damaged tools so that they can be tagged and its condition asFsessed. The Superintendent/Foreman shall turn the tool in for repair and/or replacement. Employees shall inspect tools that have been repaired prior to use to verify repair.

3. All hand and power tools and similar equipment, whether furnished by the employer or the employee shall be maintained in a safe condition. Employees shall inspect tools before each use and the defective/damaged tools shall be removed from service immediately.

GUARDING

1. When power operated tools are designed to accommodate guards, they shall be equipped with such guards when in use.

2. Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating or moving parts of equipment shall be guarded if such parts are exposed to contact by employees or otherwise create a hazard.

3. "Types of Guarding" – One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are: barrier guards, two-hand tripping devices, electronic safety devices, etc.

POINT OF OPERATION GUARDING

1. "Point of Operation" is the area on a machine where work is actually performed upon the material being processed.

2. The point of operation of machines whose operation exposes an employee to injury shall be guarded. The guarding device shall be in conformity with any appropriate

standards; therefore, or in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

3. Special hand tools for placing and removing material shall be such as to permit easy handling of material without the operator placing a hand in the danger zone. Such tools shall not be in lieu of other guarding required by this section, but can only be used to supplement protection provided.

4. The following are some of the machines which usually require point of operation guarding:

    A. Guillotine Cutters
    B. Shears
    C. Alligator Shears
    D. Powered Presses
    E. Milling Machines
    F. Power Saws
    G. Jointers
    H. Portable Power Tools

5. "Exposure of Blades" – When the periphery of the blades of a fan is less than 7 ft. above the floor or working level, the blades shall be guarded. The guard shall have openings no larger than 1/2 inch.

6. All hand-held powered drills, tapper fastener drivers, horizontal, vertical, and angle grinders with wheels greater than 2 inches in diameter, disc sanders, belt sanders, reciprocating saws, saber saws, and other similar operating powered tools shall be equipped with a momentary contact "on/off" control and may have a lock-on control, provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.

7. All other hand-held powered tools, such as circular saws, chain saws, and percussion tools without positive accessory holding means shall be equipped with a constant pressure switch that will shut off the power when the pressure is released.

ELECTRIC POWER – OPERATED TOOLS

1. Electric power-operated tools shall either be of the approved double-insulated type of grounded.

2. The use of electric cords for hoisting or lowering tools shall not be permitted.

PNEUMATIC POWER TOOLS

1. Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.

2. Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.

3. All pneumatic driven nailers, staplers, and other similar equipment provided with automatic fastener feed, which operate at more than 100 p.s.i. pressure at the tool, shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.

4. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment which meets the requirements of Subpart E of this part. The 30 p.s.i. requirement does not apply for concrete form, mill scale and similar cleaning purposes.

5. The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.

6. The use of hoses for hoisting or lowering tools shall not be permitted.

7. All hoses exceeding 1/2 inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure.

8. Airless spray guns of the type which atomize paints and fluids at high pressures (1,000 pounds or more per square inch) shall be equipped with automatic or visible manual safety devices which will prevent pulling of the trigger to prevent release of the paint or fluid until the safety device is manually released.

9. In lieu of the above, a diffuser nut which will prevent high pressure, high velocity release, while the nozzle tip is removed, plus a nozzle tip guard which will prevent the tip from coming into contact with the operator, or other equivalent protection, shall be provided.

10. "Abrasive Blast Cleaning Nozzles" – The blast cleaning nozzles shall be equipped with an operating valve which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.

FUEL POWERED TOOLS

1. All fuel powered tools shall be stopped while being refueled, serviced, or maintained, and fuel shall be transported, handled, and stored in accordance with Subpart F of this part.

2. When fuel powered tools are used in enclosed spaces, the applicable requirements for concentrations of toxic gases and use of personal protective equipment shall be followed.

HYDRAULIC POWERED TOOLS

1. The fluid used in hydraulic powered tools shall be fire-resistant fluids approved under Schedule 30 of the U.S. Bureau of Mines, Department of the Interior, and shall retain its operating characteristics at the most extreme temperatures to which it will be exposed.

2. The manufacturer's safe operating pressures for hoses, valves, pipes, filters, and other fittings shall not be exceeded.

POWDER – ACTUATED TOOLS

1. Only employees who have been trained in the operation of the particular tool in use shall be allowed to operate a powder-actuated tool.

2. The tool shall be tested each day before loading to see the safety devices are in proper working condition. The method of testing shall be in accordance with the manufacturer's recommended procedure.

3. Any tool found not in proper working order, or that develops a defect during use, shall be immediately removed from service and not used until properly repaired.

4. Personal protective equipment at a minimum shall protect the eyes, face and hearing.

5. Tools shall not be loaded until just prior to the intended firing time. Neither loaded nor empty tools are to be pointed at any employees. Hands shall be kept clear of the open barrel end.

6. Loaded tools shall not be left unattended.

7. Fasteners shall not be driven into very hard or brittle materials including, but not limited to, cast iron, glazed tile, surface-hardened steel, glass block, live rock, face brick, or hollow tile.

8. Driving into materials easily penetrated shall be avoided unless such materials are backed by a substance that will prevent the pin or fastener from passing completely through and creating a flying missile hazard on the other side.

9. No fastener shall be driven into a spalled area caused by an unsatisfactory fastening.

10. Tools shall not be used in an explosive or flammable atmosphere.

11. All tools shall be used with the correct shield, guard, or attachment recommended by the manufacturer.

12. All tools shall be maintained per the manufacturer's recommendations.

13. Areas where these types of tools are used will have signs posted that they are in use.

HYDRAULIC JACKS

1. The manufacturer's rated capacity shall be legibly marked on all jacks and shall not be exceeded.

2. All jacks shall have a positive stop to prevent over-travel.

3. Blocking – When it is necessary to provide a firm foundation, the base of the jack shall be blocked or cribbed. Where there is a possibility of slippage of the metal cap of the jack, a wood block shall be placed between the cap and the load.

OPERATION AND MAINTENANCE

1. After the load has been raised, it shall be cribbed, blocked, or otherwise secured at once.

2. Hydraulic jacks exposed to freezing temperatures shall be supplied with an adequate anti-freeze liquid.

3. All jacks shall be properly lubricated at regular intervals.

4. Each jack shall be thoroughly inspected at times which depend upon the service conditions. Inspections shall not be less frequent than the following:

    A. For constant or intermittent use at one locality, once every six months.
    B. For jacks sent out of shop for special work, when sent out and when returned.
    C. For a jack subjected to abnormal load or shock, immediately before and immediately thereafter.
    D. Repair or replacement parts shall be examined for possible defects.
    E. Jacks which are out of order shall be tagged accordingly and shall not be used until repairs are made.

Section 29: Hazard Communication

POLICY

The policy of Calhoun is to perform work in the safest manner possible. Calhoun will provide the safest possible working conditions for its employees' workplace. It is a condition of employment for employees of Calhoun to acknowledge, in writing, that they have received a briefing on this program and that they agree to follow all directions, written, verbal, and visual pertaining to this program. This written Hazard Communication program will be available upon request to employees, their designated representatives, Emergency Personnel, and interested members of the community.

The Safety Director has the responsibility for the administration of the HazCom Program, to ensure employees receive required training on HazCom, and to ensure that all superintendents have a copy of the Calhoun HazCom Program on their jobsite.

PURPPOSE

The purpose of the Calhoun Hazard Communication Program is to inform its employees of the Occupational Safety and Health Administration (OSHA) and regulations which require that employees be informed concerning hazards from chemicals that they may encounter at the workplaces and appropriate protective measures they can take. The objective of the Hazard Communication program is:

1. To safeguard our employees' health by providing a management guide for safe compliance.

2. To provide our employees, subcontractors and licensed vendors with necessary information concerning health and physical hazards of the chemical materials in use at the workplace.

PROGRAM ELEMENTS

The major elements of the Calhoun Hazard Communications Program include the following:

1. A listing of all chemical products used at company workplaces or stored on company property and the corresponding SDS.

2. Hazard identification of all chemicals in use or stored at company workplaces.

3. Labeling of all containers of all chemicals used.

Chemical Inventory

Note: All chemicals brought onto the work site must be properly stored to prevent spills. Chemical Label / SDS will outline proper storage requirements.

1. Hazardous chemicals brought onto the work site by Calhoun will be included on the hazardous chemical inventory list. Superintendents shall ensure that whenever they order materials/chemicals, that they will also request that a copy of the SDS accompany the delivery. Superintendents will then copy the SDS, insert the copy in their onsite binder and forward the original to the Calhoun Corporate office for inclusion in the master book of Calhoun SDS.

2. Container Labeling: All chemicals on site will be stored in their original or approved containers with a proper label attached. Any container not properly labeled should be given to Superintendent/Foreman for labeling or proper disposal.

    A. Workers may dispense chemicals from original containers into unmarked containers in small quantities intended for immediate use. Any chemical left after work is completed, must be returned to the original container.
        1) No unmarked containers of any size are to be left in the work area unattended.
        2) Calhoun will rely on manufacturer applied labels whenever possible and will ensure that these labels are maintained. Containers that are not labeled or on which the manufacturer label has been removed will be re-labeled.
        3) Calhoun will ensure that each container is labeled with the identity of the hazardous chemical contained and any appropriate hazard warnings.
        4) Calhoun will ensure that labeling on containers will be printed in a language that all Calhoun employees can understand if there are *non-English* speaking employees.

3. Safety Data Sheets

    A. Employees working with a hazardous chemical may request a copy of the Safety Data Sheet (SDS). SDS's are kept in the Calhoun jobsite office.
    B. A standard chemical reference may also be available on the site to provide immediate reference to chemical safety information.
    C. An emergency procedure to gain access to SDS information will be established.

4. Employee Training

A. Employees will be trained to work safely with hazardous chemicals. Employee training will include:
    1) Methods that may be used to detect a release of a hazardous chemical(s) in the workplace;
    2) Physical and health hazards associated with chemicals;
    3) Protective measures to be taken;
    4) Safe work practices, emergency responses, spill prevention, and use of personnel protective equipment;
    5) Information on the Hazard Communication Standard including:
        a) Labeling and warning systems,
        b) Explanation of Safety Data Sheets

5. Personnel Protective Equipment (PPE): Required PPE is available from the Project Superintendent. Any employee found in violation of PPE requirements will be subject to disciplinary actions up to and including discharge.

6. Emergency Responses

    A. Any incident of over-exposure or spill of a hazardous chemical/substance must be reported to the Project Superintendent at once.

    B. The foremen or the immediate supervisor will be responsible for insuring that proper emergency response actions are taken in leak/spill situations.

    C. Spill kits must be readily available at or near chemical storage areas.

7. Hazards of Non-Routine Tasks

    A. Supervisors will inform employees of any special tasks that may arise which would involve possible exposure to hazardous chemicals.

    B. Review of safe work procedures and use of required PPE will be conducted prior to the start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

8. Informing Other Employers (Multi-Employer Jobsites)

    A. Other on-site employers are required to adhere to the provisions of the Hazard Communication Standard.
    B. Information on hazardous chemicals known to be present will be exchanged with other employers. Employers will be responsible for providing necessary information to their employees.
    C. Other on-site employers will be provided a copy of Calhoun's Hazard Communication Program.

D. Posting - Calhoun has posted information for employees at this job site on the Hazard Communication Standard. This information can be found at the job site office trailer.

HAZARDOUS CHEMICAL INVENTORY

1. Currently, the scope of the Hazard Communication Standard establishes no exposure limits, so any quantity of chemical in use may trigger the standard's requirements.

2. OSHA's definition of a Hazardous Chemical is any chemical that a recognized authority has labeled as hazardous and any chemical that produces cellular effects of some kind and any potential or possible exposure in normal use or foreseeable emergency.

3. In order to ensure compliance, employers will need to begin and maintain an inventory of all chemicals used, stored or ordered for each job site.

    A. Obtaining Needed Information: Chemicals on the job site must be located and the following information copied from the label on the container and put on the chemical information sheet:
        1) Name of the product
        2) Chemical name(s)
        3) Manufacturer's name and address
        4) Container size
        5) Container count (how many)
        6) Location
        7) Product use
        8) Trades involved
        9) ID# (if on label)
        10) Any product warnings
    B. Establish a Chemical Inventory: Using the chemical information sheets, locate each chemical and fill in the information indicated. The chemical information sheets are utilized to develop a chemical inventory list. The chemical inventory sheet has a classification column. There are only five chemical classifications: Fire Hazard, Sudden Release or Pressure Hazard, Reactive Hazard, Immediate Health Hazard (acute), and Delayed Health Hazard (chronic). While the inventory is being conducted, any containers found unlabeled should be properly discarded or re-labeled.
    C. Compilation of Job Site and Company Wide Information: By collecting the chemical information sheets for each work site, a chemical inventory sheet can be compiled for each project and/or for Calhoun as a whole.

EXEMPTIONS TO HAZARDOUS CHEMICAL

1. The HCS does exempt some chemicals from coverage.

2. Chemicals Exempted from Labeling Include:

    A. Pesticides (if covered by other Federal Regulations).
    B. Food, food additives, color additives, drugs, cosmetic or medical and veterinary supplies.
    C. Distilled spirits or malt beverages for non-industrial use.
    D. Consumer products (covered by other regulations).

3. Exemptions from the entire section pertaining to construction are:

    A. Hazardous waste, if subject to EPA
    B. Tobacco or tobacco products
    C. Wood or wood products (but, probably not chemicals used to treat wood and treated lumber or turpentine)
    D. Articles - A manufactured item which does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use. This exempts from consideration manufactured items that are in stable condition and are used without modifications during the construction process.

(The problem comes in the reality that most everything in construction must be cut, fitted or otherwise modified.)

HOW TO READ AND INTERPRET LABELS

Chemical warning labels may include this information:

Identity of the Chemical	**Signal Words**	**Hazard Statement**
A CODE NUMBER, CHEMICAL OR TRADE NAME	TELLING YOU THE DEGREE OF HAZARD: "CAUTION!" -OR- "WARNING!" -OR- "DANGER!"	TELLING YOU THE MAJOR HAZARDS YOU FACE: "EXTREMELY FLAMMABLE" OR "HARMFUL IF INHALED"
Precautions	**Instructions in Case of Exposure**	**Antidotes**
WHAT TO DO TO AVOID INJURY OR ILLNESS: "AVOID BREATHING" OR "WASH THOROUGHLY AFTER HANDLING"	FIRST-AID INFORMATION TELLING YOU WHAT TO DO IF YOU ARE EXPOSED TO A CHEMICAL	MEASURES THAT CAN BE USED BY A MEDICAL LAY-PERSON TO COUNTERACT THE EFFECTS OF CHEMICAL EXPOSURE
Fire, Spill, Leak Instructions	**Notes to Physician**	**Handling & Storage Instructions**
HOW TO PUT OUT OR CONTROL FIRES, CLEAN UP LEAKS OR SPILLS	INFORMATION FOR PHYSICIANS IN CASE SOMEONE IS EXPOSED TO A CHEMICAL	SPECIAL PROCEDURES FOR HANDLING AND STORING CHEMICAL CONTAINERS

Section 30: Hearing Protection

PURPOSE

The purpose of this program is to set forth the minimum requirements which are to be followed when employees of Calhoun are occupationally exposed to noise. This program will apply when administrative or engineering controls fail to reduce noise levels below 85 dba on an 8 hour time weighted average (TWA).

PROGRAM ADMINISTRATION

Safety Director is responsible for the administration of this program.

MONITORING

Where host employer monitoring has been done, the results of that monitoring will be used. If host monitoring has not been done, Calhoun will perform the monitoring. The monitoring results will be used to identify employees for inclusion in the hearing conservation program and to select proper hearing protection for the specific noise environment.

HEARING PROTECTION

Where an employee would be exposed to noise in excess of 85 dba, Calhoun will provide hearing protection which will reduce the noise to an acceptable level. This hearing protection will be worn while employees are working in the high noise area and will be replaced as needed. Supervisory and safety personnel will make periodic inspections to ensure that hearing protection is being worn.

TRAINING

Employees who will be exposed to action level noise will receive annual training in:

1. The effects of noise on hearing.

2. The purpose, advantages, disadvantages and attenuation of various types of hearing protection, and instruction on selection, fitting, use and care.

3. The purpose of audiometric testing and the procedures involved.

4. Training will be updated with changes in PPE or work processes. Copies of the noise exposure procedures will be posted in the workplace and be made available to employees.

ENGINEERING CONTROLS

After it is determined that noise exposure above 85 dB(A) on an 8-hour, time-weighted average basis are present, engineering controls should be evaluated and implemented to reduce the noise exposure before administrative controls are initiated. Some examples of engineering controls include:

1. Noise reducing baffles
2. Compartmentalization
3. Installing noise reducing gears
4. Installing rubber pads under machinery

ADMINISTRATIVE CONTROLS

1. After engineering controls are evaluated for effectiveness or feasibility, administrative controls should be considered to reduce noise exposure. Administrative controls include restricting exposure time or using personal protective equipment (PPE).

2. PPE, such as earplugs or muffs, may be used to reduce the amount of noise exposure. Each plug or muff has a noise reduction factor (NR) as evaluated by ANSI Standards (S3.19 – 1974 or Z24.22 – 1957). For example, if a work area has an ambient noise exposure of 96dB(A), the hearing protectors should be rated 6NR or better to be effective.

3. According to OSHA Regulations, each location with noise exposure of 85 to 89dB(A) will provide hearing protectors for the employee's optional use. Noise exposures at 90dB(A) or above require the mandatory use of hearing protection. Further, OSHA requires that a variety of hearing protectors be available for employees to choose.

TYPES OF HEARING PROTECTORS

Hearing protection devices are the first line of defense against noise in environments where engineering controls have not reduced employee exposure to safe levels. Hearing protective devices can prevent significant hearing loss, but only if they are used properly.

1. The most popular hearing protection devices are earplugs, which are inserted into the ear canal to provide a seal against the canal walls.

2. Earmuffs enclose the entire external ears inside rigid cups. The inside of the muff cup is lined with acoustic foam and the perimeter of the cup is fitted with a cushion that seals against the head around the ear by the force of the headband.

USE OF HEARING PROTECTORS

Management, supervision, and employees shall properly wear the prescribed hearing protector while working in or traveling through any section of a location that is designated a high noise area (excluding offices, break rooms, and rest facilities). The following rules will be enforced:

1. Personal electronics, such as MP3 players, phones, tablets, etc., will not be permitted in any operation area of company property.

2. Hearing protectors and replacements will be provided free of charge.

3. Hearing protectors will be properly worn at all times, except in offices, break rooms, rest facilities.
4. Pre-formed earplugs and earmuffs should be washed periodically and stored in a clean area, and foam inserts should be discarded after each use. It is important to wash hands before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear that may increase your risk of developing infections.

HEARING CONSERVATION PROGRAM

1. When an employee's exposure equals or exceeds the 8 hour time weighted average of 85 dba, he /she will be included in the hearing conservation program at no cost to the employee. Within six months of the employee's first exposure at or above the action level (one year in the case of a mobile test van), audiometric testing will be done to establish a baseline audiogram. At least 14 hours prior to this test, the employee will not be exposed to workplace noise. If a mobile test van is used, the employee shall wear hearing protection after a period of six months until the audiogram is completed.

2. Audiometric testing will be done at least annually thereafter for each employee exposed to action level noise. This audiogram will be compared to the baseline audiogram to determine validity and if a standard threshold shift has occurred. If a standard threshold shift has occurred, the employee will be informed in writing within 21 days. At that time, use of hearing protection will be re-evaluated or re-fitted and if necessary, medical evaluation may be required.

RECORDKEEPING

1. Calhoun will maintain an accurate record of all employee exposure measurements and audiometric testing results. These records will reflect:

    A. The name and job classification of the employee
    B. The date of the audiogram
    C. The name of the examiner
    D. The date of the last calibration of the audiometer
    E. The employee's most recent noise exposure evaluation
    F. The accurate records of background sound pressure levels in the test room

2. These records will be retained for the following periods:

    A. Noise exposure measurements – two years
    B. Audiometric test records – duration of employment

3. All records will be provided on request to employees, former employees, employee representatives, and the Assistant Secretary.

Section 31: Hole Covers

PURPOSE

This section covers the basic requirements as required by Calhoun. If additional information is needed, Subpart M of the OSHA Standards should be reviewed.

DEFINITIONS

1. ***Hole*** - means a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface.

2. ***Opening*** - means a gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which employees can fall to a lower level.

HOLES

1. Each employee on walking/working surfaces shall be protected from falling through holes or tripping in / stepping in or through holes by personal fall arrest systems, covers, or guardrail systems erected around such holes.

2. Each employee on a walking/working surface shall be protected from objects falling through holes by covers.

COVERS

Covers for holes in floors, roofs, and other walking/working surfaces shall meet the following requirements:

1. Covers located in roadways and vehicular aisles shall be capable of supporting, without failure, at least twice the maximum axle load of the largest vehicle expected to cross over the covers.
2. All other covers shall be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.
3. All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.
4. All covers shall be color-coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

Section 32: Housekeeping

All trash, scrap material, and waste material will be considered before work begins. The project manager, project superintendent, and safety representative will coordinate the considerations into the site-logistic plan. This information must be covered in the site New Employee Orientation.

POLICY

1. Scrap material will be removed from the work area each day.
2. Construction materials and debris will not be allowed to block or obstruct any aisle way, walkway, or road.
3. All construction material will be staged, stored, or stacked in a neat and secure manner.
4. Rolling stock will be secured from displacement.
5. Nails will be removed or bent over before stacking or discarding lumber.
6. Project supervision will ensure there is an adequate amount of trash receptacles on the project.
7. The disposal of hazardous and controlled materials will be coordinated by the Project Manager and the Safety Director.
8. Employees are not to drop or throw materials from one level to another without controlling the material with a chute, rope, or other means.
9. Tools and equipment, when not in use, will be returned to the proper storage area (gang box, supply trailer, etc.).
10. Tools, equipment, scrap, debris, and other combustible materials will not be stored in electrical rooms.
11. The areas in front of and surrounding electrical installations such as switchgear, temporary and permanent power panels, and transformers shall be kept clear. A minimum of 3 ft. of workspace is required in front of these units.
12. Any scrap material that can be recycled will be recycled.

5S Program – Best Practices

Purpose: The Calhoun 5S program has been put in place to drive consistency across all projects and set a "best in class" standard to help achieve Zero Injury by eliminating slips/trips/falls from poor housekeeping/organization. The goal of the program is to reduce slips/trips/falls by 20%.

Implementation: the established frontend language is the MINIMUM requirements for each project. However, they should be reviewed for each project to see if they need to be tailored or enhanced to make project specific. These changes should be reviewed with the Safety Professionals.

The following principles must be adhered to in order to make the program successful:

1) The entire team must buy in and be willing to hold the project team and subcontractors accountable. It is particularly important that the site leaders support their superintendents/foreman and enforce back charges if necessary to hold subs accountable.
2) It must be enforced from the first day on the project and through the completion.

If the team stays focused on these items and does not waver on enforcement, the project will be safer and with increased productivity which will dramatically improve the results in the end.

Best Practices:

1) **Sort:** Just-in time deliveries / Long-term storage
   a. Challenge subs to the quantity of materials they are bringing on site and ensuring it will be installed within a one-week period.
   b. If the team notices materials sitting around longer than a week, Discuss material lead times with the contractor to determine if the contractor can reduce total materials or if we need to consider a long-term storage area.
   c. Long-Term storage of materials must be coordinated with the site CM team.

2) **Straighten:** Organized Material and Equipment Storage
   a. Exterior: below is a list of best practices of places materials and equipment cannot be stored:
      i. Materials should not be stored within 15' of the building so there is clear access all the way around the building. On tight project sights, pick one elevation for storage.
      ii. Nothing should ever be placed over or around new or existing manholes so they remain accessible. This also applies to generators/transformers/electrical switches.
      iii. No materials or equipment should be placed within the tree protection limits or drip line to avoid damage to the trees (which can be costly)
   b. Interior: below are some best practices for inside a project.
      i. Create a drawing at the beginning on in the project with designated rooms/areas for storage of equipment and gang boxes. Projects with limited laydown areas may need to update/modify these plans on a routine basis as the project progresses (reference Exhibit A).

ii. All materials that are brought on site need to be stored on carts/racks/pallets or dunnage so they can be easily moved. Ensure materials on pallets and dunnage are out of walk paths. Challenge subs to use creative equipment to keep material mobile. Below are some suggestions for common items and reference Exhibit B for some examples:

1. Pipe, conduits, spiral duct, and studs should utilize pipe racks/cart
2. Electricians should utilize storage containers on wheels for
3. Long boxes with ceiling grid, handrails should be placed on furniture dollies.

iii. Plan the storage of materials and equipment so they avoid the following:

1. Telecom and electrical closets, restrooms should not be used as material storage areas due to the amount of work that is required in these locations.
2. Material should be stored a minimum of 4' from walls so there is clear access to the walls for the work.

