South Putnam MS/HS Fieldhouse Addition

July 3, 2024

ADDENDUM NO. 3

This addendum is issued as a supplement to the plans and specifications and shall be considered an integral part of the same.

Item:	**3.01**
Location:	General Conditions
Description:	All testing will be by owner.

Item:	**3.02**
Location:	Winter Protection
Description:	Prime Contractor is responsible for winter conditions, i.e. heat, tenting, etc. and is to include costs in base bid.

Item:	**3.03**
Location:	Temporary Power and Water
Description:	Temporary power and water will be provided by the owner. The Prime Contractor is responsible to make the connections.

Item:	**3.04**
Location:	Snow Removal
Description:	If snow removal is required for the immediate jobsite, the Prime Contractor is to include costs in base bid.

Item:	**3.05**
Location:	Final Cleaning
Description:	Final cleaning is by the Prime Contractor. Cleaning includes cleaning all exposed steel members, light fixtures, gym equipment, scoreboards, windows (interior and exterior), doors/door frames, lockers, benches, plbg. fixtures, toilet compartments, casework/counters, appliances, walls, floors, etc.

Item:	**3.06**
Location:	Section 01 23 00
Description:	Alternate 11 and Alternate 12 added. Revised Alternate bid form and revised Section 01 23 00. Both are included in addendum.

Item:	**3.07**
Location:	Question: Bid documents reference MKS safety. Can a copy be shared?
Description:	Response: MKS Safety Program is attached.

Item:	**3.08**
Location:	Question: Central ES Parking Lot, Demolition Keynote 9 on C2.0, how does contractor bid?
Description:	Response: Remove existing stone, strip to subgrade for proposed pavement. Haul all spoils offsite.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

Copy and re-edit paragraph below for each alternate required for Project. See samples of alternate descriptions in Evaluations.

A. Alternate No. 1: Provide all components for a new sound system in Weight Room, Room B115, as indicated on Drawings T-11B and T-503.
B. Alternate No. 2: Provide alternate manufacturer for Fluid-Applied Athletic Flooring as described in Specification Section 09 67 66.
C. Alternate No. 3: Provide Exterior Illuminated Panel Signage as described in Specification Section 10 14 33 and indicated on Elevation drawings. Power to sign location shall be part of Base Bid.
D. Alternate No. 4: Provide full height wall tile and tile base on additional walls of locker rooms and restrooms as indicated on finish plan Drawings.
   Base bid: Full height tile shall be provided in the showers and wet walls as indicated on the finish plan Drawings.
E. Alternate No. 5: Provide Decorative Metal Fences and Gates as described in Specification Section 32 31 19 in lieu of chain link fences and gates indicated on Drawings.
F. Alternate No. 6: Remove existing exterior dimensional letters on north face of the existing building and replace with new dimensional letters as described in Specification Section 10 14 19 and shown on Drawing Sheet A-201.
G. Alternate No. 7: Raise existing unit ventilators in Commons, room A30. Replace and reconnect piping and ductwork as shown on Mechanical Drawings.
H. Alternate No. 8: Base bid to include no work on SP HS Pool drawings and specifications.
   Alternate No. 8: State the cost to include all scope of work shown on SP HS Pool drawings, dated May 23, 2024, and specifications dated May 23, 2024.
I. Alternate No. 9: Base bid to include no work on parking lot at Central Elementary School.
   Alternate No. 9: State the costs to include all scope of work to complete the base bid CES parking lot work per the drawing by HWC Engineering dated January 29, 2024.
J. Alternate No. 9a: Base bid to include no work on parking lot at Central Elementary School.
   Alternate No. 9a: State the costs to include all scope of work (ADD. BID) to complete the CES existing parking lot work per the drawing by HWC Engineering dated January 29, 2024.
K. Alternate No. 10: State the cost to exclude payment and performance bond from your quote.
L. Alternate No. 11: State the credit to include a Gavalume finish on the roof panels for the metal building in lieu of painted roof panels.
M. Alternate No. 12: State the credit to include a standard 5 year limited warranty in lieu of specified 20 year Special Weathertightness Warranty for Standing Seam Metal Roof Panels.

END OF SECTION 01 23 00

ALTERNATE BIDS: I agree to execute the work for this Bid Package indicated for the lump sum amount given therein. (Circle ADD or DEDUCT). Base bid amount may be increased or decreased in accordance with such of the following alternate proposals as may be selected. If there is no bid amount submitted for the alternate, it will be assumed that the alternate has no effect on the bidder's scope of work.

ALTERNATE BID #1 Provide all components for a new sound system in Weight Room, Room B115, as indicated on Drawings T-11B and T-503.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #2 Provide alternate manufacturer for Fluid-Applied Athletic Flooring as described in Specification Section 09 67 66.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #3 Provide Exterior Illuminated Panel Signage as described in Specification Section 10 14 33 and indicated on Elevation drawings. Power to sign location shall be part of Base Bid.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #4 Provide full height wall tile and tile base on additional walls of locker rooms and restrooms as indicated on finish plan Drawings.
Base bid: Full height tile shall be provided in the showers and wet walls as indicated on the finish plan Drawings.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #5 Provide Decorative Metal Fences and Gates as described in Specification Section 32 31 19 in lieu of chain link fences and gates indicated on Drawings.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #6 Remove existing exterior dimensional letters on north face of the existing building and replace with new dimensional letters as described in Specification Section 10 14 19 and shown on Drawing Sheet A-201.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #7 Raise existing unit ventilators in Commons, room A30. Replace and reconnect piping and ductwork as shown on Mechanical Drawings.

ADD / DEDUCT: ($_____)_____

ALTERNATE BID #8 Base bid to include no work on SP HS Pool drawings and specifications.

Alternate No. 8: State the cost to include all scope of work shown on SP HS Pool drawings, dated May 23, 2024, and specifications dated May 23, 2024. Include P & P Bond.

ADD: ($_____)_____

Breakdown of Alternate #8 (for accounting purposes)

Pool	$_____
Steel & Erection	$_____
Mechanical	$_____
Bond	$_____
General Conditions/General Requirements	$_____
Fees	$_____
Total Alternate #8 Bid	$_____

ALTERNATE BID #9 Base bid to include no work on parking lot at Central Elementary School.

Alternate No. 9: State the costs to include all scope of work to complete the base bid work on the CES parking per the drawing by HWC Engineering dated January 29, 2024. Include P & P Bond.

ADD: ($_____)_____

ALTERNATE BID #9a Base bid to include no work on parking lot at Central Elementary School.

Alternate No. 9a: State the costs to include all scope of work to complete the work on the existing CES parking (ADD. BID) per the drawing by HWC Engineering dated January 29, 2024. Include P & P Bond.

ADD: ($_____)_____

ALTERNATE