3) **Shine:** Daily Cleanup

a. Exterior:

i. Site utility contractors shall dispose of spoil piles daily or be taken to designated areas.

ii. Any egress/access pathways disturbed need to be regraded and put back to original condition.

b. Interior:

i. Enforcement of daily cleanup. If subs are found not cleaning up their materials or not emptying their trash carts, put the issues into Calhoun's quality/safety control software (Procore Observations) and force the subs to close out the issue.

ii. It is Calhoun's responsibility that there are effective means (i.e., buck hoist / elevators / landing areas) to get dump carts emptied. It is also critical that there is clear access the dumpster and capacity in the dumpster to receive the debris. This may seem obvious but often is the root cause of poor housekeeping.

1. The plan for trash disposal should be clearly identified on the site logistics map and updated through the course of construction. It is important that as site conditions / progress of the project progresses, that the logistics for the access to the dumpster and means of access are updated. This should be updated on the site logistics map and communicated clearly to the job.

iii. Each cut station (i.e., studs for framing, threading machines for pipe fitters, blocking) shall have a cart/trash receptacle under what they are cutting so all the debris falls into the container. Also, a separate cart should be at the station for all scraps so they never hit the floor.

iv. Cord management:

1. Pre-plan routes of temp lighting and power so they are not in the walls. If they need to penetrate the walls, utilize permanent sleeves so wall inspections are not held up.
2. Use S-hooks as an easy means to suspend cords and find common paths to consolidate cords.

4) **Standardize:** Color Coded Delivery Process

a. Create a logistics map outlining each contractor's material storage areas. Each designated area identified on the map should be identified with the contractor's name. Post these maps in the storage areas, in the break areas, and in the office trailers.
Refer to Exhibit A for reference.

5) **Sustain:** Composite Cleanup Crews

a. When daily cleanup is enforced, the composite clean-up crew should only be polishing the job and hitting areas that subs aren't necessarily working in (i.e., stairwells/access and egress paths).
b. Determine what the appropriate ratio of workers for a composite crew is (1 for every 5 or 10) based on your job.
c. It is critical that the composite cleanup crew is led by someone with authority to make decisions and hold subcontractors accountable (lead person/foreman). It is also important they are performed on a routine schedule (i.e., every Friday stating at 7 AM) so it is not a surprise to the subs and they can plan accordingly.
d. One successful model is to have the superintendent of the job lead this effort and force the subcontractors foreman/superintendents actually perform the cleanup.
e. Discuss the composite cleanup crew in your weekly subcontractor meetings and have a plan in place prior to the day it occurs.

i. Identify how many participants are required from each sub in this meeting so they plan accordingly.
ii. Announce at the morning huddle where the composite crew will begin.
iii. Remind them they need to bring the required equipment (i.e., brooms/shovels/dump carts)
iv. Have a sign-in sheet at the beginning and sign-out at the end so we can track who participated.

f. Attendance at composite clean-up may become an issue so it is critical that the site leaders follow through on issuing back charges if necessary. The $250/hour amount is substantial enough that it will impact the company and force them to participate.

g. Ultimately, the composite cleanup should not last the full day and may not be required if daily cleanup is strictly enforced. Use this as an incentive to the subs and a reward for great performance. Keep in mind, we are "buying" these resources so if they don't have to incur the costs, it helps their bottom line.

EXHIBIT A – Laydown Storage Map

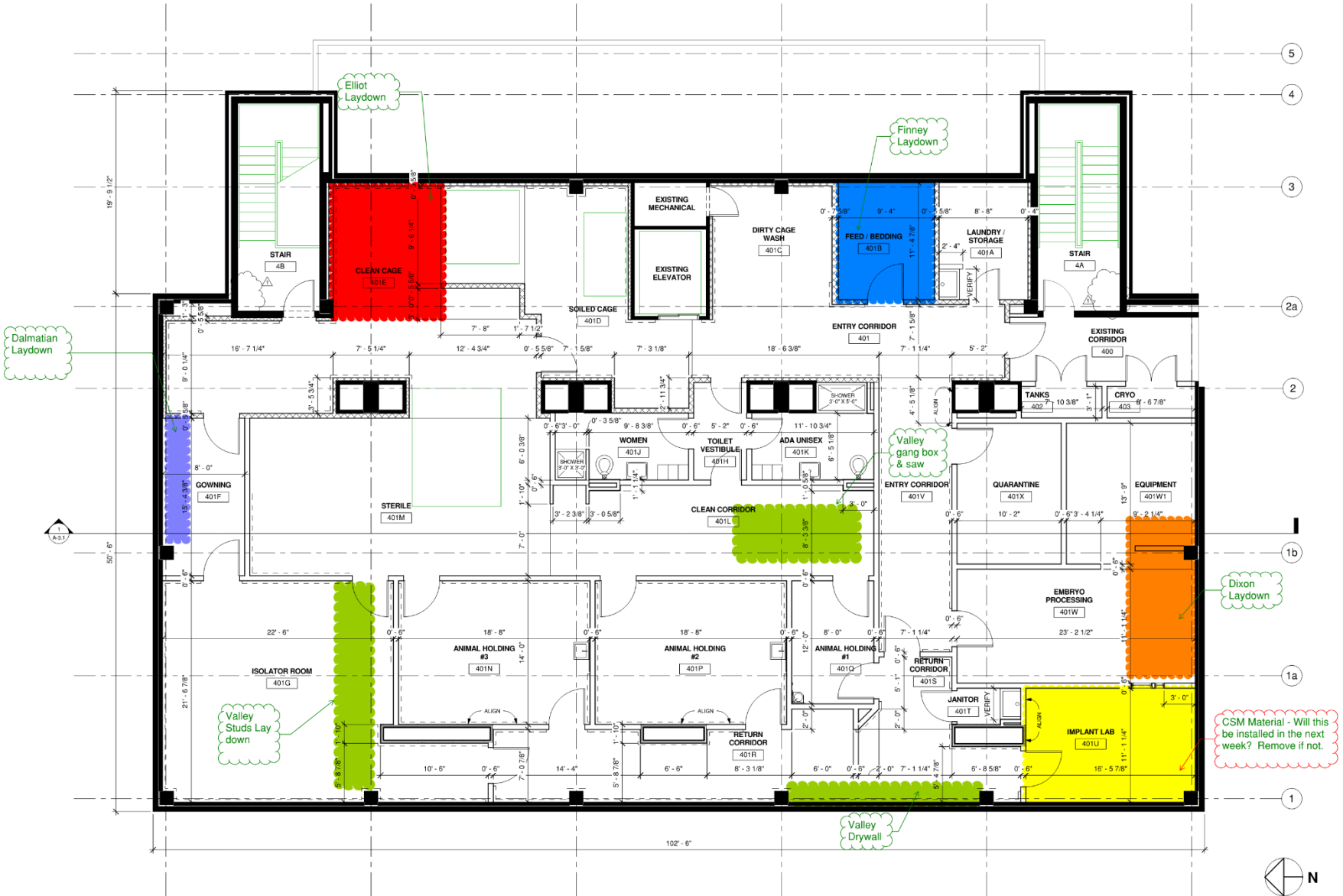
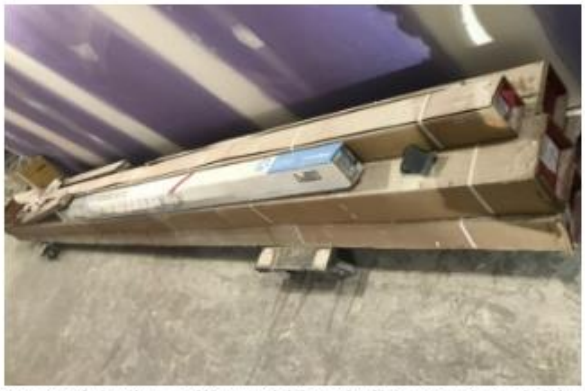


EXHIBIT B

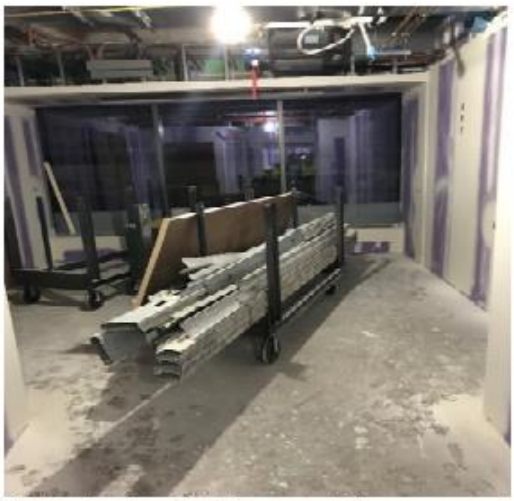
Exterior materials stored on dunnage

Exterior materials organized and properly stored

Large bins can be used for duct fittings



Long materials (i.e. ceiling grid/handrails) stored on dollies



Pipe racks for miscellaneous studs

Pipe fitting stored in carts on wheels

RESERVED

Section 34: Ladders & Stairs

POLICY

Each Contractor working for Calhoun Construction Services is required to comply with the following requirements when using, inspecting, or installing ladders and stairways.

GENERAL REQUIREMENTS

1. Whenever there is a change of elevation of 19 inches or more workers must use a ladder, stairway, runway, personnel hoist, or embankment to gain access.

2. Access areas between elevations must be kept clear to allow the free passage of workers.

3. Two or more separate points of access must be provided when there are 25 or more workers in an area.

4. Workers shall be trained prior to use of a ladder on the following items listed under portable ladders. Retraining shall be provided for each employee as necessary so that the employee maintains the understanding and knowledge acquired through compliance with this section.

5. Conductive side rail ladders are not acceptable on Calhoun jobsites unless approved by the Calhoun Site Leadership Team.

PORTABLE LADDER REQUIREMENTS

1. All portable ladders used on a Calhoun Managed Construction site must meet OSHA/ANSI specifications.

2. Each portable ladder will be capable of supporting four times the intended load without failing.

3. Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced when the ladder is in position for use.

4. Rungs, cleats, and steps of portable ladders shall be spaced not less than 10 inches apart, nor more than 14 inches apart, as measured between the centerline of the rungs, cleats, and steps.

5. The minimum clear distance between side rails of portable ladders shall be 11 ½ inches.

6. The rungs and steps of portable ladders shall be corrugated, knurled, coated with skid-resistant material, or otherwise treated to minimize slipping.

7. A metal spreader or locking device shall be provided on each stepladder to hold the front and back sections in an open position when the ladder is being used.

8. Ladder components shall be surfaced so as to prevent injury to an employee from punctures or lacerations and to prevent snagging of clothing.

9. Wood ladders shall not be painted or covered with any material that would hinder inspection of the ladder.

10. A minimum distance of 7 inches must be kept between the back of the rungs and any obstruction behind the ladder.

11. When two or more ladders are used to gain access to an elevated work area, the ladders shall be offset with a platform or landing between the ladders.

LADDER USE

1. When ladders are used to gain access to an upper landing, the side rails of the ladder must extend 3 feet above the landing surface; or, when such an extension is not possible due to ladder length, a grasping device, such as a grab rail or post shall be provided and the ladder is to be secured from tipping.

2. Ladders shall be maintained free of oil, grease, mud, and any other slipping hazards.

3. Ladders shall not be loaded in excess of their capacity.

4. Ladders shall be used for the purpose for which they were designed. This means that a stepladder must be opened and used in the "A" frame position. Do not lean a stepladder against a wall and use it like an extension ladder.

5. Straight or extension ladders must be used at an angle of 4 to 1. For every 4 feet vertical you move the base of the ladder 1 foot horizontal.

6. Ladders shall be used only on stable and level surfaces unless secured to prevent displacement.

7. Ladders shall not be used on slippery surfaces unless secured or provided with slip-resistant feet to prevent displacement.

8. Ladders placed in high traffic areas such as doorways, hallways, stairwell landings, and driveways must be protected from displacement. Barricade the area to divert the traffic is the first option. Secondly, place warning signs and secure the ladder from displacement.

9. The areas at the top and bottom of the ladder shall be kept clear of debris and other hazardous materials.

10. The top of a straight or extension ladder must have both side rails making equal contact to ensure the ladder is stable.

11. Ladders shall not be moved, shifted, or extended while occupied.

12. The top cap or top step of a stepladder shall not be used as a step.

13. Cross-bracing on the rear section of a step-ladder shall not be used for climbing unless it is designed for that purpose.

14. Only ladders with non-conductive side rails shall be used while working near energized electrical parts.

15. When ascending or descending a ladder, the employee shall face the ladder.

16. The employee must maintain 3 points of contact at all times while ascending or descending a ladder.

17. Employees are not to carry any object or load that could cause them to lose their balance and fall while working from a ladder or progressing up and/or down the ladder.

18. Employees shall not over-reach while working from the ladder. The center of gravity of the employee's body must stay between the side rails to prevent displacement of the ladder.

19. When ladders are used in close proximity of areas such as elevator shafts, building perimeters, roof edges, and holes that create a fall hazard to another level, workers are required to have a fall protection system in place to prevent a fall to the lower level.

INSPECTION

1. Each ladder shall be inspected periodically by a Competent Person.

2. Each worker will visually inspect the ladder before he/she uses it.

3. Any ladder found to be defective shall be removed from service by means of:
    A. Tagging- "Do Not Use" or "Out of Service"
    B. Destroying the ladder

4. Items to look for:
    A. Split or broken side rails
    B. Bent or broken rungs
    C. Broken or missing rivets
        1) Broken or missing spreader device
        2) Broken or missing cross-bracing
        3) Missing safety feet
        4) Splits or cracks in the top cap
        5) Evidence of weakening of any part of the ladder due to exposure to chemicals, heat, blunt force, etc.

1. Stairways:

    A. Stairways that will not be a permanent part of the structure on which construction work is being performed shall have landings of not less than 30 inches in the direction of travel and extend at least 22 inches in width at every 12 feet or less of vertical rise.
    B. Stairs shall be installed between 30 and 50 degrees from horizontal.
    C. Riser height and tread depth shall be uniform within ¼ inch.
    D. Where doors or gates open directly on a stairway, a platform shall be provided, and the platform shall extend a minimum of 20 inches past the swing of the door or the width of the platform shall be no less than 20 inches.
    E. All parts of the stairway shall be free of hazardous projections such as protruding nails.
    F. Slippery conditions on stairways are to be eliminated before the employees are allowed to use them.
    G. Stairways that have open metal pan treads and landings are not to be used until they have been filled with wood, concrete, or other suitable materials.

2. Stair Rails and Handrails:

    A. Stairways having four or more risers or rising more than 30 inches, whichever is less shall be equipped with:
        1) At least one handrail; and
        2) One stair rail system along each unprotected side or edge
    B. The height of stair rails shall be as follows:

1) Stair rails shall be not less than 36 inches from the upper surface of the tread to the top of the stair rail.
2) Mid-rails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members, shall be provided between the toprail and the steps.
3) Mid-rails, when used, shall be placed midway between the top edge of the stair rail and the stairway steps.
4) Screens or mesh, when used, shall extend from the toprail to the steps, and along the entire opening between the stair rail posts.

C. When intermediate vertical members, such as balusters, are used between posts, they shall be no more than 19 inches apart.
D. Handrails and top-rails shall be able to withstand, without failure, a force of 200 lbs.
E. Stair rail systems and handrails shall be so surfaced as to prevent injury to employees from punctures or lacerations, and to prevent snagging of clothing.
F. Handrails shall have a minimum of 3 inches of clearance between the handrail and the wall or other obstruction to allow adequate handhold for employees.
G. Unprotected sides and edges of stairway landings shall have guardrail systems that meet or exceed the criteria established in the Fall Protection section of this manual and OSHA 1926 Sub Part M.

TRAINING REQUIREMENTS

1. The nature of fall hazards in the work area;

2. The correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used;

3. The proper construction, use, placement, and care in handling of all stairways and ladders;

4. The maximum intended load-carrying capacities of ladders; and

5. The requirements of this section.

Workers shall be trained prior to use of a ladder. Retraining shall be provided for each worker as necessary so that the worker maintains the understanding and knowledge acquired through compliance with this section.

Section 35: Lead Exposure Program

POLICY

The policy of Calhoun is to protect its employees from being exposed to lead and lead components while working for Calhoun. If materials are suspected of containing lead, Calhoun employees will not disturb the materials until after an exposure assessment has been completed. Exposure to lead may occur in several different occupations in the construction industry. Construction and construction related activities where lead or lead compounds may be encountered include:

- Demolition or salvage of structures where lead is present.
- During removal or encapsulation of lead-containing materials.
- During installation of products containing lead.
- During transportation, disposal, storage or containment of lead or materials containing lead on construction sites.
- Maintenance operations associated with construction activities.

PERMISSIBLE EXPOSURE LIMITS

The Occupational Safety and Health Administration (OSHA) has established limits on lead exposure for construction activities. The permissible exposure limit (PEL) is fifty (50) micrograms of lead per cubic meter of air, averaged over an 8-hour workday. This is the highest level of lead in the air that employees will be permissibly exposed to over an 8-hour workday. Since this is an 8-hour average, employees may for short durations be exposed to higher levels as long as the average exposure over the 8-hour workday has not been exceeded.

EXPOSURE ASSESSMENT

If lead is suspected to be present on a job site, an initial determination will be made to determine if any employee will be exposed to lead in excess of the action level. The action level is defined as thirty (30) micrograms of lead per cubic meter averaged over an 8-hour workday.

If this initial determination shows that a reasonable possibility exists that an employee may be exposed, without regard to respirators, over the action level, Calhoun will set up a monitoring program to determine the exposure level. See Appendix A – ***Procedure for Exposure Monitoring***, for a description of exposure monitoring requirements.

Employees who are exposed to lead during the assessment period will be notified IN WRITING within five (5) working days of the air monitoring results. If the exposure exceeds the PEL, a description of the corrective action that has been or will be taken to reduce the exposure will be provided. Medical surveillance is required for any employee exposed to lead.

METHODS OF COMPLIANCE

1. Compliance Program: Calhoun will establish and implement a written compliance program prior to commencement of any job where employee exposure is anticipated to reach the PEL. A typical program is shown in Appendix B, Jobsite Compliance Program. A copy of the written program will be made available to affected employees and their designated representatives upon request. The written program will be reviewed and updated at least every six (6) months.

2. Engineering and Work Practice Controls: In order to reduce and maintain employee exposure to lead to or below the permissible exposure limit on the job site, Calhoun will implement engineering and work practice controls where feasible. Where above controls are not sufficient to reduce the employee exposure, these controls shall be supplemented by use of respiratory protection.

3. Administrative Controls: Job rotation schedules may be implemented by Calhoun to keep employees from lead exposure above the PEL. Employees involved in job rotation shall be identified by names and a record of duration and exposure levels at each job or work station shall be maintained. Appropriate signage indicating areas where lead is present will be posted.

4. Respiratory Protection

    A. Calhoun shall provide, at no cost to the employee, a respirator when required. Respirators shall be used when
        1) Employee's exposure to lead exceeds PEL.
        2) Engineering controls and work practices are not sufficient to reduce exposure to or be below PEL.
        3) An employee requests a respirator.
        4) Exposure assessments are being conducted on tasks listed in Appendix A.
    B. Respirator selection shall be conducted in accordance with Calhoun's written respirator protection program.

5. Protective Work Clothing and Equipment

    A. Calhoun shall provide, at no cost to the employee, the necessary protective clothing, if the employee is required to work in areas where lead exposure exceeds the PEL (without regard to the use of respirators) or where employees are exposed to lead compounds which may cause skin or eye irritation (i.e. lead arsenate, lead azide). Appropriate protective clothing and equipment can include the following
        1) Coveralls or similar full-body work clothing.
        2) Gloves, hats, shoes or disposable shoe coverlets.

3) Face shields or vented goggles.

B. Calhoun will provide for the cleaning, laundering and disposal of protective clothing and equipment. Protective clothing is to be removed only in change areas provided for that purpose. Contaminated protective clothing to be cleaned, laundered or disposed of will be placed in containers in the change area. The containers shall be labeled as follows:

Caution: Clothing contaminated with lead. Do not remove dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state or federal regulations.

Procedures to be followed in donning and removing protective work clothing are covered in Appendix C, Training.

HOUSEKEEPING

1. Vacuuming shall be used as the preferred method for maintaining all surfaces as free as practicable of lead accumulation in work areas exposed to lead or lead compounds.

2. Vacuums used for cleanup shall be equipped with high-efficiency particulate air (HEPA) filters. Vacuum contents shall be emptied into sealable containers in a manner that minimizes the re-entry of lead into the workplace.

HYGIENE FACILITIES AND PRACTICES

1. Washing Facilities: Calhoun shall ensure that, as a minimum, hand washing facilities are available to employees who may be exposed to lead. Employees shall be instructed to wash their hands and face prior to eating, drinking, smoking or applying cosmetics and after the work shift. Where feasible, shower facilities may be provided in areas where exposure to lead exceeds the PEL.

2. Change Areas: Clean change areas equipped with separate storage facilities for protective work clothing and equipment and street clothes will be provided for employees where airborne exposure to lead is above the PEL. Employees will not be allowed to leave the workplace wearing protective clothing or equipment worn during the work shift.

3. Eating Facilities: Calhoun will provide lunchroom facilities or eating areas that are as free as practicable from lead contamination and which are readily accessible to the employees. Employees shall be instructed to wash their hands and face prior to eating. Lunchroom facilities or eating areas shall not be entered wearing protective clothing unless surface lead dust has been removed by vacuuming.

SIGNS

1. Calhoun will post the following warning sign in work areas where an employee exposure to lead is above the PEL:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

MEDICAL SURVEILLANCE

1. Initial Medical Surveillance

    A. Calhoun will provide initial medical surveillance to employees occupationally exposed at any one day to lead at or above the action level (30 micrograms / cubic meter of air averaged over an 8-hour day). The initial medical surveillance shall consist of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels.

2. Full Medical Surveillance

    A. Calhoun will make available full medical surveillance to all employees who are or may be exposed to lead in excess of the action level for more than 30 days a year and whose blood lead level exceeds 40 micrograms/ deciliter.
    B. The blood lead level determination for employees exposed to lead, as stated above, shall be conducted at least every two (2) months for the first six (6) months of exposure and every six (6) months thereafter.
    C. If blood levels are at or greater than 40 micrograms/deciliter, then blood sampling at least every two (2) months until two (2) consecutive analyses show blood levels below 40 ug/dl.
    D. If the employee is removed from exposure to lead, then blood sampling at least monthly during removal period.

3. Medical Examination & Consultation: Calhoun will make available medical examination and consultation to employees according to the following schedule:

    A. At least annually for any employee who had a blood lead level at or above 40 ug/dl.
    B. When an employee notices signs or symptoms associated with lead intoxication.
    C. When employee desires medical advice on ability to have a healthy child.
    D. When employee demonstrates difficulty in breathing during respirator fit test.

4. Medical surveillance will be provided by Calhoun at no cost to the employee and will be performed by or under the supervision of a licensed physician at a reasonable time and place.

5. Calhoun shall establish and maintain an accurate record for each employee subject to medical surveillance. The record shall include the following:

    A. The name, social security number and description of the employee duties.
    B. A copy of the physician's written opinion.
    C. Results of any airborne exposure monitoring done on or for the employee.
    D. Any employee medical complaints related to exposure to lead.
    E. In addition, Calhoun will request that the examining physician keeps the following medical records:
        1) Copy of the medical examination results.
        2) Description of the laboratory procedures and any guidelines used to interpret the test results.
        3) Copy of the biological monitoring results.

6. If an employee is removed from current exposure to lead, Calhoun shall establish and maintain the following record(s):

    A. Name and social security number of the employee.
    B. The date that the employee was removed and the date on which the employee was returned to former job status.
    C. A brief explanation on how removal was accomplished.
    D. A statement whether the removal was for reason of elevated blood lead level.

EMPLOYEE INFORMATION AND TRAINING

1. Calhoun will train employees in regard to lead at the following times:

    A. Initially
    B. Annually
    C. As employee's work environment changes

2. See Appendix C.

DISPOSAL OF LEAD CONTAINING MATERIALS AND WASTE

Calhoun shall coordinate with local and/or state authorities to determine the proper procedures for disposal of lead containing materials. All lead waste shall be stored in properly marked sealed containers in accordance with local jurisdiction requirements while awaiting disposal.

APPENDIX A
Exposure Monitoring Requirements

1. Monitoring for the initial determination by Calhoun may be limited to a representative sample of the employees who are exposed to the greatest airborne concentration of lead in the workplace. Employee exposure is that exposure which would occur if the employee were not using a respirator.

2. Where Calhoun has available objective data which demonstrates conclusively that no employee will be exposed to lead in excess of the action level, Calhoun may use this data in lieu of actual monitoring of employee exposure. Where objective data is used, Calhoun will establish and maintain an accurate record documenting the relevancy of the data in assessing exposure levels for the current job conditions.

3. Objective data may be compiled from various sources, i.e. insurance companies, trade associations, information from suppliers or exposure data collected from similar operations. Results from appropriate air sampling conducted by Calhoun in the past 12 months may be used provided they are applicable to the same employee tasks and exposure conditions.

4. The standard lists certain tasks which may result in exposure to lead in excess of the PEL and in some cases exposure in excess of 50 times the PEL. Employees of Calhoun performing these tasks will be provided with appropriate respiratory protection, protective clothing and personal Protective equipment (PPE), change area, hand washing facilities, biological monitoring and training <u>until such time that an exposure assessment is conducted which demonstrates that the exposure level is below the PEL.</u> Following are the assumed exposure and the protective respirator requirements for the tasks that fall into the category noted above:

    A. Task
        1) Where lead containing coatings or paint is present on structures when performing abrasive blasting, welding, cutting and torch burning.
    B. Assumed Exposure
        1) In excess of 2500 micrograms/cubic meter (50x PEL).
    C. Respirator Requirements
        1) One-half mask supplied air respirator operated in pressure demand or other positive pressure mode.

    For the above listed tasks, Calhoun will treat the employee and provide the specified respiratory items, as if the employee were exposed to lead in excess of 2,500 ug/m^3 until Calhoun performs an exposure assessment and documents that the employee exposure is below 2,500 ug/m^3. The employer may then provide the employee with an appropriate respirator for the lower exposure.

5. Calhoun will establish and maintain an accurate record of all monitoring and other data used in conducting employee exposure. The following information shall be included in the record:

    A. The date(s), number, duration, location and results of each sample taken to include a description of the sampling procedure.
    B. The type of respiratory protection used, if any.
    C. The name, social security number and job classification of the employee monitored and of all other employees whose exposure the measure is intended to represent.
    D. The environmental variables that could affect the measurement of the employee exposure.
    E. The exposure monitoring records will be retained for at least thirty (30) years.

6. Calhoun will preserve and maintain records of biological monitoring and medical examination results for the duration of employee employment plus thirty (30) years. If the duration of employment is less than one (1) year, the records will be provided to the employee upon termination of employment.

7. Calhoun will, upon proper request from the employee of his/her authorized representative provide environmental monitoring, blood lead level (BLL) monitoring and medical removal records for review or copying. The employee union representative may also have access to these records.

    Medical records, other than BLL's, will be provided upon proper request to the employee or any other person specifically designated by the employee or the employee's physician. Personal medical records will not be available to the employee's union representative unless specifically authorized by the employee.

[3] A high efficiency particulate filter (HEPA) means a filter that is 99.97 percent efficient against particles of 0.3 micron size or larger.

APPENDIX B
Compliance Program for Lead Exposure

Job Location / Building Number

1. Describe the activity to be performed where lead emission is anticipated.

2. Describe the equipment and materials that will be used in performing the work.

3. Describe the safeguards and engineering controls that will be in place during performance of the work to keep lead exposure to below PEL.

4. List the employees that will be performing the work together with their specific job responsibilities.

5. List the items of personal protective equipment that will be used by employees to perform the work, i.e. respirators (type), work clothes, shoes, face shields, etc.

6. Describe the hygiene facilities that will be available to employees engaged in work involving lead emissions, i.e. type of washing facilities, change areas, eating facilities, etc.

7. Describe arrangements made with other contractors on informing affected employees regarding lead exposure, type and location of warning signs, etc.

APPENDIX C
Employee Training Script

Part I – Introduction and General Hazards

OVERVIEW

All hazardous substances are not created equal. The seriousness of the hazard varies, as does the amount of exposure that could bring on health problems. Sometimes exposure to a substance may lead to short-term health problems like skin rashes or headaches; some exposures can cause more serious long-term consequences to our organs or systems.

There are some substances that we know are hazardous, and perhaps no substance has such clearly documented health hazards as lead. Not surprisingly, lead is also the subject of particularly detailed and cautious OSHA regulations, designed to protect the health of all those who work with it.

The greatest risks of lead hazards can come from old building and equipment. You may have heard or read that children can become seriously ill or suffer permanent damage from eating chips of lead-based paint. Similar risks are present to anyone who is involved in demolition, repair and other work on anything old enough where lead-based paint, lead pipes or solder, and certain construction materials that contain lead were used. Any work that involves lead-containing products is potentially hazardous.

For this reason, you need to understand the kinds of monitoring, testing, and protections required by OSHA's lead regulations. They're designed to protect anyone who could be exposed to lead from suffering serious health consequences.

GENERAL HAZARD

We know that overexposure to lead can have serious effects on health.

The primary source of lead exposure comes from breathing in too much lead dust or fumes. There's also a risk of swallowing lead if you touch food, cigarettes, cosmetics, etc., when your hands are contaminated by lead.

Most of the effects, however, take time to show up. When lead enters your body, it gets into your bloodstream and from there into organs and body tissues. If your body takes in more lead than it can naturally eliminate, the lead builds up and over time can cause severe and irreversible damage to your blood-forming, nervous, urinary, and reproductive systems.

The milder short-term effects of overexposure to lead can include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, tremors, numbness,

dizziness, hyperactivity, and stomach pain. If you work with or around lead and have any of these symptoms, it's crucial that you report them immediately.

Chronic overexposure to lead can cause much more serious problems – problems that rarely show symptoms until it's too late to reverse them. They include:

1. **Anemia** – That's a decrease in the blood's capacity to carry oxygen, which can make you weak and tired.

2. **Nervous System Damage** – Sometimes this is temporary, but the worst cases can lead to severe or even fatal brain damage. The symptoms of lead-caused nervous system damage can be vomiting, poor memory, restlessness, irritability, tremors, convulsions, muscular weakness, and a feeling of dullness progressing to drowsiness and stupor. Again, it's important to report any of these symptoms if you have been exposed to lead. In the worst cases, people may have seizures, go into a coma, and even die.

3. **Kidney Disease** – Unfortunately, urinary problems and other symptoms of lead-related kidney disease don't usually show up until kidney damage is major and usually permanent.

4. **Reproductive Impairment** – One of the worst hazards from lead is the danger it poses to both men and women who plan to have children. Women who are pregnant, or hope some day to be, should avoid long-term exposure to lead.

   Lead is a reproductive risk for both men and women. It may decrease women's fertility and cause abnormal menstrual cycles. For men, overexposure may decrease the sex drive or cause impotence or sterility.

   If either parent had been overexposed to lead, there's apparently a greater chance of miscarriage or stillbirth. Any children born to a parent exposed to high lead levels are more likely to have birth defects, mental retardation, behavioral disorders, and/or die during the first year of childhood.

Lead-based paint and paint debris are a key hazard when you're painting, repainting, rehabbing, demolishing, or renovating buildings, tanks, bridges, etc. Lead bricks, mortar and sheets, lead support rods and construction materials, mineral wool insulation with lead contaminants, lead solder and leaded steel roofing materials are potential hazards when you're doing renovation or re-insulation work.

APPENDIX C
Employee Training Script

Part II - Work Involving Exposure to Lead, Exposure Limits and Medical Examination Requirements

OVERVIEW

Because lead is so potentially hazardous, OSHA has a detailed regulation (29 CFR 1926.62) to protect construction workers from risk.

The regulations set a permissible exposure limit (PEL) of a time-weighted average of 50 micrograms of lead per cubic meter or air. That is the highest level of lead in the air to which you can be exposed over an 8-hour workday. Short-term exposures above the PEL are permitted as long as the workday average stays within the regulated limit.

OSHA regulation for lead exposure in construction applies to all jobs that might have employment-related exposure to metallic lead, inorganic lead compounds, and organic lead soaps.

OSHA specifically mentions the risk of exposure when work involves:

1. Demolition or salvage of structures with lead or lead-containing materials.
2. Removal of encapsulation of materials containing lead.
3. Construction alteration, repair or renovation of structures, substrates or portions thereof that contain lead or lead-containing materials.
4. Installation or products containing lead.
5. Lead contamination/emergency cleanup.
6. Transportation, disposal, storage, or containment of lead or lead-containing materials at the construction site.
7. Maintenance operations associated with these construction activities.

For both construction and general industry, OSHA sets not just a permissible exposure limit, but also an action level of 30 micrograms of lead per cubic meter of air. If workers are exposed to lead between the action level and the PEL over an 8-hour day, without wearing a respirator, employers must meet various OSHA regulatory requirements. These include:

1. Training workers on how to protect themselves from exposure to lead.

2. Monitoring the air around affected employees to determine lead levels.

3. Giving blood tests to affected employees to determine blood lead levels.

4. Providing a thorough medical exam before assigning an employee to a lead-containing area.

5. Implement efforts to reduce employee exposure.

The frequency of air monitoring and blood tests varies depending on the levels of lead in the work areas and the results of previous blood tests.

1. For instance, employers must take air samples every three months to monitor the exposure of employees who work in areas where lead is at or above the PEL.

2. If exposure is at or above the action level thirty (30) or more days per year, an affected employee's blood must be tested at least every two (2) months for the first six (6) months and every six (6) months thereafter.

3. And if blood tests show that the employee has 40 or more micrograms or lead per 100 deciliters of whole blood, he or she will have to have a blood test every two (2) months as well as a very detailed medical exam at least annually.

OSHA also requires that a medical exam and consultation be made available to any employee who works around lead and:

1. Has symptoms associated with lead exposure.

2. Has trouble breathing during a respirator fit test.

3. Desires medical advice on ability to procreate a healthy child.

Removal from a job to control lead exposure is obviously a last resort, but if it becomes necessary, the OSHA regulation states that the affected employees must retain their pay levels, seniority, and benefits. Once blood levels reach the safety zone, exposed workers can return to their jobs. Of course, close monitoring and testing continues.

Medical services are to be provided at no cost to the employee and will be performed by or under the supervision of a licensed physician.

APPENDIX C
Employee Training Script

PART III – Protection Against Lead Exposure

OVERVIEW

The fact that OSHA regulation includes such a rigid requirement for air and blood testing – and even for removal from the job in certain circumstances – gives you an idea of how seriously government and employers take lead exposure. Fortunately, there are also many ways to protect you from these hazards and they're part of the OSHA regulations, too.

The OSHA regulation requires that all employees who may become exposed to lead be trained to understand the hazards of lead, the provisions of the lead regulation, and the protective measures we can al take to avoid health problems.

Employers must also have a written compliance plan before they start jobs where employee exposure to lead, without respirators, will exceed the PEL. These plans have to:

1. Describe the activities that emit lead.

2. Document the lead emissions.

3. Explain the engineering and administrative controls, work practices, PPE, etc. that will be used to reduce exposure and protect employees.

The plan, which has to be updated every six (6) months, also has to provide for frequent and regular inspections of jobsites, materials and equipment by a person who knows how to identify lead hazards and is authorized to take prompt corrective measures to eliminate them.

To make sure that any employees in any industry are aware when they enter areas where lead exposure exceeds the PEL, OSHA also requires these areas to be clearly labeled with signs that say:

WARNING
LEAD WORK AREA
NO SMOKING OR EATING

One common protection against overexposure to airborne lead is ventilation, which may be a mechanical system used with enclosures or containment situations or local portable ventilation systems and shrouded tools with ventilation. And, taking no chances, OSHA

requires that when ventilation is used to control exposure, employers have to measure the ventilation system's effectiveness at least every three (3) months.

Another way to reduce lead exposure is to rotate jobs so that each individual has less exposure to lead. If that's done, employers must keep records of who is rotated, where and when.

RESPIRATORY PROTECTION

OSHA also requires use of personal protective clothing and equipment – including respirators – in an effort to keep individuals' exposure to lead at a safe level.

Respirators are required when ventilation, job rotation, and other engineering and administrative controls aren't enough to reduce lead exposure below the PEL. OSHA also gives you the right to request a respirator even if lead levels aren't high enough to require one.

OSHA explains just what types of respirators you have to use to provide the needed level of protection for different tasks. In addition, the agency requires employers to train employees to select and use respirators and to conduct fit testing programs. It's essential that your respirator fit properly to make sure that it won't let contaminated air in. The regulation, which recognizes that not everyone can work effectively while wearing a respirator, goes into more detail on respirator fit testing and selection.

Because construction-related tasks tend to be relatively short-term and create high lead levels, OSHA assumes that respirators will be needed for many tasks. The lead regulation for construction breaks jobs down into three (3) respirator-type categories, based on the level of exposure associated with each type of job. Unless testing has proved otherwise, employers must assume that these tasks generate sufficient lead levels to require respiratory protection. In addition, employees must also be provided with other types of protection, including protective clothing, change areas, and hand washing facilities.

A half-mask air-purifying respirator is called for when you perform the tasks where potential for lead exposure is assumed to be ten (10) times the PEL. This respiratory protection must be provided until an exposure assessment is conducted that shows exposure is below PEL. These tasks include:

1. Manual demolition of walls or other building components coated with lead-based paint.

2. Manual scraping and sanding of a surface coated with lead-based paint.

3. Using a heat gun to melt lead paint on a surface prior to scraping.

4. General cleanup in lead-containing areas.

5. Removing dirt, scale or paint from structures coated with lead-based paint using power tools with dust collections systems. These tools might include grinders, brushes, needle guns, or sanders.

6. Spray painting.

A powered air-purifying respirator is OSHA's choice for tasks with the next highest levels of lead exposure. This respiratory protection must be provided to employees performing these tasks until it is determined through exposure assessment that a less protective respirator can be used. These tasks include:

1. Repainting, repairing or relining high-pressure acid tanks lined with specialized tile or lead brick held in place with lead-containing mortar or grout.

2. Lead turning that uses torch melting or fusing of lead or alloyed lead to another lead object.

3. Removing dirt, scale, or paint from lead-based painted structures with power tools that don't have dust collection systems.

4. Cleaning up after blasting with dry expendable abrasives on structures with lead-based paint.

5. Moving or removing the enclosures within which abrasive blasting is performed. These enclosures usually have quite a bit of lead residue.

A supplied air-respirator is required for the jobs that risk exposure to especially high levels of lead in the air. Again, this respiratory protection must be provided to employees performing these tasks until an exposure assessment is conducted that shows that a less protective respirator can be used. These tasks include:

1. Abrasive blasting with sand, steel grit, steel shot, aluminum oxide, etc.

2. Using an acetylene torch or arc welder to weld, cut, or burn on steel structures whose coatings or paint contains lead.

Respirators are a crucial part of your protection when you work in areas with high lead levels. No matter what type of work you do, OSHA says that you can change a respirator's filter elements any time you have an increase in breathing resistance. You can also leave the work areas to wash your face and respirator face piece whenever necessary to prevent skin irritation.

A respirator isn't the only protection you're given in a work area with lead exposure above the PEL. OSHA also requires employers to provide protective clothing and other personal protective equipment in high lead exposure areas at least weekly – and you're required to wear it. In areas with exposure more than four (4) times the PEL, without a respirator, you are to be given clean protective clothing daily, which may include:

1. Coveralls or similar clothing.

2. Gloves, hats, shoes or disposable shoe covers.

3. Face shields, vented goggles, or other appropriate protective equipment.

To make sure the protective clothing does its job and doesn't create other problems, employers must repair, replace, clean, launder and dispose of protective clothing in a way that doesn't spread the lead contamination around.

An explanation of lead hazards must also be provided to those responsible for cleaning or laundering the protective clothing. In addition, disposal or laundry containers have to be labeled:

CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD-CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

APPENDIX C
Employee Training Script

PART IV – Employee Responsibility

As you can see, the lead regulation builds in a lot of protections. But you have to do your part, too, to reduce your chances of developing lead-related health problems.

You must, of course, use the respirators and protective clothing that are assigned to you and you have to inspect them to be sure they're in good condition and remove them according to regulations to prevent the spread of contamination.

Another very important thing for which you're responsible is **good hygiene**. That means never taking food or beverages or tobacco products or cosmetics into work areas with lead exposure. In addition, you must wash carefully before handling any of those items.

To further reduce the possibility of spreading lead contamination, employers are required, where feasible, to provide showers, change rooms, and lunchrooms for workers exposed to airborne lead above the PEL. And you are required to use them. In other words, when you're working with lead, you don't just sit down in the work areas and eat your lunch. At the end of the shift, you don't just change your clothes and go home.

When it's time for lunch, you wash your hands and face, remove your contaminated work clothing or have it vacuumed or cleaned of surface dust. **Never remove lead from protective clothing by blowing or shaking**. That would just put more lead into the air. Once you're cleaned up, you then go to the lunchroom to have your lunch.

At the end of the shift, you remove your contaminated work clothing according to our rules, shower, and leave the work clothing in the change room. In the change room itself, work clothing and personal clothing have to be stored in separate areas so you don't take lead dust home with you.

Another important part of protection where you have a role to play is **housekeeping**. OSHA says that, "*All surfaces shall be maintained as free as practicable of accumulations of lead.*"

To accomplish this, OSHA recommends using vacuums with HEPA filters to clean up floors or other surfaces. Don't use compressed air, and don't shovel, brush, or use dry or wet sweeping unless vacuuming has been tried and found not to work well.

I've previously mentioned another important responsibility you have when you're exposed to lead on the job. You must be aware of health symptoms that might indicate overexposure and **report any possible symptoms immediately.**

Once you've made that report, your employer must offer and pay for – and you should have – a thorough medical exam. OSHA requires employers to provide such an exam, you'll recall when you're first assigned to work around lead, when your blood lead level is 40 or more micrograms per 100 deciliters of whole blood, or when you're removed from the job because of overexposure to lead.

It's up to all of us to take possible lead exposure seriously. Don't ignore any symptoms that could indicate health problems related to working with lead. Pay attention to them and report them immediately so we can investigate the problem and do everything possible to prevent dangerous lead exposure and its effects on health.

APPENDIX C
Employee Record of Training

I hereby acknowledge that on the date and time noted below I received training on lead exposure prevention and that I have been instructed where I may obtain a copy of Calhoun Construction Services's Lead Exposure Prevention Program, as well as the OSHA Lead Exposure in Construction Standard (1926.62 Lead).

Name (Print): _____

Signature: _____

Date: _____ Time: _____

Supervisor: _____ Title: _____

Section 36: Lockout/Tagout

NOTE: All Machinery/Equipment shutdown procedures must be followed.

PUROPOSE

The purpose of this program is to establish lockout/tagout procedures to prevent the unintended release of stored energy which may energize a machine or equipment, causing injury to an employee. All energy sources must be isolated before maintenance work is performed.
The Safety Director shall be responsible for the establishment and implementation of this program.

ESTABLISH A WRITTEN PROGRAM

1. Conduct a survey of the entire facility to determine locations of all hazardous energy sources. These sources may include the following:

   A. Electricity
   B. Pneumatic (air)
   C. Hydraulic
   D. Elevated-machine Members
   E. Gas
   F. Mechanical
   G. Springs
   H. Falling
   I. Water Pressure
   J. Chemical
   K. Steam
   L. Thermal
   M. Nuclear

2. Devise methods to control unintended operation of machines or equipment being serviced or maintained. Examples of equipment Calhoun constructs and performs maintenance on are as follows:

   A. Pumps
   B. Compressors
   C. Air Handlers
   D. Chillers
   E. Boilers
   F. Cooling Towers
   G. Turbines
   H. Heat Exchangers
   I. Flare Towers
   J. Columns/Towers
   K. Fermenters
   L. Roll/Sheet Slitter
   M. Sumps/Pits
   N. Furnaces
   O. Conveyors
   P. Robotics
   Q. Lift Stations
   R. Ductwork

3. Establish procedures for affixing appropriate lockout or tagout devices, and to otherwise disable machines or equipment to prevent unexpected energization, start-up or release of stored energy in order to prevent injury to employees. This includes any and all temporary systems as well as blocking of movable parts which may create a hazard.

ENERGY CONTROL & ISOLATION DEVICES

1. Protective materials and devices:

   A. Locks
   B. Self-locking Fasteners
   C. Chains
   D. Wedges
   F. Key Blocks
   E. Adapter Pins
   G. Tags

2. All lockout/tagout devices shall be identified and used only for the purpose they are intended and labeled with the name and contact information of the person applying the device.

3. Durable lockout/tagout devices shall be capable of withstanding the environment in which they are used.

4. Tags shall be capable of withstanding weather, damp locations, and corrosive environments.

5. All lockout/tagout devices shall be uniform in color, shape or size.

6. Lockout devices shall only be removed by their installer.

7. Lockout devices shall be substantial enough to prevent inadvertent or accidental removal and shall indicate the identity of the employee using the device and a warning of what precautions to take.

8. Lockout procedures shall be used in preference to tagout procedures where possible.

PERIODIC INSPECTIONS

1. A periodic inspection of the energy control procedures shall be conducted and documented annually. This will ensure the procedures and requirements are being followed.

2. The periodic inspection shall be performed by an authorized employee (job site superintendent or site safety coordinator) other than the one(s) utilizing the energy control procedure being inspected.

3. The periodic inspection shall be designed to correct any deviations or inadequacies observed.

4. Where lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure being inspected.

TRAINING

1. Essential Elements: Each affected employee shall be instructed in the purpose and use of the energy control procedure. All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or re-energize machines or equipment which are locked out or tagged out.

2. Tagging Limitations:

    A. Inform employees that tags do not afford the same protection as a lock.
    B. Tags are not to be removed without the authorization of the installer.
    C. Tags must be legible and be made familiar to all employees whose work is affected or may be in the affected areas.
    D. Tags and means of attachment must be capable of withstanding environmental conditions in the workplace.
    E. Tagout device shall be non-reusable and self-locking with a minimum unlocking strength of no less than 50 pounds.
    F. Tags often evoke a false sense of security and their importance needs to be clearly understood by employees.

RETRAINING

Should be established under the following conditions:

1. There is a change in job assignments

2. A change in machines or equipment

3. Equipment or processes present a new hazard

4. A change in the energy control procedures

5. There are deviations or inadequacies detected in the procedures

6. New or revised control methods are used

7. A record of employee retraining including employee name and date of retraining should be kept when any of the above is present.

CONTROL

1. Elements and Actions

    A. Make employees aware of the type and magnitude of hazardous energy.
    B. All affected employees shall be informed of the physical locations of energy isolating devices.
    C. Ensure affected employees understand the proper procedure/sequence to de-energize the equipment they will be working on.
    D. If de-energizing a client or owner's equipment, request to have their shutdown sequence.
    E. All workers involved in the work activity must place their own lock and tag on each energy control point.

2. Lockout/Tagout of Energy Isolating Devices

    A. Only trained and authorized employees shall affix energy isolating devices.
    B. Devices are to be affixed in such a manner that it will hold the energy isolating device in a "safe" or "off" position thus isolating the machine/equipment from the energy source.

3. Stored Energy

    A. After lockout or tagout devices have been applied, stored energy or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe whenever possible.
    B. If re-accumulation of stored energy to a hazardous level can take place, verification or isolation shall continue when service or maintenance is being performed until work is completed.
    C. Prior to servicing or maintaining machines or equipment, employees must verify that energy isolation and de-energization of the machines or equipment have been accomplished.

RELEASE FROM LOCKOUT OR TAGOUT

1. Before removing lockout or tagout devices from machines and equipment, authorized employees must take certain precautions. These precautions will apply anytime a lockout or tagout devise is removed whether it be temporary for testing, end of a shift, or at the completion of the work:

    A. Inspect the work area to ensure non-essential items, such as tools and parts, have been removed.
    B. Check the work area to see that all employees have been safely positioned or removed.
    C. Before removing lockout or tagout devices, notify all affected employees.

2. Before lockout and tagout devices are removed and energy is restored, procedures shall be taken by authorized employees to ensure the following:

    A. If the employee who applied the lockout or tagout device is unavailable, the device may only then be removed under the direction of management.
    B. Management will verify that the employee who applied the device is not at the facility.
    C. Management has made all reasonable efforts to contact the employee to inform them that their device has been removed.
    D. Management will inform the employee the device has been removed before they return to work.

OUTSIDE CONTRACTORS

1. Management and contractors will inform each other of their respective lockout or tagout procedures.

2. Management will train all affected employees on restrictions and prohibitions of contractor's energy control procedures.

GROUP LOCKOUT OR TAGOUT

When servicing or maintenance of equipment or machinery is performed by more than one employee, a procedure shall be utilized to afford each employee a level of protection equivalent to that provided by personal lockout or tagout.

1. Group requirements shall include but are not limited to the following:

    A. Primary responsibility shall be vested in one authorized employee for a number of employees under a group program with one employee having an operations lock.
    B. The authorized employee must ascertain the exposure level of individual group members.
    C. If more than one group of employees is involved in a job associated assignment, one authorized employee shall be designated to coordinate the affected workers.
    D. Each involved employee shall affix a lockout or tagout device to the group lockout device when beginning work and remove it when work is completed on the machine or equipment being serviced or maintained.

SHIFT OR PERSONNEL CHANGES

1. When a shift or personnel change occurs, a designated employee should ensure the continuity of lockout or tagout protection.

2. The designated employee shall provide for the orderly transfer of lockout or tagout devices between off-going and on-coming employees to minimize risk to employees from stored energy.

3. Employees coming on the shift will verify the lockout prior to starting work on the equipment.

EXCLUSIONS

1. Normal production operations including repetitive, routine minor adjustments and adjustments and maintenance which would be covered under OSHA's machine guarding standards.

2. Work on cord and plug connected electric equipment when it is unplugged, and the employee working on the equipment had complete control over the plug.

3. Hot tap operations involving gas, steam, water or petroleum products when the employer shows that continuity of service is essential, shutdown is impractical and documented procedures are followed to provide proven effective protection for employees.

REVIEW

This entire program shall be reviewed on an annual basis and updated/revised where necessary.

Section 37: Mold

POLICY

Calhoun's policy is to prevent mold growth where possible and to address any mold issues as soon as mold is discovered.

As soon as mold or signs of mold are discovered, the Project Superintendent is to notify the Project Manager. A mold removal plan is to be constructed and implemented. If the mold cannot be removed, the Safety Director must be notified.

MOLD REMOVAL

The purpose of mold remediation is to correct the moisture problem and to remove moldy and contaminated materials to prevent human exposure and further damage to building materials and furnishings. Porous materials that are wet and have mold growing on them may have to be discarded because molds can infiltrate porous substances and grow on or fill in empty spaces or crevices. This mold can be difficult or impossible to remove completely.

As a general rule, simply killing the mold, for example, with biocide is not enough. The mold must be removed, since the chemicals and proteins, which can cause a reaction in humans, are present even in dead mold.

A variety of cleanup methods are available for remediating damage to building materials and furnishings caused by moisture control problems and mold growth. The specific method or group of methods used will depend on the type of material affected. Some methods that may be used include the following:

Wet Vacuum

Wet vacuums are vacuum cleaners designed to collect water. They can be used to remove water from floors, carpets, and hard surfaces where water has accumulated. They should not be used to vacuum porous materials, such as gypsum board. Wet vacuums should be used only on wet materials, as spores may be exhausted into the indoor environment if insufficient liquid is present. The tanks, hoses, and attachments of these vacuums should be thoroughly cleaned and dried after use since mold and mold spores may adhere to equipment surfaces.

Damp Wipe

Mold can generally be removed from nonporous surfaces by wiping or scrubbing with water and detergent. It is important to dry these surfaces quickly and thoroughly to discourage further mold growth. Instructions for cleaning surfaces, as listed on product labels, should always be read and followed.

HEPA Vacuum

HEPA (High-Efficiency Particulate Air) vacuums are recommended for final cleanup of remediation areas after materials have been thoroughly dried and contaminated materials removed. HEPA vacuums also are recommended for cleanup of dust that may have settled on surfaces outside the remediation area. Care must be taken to assure that the filter is properly seated in the vacuum so that all the air passes through the filter. When changing the vacuum filter, remediators should wear respirators, appropriate personal protective clothing, gloves, and eye protection to prevent exposure to any captured mold and other contaminants. The filter and contents of the HEPA vacuum must be disposed of in impermeable bags or containers in such a way as to prevent release of the debris.

Disposal of Damaged Materials

Building materials and furnishings contaminated with mold growth that are not salvageable should be placed in sealed impermeable bags or closed containers while in the remediation area. These materials can usually be discarded as ordinary construction waste. It is important to package mold-contaminated materials in this fashion to minimize the dispersion of mold spores. Large items with heavy mold growth should be covered with polyethylene sheeting and sealed with duct tape before being removed from the remediation area. Some jobs may require the use of dust-tight chutes to move large quantities of debris to a dumpster strategically placed outside a window in the remediation area.

Use of Biocides

The use of a biocide, such as chlorine bleach, is not recommended as a routine practice during mold remediation, although there may be instances where professional judgment may indicate its use (for example, when immuno-compromised individuals are present). In most cases, it is not possible or desirable to sterilize an area, as a background level of mold spores comparable to the level in outside air will persist. However, the spores in the ambient air will not cause further problems if the moisture level in the building has been corrected.

Biocides are toxic to animals and humans, as well as to mold. If you choose to use disinfectants or biocides, always ventilate the area, using outside air if possible, and exhaust the air to the outdoors. When using fans, take care not to extend the zone of contamination by distributing mold spores to a previously unaffected area. **Never mix chlorine bleach solution with other cleaning solutions or detergents that contain ammonia because this may produce highly toxic vapors and create a hazard to workers**.

Some biocides are considered pesticides, and some states require that only registered pesticide applicators apply these products in schools, commercial buildings, and homes. Make sure anyone applying a biocide is properly licensed where required.

Fungicides are commonly applied to outdoor plants, soil, and grains as a powder or spray. Examples of fungicides include hexachlorobenzene, organomercurials, pentachlorophenol, phthalimides, and dithiocarbamates.

Do not use fungicides developed for outdoor use in any indoor application, as they can be extremely toxic to animals and humans in an enclosed environment.

When you use biocides as a disinfectant or a pesticide, or as a fungicide, you should use appropriate PPE, including respirators. Always, read and follow product label precautions. It is a violation of Federal (EPA) law to use a biocide in any manner inconsistent with its label direction.

DOCUMENTATION

All factual investigations, remediation steps taken, and safety precautions followed are to be documented and kept in the superintendent's daily report.

Section 38: Personal Protective Equipment

POLICY

Calhoun requires every person employed by Calhoun or Contracted to Calhoun involved in construction activity wear a minimum of a hardhat, safety glasses, work pants that extend to the ankle, work boots that cover the ankle, high visibility outer most garment, and a minimum of 4-inch sleeve shirt.

This Program covers the requirements for Personal Protective Equipment, with the exception of PPE used for hearing conservation and respiratory protection or PPE required for hazardous material response to spills or releases, which are covered under separate programs.

Any deviation to this policy must be documented on a Daily Task Analysis and approved by the Calhoun Safety Department or Calhoun Superintendent when no safety personnel are on site.

PROCEDURE

Engineering controls shall be the primary methods used to eliminate or minimize hazard exposure in the workplace. When such controls are not practical or applicable, personal protective equipment shall be employed to reduce or eliminate personnel exposure to hazards.

MANDITORY PPE

Hardhats: ANSI Z89.1 rated required
Safety Glasses: ANSI Z87.1 rated required
Work Boots: Must cover ankle
Work Pants: Durably constructed work pants. Sweatpants not acceptable.
High Visible Outer Garment: Fluorescent Color, Yellow/Orange/Pink
Sleeved Shirt: 4-inch sleeve minimum
Gloves: Task Specific, must be worn while handling materials.

GENERAL RULES

1. Design: All personal protective clothing and equipment will be of safe design and construction for the work to be performed. Only those items of protective clothing and equipment that meet National Institute of Occupational Safety and Health (NIOSH) or American National Standards Institute (ANSI) standards will be procured or accepted for use.

2. Defective or damaged personal protective equipment shall not be used and must be removed from service.

TRAINING

1. All people entering a Calhoun controlled construction site must be trained to know at least the following:

    A. When PPE is necessary
    B. What PPE is necessary
    C. How to properly don, remove, adjust, and wear PPE
    D. The limitations of the PPE
    E. The proper care, maintenance, useful life, and disposal of the PPE

2. Each affected person shall demonstrate an understanding of the training and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE. Retraining of the person is required when the workplace changes, making the earlier training obsolete; the type of PPE changes; or when the employee demonstrates lack of use, improper use, or insufficient skill or understanding. The training must be completed by the workers employer.

EYE AND FACE PROTECTION

1. The majority of occupational eye injuries can be prevented by the use of suitable/approved safety spectacles, goggles, or shields. All people must wear approved safety glasses with side shields in all work areas except office and Calhoun identified break areas.

    A. Each person shall use appropriate additional task specific eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
    B. Each person shall use eye protection that provides side protection. Detachable side protectors are acceptable.
    C. Each person who wears prescription lenses shall wear eye protection that incorporates the prescription in its design or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.
    D. Each person shall use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.

HEAD PROTECTION

1. Hardhats have been designed and manufactured to provide workers protection from impact, heat, electrical and fire hazards. These protectors consist of the shell and the suspension combined as a protective system. Hardhats will be of nonconductive, fire- and water-resistant materials.
2. All people must wear approved head protection in all work areas except office and Calhoun identified break areas.

FOOT PROTECTION

1. General Requirements

    A. All people must wear protective footwear in all work areas except office areas and Calhoun identified break areas.

2. Selection Guidelines for Foot Protection

    A. Task specific footwear may be required i.e., conductive, non-conductive, slip resistance, etc.

HI-VISIBILITY CLOTHING

1. General Requirements

    A. High visibility fluorescent orange, yellow or pink vest, shirts, or jackets will be worn in all work areas except office areas and Calhoun identified break areas.
    B. High-Visibility clothing is to be visible at all times and must be the outer most garment.

HAND PROTECTION

2. General Requirements

    A. Hand protection is required when employees' hands are exposed to hazards such as those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes. This includes handling of materials.
    B. Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Gloves should be selected on the basis of the material being handled, the particular hazard involved, and their suitability for the operation being conducted. One type of glove will not work in all situations.

C. Gloves should be replaced periodically, depending on frequency of use and permeability to the substance(s) handled. Gloves overtly contaminated should be rinsed and then carefully removed after use.
D. Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts. To protect the hands from injury due to contact with moving parts, it is important to:
    1) Ensure that guards are always in place and used.
    2) Always lock out machines or tools and disconnect the power before making repairs.
    3) Treat a machine without a guard as inoperative.

RESERVED

RESERVED

Section 41: Respiratory Protection

POLICY

The use of respiratory protective equipment is necessary for the safety and wellbeing of employees engaged in certain operations. Generally, protective equipment is required where effective engineering controls are not feasible or where equipment failures or malfunctions cause atmospheric contamination by harmful dusts, fogs, fumes, mists, gases, smoke or vapor, or possible oxygen deficient atmospheres exist.

RESPONSIBILITIES

1. Safety Director / Superintendent

    A. The formulation and coordination of the Respiratory Protection Program is the responsibility of the superintendent in conjunction with the Company Safety Director. These responsibilities include:
        1) Formulating and making necessary revisions in the Program.
        2) Making certain the program complies with the current federal, state and local regulations and ordinances.
        3) Periodically monitoring the work environments and advising appropriate departments of potential hazards arising out of any current or proposed process or operation.
        4) Specifying controls necessary to minimize employee exposure to potentially harmful air contaminants and specifying the design and quality of the respiratory protective equipment.
        5) Periodically measuring program effectiveness by conducting random inspections to assure that respirators are properly selected, used, cleaned and maintained.
        6) The Company Safety Director will act in an advisory capacity on all matters pertaining to respiratory protection, as required for the guidance of all levels of management.

2. Supervision

    A. Supervision is responsible for maintaining safe working conditions within the department, plant or division, and for the administration of the Program.
    B. Their responsibilities are to maintain a work environment that insures the maximum safety for their employees and to furnish equipment, instruct them in its proper use, and enforce the wearing of such equipment.
    C. Supervisors are also responsible for notifying local management when a suspected atmospheric contaminant arises in the workplace.

3. Employees

    A. Each employee has certain responsibilities for contributing toward the success of the Program.
    B. The employee should notify his/her supervisor immediately when conditions or practices may cause personal injury.
    C. The employee must observe all safety rules, make maximum use of all prescribed respiratory protective equipment, and follow practices and procedures established to maintain his/her health and safety.

RESPIRATORY HAZARDS

The selection of respirators will be based on the exposure hazards. Only NIOSH-certified respirators will be provided. Respiratory hazards can be classified into two groups:

1. Oxygen-Deficiency – Where the oxygen concentration is below that level considered safe for human exposure.

2. Air Contaminants – Where particles, vapors or gases in the atmosphere produce a harmful effect on the human body when inhaled by workers.

OXYGEN-DEFICIENT ATMOSPHERES

1. The normal content of oxygen in the air is 20.9 percent by volume. Oxygen concentrations below 19.5 percent are considered unsafe for human exposure because of harmful effects on bodily functions, mental processes and coordination.

2. Oxygen-deficient atmospheres may cause an inability to move or semi-consciousness. In severe deficiencies, there are usually no warning symptoms; workers exposed to this environment immediately lose consciousness.

3. It is important to remember that oxygen-deficiency can occur in confined spaces by displacement of air by other gases and vapors, or by means of oxidation processes such as fire, rusting, or aerobic bacteria where oxygen is consumed.

CONTAMINATED ATMOSPHERES

Inhaled contaminants that can adversely affect the human body may be divided into three categories

1. Particles – When deposited in the lungs, may produce tissue damage, tissue reaction, or physical plugging of respiratory passages. An example is asbestos fiber, which causes fibrotic growth in the lung tissue, plugging the ducts or limiting the effective area of the lining of the lungs. Particulates can be classified as dust, fumes

or fibers. Dusts come from products that are solids at room temperature. Fumes are given off by heating metals. Fibers are associated predominantly with insulation media.

2. Toxic Vapors and Gases – Produce adverse reaction in the lung tissues. Examples of toxic gases are ammonia and chlorine, which are primary irritants of mucous membranes, causing chemical burns. Vapors are given off by those products which are liquid at room temperature, and a gas is a product that is a gas at room temperature.

3. Toxic Aerosols and Gases – Do not affect the lung tissue, but are passed from the lung into the bloodstream where they are either carried to other organs or have adverse effects on the oxygen-carrying capacity of the blood. An example is carbon monoxide, which passes into the bloodstream without harming the lungs. In the bloodstream, this gas ties up the hemoglobin so that it cannot accept oxygen, thus causing oxygen starvation.

DANGEROUS ATMOSPHERES

1. In areas where the wearer, with failure of the respirator and/or a meter is not in use to provide early detection, could be overcome by a toxic or oxygen-deficient atmosphere, at least one additional person shall be present. Communications (visual, voice, or signal line) must be maintained between both or all individuals present. Planning and positioning shall be such that one individual will be unaffected by an incident and have the proper rescue equipment to assist the other(s) in case of an emergency.

2. When self-contained breathing apparatuses or hose masks with blowers are used in atmospheres immediately dangerous to life or health, stand-by persons shall be present with suitable rescue equipment. Persons using air-line respirators in atmospheres immediately hazardous to life or health must be equipped with safety harnesses and safety lines for lifting or removing persons from hazardous atmospheres. A stand-by person(s) with suitable self-contained breathing apparatus shall be at the nearest fresh air area for emergency rescue.

RESPIRATORY PROTECTIVE EQUIPMENT

Respiratory protective devices can be divided into three categories: air purifying, supplied air, and self-contained breathing apparatus. There are several types of respirators in each group. Some of these types are

1. Air Purifying

    A. Mechanical filter respirators

B. Chemical cartridge respirators
C. Combination mechanical filter/chemical cartridge respirators
D. Gas masks

2. Supplied Air

   A. Air-line respirators

3. Self-Contained Breathing Apparatus

   A. Air packs
   B. Chemical oxygen re-breathing respirators

MECHANICAL FILTER RESPIRATORS

Mechanical filter respirators offer respiratory protection against airborne particles including dusts, mists and metal fumes.

They consist of a soft resilient face piece to which is directly attached a mechanical filter of some fibrous material which removes the harmful particles by physically trapping them as air is inhaled through the material. Gaseous matter will pass through the filter but solid or liquid particles are trapped. Mechanical filter respirators do not provide protection against gases, vapors or oxygen deficiency.

CHEMICAL CARTRIDGE RESPIRATORS

Chemical cartridge respirators afford protection against very light concentrations (up to .1 percent by volume, depending upon the contaminant) of certain acid gases, alkaline gases, organic vapors, and mercury vapors by utilizing various chemical filters to purify the inhaled air. These respirators use small cartridges containing chemicals to attract harmful gases and vapors to prevent passage into the lungs.

1. Chemical cartridge respirators are non-emergency respiratory protective devices and should never be used in immediately dangerous atmospheres, except for escape purposes. There are four major negative rules which apply to chemical cartridge respirators.

   A. Do not use chemical cartridge respirators for protection against gaseous material which is extremely toxic in very small concentrations. Example: hydrogen cyanide or phosgene.
   B. Do not use chemical cartridge respirators for exposures to harmful gases which cannot clearly be detected by odor. Example: methyl chloride and hydrogen sulfide. Methyl chloride is odorless; hydrogen sulfide, although foul

smelling, paralyzes the olfactory nerves so quickly that detection of odor is unreliable.

C. Do not use chemical cartridge respirators against any gas in concentrations which are highly irritating to the eyes.
D. Do not use chemical cartridge respirators for protection against gases that are not effectively stopped by the respirator elements, regardless of concentration. Example: carbon monoxide.

2. There are several gaseous materials for which chemical cartridge respirators should not be used for protection regardless of the concentration or time of exposure. A partial list of these contaminants is identified below

A. Carbon Monoxide
B. Hydrogen Sulfide
C. Ozone
D. Phosgene

COMBINATION MECHANICAL CHEMICAL CARTRIDGE RESPIRATORS

Combination mechanical filter-chemical cartridge respirators utilize filters to trap dust, mist, or fumes, and a chemical cartridge to remove gases or vapors for dual or multiple exposures.

GAS MASKS

Gas masks have been used effectively for many years for respiratory protection against certain gases, vapors, and particulate matter which otherwise might be harmful to life or health. However, because gas masks are air purifying devices, designed solely to remove specific contaminants from the air, it is essential that their use be restricted to atmospheres which contain sufficient oxygen to support life (at least 19.5 percent by volume at sea level) and which contain generally no more than 2 percent concentrations of toxic gases and vapors by volume.

From a practical standpoint, gas masks are generally suitable for ventilated areas not subject to rapid change, but should never be used in confined spaces below or above ground where oxygen deficiency and high gas concentrations may occur.

1. It is generally recommended that gas mask canisters used for emergency purposes be replaced after each use. Specific indications for canister replacement and/or return to fresh air are
   A. If canisters with window indicators show the specified color changes.
   B. If any leakage is detected by smell, taste, eyes, nose, or throat irritation.

C. If high breathing resistance develops.
D. If the canister shelf life is exceeded.

2. Specific warning signs which require immediate return to fresh air are

   A. Uncomfortable heat in the inhaled air. (A properly operating canister will become warm on exposure to certain gases or vapors, but a canister which becomes extremely hot indicates that concentrations above the canister limit have been encountered.)
   B. If nausea, dizziness, or signs of distress develop.

AIR-LINE RESPIRATORS

Air-line respirators are approved for use only in atmospheres not immediately harmful to life unless an auxiliary self-contained air supply is used. This limitation is necessary because the user is entirely dependent upon an air supply that is not carried by the wearer of the respirator. Another limitation of air-line respirators is that the air supply hose limits the wearer to a fixed distance from the air supply source.

1. The air-line respirator is connected to a suitable compressed air source by a hose, and air is delivered to the user continuously in sufficient volume to meet the wearer's breathing requirements.

2. Accessory equipment such as pressure regulators, pressure relief valves, and air filters are required to insure that the air is at the proper pressure and quality for breathing.

3. Air-line connectors on supplied air respirators must be unique such that they cannot be connected directly to an air supply but to an air filter which is connected to the air supply.

4. The air supply is very important and air-line respirator is approved for use only when it supplies respirable air at the correct pressure and flow. The compressed air must meet the most recent requirements of Compressed Gas Association Specification G7.1 for Type 1, Grade D breathing air. This currently requires that the carbon monoxide level not exceed 20 parts per million (ppm), the carbon dioxide content not exceed 1000 ppm, and condensed hydrocarbons not exceed 5 milligrams per cubic meter.

5. Breathing air may be supplied to respirators from cylinders or air compressors.

   A. Cylinders shall be tested and maintained as prescribed in the Shipping Container Specifications Regulations of the Department of Transportation.

B. If a compressor is used to supply air, it must be equipped with certain safety and standby devices. A breathing air type compressor shall be used.
C. Compressors shall be constructed and situated so as to avoid the entry of contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality.
D. A receiver of sufficient capacity to enable the respirator wearer to escape from a contaminated atmosphere in the event of compressor failure, and alarms to indicate compressor failure and overheating shall be installed in the system. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both.
E. If only a high temperature alarm is used, the air from the compressor shall be frequently tested for carbon monoxide to insure that it meets the specifications of the Compressed Gas Association.

SELF-GENERATING APPARATUS (Closed Circuit)

This apparatus utilizes a chemical canister which evolves oxygen when contacted by the moisture and carbon dioxide in the exhaled breath, and retains the carbon dioxide and moisture. Retaining moisture is important, as it aids in preventing lens fogging.

1. In use, the self-generating unit operates as other re-breathing apparatus except that the wearer, using the canister, makes his own oxygen instead of drawing from a compressed gas cylinder.

2. Generally, this respirator can be used for respiratory protection in atmospheres considered immediately hazardous to life. It has an operating time of one hour. (Maximum recommended time is 30 minutes.)

AIR PACKS (Open Circuit)

Air packs are a type of self-contained breathing apparatus that are approved for use in oxygen-deficient atmospheres and hazardous concentrations of toxic gases.

1. These units provide a high flow rate of air to meet breathing demands even during extreme exertion.

2. Generally, they supply air for up to 30 minutes activity.

3. They are equipped with an audible alarm signal to indicate when the breathing supply is low.

4. The type of air that is to be supplied is Compressed Gas Association Specification G7.1 for Type 1 Grade D Breathing Air.

TRAINING

For safe use of any respiratory protective device, the user shall be properly instructed in its selection, use and maintenance.

1. Minimum training shall include

    A. Instruction in the nature of the hazard, whether acute, chronic, or both, and an honest appraisal of what may happen if the proper device is not used.
    B. Explanation of why more positive control is not immediately feasible. This shall include recognition that every reasonable effort is being made to reduce or eliminate the need for respiratory protection.
    C. When changing cartridges, washing, or if you detect a breakthrough/resistance, you must leave the area of concern. A designated area will be administered at the jobsite.
    D. A discussion of why this is the proper type of unit for the particular purpose.
    E. A discussion of the device's capabilities and limitations.
    F. Instruction and training in actual use (especially a respiratory protective device for emergency use) and close and frequent supervision to assure that it continues to be properly used.
    G. Training shall provide employees an opportunity to handle the device, have it fitted properly, test its face piece-to-face seal, and wear it in normal air for a familiarity period.
    H. Retraining will be conducted on an annual basis.

QUALITATIVE FIT TESTING

All employees who will be required to utilize a respirator shall be provided the opportunity to handle the respirator, have it fitted properly, test its face piece-to-face seal, and wear it in normal air for a familiarity period. The following requirements meet this regulation

1. Respirators must be fit-tested.

2. The fit-test must be applied to each and every employee required to wear a respirator.

3. The fit-test requirement applies to all negative pressure respirators, including single-use respirators (disposable).

IMPORTANT NOTES

1. Respiratory protective devices shall not be worn when a satisfactory seal cannot be obtained by qualitative fit testing or equivalent. Therefore, employees utilizing any type of respiratory device shall not be permitted to wear any hair growth which interferes with proper face-to-respirator seal (Employee must be clean-shaven).

2. Contact lens shall not be worn in contaminated environments with a respirator.

3. Further, eyeglass temple bars shall not be worn with full-face respiratory devices. Special lens holding devices must be utilized. A corrective spectacle with short temple bars that do not protrude between the sealing surface of a full face-piece and respirator wearer's face may be taped to the respirator wearer's head. Special corrective lenses, which are made to be mounted inside a full, face piece are available and should be used by one who needs corrective lenses.

4. All training and qualitative fit testing is at no cost to the employee.

5. If Immediately Dangerous to Life and Health (IDLH) conditions are found, all work must stop until the IDLH conditions are cleared.

MEDICAL DETERMINATION

1. A Medical Questionnaire will be completed by each employee who will be required to wear respiratory equipment.

2. The Questionnaire will be sent to designated medical facility for review by the doctor. This review will be confidential between the employee and the doctor.

3. If required by the health care provider, a medical examination will be provided at no cost to the employee.

4. The health care provider will communicate to the company whether the employee is physically fit to use respiratory equipment or not.

VOLUNTARY USE

If an employee chooses to wear a dust mask, Calhoun will provide the basic training to the employee and make the equipment available to the employee.

INSPECTION, MAINTENANCE AND REPAIR OF RESPIRATORY PROTECTION EQUIPMENT

Proper inspection, maintenance, and repair of respiratory protective equipment are mandatory to insure success of any respiratory protection program. The goal is to maintain the equipment in a condition providing the same effectiveness it had when manufactured.

1. Inspection

    A. All respirators shall be inspected routinely before and after each use. A respirator that is not routinely used but is kept ready for emergency use shall be inspected after each use and at least monthly to assure that it is in satisfactory working condition.
    B. Self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be fully charged according to the manufacturer's instructions. It shall be determined that the regulator and warning devices function properly.
    C. Respirator inspection shall include a check of the tightness of connections and the condition of the face-piece, headbands, valves, connecting tube, and canisters. Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a set during storage.
    D. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.

2. Cleaning and Disinfecting

    A. Routinely used respirators shall be cleaned and disinfected as frequently as necessary to insure that proper protection is provided for the wearer.
        1) Those issued for the exclusive use of one worker should be cleaned frequently.
        2) Those used by more than one worker shall be thoroughly cleaned and disinfected after each use.
        3) All respirators needing cleaning shall be turned in to the tool crib attendant or supervisor for cleaning.
    B. Each worker should be briefed on the cleaning procedure and be assured that he will always receive a clean and disinfected respirator.
        1) Such assurances are of greatest significance when respirators are not individually assigned to workers.
    C. Respirators maintained for emergency use shall be cleaned and disinfected after each use.
    D. Designate a person responsible for the cleaning and disinfecting of equipment.

3. Repair

A. Replacement of other than disposable parts and repairs shall be done only by experienced persons with parts designed for the specific respirator.
B. No attempt shall be made to replace components or to make adjustments or repairs beyond the manufacturer's recommendations.
C. Reducing or admission valves on regulators shall be returned to the manufacturer or to a trained technician for adjustment or repair.

STORAGE

After inspection, cleaning and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals.

1. Respirators placed at stations and work areas for emergency use should be quickly accessible at all times and should be stored in compartments built for the purpose.
2. The compartments should be clearly marked. Routinely used respirators, such as dust respirators, may be placed in plastic bags after they have been dried.

PROGRAM EVALUATION

The Respiratory Protection Program shall be reviewed by the Safety Director on an annual basis to ensure compliance with Local, State, and Federal codes. The following will be part of the evaluation process

1. Employees asked about fit of the respirator
2. The use of respirators
3. Selection & maintenance of the respirator, etc.

RECORDKEEPING

Records of training will consist of

1. Medical evaluations
2. Fit testing documentation
3. Training records
4. Calhoun's insurance coordinator is responsible for retaining and making available these records at 3914 Prospect Street, Indianapolis, IN (317) 359-5411. The insurance coordinator will have access to these records and each employee affected will have the right to access their records upon request.

5. Calhoun will also distribute to current employees any informational materials concerning this section.

EMPLOYEE MEDICAL RECORDS

Calhoun, upon request, will assure the access of each designated representative to the employee medical records of any employee who has given the designated representative specific written consent.

1. Whenever access to employee medical records is requested, a physician representing the employer may recommend that the employee or designated representative
    A. Consult with the physician for the purposes of reviewing and discussing the records requested
    B. Accept a summary of material facts and opinions in lieu of the records requested
    C. Accept release of the requested records only to a physician or other designated representative.

2. Whenever an employee requests access to his or her employee medical records, and a physician representing the employer believes that direct employee access to information contained in the records regarding a specific diagnosis of a terminal illness or a psychiatric condition could be detrimental to the employee's health, the employer may inform the employee that access will only be provided to a designated representative of the employee having specific written consent, and deny the employee's request for direct access to this information only.

3. Where a designated representative with specific written consent requests access to information so withheld, the employer shall assure the access of the designated representative to this information, even when it is known that the designated representative will give the information to the employee.

4. A physician, nurse, or other responsible health care personnel maintaining employee medical records may delete from requested medical records the identity of a family member, personal friend, or fellow employee who has provided confidential information concerning an employee's health status.

DISCLAIMER

Any other duties and requirements not mentioned in this program Calhoun will follow 29CFR 1910.1020.

Section 42: Scaffolding

This section covers scaffold commonly used on Calhoun Construction jobsites. All scaffold not covered by this section must be in compliance with OSHA 1926 subpart L. All scaffolding plans must be submitted and approved by the Calhoun site leadership team a minimum of 1 week prior to the intended use.

Scaffold Plans

Each contractor using scaffold other than Narrow-Frame, Stilts, or Scissor lifts must submit a written scaffold plan to the Calhoun Construction site leadership team. This plan must include the following information:

- Competent person's name.
- Type of scaffold.
- Erection location.
- Mobile or not mobile.
- Fall protection precautions.
- Falling debris precautions.
- Height
- Guy wire locations.
- Sheeted/wrapped.

Fall Protection

All working platforms over 6 feet in height MUST utilize 100% fall protection. This may be achieved using a guard rail system or fall arrest system.

Inspections

All scaffolds MUST be inspected and tagged before use. Tags must be displayed at an access point. Documentation must include inspection date and name of inspector. Tags are not required on stilts.

Sheeting / Wrapping Scaffold

It is the contractor's responsibility to have the loads specific to the scaffold (anchors, wind, dimensions, etc.) validated by a structural engineer to see if a plastic tarp/netting can be used. This validation must be submitted to the Calhoun leadership team prior to scaffold wrapping.

STILTS

1. Stilts, when used, shall be used in accordance with the following requirements:

    A. An employee may wear stilts on a scaffold only if it is a large area scaffold.
    B. When an employee is using stilts on a large area scaffold where a guardrail system is used to provide fall protection, the guardrail system shall be increased in height by an amount equal to the height of the stilts being used by the employee.

C. Surfaces on which stilts are used shall be flat and free of pits, holes and obstructions, such as debris, as well as other tripping and falling hazards.
D. Stilts shall be properly maintained. Any alteration of the original equipment shall be approved by the manufacturer.

NARROW FRAME SCAFFOLDS – Baker/Perry

1. Narrow frame scaffold is restricted to single stack. DO NOT attach multiple towers to one another.

2. DO NOT modify/alter any components. DO NOT DRILL OR INSTALL SCREWS INTO ANY COMPONENT.

3. DO NOT stack more than 3 frames (18 feet)

4. Inspect before use.

5. Securely lock all braces before use.

6. The deck must be securely seated.

7. Casters must be secured with locking pins.

8. There must be a minimum of 2 side braces installed on each level of scaffold. Pins MUST be used to secure side braces.

9. Outriggers and Guardrails must be used when stacking units.

10. Guardrails must be installed on all open sides of a work deck where a person could fall from a height of 6 foot or more.

11. Do not climb unless casters are locked into place.

12. Replace casters with feet when installed on stairs.

13. Scaffold stack must consist of the same manufacturer.

SCISSOR LIFTS

1. The surface where the lift will be operated shall be stable enough to support the weight of the lift and its maximum intended load.
2. Employees must inspect the work surface for holes, obstructions, and other hazards, prior to operating the lift. Any hazards found must be removed or guarded before the lift can be used in the area.

3. The midrail chain or gate must be in the closed position before the lift can be operated.
4. When operating a scissor lift along the edge of an elevated work surface (example: elevator shaft openings, stairwell openings, or floor edges), the wheels must run parallel with the edge of the opening to prevent inadvertently driving off of the floor.

TRAINING REQUIREMENTS

1. The employer shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following areas, as applicable

    A. The nature of scaffold hazards.
    B. The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question;
    C. The design criteria, maximum intended load-carrying capacity and intended use of the scaffold;
    D. Scaffold tagging system for defects that are found during inspection. Employees are instructed and mandated to report to their immediate supervisor for any defects found. Defected scaffold shall be tagged "out of service" and "do not use." Tags are available and located in the job trailer. All defected scaffold and or parts shall be stored in a designated area appointed by the superintendent so they can't get mixed up with the non-defected material.
    E. All employees are instructed in complying with Calhoun policy on the tagging system.
    F. Any other pertinent requirements of subpart L.

Section 43: Steel Erection

POLICY

This section covers the basic requirements as mandated by Calhoun. If additional information is needed, Subpart R, Steel Erection of the OSHA Standards should be reviewed.

Steel erection activities include hoisting, laying out, placing, connecting, burning, guying, bracing, bolting, plumbing and rigging structural steel, steel joists and metal buildings; installing metal decking, curtain walls, siding systems, miscellaneous metals, ornamental iron and similar metals; and moving point-to-point while performing these activities.

The following activities are covered by this subpart when they occur during and are a part of steel erection activities: rigging, hoisting, laying out, placing, connecting, guying, bracing, dismantling, burning, welding, bolting, grinding, sealing, caulking, and all related activities for construction, alteration and/or repair of materials and assemblies such as structural steel, ferrous metals and alloys, non-ferrous metals and alloys, glass, plastics and related bracing and assemblies, anchoring devices, structural cabling, cable stays, permanent bents and towers, false-work for temporary supports of permanent steel members, stone and other non-pre-cast concrete architectural materials mounted on steel frames; safety systems for steel erection, steel and metal joists, metal decking and raceway systems and accessories, metal roofing and accessories, bridge flooring, cold formed steel framing, elevator beams, grillage, shelf racks, multi-purpose supports, crane rails and accessories, miscellaneous, architectural and ornamental metals and metal work, ladders, railings, handrails, fences and gates, gratings, trench covers, floor plates, castings, sheet metal fabrications, metal panels and panel wall systems, louvers, column covers, enclosures and pockets, stairs, perforated metals, ornamental iron work, expansion control including bridge expansion joint assemblies, slide bearings, hydraulic structures, fascias, soffit panels, penthouse enclosures, skylights, joint fillers, gaskets, sealants and seals, doors, windows and hardware, detention/security equipment and doors, conveying systems, building specialties, building equipment, machinery and plant equipment, furnishings and special construction.

APPROVAL TO BEGIN STEEL ERECTION

1. Before authorizing the start of steel erection, the *Controlling Contractor* (Calhoun, if we are the GC/CM) must provide the steel erector with a written notification that: (a) the concrete and/or mortar have attained either 75% of the intended compressive strength or sufficient strength to support the loads imposed during steel erection; and (b) any repairs, replacements, or modifications made to the anchor bolts were conducted with the approval of the engineer of record for the project.

SITE LAYOUT

1. The Controlling Contractor will maintain adequate access roads and lay down areas for the safe delivery and movement of material and equipment associated with the steel erection process.

ERECTION PLANS

1. Due to conditions at the site, the steel erector may elect to provide alternative means and methods of protection to employees in accordance with 753(c)(5), 757(a)(4), and 757(e)(4) of this subpart. A site specific erection plan will need to be submitted by the steel erector to the Controlling Contractor prior to the start of steel erection, if the erector elects to provide these alternative means and methods.

HOISTING AND RIGGING

1. Cranes used in steel erection activities shall be visually inspected prior to each shift by a competent person. If any deficiencies are found that constitute a hazard, the crane will be taken out of service until the deficiency has been corrected.

2. The operator will be responsible for those operations under his/her direct control. Whenever there is any doubt as to safety, the operator has the authority to stop and refuse to handle loads until safety has been assured.

3. A qualified rigger will inspect the rigging prior to the start of each shift.

4. Safety latches on hooks shall not be made inoperable.

5. Routes for suspended loads will be preplanned to ensure no employee is required to work directly under a suspended load except for:

    A. Employees engaged in the initial connection of the steel
    B. Employees necessary for hooking or unhooking the load

6. When working under suspended loads, the materials shall be rigged to prevent unintentional displacement by the use of safety latches on the hook.

MULTIPLE LIFT RIGGING (Christmas Treeing)

1. No crane is permitted to be used for a multiple lift where such lift is contrary to the manufacturer's specifications and limitations.

2. All components of the rigging assembly shall be designed and installed to meet the maximum capacity of the total assembly and each individual section of the assembly.

3. This capacity, certified by the qualified rigger or manufacturer, shall be based on the manufacturer's specifications with a 5 to 1 safety factor for all components.

4. The total load shall not exceed the rated capacity of the hoisting equipment.

5. The assembly shall be rigged with members attached at their center of gravity;

6. Rigged from the top down; and

7. Rigged at least 7 feet apart.

8. The members of the assembly shall be set from the bottom up.

9. Controlled load lowering shall be used whenever the load is over the connectors.

STRUCTURAL STEEL ASSEMBLY

1. There shall not be more than 8 stories between the erection floor and the uppermost permanent floor.

2. There shall be no more than 4 floors or 48 feet, whichever is less, of unfinished bolting or welding above the foundation or uppermost permanently secured floor.

3. Shear connectors, reinforcing bars, deformed anchors, or threaded studs shall not be attached to the top flanges of beams, joists, or beam attachments until the metal decking or other walking/working surface has been installed.

4. Shear connectors shall not be installed from within a Controlled Decking Zone.

5. When deemed necessary by a competent person, plumbing-up equipment shall be properly installed before the structure is loaded with construction material such as joists or bundles of decking.

6. Plumbing-up equipment shall be removed only with the approval of a competent person.

7. Metal decking bundles shall be landed on framing members so that enough support is provided to allow the bundles to be unbanded without displacement.

8. Packaging or strapping on bundles of metal decking shall not be used for hoisting.

9. Loose items placed on top of the bundle must be secured to the bundle before hoisting.

10. Metal decking bundles shall be secured against displacement at the end of the shift or when adverse environmental conditions exist.

INSTALLATION OF METAL DECKING

1. Metal decking panels shall be placed to ensure full support by structural members.

2. Wire mesh, exterior plywood, or the equivalent shall be placed over gaps around columns where planks or metal decking do not fit tightly to prevent personnel or materials from falling through the gaps.

3. Materials stored on metal decking shall have the load distributed over the underlying supports to prevent overloading of the decking.

4. Framed metal deck openings shall have structural members turned down to allow continuous decking installation.

5. Roof and floor openings that cannot be decked over due to size or configuration shall be protected to prevent employees falling through.

6. Metal decking holes and openings shall not be cut until immediately prior to being permanently filled or covered.

COVERING ROOF AND FLOOR OPENINGS

1. Covers shall be capable of supporting, without failure, twice the weight of the employees, equipment and materials that may be imposed on the cover at any one time.

2. Covers shall be secured from accidental displacement.

3. Covers shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

COLUMN ANCHORAGE

1. All columns shall have a minimum of four (4) anchor bolts.

2. Anchor bolts shall not be repaired, replaced, or field-modified without the approval of the project structural engineer of record.

3. Prior to erection of the columns, the controlling contractor must provide written notification to the steel erector of any repairs, replacements, or modifications done to the anchor bolts.

BEAMS AND COLUMNS

1. During the placement of structural members, the hoisting line shall not be released until there is a minimum of two (2) bolts installed and drawn up wrench-tight.

2. During the placement of diagonal bracing, the hoisting line shall not be released until one bolt has been installed and drawn up wrench-tight.

3. Double connections at columns and/or at beam webs over a column. When two members share common connecting holes, at least one bolt with its wrench-tight nut shall remain connected to the first member unless there is a seat attached to secure the first member.

4. If a seat or equivalent device is used, it shall be designed to support the load during the double-connection process.

5. Perimeter columns shall not be erected unless they extend a minimum 48 inches above the finished floor to permit the installation of safety cables and they have a means of attaching those cables.

OPEN WEB STEEL JOISTS

1. Where steel joists are used and columns are not framed in at least two directions with solid web structural members, a steel joist shall be field-bolted at the column to provide lateral stability to the column.

2. A vertical stabilizer plate shall be provided for steel joists.

3. The bottom chords of steel joists at columns shall be stabilized to prevent rotation during erection.

4. The hoisting cables shall not be removed until the joist is stabilized to prevent rolling.

5. Where constructability does not allow a steel joist to be installed at the column, an alternate means of stabilizing the joist shall be installed near the column.

6. Steel joists with a span of 60 ft. or less will be designed with sufficient strength to allow one (1) employee to release the hoisting cables without bridging.

7. Steel joists with a span over 60 ft. will be set in tandem with all bridging installed.

8. A steel joist or steel joist girder shall not be placed on any support structure until that structure has been stabilized.

9. When steel joists are landed on a structure, they shall be secured to prevent unintentional displacement.

10. There can be no modifications made that will affect the structural integrity of the joist without approval from the engineer of record.

11. Steel joists and steel joist girders shall not be used as anchorage points for a fall arrest system unless written approval is obtained from a qualified person.

FALLING OBJECT PROTECTION

1. All materials, equipment, and tools, which are not in use while aloft, shall be secured against accidental displacement.

2. The Controlling Contractor shall bar other construction activities below the steel erection unless sufficient overhead protection for the employees below is provided.

FALL PROTECTION

1. Each employee engaged in steel erection activities that are more than 6 ft. above a lower level will be protected from falling by means of a guardrail system, safety net system, personal fall arrest system, positioning device system or fall restraint system.

2. Perimeter safety cables shall be installed as soon as the metal decking has been installed.

3. Each connector shall complete specialized training prior to performing this work.

4. All components used in fall arrest and fall restraint systems shall meet the requirements in 1926.502.

5. Custody of Fall Protection – Fall protection provided by the steel erector shall remain in the area where steel erection activity has been completed, to be used by other trades, only if the Controlling Contractor has directed the steel erector to leave the fall protection system, and has inspected and accepted control and responsibility of the system.

CONTROLLED DECKING ZONE (CDZ)

1. Each worker in the CDZ shall have completed CDZ Training.
2. The leading edge of the CDZ can be no more than 30 ft. above the lower level.
3. The CDZ shall be limited to those employees performing decking installation.
4. Control lines shall be no closer than 6 ft. nor further than 90 ft. from the leading edge.
5. The CDZ can be no wider than 90 ft.
6. Control lines must extend along the entire length of the unprotected side or edge.
7. Control lines will be connected to a guardrail system, wall, post, or other suitable anchorage.
8. Control lines shall consist of ropes, wires, tapes, or equivalent materials that have a minimum breaking strength of 200 pounds.
9. Control lines shall be at a height of no less than 39" or no more than 45" from the working surface.
10. A maximum of 3,000 sq. ft. of unsecured decking is allowed in the CDZ.

TRAINING

1. Fall Hazard Training

    A. Recognize and identify fall hazards in the work area.
    B. Use and operation of guardrail systems, personal fall arrest systems, positioning device systems, fall restraint systems, safety net systems, and any other systems that may be used.
    C. The correct procedures for installation, disassembling, maintaining, and inspecting the systems to be used.
    D. Procedures to be used to prevent falls into or through holes and openings in walls or walking/working surfaces.
    E. Fall protection requirements for Subpart R.

SPECIAL TRAINING PROGRAMS

1. Multiple Lift Rigging

A. Nature of the hazards associated with multiple lifts, and
B. The proper procedures and equipment to perform multiple lifts required by 1926.753(e).

2. Connector Procedures

A. Nature of the hazards associated with connecting
B. The establishment, access, proper techniques and work practices required by 1926.756(c) and 1926.760(b).

3. Controlled Decking Zone Procedures

A. Nature of the hazards associated with work within a CDZ, and
B. The establishment, access, proper installation techniques and work practices required by 1926.756(c) and 1926.760(b).

REMOVAL OF STEEL RIVETS

1. Procedure

A. Remove the head of the rivet on both sides, if accessible, by either flame scarfing or grinding.
B. Using a ninety, better known as a "helldog," drive the rivet out. Other methods can be used. If the rivet will not drive out due to being flared out when installed, flame torch or drill a hole through the center of the rivet to collapse the shaft of the rivet. This should successfully drive the rivet out.

2. Safety Procedure

A. Rivets have the potential to be extremely hot upon removal. Some method should be applied to contain the rivets when driven out. Appropriate PPE should be worn.

RESERVED

Section 45: Hot Work

1) POLICY

a) Hot Work, such as brazing, grinding, welding, torching, or throwing sparks, present a significant opportunity for fire and injury. All precautions of this program must be applied prior to commencing any hot work by company employees or subcontractors. A minimum of a 10lb Fire Extinguisher must be within 15 feet of all hot work activity.

2) HOT WORKS PROCEDURES

a) Where practical, all combustibles shall be relocated at least 35 feet from the work site. Where relocation is impractical, combustibles shall be protected with flame proof covers, shielded with metal, guards, curtains, or wet down material to help prevent ignition of material. If combustibles cannot be relocated at least 35 feet from the hot work activity, a Hot work permit MUST be utilized.

b) Ducts, conveyor systems, and augers that might carry sparks to distant combustibles shall be protected or shut down.

c) Where cutting or welding is done near walls, partitions, ceilings, or a roof of combustible construction, fire-resistant shields or guards shall be provided to prevent ignition.

d) If hot work is to be done on a metal wall, partition, ceiling, or roof, precautions shall be taken to prevent ignition of combustibles on the other side, due to conduction or radiation of heat. Where combustibles cannot be relocated on the opposite side of the work, a fire watch person shall be provided on the opposite side of the work.

e) Welding shall not be attempted on a metal partition, wall, ceiling or roof having a covering, or on walls having combustible sandwich panel construction.

f) Cutting or welding on pipes or other metal in contact with combustible walls, partitions, ceilings, or roofs shall not be undertaken if the work is close enough to cause ignition by combustion.

g) A minimum of a 10 lb. fire extinguisher and fire-watch must be located at all levels sparks may come in contact with.

h) Hotwork shall not be permitted in the following situations:

i) In areas not authorized by management.
ii) In the presence of potentially explosive atmospheres, e.g.. a flammable.
iii) In areas near the storage of large quantities of exposed, readily ignitable materials.
iv) In areas where there is dust accumulation of greater than 1/16 inch within 35 feet of the area where welding/hot works will be conducted.

3) Designated Hot work Areas:

a) At least one 10 lb. dry chemical fire extinguisher must be within 15 feet of the work area.
b) Protective dividers such as welding curtains or non-combustible walls will be provided to contain sparks and slag to the combustible free area.
c) Floors swept and clean of combustibles within 35 ft. of work area.
d) Flammable and combustible liquids and material will be kept 35 ft. from work area.
e) Adequate ventilation providing 20 air changes per hour, such as a suction hood system, should be provided to the work area.

4) Hot work Outside Designated Hot work Areas:

a) Hot work Permits MUST be utilized.
b) At least one 10 lb. dry chemical fire extinguisher must be within 15 feet of the work area.
c) Portable welding curtains or shields must be used to protect other workers in a welding area.
d) Flammable materials are to be covered with protective tarps during hot work activity.
e) Fire Watch must be utilized and maintained for at least 60 minutes after hot work activities are completed. (NFPA 51B 5.6.1.1)

5) Hot work Permit Process

a) Calhoun Site Supervision is responsible for issuing, verifying, and closing out hot work permits.
b) The contractor must fill out the location, activity, hot work personnel, and fire-watch personnel.
c) Calhoun Site Supervision must review the contractor's information and sign-off on the permit (issuing).
d) The issued permit must be documented on an active hot work log.
e) The contractor performing hot work must keep their permit in the work area.
f) Calhoun Site Supervision MUST periodically inspect (verifying) hot work operations to ensure procedures are followed.
g) The contractor performing hot work must document the times hot work starts and stops.
h) The contractor performing hot work must document the times fire-watch starts and stops.
i) Once hot work is complete for the shift, and the hour fire-watch has stopped, the permit must be turned in to Calhoun Site Supervision.
j) Calhoun Site Supervision must sign the permit confirming the permit has been closed.

Purpose: Fencing/signage requirements will be determined on a job-by-job basis by the Calhoun project team and reviewed by upper management. The following procedure must be followed when Fencing/Signage has been determined to be required.

1. **Entrance Signage/Fence Wrap**
   - **a.** All entrances to the jobsite must have the following signs posted:
     - **i.** Calhoun Construction
     - **ii.** Danger, Authorized Personnel Only
     - **iii.** PPE Requirements (Jobsite Jeff)

   - b. Fence wrap is defined as any material attached to a fence that covers more than 50% of a fence panel. Fence Wrap must be approved by the safety department prior to installation.

2. **Temporary Fencing**
   - a. Temporary fencing includes the following:
     - i. Pedestal Fencing
     - ii. Bolt down base plate fencing
     - iii. Water-filled Jersey barrier fence
     - iv. Concrete Jersey barrier fence

   - b. If using Pedestal Fencing or Bolt Down Base Plate Fencing, it must be secured at all gates and at the location of any sign mounted to the fence. If the Pedestal Fencing or Bolt Down Base Plate fencing meets **ANY** of the following, it must be secured every 5 panels (50 feet).
     - i. Over 50 feet long.
     - ii. Single line of fence not connected to a perpendicular section of fence.
     - iii. Signage mounted to the temporary fence.
     - iv. Appears to be unstable
     - v. Adjacent to pedestrians walk paths, parking lots, or roadways.

   - **c.** All temporary fence panels must be clamped to their neighboring panels. Proven means of securing temporary fencing includes the following:
     - i. Kickers
     - ii. High-visible guy wires
     - iii. Perpendicular Panels

3. **Inspections**
   - **i.** All temporary fencing must be inspected weekly by the Calhoun Site Leadership team.

RESERVED

Section 48: First Aid & CPR

POLICY

Occupational health concerns receive high priority. It is essential that each location be able to adequately respond to first-aid events and resolve all other occupational health problems quickly. The health and wellness of each employee is a key segment of the overall safety environment.

OSHA REQUIREMENTS

1. OSHA requirements for medical services and first aid are found in Standard Number 1910.151 and are listed below:

    A. Ensure the ready availability of medical personnel for advice and consultation on matters of plant health.
    B. In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid.
    C. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

RESPONSIBILITIES

1. Management:

    A. Ensure there are a sufficient number of qualified first aid providers to assist injured workers.
    B. Provide first aid training for all supervisors.
    C. Offer first aid training for all employees.
    D. First aid training will be conducted and certified from American Red Cross or equivalent reputable agency.

2. Safety Director or Designee:

    A. Ensure first aid and health programs are adequate.
    B. Maintain all required records.
    C. Inspect and Ensure first aid supplies are always well stocked.
    D. Conduct first aid training.
    E. Administration of all medical management programs.
    F. Administration of the return to work program.
    G. Maintain employee health/medical files.
    H. Provide all necessary services in a courteous and professional manner.

I. Conduct physical screenings.
J. Maintain all clinic areas clean, neat, and well stocked.
K. Follow accepted medical practices and procedures.
L. Adhere to all standards of the Bloodborne Pathogen Program.
M. Ensure on-site personnel:
    1) Know the local emergency number(s)
    2) Emergency number(s) are posted on-site
    3) Have the means (cell phone or land line) to contact emergency personnel
    4) Have the means to transport an injured employee to a health care provider. (non-life threatening injuries only)

RECORDS

1. **Treatment Records** are permanent records and will be filled out for any of the following:

    A. All visits to the processing plant First Aid Station with the exception of visits for minor cuts, comfort care, etc.
    B. All accidents that result in any injury.
    C. All occupational illnesses.
    D. Prior to referral to any medical provider.

2. **Medical Appointment Log** will be filled in when any appointment for medical treatment, evaluation, or other medical service is made for an employee.

3. **Modified Duty Assignment** forms shall be completed by the attending physician for any employee who has a condition that prevents them from conducting their normal duties. This form shall be used to notify management of the limitations. Questions concerning the limitations are to be directed to the Safety Director. The Safety Director shall maintain a file for original forms. Copies shall be provided to the employee and to the employee's Supervisor and Manager.

4. **Confidentiality:** Records of all first aid and medical events shall be kept in each individual's medical file. All medical record information is confidential and shall not be released to third parties without written authorization by the employee involved or as authorized by law.

FIRST AID KITS

1. Well-stocked First Aid kit(s) for employee use will be maintained and contents will be periodically assessed.

A. The basic inventory of each first aid kit must be approved by the company consulting physician. This approval shall be initialed and records maintained by the Safety Director.
B. These kits will be located so as to allow easy and quick access. First aid kits and required contents are to be maintained in a serviceable condition.
C. All items, which must be kept sterile, must be individually wrapped and sealed. Items such as scissors, tweezers, tubes of ointments with caps, or rolls of adhesive tape, need not be individually wrapped, sealed, or disposed of after a single use or application.

2. Required First-Aid Supplies:

A. **Sterile first-aid dressing**
   2 x 2 in (5 x 5 cm) for small wounds
   Quantity: Box of 12
   For open wounds or dry dressings for burns. (These are packaged sterile; do not try to make your own)
B. **Sterile first-aid dressing**
   4 x 4 in (10 x 10 cm) for larger wounds and for a compress to stop bleeding.
   Quantity: Box of 12
   For open wound or dry dressings for burns. (These are packaged sterile; do not try to make your own)
C. **Large sterile dressing**
   14 x 14 in (36 x 36 cm)
   Quantity: 2
   For covering large chest or abdominal wounds
D. **Rolled gauze bandage**
   1 in x 5 yd (2.5 cm x 5 m)
   Quantity: 2
   For finger bandage
E. **Rolled gauze bandage**
   2 in x 5 yd (5 cm x 5 m)
   Quantity: 2
   To hold dressings in place
F. **Compression bandage**
   2-, 3-, and 4-in (5-, 7.5-, and 10-cm) width
   Quantity: 1 each
   For sprains and strains
G. **Adhesive tape**
   2-in (2.5- and 5-cm) width
   Quantity: 1 roll each
   To secure dressings in place

H. **Triangular bandage**
   37 x 37 in (94 x 94 cm) square, cut, or folded diagonally, with 2 safety pins
   Quantity: 4
   For a sling, as a covering, or for a dressing

I. **Safety pins**
   1-1/2 in (4 cm) long
   Quantity: 8
   For use with triangular bandage

J. **Soap**
   Quantity: 1 bar
   For cleansing wounds, scratches, and cuts. (Antiseptics are not necessary)

K. **Paper drinking cups**
   Quantity: 25
   To administer fluids

L. **Cotton tip swabs**
   Quantity: 4
   To remove foreign particles from wounds

M. **Diphenhydramine (an over-the-counter antihistamine)**
   Quantity: 2 tablets (25 mg each)
   To relieve symptoms of allergies, such as itching or swelling

N. **Aspirin, acetaminophen, or ibuprofen**
   Quantity: 2 tablets
   To relieve pain

O. **Flashlight and batteries**
   Quantity: 1
   For use in darkened areas and at night. (Check batteries periodically)

P. **Scissors with blunt tips**
   Quantity: 1 pair
   For cutting bandages or clothing

Q. **Tweezers**
   Quantity: 1
   To remove splinters and other foreign objects, except stingers from insect bites

R. **Splints, long and short board or inflatable type**
   Quantity: 1 package
   For splinting broken bones

S. **Tongue depressors, wooden**
   Quantity: 6 to 12
   For splinting broken fingers and stirring solutions

T. **Activated charcoal**
   Quantity: 1 container
   To use for poisoning

U. **Rubbing or grain alcohol**
   Quantity: 3-4 oz (90-120 ml)
   For sterilizing scissors
V. **Chemical cold and heat packs**
   Quantity: 1 each
   For sprains, bruises, etc.
W. **Containers of water**
   Quantity: 1-2 gallons (3.8-7.6 liters)
   For cleansing wounds, abrasions, and eyes, and for drinking.
X. **Blanket**
   Quantity: 1
   For warmth
Y. **Nail clipper**
   Quantity: 1
   To clip broken toenails and fingernails
Z. **Large bath towels**
   Quantity: 2
   For bandages or dressings (Old, soft towels and sheets are best. Towels and sheets should be laundered, ironed, and wrapped in heavy paper. Re-launder every 3 months.)
AA. **Bed sheet**
   Quantity: 1
   Same as bath towels
BB. **Essential personal prescription medications**
   As directed by your doctor (Keep a current list of all medications and dosages handy for reference.)
CC. **Eyewash station**
   Quantity: 1
   Must be readily available for treating eye contamination.

EYE CONTAMINATION (chemical or other foreign material in eye):

1. Prompt first-aid treatment is essential. Delay greatly increases the extent of injury.

2. Treatment:

   A. Immediately rinse the eyes with a gentle stream of room-temperature water from a faucet, shower, hose, or pitcher while holding the person's eyes open. You can use milk if water is not available. Do not use an eyecup. Rinse for at least 10 minutes.
   B. Do not use boric acid or eye drops, drugs, or ointments. Such substances may increase the injury.
   C. Take the person to the nearest hospital emergency department immediately.

D. Ask the person if he or she is wearing contact lenses. Remove them if the person cannot do it, medical help is unavailable, and you know how. Often, running a gentle stream of water over the eyes will dislodge the lenses.
E. Do not remove a contact lens if the colored area of the person's eye is not visible upon opening his or her eyelids.
F. Never try to pry a contact lens loose with fingernails, matches, pencils, toothpicks, swabs, or similar objects.
G. Do not use force. If you see the lens but can't remove it, use the eyelids to gently slide it onto the white of eye. The lens can stay there until medical help arrives.
H. You can remove contact lenses with the person standing, sitting, or lying on his or her back.
I. After removing contact lenses, put them in their container. If the lens container is not available, place the lenses in bottles with a little water and identify the eye from which the lenses were removed.

POST ACCIDENT

1. For all accidents that result in injuries or property damage or that requires off-site medical attention and/or evaluation, a DOT Drug screening or greater will be conducted in accordance with procedures provided by the Indiana State Worker's Compensation Program. This screening is part of the company Substance Abuse Program.

2. MINOR CARE - Comfort providing systems such as wraps, balms, hot-wax and other non-invasive, non-medicated procedures may be employed to provide comfort to the employee experiencing minor work-related physiological stresses.

3. MEDICAL REFERRALS - The Insurance Coordinator will arrange for employees to see appropriate medical care providers for other than minor work related complaints. A medical Referral and Work Release Form shall be filled in by the Insurance Coordinator for all medical referrals. This record shall accompany the employee to the care provider and be returned for use in determining the need for any modified duty.

4. MODIFIED DUTY - When an employee has been identified by proper medical authority as having a condition that would limit them in their normal job function, the Insurance Coordinator shall initiate a Modified Duty Assignment Sheet. This sheet will list the limitations and advise management of the need for assignment to duties that will not exceed the limitations. Management will assign limited duties in writing on the Modified Duty Assignment Sheet. The original shall remain in a Pending and Review File, held by the Insurance Coordinator to prompt periodic monitoring of the employee's condition. Copies shall be provided to the employee, the employee's supervisor and manager.

5. RETURN TO DUTY - When conditions have changed, such that the employee no longer has limitations, the Insurance Coordinator shall initiate "Return to Duty" actions by filling out the reverse side of the Modified Duty Assignment Sheet. The Insurance Coordinator shall consult with the employee's manager to provide guidance for any appropriate reconditioning program based on the employee's normal job functions. Examples of elements that would be considered are: normal job functions, length of time away from normal job, type of limitation, etc. If the limitation was caused by physiological stress factors, the Insurance Coordinator will provide the employee information to be used to minimize the chance of reoccurrence of the same or similar stress limitation. The original form shall be filed in the employee's Medical Record and copies provided to the employee, supervisor, and manager.

RESERVED

Section 50: Pandemic Preparedness

INTRODUCTION

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide. A worldwide influenza pandemic could have a major effect on the global economy, including travel, trade, tourism, food, consumption and eventually, investment and financial markets. Planning for pandemic influenza by Calhoun is essential to minimize a pandemic's impact. As with any catastrophe, having a contingency plan is essential. The Safety Director will be the main contact for this plan.

DEFINITIONS

1. **Seasonal Influenza**

    A. Refers to the periodic outbreaks of respiratory illness in the fall and winter in the United States. Outbreaks are typically limited; most people have some immunity to the circulating strain of the virus.
    B. A vaccine is prepared in advance of the seasonal influenza; it is designed to match the influenza viruses most likely to be circulating in the community.
    C. Employees living abroad and international business travelers should note that other geographic areas (for example, the Southern Hemisphere) have different influenza seasons which may require different vaccines.

2. **Pandemic influenza**

    A. Refers to a worldwide outbreak of influenza among people when a new strain of the virus emerges that has the ability to infect humans and to spread from person to person.
    B. During the early phases of an influenza pandemic, people might not have any natural immunity to the new strain; so the disease would spread rapidly among the population.
    C. A vaccine to protect people against illness from a pandemic influenza virus may not be widely available until many months after an influenza pandemic begins.
    D. It is important to emphasize that there currently is no influenza pandemic. However, pandemics have occurred throughout history and many scientists believe that it is only a matter of time before another one occurs.
    E. Pandemics can vary in severity from something that seems simply like a bad flu season to an especially severe influenza pandemic that could lead to high levels of illness, death, social disruption and economic loss.

F. It is impossible to predict when the next pandemic will occur or whether it will be mild or severe.

CONTROLS

WORK PRACTIVE & ENGINEERING CONTROLS

Historically, infection control professionals have relied on personal protective equipment (for example, surgical masks and gloves) to serve as a physical barrier in order to prevent the transmission of an infectious disease from one person to another. This reflects the fact that close inter-actions with infectious patients is an unavoidable part of many healthcare occupations.

The principles of industrial hygiene demonstrate that work practice controls and engineering controls can also serve as barriers to transmission and are less reliant on employee behavior to provide protection. Work practice controls are procedures for safe and proper work that are used to reduce the duration, frequency or intensity of exposure to a hazard. These controls should be understood and followed by managers, supervisors and employees. When work practice controls are insufficient to protect employees, engineering controls need to be implemented.

1. Engineering controls involve making changes to the work environment to reduce work-related hazards. These types of controls are preferred over all others because they make permanent changes that reduce exposure to hazards and do not rely on employee or customer behavior. By reducing a hazard in the workplace, engineering controls can be the most cost-effective solutions.

2. During a pandemic, engineering controls may be effective in reducing exposure to some sources of pandemic influenza and not others. For example, installing sneeze guards between customers and employees would provide a barrier to transmission.

3. The use of barrier protections, such as sneeze guards, is common practice for both infection control and industrial hygiene. However, while the installation of sneeze guards may reduce or prevent transmission between customers and employees, transmission may still occur between coworkers. Therefore, administrative controls and public health measures will be implemented along with engineering controls.

4. Work practice controls include

    A. Providing resources and a work environment that promotes personal hygiene. For example, provide tissues, no-touch trash cans, hand soap, hand sanitizer, disinfectants and disposable towels for employees to clean their work surfaces.

B. Encouraging employees to obtain a seasonal influenza vaccine (this helps to prevent illness from seasonal influenza strains that may continue to circulate).
C. Providing employees with up-to-date education and training on influenza risk factors, protective behaviors, and instruction on proper behaviors (for example, cough etiquette and care of personal protective equipment).

5. Engineering controls include

A. Installing physical barriers, such as clear plastic sneeze guards.
B. In some limited healthcare settings, for aerosol generating procedures, specialized negative pressure ventilation may be indicated.

6. Administrative controls include

A. Controlling employees' exposure by scheduling their work tasks in ways that minimize their exposure levels.
B. Ill employees are encouraged to stay at home without fear of any reprisals.
C. The discontinuation of unessential travel to locations with high illness transmission rates.
D. Minimize face-to-face contact between employees such as e-mail, websites and teleconferences. Where possible, encourage flexible work arrangements such as telecommuting or flexible work hours to reduce the number of employees who must be at work at one time or in one specific location.
E. Maintain a forum for answering employees' concerns. Develop internet-based communications.
F. Continuation of work if most of the staff is sick, will resume and other trained employees will cover that person's duty until the employee is able to return to work.
G. Internal communications is a must and should be an effective process. Each employee who cannot make it work because of an illness will be required to call their immediate supervisor. The supervisor will then relay the information to the appropriate party. Key contacts will be developed for these situations.
H. If an outbreak develops, the key contacts for our customers will be notified of the condition, and delay in work may be a factor.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

While administrative and engineering controls and proper work practices are considered to be more effective in minimizing exposure to the influenza virus, the use of PPE may also be indicated during certain exposures.

1. If used correctly, PPE can help prevent some exposures; however, they should not take the place of other prevention interventions, such as engineering controls, cough etiquette, and hand hygiene.

2. Examples of personal protective equipment are:

    A. Gloves
    B. Goggles
    C. Face shields
    D. Surgical masks and,
    E. Respirators (for example, N-95).

3. It is important that personal protective equipment be:

    A. Selected based upon the hazard to the employee;
    B. Properly fitted and some must be periodically refitted (e.g.,respirators);
    C. Conscientiously and properly worn;
    D. Regularly maintained and replaced, as necessary;
    E. Properly removed and disposed of to avoid contamination of self, others or the environment.

4. Calhoun is obligated to provide their employees with protective gear needed to keep them safe while performing their jobs.
5.
6.
7.
8.

5. The types of PPE recommended for pandemic influenza will be based on the risk of contracting influenza while working and the availability of PPE.

REDUCING THE RISK OF EXPOSURE

The best strategy to reduce the risk of becoming infected with influenza during a pandemic is to avoid crowded settings and other situations that increase the risk of exposure to someone who may be infected. If it is absolutely necessary to be in a crowded setting, the time spent in a crowd should be as short as possible.

Some basic hygiene and social distancing precautions that can be implemented in every workplace include the following

1. Encourage sick employees to stay at home.

2. Encourage employees to wash their hands frequently with soap and water or with hand sanitizer if there is no soap or water available. Also, encourage employees to avoid touching their noses, mouths, and eyes.

3. Encourage employees to cover their coughs and sneezes with a tissue, or to cough and sneeze into their upper sleeves if tissues are not available. All employees should wash their hands or use a hand sanitizer after they cough, sneeze or blow their noses.

4. Employees should avoid close contact with their coworkers and customers (maintain a separation of at least 6 feet). They should avoid shaking hands and always wash their hands after contact with others. Even if employees wear gloves, they should wash their hands upon removal of the gloves in case their hand(s) became contaminated during the removal process.

5. Keep work surfaces, telephones, computer equipment and other frequently touched surfaces and office equipment clean. Be sure that any cleaner used is safe and will not harm your employees or your office equipment. Use only disinfectants registered by the U.S. Environmental Protection Agency (EPA), and follow all directions and safety precautions indicated on the label.

6. Discourage your employees from using other employees' phones, desks, offices or other work tools and equipment.

7. Minimize situations where groups of people are crowded together, such as in a meeting. Use e-mail, phones and text messages to communicate with each other. When meetings are necessary, avoid close contact by keeping a separation of at least 6 feet, where possible, and assure that there is proper ventilation in the meeting room.

8. Reducing or eliminating unnecessary social interactions can be very effective in controlling the spread of infectious diseases.

9. Reconsider all situations that permit or require employees, customers, and visitors (including family members) to enter the workplace. Workplaces which permit family visitors on site should consider restricting/eliminating that option during an influenza pandemic. Work sites with on-site day care should consider in advance whether these facilities will remain open or will be closed, and the impact of such decisions on employees and the business.

10. Promote healthy lifestyles, including good nutrition, exercise, and smoking cessation. A person's overall health impacts their body's immune system and can affect their ability to fight off, or recover from, an infectious disease.

11. All Calhoun employees are encouraged to obtain all appropriate immunizations to help slow the spread of a Pandemic.

TRAINING

Calhoun will educate and train employees about the protective clothing and equipment appropriate to their current duties and the duties which they may be asked to assume when others are absent. Education and training material should be easy to understand and available in the appropriate language and literacy level for all employees.

1. Employees will be fit tested and trained in the proper use and care of a respirator. It is also important to train employees to put on (don) and take off (doff) PPE in the proper order to avoid inadvertent self-contamination. Employees who dispose of PPE and other infectious waste will also be trained and provided with appropriate PPE.

2. During a pandemic, recommendations for PPE use in particular occupations may change depending on geographic location, updated risk assessments for particular employees, and information on PPE effectiveness in preventing the spread of influenza.

3. Training will also consist of details on the differences between a surgical mask and a respirator, the state of science regarding influenza transmission, and the rationale for determining the appropriate protective device.

4. Periodic training consists of this program and the prevention of illness, spreading of disease symptoms and disease containment. Periodic to annual emergency communications will be tested to assure its effectiveness.

Review

This policy is to be reviewed annually and updated by the Safety Director.
Following a pandemic event this policy must be reviewed to ensure all lessons learned have been implemented.

COMMUNICATION PROTOCOL FOR SITE SHUTDOWN DUE TO PANDEMIC

In the event of a large percentage of the work force becomes ill or a government agency shuts down construction sites, follow these steps:

A) Gather superintendents and project managers to communicate shut down of site and confirm roles and responsivities.

B) Calhoun and trade partners will call/email all services, deliveries, caterers, vendors, shipping companies that the site will be closed to all visitors. Any large deliveries in transit need to be communicated to the Calhoun project team for further planning. These large deliveries that are underway are to be listed and communicated to Calhoun leadership.

C) Trade partners will be expected to communicate shut down to their teams, identify who should immediately leave the site, and who should stay to help with shut down activities. If the entire site cannot be secured in a single day, smaller crews will return the following day to finish the shutdown work.

D) Trade partners will be expected to confirm with Calhoun that their work areas have been secured, deliveries have been canceled, materials have been secured, trash has been removed, and trailers cleaned out; and will walk with a member of the Calhoun project team for sign off prior to completely leaving the shite.

E) All effected Calhoun employees will be notified via email, phone, or text.

Section 51: Working Over and/or Near Water

POLICY

Employees working in areas unprotected by passive fall protection systems (OSHA specified railings or nets), where the danger of drowning exists, must wear a U.S. Coast Guard-approved life jacket or buoyant work vest, commonly referred to as a personal flotation device (PFD).

This regulation can be superseded with the use of 100% fall protection. If an employee cannot fall into the water as a result of use of active or passive fall protection, there is no danger of drowning, and a PFD is not required. For example, where an employee is working on a steep slope and could fall into water, a PFD is required.

Safety lines that prevent employees from reaching the water eliminate the danger of drowning, and negate the need for a PFD. The same is true when working on a barge or floating platform with an approved railing system.

In addition, both of the following shall be in place:

1. A skiff or boat for emergency rescue operations, equipped with paddle or oars; a ring buoy or other life preserver; and a reach extension device. Where water current exists, the skiff or boat must be motorized or occupied at all times. A safety line may be connected between the boat and a structural member capable of maintaining the position of the boat. All occupants of boats must wear a PFD. One or more ring buoys, with at least 90 feet of line attached, located at 150 foot intervals across the distance of the work area which is over water.

2. OSHA Construction Industry Standards (1926) state: "employees working over or near water, **where the danger of drowning exists**, shall be provided a Coast Guard-approved PFD."

Employees shall not work alone, where practical, in situations where a drowning hazard exists.

Section 52: Demolition

POLICY

To protect contractor employees and the public from undue exposure to hazards associated with demolition operations.

Calhoun superintendent will be responsible for providing direction and guidance to all subcontractors during the demolition operation.

Calhoun's internal demolition permit MUST be filled out and approved by the either the project Superintendent, Project Manager, or a member of the Safety department.

PROCEDURES

1 Pre-Demolition

a Demolition Contractors are responsible for training their employees in demolition safety.

b Architectural and structural demolition plans must be reviewed. If this item is not provided by the design team, an engineering survey will be made by a qualified person. A copy of this documentation is to be kept on file in the Calhoun field office.

c The Calhoun leadership team must obtain from the owner a site survey identifying the locations of asbestos- and lead-containing materials. If the owner is unable to provide this information, a site survey must be completed to identify and/or verify areas suspected of containing these materials prior to their disturbance during the demolition operation. This survey must be completed by a contractor experienced in asbestos and lead identification. A copy of the results of this testing is to be retained in the Calhoun field office.

d The Calhoun leadership team must verify that all regulatory permits have been applied for and received.

e Pre-Demolition Safety Meeting Must be held with the Calhoun Leadership team, Calhoun Safety Department, and Demolition Contractors.

f Calhoun Demolition permit must be Completed and Authorized. This includes all Live utilities marked and shutoff procedures known.

2 Demolition Activities

a Workers will be required to wear task related gloves in addition to their standard Personal Protective Equipment when performing selective demolition operations. Cut resistant sleeves are required when dealing with sharp materials.

b All electric, gas, water, steam, sewer, and other service lines that carry energy must be shut off and disconnected or identified as live before demolition work is started. The Calhoun site leadership team must visually verify these services are disconnected or identified. Utilities slated for demolition and verified disconnected must be painted with Green Paint every 10 feet. Utilities left active must be identified with red tape, paint, or danger signage every 10 feet

c All floor and wall openings that pose a threat of being fallen through must be protected.

d Entrances to multi-story structures being demolished must be completely protected by sidewalk sheds, canopies, or both. Protection will be provided from the face of the building for a minimum of 8 feet. Canopies must be at least 2 feet wider (1 foot each side) than the opening or entrance protected and will be capable of sustaining a load of 150 pounds per square foot.

e No material will be dropped outside the exterior walls of a structure unless the landing area is effectively protected and under 20 feet. Effectively protected will be determined by site leadership team and approved by upper management.

3 CHUTES

a Each chute must have a substantial gate at or near the discharge end. A competent person must control the operation of the gate and the backing and loading of trucks.

b When operations are not in progress, the area surrounding the discharge end of a chute must be securely closed off.

c Any chute opening into which debris is dumped will be protected by a substantial guard rail approximately 42 inches above the surface on which workers stand when dumping debris.

d Where material is dumped from mechanical equipment or wheelbarrows, a securely attached toe-board or bumper not less than 4 inches thick and 6 inches in height will be provided at each chute opening.

4 REMOVAL OF WALLS, MASONRY SECTIONS, AND CHIMNEYS

a No wall section more than one story in height may stand alone without lateral bracing unless the wall was originally designed and constructed to stand without lateral support and is in a condition safe enough to be self-supporting. All walls will be left in a stable condition at the end of each work shift.

b Demolition personnel will not work on the top of a wall during hazardous weather conditions, as determined by the site team.

c In buildings of "skeleton-steel" construction, the steel framing may be left in place during the demolition of masonry. Where this is done, all beams, girders, and similar structural supports must be cleared of all loose material as the masonry demolition progresses downward.

d Walls which serve as retaining walls to support earth or adjoining structures will not be demolished until the earth has been properly braced or the adjoining structures has been properly underpinned.

e All Masonry demolition must follow Calhoun’s Safety Manual Chapter 53 Crystalline Silica Protection Program.

5 REMOVAL OF WALLS, FLOORS AND MATERIAL WITH EQUIPMENT

a Mechanical equipment will not be used on floors or working surfaces unless the floor or surface is strong enough to support the imposed load.

b Floor openings must have curbs or stop-logs to prevent equipment from running over the edge.

6 STORAGE

a The storage of waste material and debris on any floor will not exceed the allowable floor loads.

b Storage space into which debris is dumped will be blocked off, except for opening necessary for debris removal. The openings will be kept always closed when debris or material is not being removed.

7 REMOVAL OF STEEL CONSTRUCTION

a Steel construction must be dismantled column length by column length and tier by tier.

8 DEMOLITION USING MECHANICAL EQUIPMENT

a When equipment is used for demolition, no craft personnel will be allowed to enter an area that can be adversely affected by this operation. Only those employees and subcontractors necessary for the performance of the operations will be permitted in this area at any other time.

b During demolition, continuing inspections by a competent person will be made as the work progresses so that hazards that could result from weakened or deteriorated floors, or walls, or loosened material are detected. No contractor employee will be allowed to work where such hazards exist until these hazards are corrected by shoring, bracing, or other effective means.

Section 53: Crystalline Silica Protection Program

POLICY

Calhoun is committed to providing its employees, subcontractors and the public with protection from the hazards associated with crystalline silica. The purpose of this program is to reduce exposure to airborne crystalline silica to below the OSHA Permissible Exposure Limit (PEL) by means of substitution, engineering controls, work methods and administrative controls.

SCOPE

This policy applies to all operations involving Calhoun Construction Services, Inc. where respirable silica is present in volumes larger than 25 $\mu g/m^3$ of air during an 8-hour time-weighted average (TWA) under foreseeable conditions.

REFERENCES

OSHA 1926.1153 Respirable Crystalline Silica, 1919.1200 Hazard Communication Safety Program, and 1910.134 Respiratory Protection Safety Program.

INTRODUCTION

Crystalline Silica is a common mineral in the earth's crust, and is found in many types of rock including sand, quartz, and granite. Silica is present in both work and non-work environments, and exposure to crystalline silica dust has long been known to cause a disease called silicosis. When you inhale crystalline silica the lung tissue reacts by developing fibrous tissue around trapped silica particles. This condition of the lung is called silicosis.

TRAINING AND PROGRAM IMPLEMENTATION

Calhoun Construction Services, Inc. will implement a written exposure control plan that is readily available to employees upon request. In this program Calhoun Construction Services, Inc. will designate a competent person whom is tasked with regularly inspecting job sites, equipment, and effectiveness of the written control plan annually. Training is provided prior to using silica-containing materials or working in an environment known to contain airborne concentrations of Silica. Calhoun Construction Services, Inc. shall coordinate refresher training on this topic.

All employees will be training by Calhoun Construction Services, Inc. on silica protocols and be able to identify health hazards associated with Silica, tasks that result in exposure to silica, and be knowledgeable in engineering controls to limit exposure to respirable crystalline silica.

RESPIRATORY PROTECTION PROGRAM

Calhoun Construction Service, Inc.'s respiratory program will comply with 29 CFR 1910.134 and will be implemented where respiratory use is required according to Table 1 in OSHA 1926.1153. See also the Alternate Control Methods section of this chapter for further detail of respiratory protection requirements.

SPECIFIED EXPOSURE CONTROL METHODS (TABLE 1)

When employees are partaking in work described on Table 1, the employer must properly implement the engineering controls, work practices, and respiratory protection as described in the table.

Requirements for employee protection are outlined in the table for each specific task. The only exception to this is when the employer has conducted an exposure test that revealed the exposure is lower than the action level (25 µg/m^3) as listed in the standard.

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

Equipment/task	Engineering and work practice control methods	Required respiratory protection and minimum assigned protection factor (APF)	
		≤ 4 hours/shift	>4 hours/shift
(i) Stationary masonry saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None

(ii) Handheld power saws (any blade diameter)	Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
	-When used outdoors	None	APF 10
	-When used indoors or in an enclosed area	APF 10	APF 10
(iii) Handheld power saws for cutting fiber-cement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only: Use saw equipped with commercially available dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency	None	None
(iv) Walk-behind saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
	-When used outdoors	None	None
	-When used indoors or in an enclosed area	APF 10	APF 10
(v) Drivable saws	For tasks performed outdoors only:		

	Use saw equipped with integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
(vi) Rig-mounted core saws or drills	Use tool equipped with integrated water delivery system that supplies water to cutting surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills)	Use drill equipped with commercially available shroud or cowling with dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism Use a HEPA-filtered vacuum when cleaning holes	None	None
(viii) Dowel drilling rigs for concrete	For tasks performed outdoors only:		
	Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism	APF 10	APF 10

	Use a HEPA-filtered vacuum when cleaning holes		
(ix) Vehicle-mounted drilling rigs for rock and concrete	Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector	None	None
	OR		
	Operate from within an enclosed cab and use water for dust suppression on drill bit	None	None
(x) Jackhammers and handheld powered chipping tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact:		
	-When used outdoors	None	APF 10
	-When used indoors or in an enclosed area	APF 10	APF 10
	OR		
	Use tool equipped with commercially available shroud and dust collection system		
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		

	Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism:		
	-When used outdoors	None	APF 10
	-When used indoors or in an enclosed area	APF 10	APF 10
(xi) Handheld grinders for mortar removal (*i.e.*, tuck-pointing)	Use grinder equipped with commercially available shroud and dust collection system	APF 10	APF 25
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		
	Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism		
(xii) Handheld grinders for uses other than mortar removal	For tasks performed outdoors only: Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		

	OR		
	Use grinder equipped with commercially available shroud and dust collection system		
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		
	Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism:		
	-When used outdoors	None	None
	-When used indoors or in an enclosed area	None	APF 10
(xiii) Walk-behind milling machines and floor grinders	Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		
	OR		

	Use machine equipped with dust collection system recommended by the manufacturer	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions		
	Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism		
	When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes		
(xiv) Small drivable milling machines (less than half-lane)	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant	None	None
	Operate and maintain machine to minimize dust emissions		
(xv) Large drivable milling machines (half-lane and larger)	For cuts of any depth on asphalt only: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust	None	None
	Operate and maintain machine to minimize dust emissions		

	For cuts of four inches in depth or less on any substrate:		
	Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust	None	None
	Operate and maintain machine to minimize dust emissions		
	OR		
	Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant	None	None
	Operate and maintain machine to minimize dust emissions		
(xvi) Crushing machines	Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points)	None	None
	Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions		

	Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station		
(xvii) Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (*e.g.*, hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	Operate equipment from within an enclosed cab	None	None
	When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions	None	None
(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: Demolishing, abrading, or fracturing silica-containing materials	Apply water and/or dust suppressants as necessary to minimize dust emissions	None	None
	OR		
	When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab	None	None

IMPLEMENTING CONTROL MEASURES FROM TABLE 1

Calhoun Construction Services, Inc. shall ensure engineering controls are effectively working at all times. When work is being performed indoors or in enclosed area proper ventilation shall be set up to control the accumulation of airborne dust.

If wet methods are being used to control airborne dust, Calhoun Construction Services, Inc. shall ensure that proper flow rates are applied. Flow rates should be sufficient to prevent or keep to a minimum any visible airborne dust.

When work is done in an enclosed cab or booth, the booth must be as free as possible from settling dust. When inspecting the booth it shall be ensured that all door seals and closing mechanism work properly, gaskets/seals are in good working condition, and the booth should be under delivery of fresh air through a positive pressure system with heating/cooling capabilities. Air introduced through the system must come through a filter with a 0.3-10.0 µm efficiency range.

If the total amount of time an employee spends on a job listed in Table 1 is less than 4 hours that employee shall follow respiratory guidelines in the table for 1-3 hours. If the employee is exposed more than 4 combined hours the employee is to follow guidelines listed for more than 4 hours per shift.

ALTERNATE CONTROL METHODS

For any task not listed in Table 1 or tasks from Table 1 where the engineering controls, work practices, and respiratory protection are not fully implemented, Calhoun Construction Services, Inc. will establish functional control methods which will make every attempt to achieve the lowest possible concentration of airborne dust, As long as those methods are feasible in the work environment. When methods of control are not feasible in the work environment adequate respiratory protection must be implemented based on the employee's exposure in excess of the PEL.

HOUSEKEEPING

Calhoun Construction Services, Inc. will not allow dry sweeping or brushing where it may contribute to employee exposure, unless using methods to minimize the likelihood of exposure, such as wet sweeping, HEPA-filtered vacuuming, or other effective methods.

EXPOSURE ASSESSMENTS

Calhoun Construction Services, Inc. will conduct exposure assessments of each job function not included in Table 1 or where objective data is not available, to insure the exposure are in compliance with OSHA 1926.1153. No employee will be exposed to silica in excess of the PEL (50 ug/m^3 calculated as an 8-hour TWA). The following will dictate when exposure monitoring must take place:

- Calhoun Construction Service, Inc. will perform initial monitoring to assess the 8-hour TWA for each job function with one or more air samples in each work area.
- When initial monitoring shows exposures are below the action level monitoring shall be conducted again within six months and repeated until two consecutive measurements, taken more than seven days apart, are below the action level. At such time monitoring may be discontinued as long as job function and control methods remain the same.
- If initial monitoring indicates exposures are above the PEL, monitoring shall be conducted again within three months of the most recent.
- Reassessment of exposures shall be conducted anytime there is a change in process, engineering controls, personnel, or work practices.

Calhoun Construction Services, Inc. shall ensure that all samples taken are evaluated by a laboratory or equivalent in compliance with 1926.1153. Employees shall be notified with the results within 5 working days after completing an assessment as stated in 1926.1153. Whenever an assessment reveals that exposure is above the PEL, Calhoun Construction Services, Inc. will provide written notification of corrective actions being taken. Employees or their representatives are permitted to observe air monitoring of respirable crystalline silica which they may be exposed to. Calhoun Construction Services, Inc. will provide PPE at no cost for areas that require PPE.

OBJECTIVE DATA

Calhoun Construction Services, Inc. will maintain accurate record of all objective data which is relied upon to comply with the requirements of 1910.1020. Records will include the following information:

- The Crystalline silica-containing material in question
- The source of objective data
- The testing protocol and results of testing
- A description of the process, task, or activity on which the objective data were based
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

Information will be maintained and available upon request as stated in OSHA 1910.1020.

MEDICAL EVALUATION AND RECORDKEEPING

Calhoun Construction Services, Inc. will provide medical assessment, at no cost, to all employees whom are required to wear a respirator 30 or more days in a calendar year. All assessment will be performed by a PLHCP with the initial assessment being conducted within 309 days of initial assignment. Calhoun will have the following procedures conducted in the assessment by the PLHCP:

- Medical History Assessment,
- Any test deemed necessary by the PLHCP as a result of Personal/Family Medical History
- Physical Examination
- Chest X-Ray
- Pulmonary Function Test
- Latent Tuberculosis Test

Calhoun will ensure that each employee is given a written medical report within 30 days of each screening. A written medical opinion for the employer will also be provided within 30 days of any screening. The information provided to the employer will be limited to the following:

- Date of Examination
- Statement confirming the examination has met requirements
- Any recommended limitations of the employee's use of respirators
- If the employee provides written authorization the report will also include:
    - Any recommended limitations concerning exposure to Silica
    - A statement recommending the employee see a specialist if necessary
    - Any recommended additional examinations as recommended by the PLHCP

Any tests conducted by a medical specialist shall follow the3 same protocol as listed above for initial assessments. Calhoun will encourage continued lung health assessment and consideration over the duration of employment and provide medical assessments as needed with 1 conducted at least every 3 years. Calhoun will keep record of all examinations conducted for each employee.

The company will maintain a record of all exposure assessments taken to assess employee exposure to respirable silica. The information in this record will include:

- Date of assessment
- Job Task Monitored
- Methods used
- Number, Duration, and Results of samples taken
- List of laboratory that performed the analysis
- Type of PPE worn by monitored employees
- Information for employee that was monitored

All assessment records and data will be maintained and made available in accordance with 29 CFR 1910.1020.

Underground Utility Locating Process

1. **Purpose:**

Calhoun has established the following procedure to eliminate the problems that have incurred related to damaging live utility lines. Failure to identify and properly mark utility lines could result in loss of power, communication, and basic utility to neighboring public, businesses, and the construction site itself.

These mandatory procedures, for below grade work, are to be followed prior to and throughout the project by all subcontractors and CCS employees. The below outlined procedures are not optional, they are mandatory. Shortcuts to these policies are unacceptable.

We recognize that some of our customers have their own policies and procedures pertaining to utilities, the process to locate and verify. They may also have different protocol for notification in case of an emergency. You must always follow their policies first and foremost if they are more stringent.

It is also important to note, that if you uncover suspected asbestos while excavating and/or locating you must contact Calhoun immediately.

Excavate by statutory definition includes the following: augering, backfilling, boring, digging, ditching, drilling, driving, grading, jacking, plowing in, pulling in, ripping, scraping, trenching, tunneling, landscaping, sidewalks, and curbs. Using a saw to cut concrete would qualify, as would core drilling.

2. **Procedure:**

a. Calhoun Construction Services CM

Prior to any excavation work beginning on a project, a color-coded map of the construction site will be developed identifying all known utilities. This information must be recorded on full scale site or site utility drawing(s). No work shall begin until underground locate calls, Public and Private, have been made and completed. The civil drawings commonly indicate the call-in number for public utility locates.

If your project is located outside the state of Kentucky, you need to contact the local locating agency to ensure you are abiding by their rules and regulations regarding underground utilities.

The Calhoun Superintendent will begin the locate process by requesting a locate from Kentucky locate (811) and an independent private locating service. Prior to the locates, we are to mark out the boundaries where we need the locate performed. This process is referred to as “White Lining” and

white paint or white flags may be used to accomplish this. Once the locates are scheduled, notify the Calhoun Safety Department, and schedule a site walk to identify any potential underground utilities. Superintendents are asked to provide as much advanced notice as possible so that everyone's time can be scheduled effectively and efficiently.

When the locators arrive, explain to the locator representative who you are, your role on the project and exactly what we expect to be doing both on and off the site. It is recommended that you get a direct phone number for the locator or locators, if there are more than one for the different utilities, so you can contact them directly if the need arises.

If possible, a Calhoun representative will walk the area with the locator to identify any obvious underground utilities. It is the responsibility of the superintendent to capture all identified lines and verify the site map is updated. The site map information will then be transferred to a full-sized drawing and displayed on the office trailer wall.

As part of the mobilization process a list of all local utility companies and emergency phone numbers for each will be gathered. Those will be posted on the trailer wall next to the Utility Locate Map.

On active business or plant sites we will request any as-built drawings the owner has and contact the site utility, or maintenance manager. A request for any information they have, either on drawings or memory will be made and this information will be documented on the site utility map also.

All contractors on site are required to turn in updated as-built information weekly. Once we have gathered and incorporated all this information on to the map. All Contractors conducting underground work must review the map with all layout workers, foremen, and operators that will be involved in any type of excavation or site work.

These maps and the utility drawings posted on the trailer wall will be reviewed at the pre-shift excavation meeting, and with everyone involved in excavation operations on that day, prior to any work beginning for the day.

In the event of a utility strike, notify the Safety Department immediately. If they are unavailable, notify the Operations Manager, General Superintendent, or President. The Calhoun Superintendent is responsible for completing the Field Incident Report and following the Calhoun Incident Reporting Procedures. Calhoun Safety Department is responsible for completing a root cause analysis report.

b. Contractors

i. Utility Locates

All contractors conducting excavation activities must obtain Public Utility Locate Tickets numbers and Private locate confirmation. Utility Locate ticket numbers must be communicated with Calhoun at initial locate and every time it is refreshed. Utility locate marks must be refreshed every 21 calendar days or at any time the lines are not clearly visible, until the work is completed.

ii. Utility Marking and Verification

Color Code Chart:

WHITE – Proposed Excavation
PINK – Temporary Survey Markings
RED – Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW – Gas, Oil, Steam, Petroleum, or Gaseous Materials.
ORANGE – Communication, Alarm, or Signal Lines, Cables, or Conduit.
BLUE – Potable Water.
GREEN – Sewers and Drain Lines
PURPLE – Reclaimed Water, Irrigations, and Slurry Lines

Potholing is the act of non-mechanical excavation (vac truck, hand dig) done for the purpose of locating an assumed underground utility.

When a utility is suspected in a dig area, contractors are required to pothole all gas, electric, water lines, fiber optics and any other data communications lines. Storm and sanitary lines may be located by means of careful machine excavation and use of a probe rod until located.
Vertical Markers must be installed at all potholed locations and backfilled. The bottom of these markers should be a minimum of 1’ above the utility line, and approximately 2’-4’ above grade. Post will be painted or taped the color of the utility they represent and the depth below grade at that location. Post must be placed no further than 50’ apart.

All utilities verified must have their depts recorded and communicated to Calhoun.

iii. As-Builts

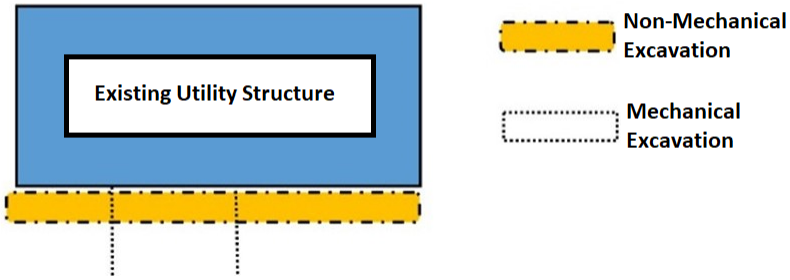
Updated As-built information must be turned into Calhoun weekly. This includes permanent and temporary installation.
As-built information is to include structures, pull or junction boxes, risers, valves, etc.
Piping, duct banks, direct bury cabling should be documented at intervals not to exceed 100’.
Excavation Permit Process
Each contractor conducting excavation work must meet with Calhoun at the start of each shift to discuss excavation locations and to obtain an excavation permit. Utilities must be located prior to the permit issuance. Permits are valid for 1 shift only.

iv. Excavating near Utilities

In the event of a utility like strike (no matter how minor), notify Calhoun immediately.
If a utility is determined to be less than 2’ below proposed bottom of the excavation, the contractor will expose the entire line through non-mechanical excavation.
When crossing a utility that is determined to be between 2’ to 4’ below bottom of excavation, the contractor will non-mechanically excavate at 10’ intervals.

When a utility is within 2’ from the side of an excavation, the contractor will pothole the utility line every 10’.
When an excavation intersects an existing structure, non-mechanical excavation must be used to expose the face of the structure to ensure no utilities are in the area.

EXAMPLE - Correct Way to Expose Existing Utility Structure Face



v. Found Utilities Not Located

At any time while performing excavation work, pile installation or earth retention systems you encounter cable, pipe, concrete (potential duct bank) that have not been located as suspected utilities, you must stop work. Calhoun must visually verify that a utility line is abandoned or dead before tearing it out. There are multiple options to assist in achieving this:

If the construction site is between other buildings and you can gain access into those buildings, you can attempt to find the vacated lines penetrating the walls at both ends. Ensure that the lines cannot be reconnected. Ask the site utility or maintenance supervisor in they have any knowledge of these lines, and can they show us the disconnected ends for verification. Ensure that the lines cannot be reconnected. Call the locate companies to come out and verify if the line is abandoned or live. If the locate company believes the line is abandoned but the designated Calhoun supervisor is unable to visually confirm both ends are disconnected, you will not remove the line.

vi. Gas Line Strike

If the contractor hits a gas line and creates a gas release, you must call 911, the gas company and 811. If Calhoun or the Contractor believe there is an immediate danger to people and/or occupied structures, refer to Calhoun Crisis Management Plan.
DO NOT ATTEMPT TO IMPEDE THE FLOW OF GAS OR REPAIR THE LINE.
Any other utility that is hit and either disrupts services or damages the line notify Calhoun immediately.

Section: Severe Weather

When severe or adverse weather is expected then it is the contractor's responsibility to monitor weather reports and plan work tasks and responses to forecast weather appropriately.

High Winds

Wind condition is something that all construction projects must monitor. High winds can be dangerous to all workers on construction sites. Calhoun defines "High-winds" as being 25MPH and over. Therefore, should a high wind weather conditions arise, Calhoun Construction Services will take the following action:

1. Communicate wind speeds with contractors on site & have them verify shutdown wind speeds for their exterior equipment.
2. Be prepared to shutdown exterior equipment like swing stages, aerial lifts, cranes, and forklifts.
3. Conduct a quick jobsite survey and secure any potential loose items or materials.
4. All work activity related to exterior material handlings will be reviewed for hazards.

Lightning

Lightning is a threat whenever: You see it or hear thunder. WeatherBug and Lightning mobile apps will be used to monitor lighting strikes near the jobsite. If lightning strikes are detected within a 12-mile radius of a Calhoun Construction Services Project, the Management team will take the following action steps:

1. Contact all Calhoun Construction Services Foremen/Supervisors, sub-contractors and notify them of the lightning hazard and instructing them to stop all exposed work activities. The means of communication should be outlined in the projects Site Specific Safety Plan.
2. All employees working at elevated locations, as well as anyone working in an area that is exposed to the elements, shall stop working and seek shelter inside protected structures (structure with roof and sheathed exterior walls).
3. Do not seek cover near trees, fences, poles, shelters that are not fully enclosed, near metal objects, or tents.
4. Foreman, Superintendents and Supervisors are responsible for the accountability of their employees. Each contractor is to report to Calhoun Constructions Site Team when their employees are in a safe area.
5. Once lightning has moved out of the 12-mile radius, the Calhoun Management team can give the "all clear" and resume all exposed work activities.

Tornados

1. Tornado Watch - A watch means the conditions are right for tornadic activities. These watches should put the employee on alert to the potential of severe weather. Conduct a

quick jobsite survey and be prepared to secure any loose items or material. Be ready to move as weather approaches. Contractors must be notified of the potential weather and steps to take if it escalates to a tornado warning.

2. Tornado Warning - This means a sighting has occurred of a violently rotating column of air extending from a thunderstorm toward the ground (funnel cloud). It may or may not have touched down on the ground. In the event of a tornado warning the area surrounding the project, the jobsite will be immediately evacuated or take shelter if tornado shelter is available.

Winter Weather

Calhoun Construction Services staff must be prepared when winter weather occurs. Calhoun Construction Services staff should know the difference in a Winter Weather Watch, Warning and Advisory.

1. Winter Watch - means winter storm conditions are possible within the next 36-48 hours.
2. Winter Warning - means that potential life-threatening severe conditions have begun or will begin within 24 hours.
3. Winter Advisory - means winter weather conditions are expected to cause significant inconveniences and may be hazardous.

Calhoun Construction Services staff should tune in to local emergency weather conditions via weather alert radio for any Watch that has been issued for our area. If winter weather advisory or warning is issued for our area, Calhoun Construction Services will take the following action:

1. At the direction of the Project Manager or his designee, jobsite crews may be dismissed from the project to avoid these weather conditions.
2. Jobsite crews should be made aware of these conditions.

Cold Related Injuries

1. Chilblains - Redness, itching, possible blistering, inflammation, possible ulceration in severe cases.
2. Trench Foot - Reddening of the skin, numbness, leg cramps, swelling, tingling pain, blisters or ulcers, bleeding under the skin, gangrene (the foot may turn dark purple, blue, or gray).
3. Frostbite - Reduced blood flow to hands and feet (fingers or toes can freeze), numbness, tingling or stinging, aching, bluish or pail, waxy skin.
4. Hypothermia (Early Symptoms) - Shivering, fatigue, loss of coordination, confusion and disorientation.
5. Hypothermia (Late Symptoms) - No shivering, blue skin, dilated pupils, slowed pulse and breathing, loss of consciousness.

Preventative Measures

1. Dress appropriately for the conditions, layers of lightweight clothing keep you warmer than a single layer of heavy cloths.
2. Remove layers to prevent overheating and perspiring.
3. Look at the soles of your winter footwear. Your shoes or boots should have adequate tread to prevent slips and falls on wet or icy surfaces.
4. Get plenty of rest; fuel your body by eating right and stay hydrated, the body's thirst response is diminished sometimes by up to 40 percent even when dehydrated. Because of this, the body is fooled into thinking it's properly hydrated, meaning you don't feel as thirsty, and your body doesn't conserve water.

Heat Related Illness

1. Sunburn - Red, painful itchy skin that typically feels warm to the touch. Skin may also blister.
2. Heat Cramps - Heat cramps are painful, involuntary muscle spasms in your calves, arms, abdominal wall, or back that usually occur during heavy exertion in hot environments.
3. Heat Exhaustion - Cool moist skin with goose bumps when in the heat; Heavy sweating; Faintness; Dizziness; Fatigue; Weak, rapid pulse; Low blood pressure upon standing; Muscle cramps; Nausea; and Headache.
4. Heat Stroke - Confusion, agitation, slurred speech, irritability, delirium, seizures and a coma; skin may turn red and will feel hot to the touch, dry or slightly moist; Nausea and vomiting may occur; Rapid shallow breathing; Racing heart rate, and a headache.

Employer Preventative Measures

1. Supervisors and Foreman must monitor workers for signs of heat related illness.
2. Use sound work practices such as work/rest cycles to prevent employees from overheating.
3. Provide an opportunity for workers to build up a level of tolerance to working in the heat. Allow new or returning workers to gradually increase workloads and take more frequent breaks as they acclimatize or build a tolerance for working in the heat.
4. Use whatever ventilation means available to make the work environment cooler.

Employee Preventative Measures

1. Wear lightweight, loose fitting clothing; light-colored fabrics are the best, because they reflect away some of the sun's energy.
2. It is helpful to eat smaller, more frequent meals, to avoid generating the extra body heat associated with digesting large meals.
3. Avoiding drinks containing caffeine, such as coffee, iced teas and colas, is important because they just cause the body to lose more fluid. Salt tablets should also be avoided

RESERVED

SUBCONTRACTOR MANAGEMENT

PURPOSE

The purpose of this document is to advice subcontractors of Calhoun Construction's expectations and subcontractor's responsibilities. Calhoun Construction is intentional with our selected subcontractors for each project, and we recognize that our projects could not be completed without the successful partnership of specialty contractors.

SCOPE

This document applies to Calhoun Construction operations where subcontractors work with, on behalf of, or at the request of Calhoun Construction on a jobsite.

As outlined below, the subcontractor must submit their written safety programs and safety statistics (TRIR, EMR) for consideration. Contractors Health and Safety program will be reviewed when selecting Subcontractors. In the absence of a subcontractor safety program, Calhoun Construction's safety policies have precedence. In the event of a conflict exists between the company policies, the more restrictive policy will be used.

RESPONSIBILITIES

Managers and Supervisors:

- In coordination with the Safety Manager, inform each Subcontractor of any health and safety hazards present on the jobsite that may be related to work performed under the Subcontractor's contract.
- Provide a copy of Calhoun Safety Manual and jobsite safety requirements.
- Ensure personnel are aware of hazards present in the work.
- Identify possible areas were hazards may be present.

Safety Manager:

- Coordinate safety programs and distribute accordingly.

Subcontractors:

- Submit pre-job, daily, and weekly documentation, as required.
- Abide by all Federal, State, and Local regulations. In cases where jobsite safety requirements exceed Federal, State, and Local regulations, follow the jobsite safety requirements.
- Proactively manage their employees' safety performance.
- Designate a qualified safety representative.
- Inform Calhoun Construction supervisory personnel of their scheduled work and applicable safety programs.
- Cooperate with Calhoun Construction and other Subcontractors in maintaining a safe and healthful jobsite.
- Promptly report incidents and complete applicable reporting.
- Promptly report any OSHA/EPA inspections and provide a copy of reports to Calhoun Construction.

- Maintain all equipment and tools in a safe condition.
- Notify Calhoun Construction of any observed unsafe condition or action observed.
- Attend pre-job meetings and hazard assessments

Subcontractors are required to submit the following:

- Pre-job:
  - Employee training documentation
  - SDS with list of all chemicals and hazardous substances utilized on the jobsite
  - Subcontractor safety and health program
  - Subcontractor Site Specific Safety Plan (SSSP)
  - Competent person designation
- Daily:
  - Jobsite safety inspection reports.
  - Task safety analysis
  - Task inspections
  - Work permits
- Weekly:
  - Toolbox talks/Meetings

JOBSITE SAFETY PLAN

The Project Manager and Safety Manager shall develop a hazard identification and mitigation plan. The plan will be made available to all Subcontractors prior to the job start. The plan shall consider:

- Emergency action plans
- Incident reporting
- Incident response procedures
- Jobsite first aid and medical treatment
- Inclement weather protection plan
- Emergency eyewash/shower facilities
- Communication plan
- Unsafe conditions reporting
- Materials delivery and storage
- Traffic control
- Equipment in shared work areas
- Change facilities
- Sanitary facilities
- Break rooms/areas
- Decontamination facilities
- Access and egress routes
- Public protections
- Housekeeping
- Chemical storage

- Security plan
- Lighting plan
- Environmental issues

ORIENTAION TRAINING (FIRST DAY, FIRST HOUR)
All Subcontractors must attend first day first hour safety orientation training before starting work.

HOUSEKEEPING
A daily broom sweep and cleanup of all trash of the Subcontractor's work area is required for proper housekeeping. Construction debris is to be picked up daily and removed to a designated garbage area. Unused materials are to be stored in a neat fashion.

ENFORCEMENT
When a worker is performing work in an unsafe manner, the individual must be stopped immediately. If the infraction is due to inattention or lack of knowledge, coaching will be provided. If the infraction is intentional or repeated, the individual is subject to disciplinary actions, up to and including, termination of the contract.

Failure to comply with Calhoun Construction's policies, programs, or regulations will subject the Subcontractor's employees to disciplinary action, up to and including, termination of the contract. Any regulatory citations on the part of the Subcontractor's employees will be the full responsibility of the Subcontractor.

POST JOB REVIEWS
Post job performance reviews must be done for each contractor on site and filed with the project file.

CALHOUN CONSTRUCTION SERVICES	**Attachment 1 Pre-Construction Safety Meeting**	**SECTION: 57** **Page 1 of 1** **REVISION NUMBER: 1** **REVISION DATE: 04.04.22** **SUBJECT:** **SUBCONTRACTOR MANAGEMENT**

Contractor: _____ Date: _____

Contractor MUST provide plans for the following tasks:

- Cranes
  - Lift Plans:
- Work from Height
  - Fall Protection Plan
- Excavation
  - Utility Locate
  - Depth
  - Competent Person
  - Soil Classification
- Housekeeping
  - Collection & Removal of trash
  - Laydown & Material Storage
- Equipment On Site
  - Training Certificates
- Material Handling
  - Moving materials to upper floors
- Worker Break Areas

Policy Information Covered

Site Orientations
Site PPE requirements
Utility Locate Policy
Housekeeping Policy
Hazards Present on the Jobsite
Pre-job, Daily, Weekly Documentation

Information Requested From: _____

Safety Data Sheets
Total Crew Size at Peek
Contractor Safety Manual
Operator Credentials

CALHOUN
CONSTRUCTION SERVICES

Subcontractor Site Specific Safety Plan (SSSP) Outline

Prior to beginning work on the project, all subcontractors are required to submit a detailed Site Specific Safety Plan (SSSP) to Calhoun Construction Services. The SSSP is specific to the work that will be performed on this project and will address potential hazards associated with this work. The SSSP must be kept current and updated as needed throughout the project. It will be made available to all persons who must understand and comply with its requirements. The SSSP must be compatible with Calhoun Construction's Safety, Health, and Environmental Program and the Requirements for Employees, Contractors, and Suppliers. The SSSP is required in addition to any Hazard Communication Program, Respiratory Program, insurance requirements, and any other health and safety related material that is required per contract.

Project: _____

The SSSP must include the following sections in the order below. Any sections that are not applicable to the subcontractor scope of work should be marked N/A.	
Cover Page	Company Name Address City, State Zip Project Manager – Name – Phone Number Superintendent – Name – Phone Number Foreman – Name – Phone Number Safety Director – Name – Phone Number Competent Person – Name – Phone Number
Scope of Work	Provide a brief description of your scope of work, including equipment to be used and any high-risk work to take place.
1. PPE	• **Required -** All sub-contractors must wear approved safety glasses with side shields, approved hard hats, construction grade boots that cover the ankle, and high visibility fluorescent orange, yellow or pink vest, shirts, or jackets in all work areas except office areas. • **Required -** Long pants and a shirt with sleeves that extend at least 4 inches below the shoulder are also required.
2. Lighting	• **Required -** Task lighting is the responsibility of each sub-contractor
3. Respiratory Protection	•
4. Trenching and Excavations	•
5. Hand Tools	•

6. Power Tools	•
7. Ladders	•
8. Fire Protection Systems	•
9. Hot Work	•
10. Fuel Storage	•
11. Storage and Use of Compressed Gas	•
12. Powered Industrial Trucks (PIT) Material Handling Equipment	•
13. Scaffolding	•
14. Housekeeping	•
15. Fall Protection	•
16. Mobile Elevated Work Platforms (MEWP's)	•
17. NFPA 70E Permanent Power / LOTO - Tag Out	•
18. Cranes	•
19. Rigging	•
20. Barricades - Traffic Control	•
21. Demolition	•
22. Concrete Cutting, Coring and Drilling	•
23. Environmental hazards in the form of exposure to heat.	•

24. Environmental hazards in the form of exposure to cold.	•

Section 58: CRANES

GENERAL

1. This policy applies to power-operated equipment that can hoist, lower, and horizontally move a suspended load. Such equipment includes but not limited to: Articulating cranes, crawler cranes, floating cranes, cranes on barges, locomotive cranes, mobile cranes, commercial truck-mounted, tower cranes, and service/mechanic trucks with a hoisting device.
2. **Exclusions:** This policy does not cover Power shovels, excavators, and concrete pumps. Automotive wreckers and tow trucks. Machinery designed as vehicle-mounted aerial elevating work platforms. Powered industrial trucks except when configured to hoist and lower by means of a winch or hook and horizontally move a suspended load. Mechanics truck with a hoisting device when used in activities related to equipment maintenance and repair. Machinery that hoists by using a come-a-long or chainfall. Tree trimming and tree removal work. Material Delivery: Articulating knuckle-boom truck cranes that deliver material to a construction site when used to transfer materials from the truck crane to the ground or when unloading from truck crane into a structure using a fork/cradle at the end of the boom.
3. The employer shall comply with all manufacturer's instructions, procedures, and recommendations applicable to the crane. The safe operating speeds or loads shall not be exceeded.
4. Tag lines shall be used whenever hoisting operations are being performed with a crane.
5. All cranes shall be operated in accordance OSHA 29 CFR 1926 Subpart CC - Cranes and Derricks in Construction, and this section of Calhoun Construction Corporate Safety Manual.

CRANE PLANS

1. Lift plans should be submitted to the Calhoun site management team 2 weeks prior to the planned lift.
2. Calhoun shall provide ground bearing pressure to the lifting contractor.
3. The lifting contractor must ensure the weight of the crane and the load does not exceed the ground bearing pressure.

STANDARD LIFT

1. Lift does not exceed 75% of the cranes capacity and does not meet the requirements of a critical lift or engineered lift. Lift plans must be reviewed by a member of the Calhoun Safety Department.
2. Standard lift plans must include the following:
   a) Proposed setup location of the crane.
   b) Distance from center point of crane to lift/drop-off area. (Heaviest load, longest distance)
   c) Weight of the rigging.
   d) Weight of the load.

e) Swing radius of the crane. (Visual representation)
f) Crane rating at the outer limit of the radius.
g) Angle needed to complete lift.
h) Percent of crane capacity used for lift.
i) A barricade plan for the areas to barricaded under the lift.
j) Operators credential
k) Signal person credential
l) Annual Crane Inspection
m) Rigger Qualification
n) Load Chart (in proposed crane configuration)
o) Location of all overhead power lines & overhead obstructions.

CRITICAL LIFT

1. If the planned operation includes any of the follow it is considered critical lift.
   a) Lift exceeds 75% of the rated capacity.
   b) Hoisting Personnel with a crane. Contractors must follow 1926.1431 & 1926.753(c)(4) and have approval from Calhoun Safety Department.
   c) Any load identified by Calhoun Site Management as a "Critical Component" or "Long Lead Item".
2. Lift plan must include everything in a standard lift plan with the addition of the following:
   a) Rigging Drawing

ENGINEERED LIFT

1. If the planned operation includes any of the following it is considered an engineered lift & must be reviewed by a qualified engineer.
   a) Lift exceeds 85% of the rated capacity.
   b) Multi-crane lift.
   c) The load will pass over an occupied building during the lifting operation.
2. Lift plans must include everything in a standard lift plan and critical lift plan.
3. Plan must be reviewed by Calhoun President.

INSPECTIONS

1. Before any crane is initially placed or installed on a Calhoun project an annual inspection shall be submitted to the Calhoun Construction Management team
2. For cranes assembled on site a post assembly shall be completed and shall be submitted to Calhoun Construction Management.
3. A daily inspection and operational check shall be performed daily and shall be made available to Calhoun Construction Management.
4. Monthly inspections shall be completed for each month the crane is in service and shall be made available to the Calhoun Construction Management team.
5. Equipment that has had modifications or additions which affect the safe operation of the equipment (such as modifications or additions involving a safety device or operational aid, critical part of a control system, power plant, braking system, load-

sustaining structural components, load hook, or in-use operating mechanism) or capacity must be inspected by a qualified person after such modifications/additions have been completed, prior to initial use.

6. Equipment that has had a repair or adjustment that relates to safe operation (such as: A repair or adjustment to a safety device or operator aid, or to a critical part of a control system, power plant, braking system, load-sustaining structural components, load hook, or in-use operating mechanism), must be inspected by a qualified person after such a repair or adjustment has been completed, prior to initial use.

PERSONNEL QUALIFICATIONS

1. Crane Operators:
   a) Shall have the skills and knowledge, as well as the ability to recognize and avert risk, necessary to operate the equipment safely, including those specific to the safety devices, operational aids, software, and the size and configuration of the equipment.
   b) Know the size and configuration including, but are not limited to, lifting capacity, boom length, attachments, luffing jib, and counterweight configuration.
   c) Shall have the ability to perform the hosting activities required for assigned work, including, if applicable, blind lifts, personnel hoisting, and multi-crane lifts.
   d) Shall have an NCCCO (National Commission Certification of Crane Operators) or equivalent certification at all times while operating on Calhoun Construction project.
2. Signal Persons:
   a) The employer of the signal person must ensure that each signal person meets the Qualification Requirements of this section, prior to giving any signals. This requirement must be met by using either Option (1) or Option (2) of this section.
      i) Option (1) Third party qualified evaluator. The signal person has documentation from a third-party qualified evaluator showing that the signal person meets the Qualification Requirements.
      ii) Option (2) Employer's qualified evaluator. The employer's qualified evaluator, not a third party, assesses the individual and determines that the individual meets the Qualification Requirements and provides documentation of that determination. An assessment by an employer's qualified evaluator under this option is not portable, other employers are not permitted to use it to meet the requirements of this section.
   b) The employer must make the documentation for whichever option is used available at the site while the signal person is employed by the employer. The documentation must specify each type of signaling (e.g. hand signals, radio signals, etc.) for which the signal person meets the requirements.
   c) If subsequent actions by the signal person indicate that the individual does not meet the Qualification Requirements, the employer must not allow the individual to continue working as a signal person until re-training is provided and a re-assessment is made that confirms that the individual meets the Qualification Requirements.

d) Qualification Requirements. Each signal person must:
   i) Know and understand the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.
   ii) Be competent in the application of the type of signals used.
   iii) Have a basic understanding of equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads.
   iv) Demonstrate that he/she meets the requirements through an oral or written test, and through a practical test.

3. Riggers:
   a) Shall be qualified, meaning that they are a person that possesses a recognized degree, certificate, or professional standing, or has extensive knowledge, training, and experience, and can successfully demonstrate the ability to solve problems related to rigging loads.

WORK AREA CONTROL

1. Swing radius hazards.
   a) These requirements apply where there are accessible areas in which the equipment's rotating superstructure (whether permanently or temporarily mounted) poses a reasonably foreseeable risk of:
      i) Striking and injuring an employee.
      ii) Pinching/crushing an employee against another part of the equipment or another object.
2. To prevent employees from entering these hazard areas, the employer must:
   a) Train each employee assigned to work on or near the equipment ("authorized personnel") in how to recognize struck-by and pinch/crush hazard areas posed by the rotating superstructure.
   b) Erect and maintain control lines, warning lines, railings or similar barriers to mark the boundaries of the hazard areas. Exception: When the contractor can demonstrate that it is neither feasible to erect such barriers on the ground nor on the equipment, the hazard areas must be clearly marked by a combination of warning signs (such as "Danger--Swing/Crush Zone") and high visibility markings on the equipment that identify the hazard areas. In addition, the employer must train each employee to understand what these markings signify.
3. Protecting employees in the hazard area.
   a) Before an employee goes to a location in the hazard area that is out of view of the operator, the employee (or someone instructed by the employee) must ensure that the operator is informed that he/she is going to that location.
   b) Where the operator knows that an employee went to a location, the operator must not rotate the superstructure until the operator is informed in accordance with a pre-arranged system of communication that the employee is in a safe position.
   c) Where any part of a crane is within the working radius of another crane, the controlling entity must institute a system to coordinate operations. If there is no

controlling entity, the employer (if there is only one employer operating the multiple pieces of equipment), or employers, must institute such a system.

KEEPING CLEAR OF THE LOAD

1. Where available, hoisting routes that minimize the exposure of employees to hoisted loads must be used, to the extent consistent with public safety.
2. While the operator is not moving a suspended load, no employee must be within the fall zone, except for employees:
   a) Engaged in hooking, unhooking or guiding a load;
   b) Engaged in the initial attachment of the load to a component or structure; or
   c) Operating a concrete hopper or concrete bucket.
3. When employees are engaged in hooking, unhooking, or guiding the load, or in the initial connection of a load to a component or structure and are within the fall zone, all of the following criteria must be met:
   a) The materials being hoisted must be rigged to prevent unintentional displacement.
   b) Hooks with self-closing latches or their equivalent must be used. Exception: "J" hooks are permitted to be used for setting wooden trusses.
   c) The materials must be rigged by a qualified rigger.
4. Receiving a load. Only employees needed to receive a load are permitted to be within the fall zone when a load is being landed.
5. During a tilt-up or tilt-down operation:
   a) No employee must be directly under the load.
   b) Only employees essential to the operation are permitted in the fall zone (but not directly under the load). An employee is essential to the operation if the employee is conducting one of the following operations and the employer can demonstrate it is infeasible for the employee to perform that operation from outside the fall zone:
      i) Physically guide the load.
      ii) Closely monitor and give instructions regarding the load's movement.
      iii) Either detach it from or initially attach it to another component or structure (such as, but not limited to, making an initial connection or installing bracing).

OPERATIONS

1. The employer must comply with all manufacturer procedures applicable to the operational functions of equipment, including its use with attachments.
2. The procedures applicable to the operation of the equipment, including rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions, and operator's manual, must be readily available in the cab at all times for use by the operator.
3. The operator must not engage in any practice or activity that diverts his/her attention while actually engaged in operating the equipment, such as the use of cellular phones (other than when used for signal communications).
4. Leaving the equipment unattended. The operator must not leave the controls while the load is suspended.

5. Storm warning. When a local storm warning has been issued, the competent person must determine whether it is necessary to implement manufacturer recommendations for securing the equipment.
6. If the competent person determines that there is a slack rope condition requiring re-spooling of the rope, it must be verified (before starting to lift) that the rope is seated on the drum and in the sheaves as the slack is removed.
7. The competent person must adjust the equipment and/or operations to address the effect of wind, ice, and snow on equipment stability and rated capacity.
8. Compliance with rated capacity.
   a) The equipment must not be operated in excess of its rated capacity.
   b) The operator will not be required to operate the equipment in excess of its rated capacity.
   c) Load weight. The operator must verify that the load is within the rated capacity of the equipment.
9. The boom or other parts of the equipment must not contact any obstruction.
10. The equipment must not be used to drag or pull loads sideways.
11. Neither the load nor the boom must be lowered below the point where less than two full wraps of rope remain on their respective drums.

RESERVED

1. **Purpose:**
   a. Information contained in this section must be followed by all contractors on Calhoun jobsites in regard to hazard signage and barricades.
   b. Signs are to be installed around the project to promote safety; inform and remind employees of safety requirements and procedures; designate specific areas, such as confined spaces; warn and restrict access; and provide hazard notification.
   c. Prior to starting work, ensure there are adequate supplies of signs and barricades.
   d. Employees are to be informed and understand the proper use of barricade and the different signs.
   e. Barricade tape is not to be used in place of fall protection, more robust barricades such as guardrails are to be used in these situations.
   f. Each hazardous activity shall have adequate warning signs to warn employees of potential hazards.
   g. The use of accident prevention signs and notices shall be used as required by the hazards
   h. The contractor installing the barricade shall attach signage identifying who the area belongs to and what the hazard is.
   i. Only areas where hazardous conditions exist shall be barricaded. The contractor installing the barricade shall be responsible for the maintenance of the barricade.
   j. All barricades are to have a complete perimeter, free of voids. All access ways into the barricaded area shall be properly gated and or signs installed.
   k. All signs and barricades shall be removed promptly upon completion of the work or when the hazard no longer exists.
   l. Under no circumstances shall employees cross under another contractors “Danger” barricade without permission. When a contractor wants to enter another contractors “Danger” area, the requesting contractor shall receive verbal permission from the installing contractor, and there must be no hazardous condition existing at the time of entry.

2. **Hazard Classification / Signage**

   A determination regarding what type of signs utilized shall be based upon the extent and severity of the hazards involved.

a. Green Safety Signs:

i. These signs are used to convey general safety information such as evacuation points, locations of first aid kits or automated external defibrillator (AED).

ii. Green safety signs can also be used as reminders of safety jobsite requirements such as PPE usage and to report any unsafe conditions you see on the jobsite.

iii. They can also be used as reminders of safest working practices, such as using both hands to climb a ladder or using the handrails when going up or down stairs.

b. Notice:

i. Indicates information considered important but not hazard related.

ii. Use for security messages, maintenance and cleaning guidelines, employee entrances, directions to and from, and instructions to read the reference manual before servicing a machine. Notice signs are typically used for activities that result in property damage (but no personal injury).

c. Caution:

i. Indicates a potentially hazardous situation exists which, if not avoided, may result in minor or moderate injury.

ii. Use Caution signs for information on overhead clearance hazards or certain PPE requirements and RF hazards. Do not use if there is a chance of death or serious injury or illness. In this case, use a Warning sign. A construction site sign that notifies of a hard hat requirement is best ordered as a Warning Sign.

iii. CAUTION (yellow) signs and barricade tape shall be used to warn against potential hazards, and cordon off areas to minimize traffic in work areas. Personnel may proceed through barricade with caution after observing work activities and ensuring no involvement that may create a hazard

d. Warning:

i. Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

ii. Use Warning Signs for pinch points, arc flash, blocking rules and machine with guards. Limit Warning to personal injury. Do not use this for damage that is to equipment only.

e. Danger:

i. Indicates a hazardous situation that, if not avoided, will result in death or serious injury. The signal word "DANGER" is to be limited to the most extreme situations.

ii. Use for Danger Signs for electrical warnings, confined spaces, poison and severe machine hazards. “Limit Danger to potentially lethal environments.

3. Selecting the Right Barricade

Barricades are a visual and physical obstruction intended to warn and limit access to a work area. There are different types of barricades, and you should be familiar with all of them.

A determination regarding what type of barricade shall be based upon the extent and severity of the hazards involved.

a. Sturdy Barricade

i. Physical barrier that meets the height and strength requirements of a “fall protection” guard rail, or hole cover.

ii. Use for “Warning” and “Danger” classified hazards.



b. Rigid Barricade
   i. Physical barrier that is stronger than standard tape but does not meet the requirements of a "fall protection" guard rail.
   ii. Use to identify a "Caution" classified hazards that must remain for more than 1 shift.
   iii. Examples: Orange Barricade Fence (snow fence), Horizontal Cone Bars.


c. Standard Tape (Caution/Danger)
   i. Light temporary barrier used to identify a hazard that does not last over 1 shift. If tape is the only feasible option to barricade a hazard for more than 1 shift, the contractor MUST get approval from the site leadership team before tape is used.
   ii. Use Yellow/Caution for "Caution" classified hazards.
   iii. Use Red/Danger for "Danger" classified hazards.

4. Rules for Barricades:
   i. Use barricades to identify work sites, construction hazardous areas, perimeters, and the presence of excavation work.
   ii. Barricade tape is limited to 1 shift. If the hazard persists over 1 shift, the contractor must use a rigid or sturdy barricade.
   iii. A competent or qualified person should put the barricade up and instruct workers not to cross over or under the barricade while the danger persists.
   iv. Signage easily identifies the hazard.
   v. Use barricades to outline restricted areas.
   vi. All barricades shall have a sign posted with at least the following information:
      1. *Identifying the hazard.*
      2. *Point of Contact.*
      3. *Contact number.*
   vii. Never remove a barricade unless authorized to do so:
      1. *If a barricade is worn, replace it immediately*
      2. *Do not tamper with the barricade*
   viii. When the hazard/task is no longer present, completely remove and dispose/store the barricade as appropriate from the site to eliminate any confusion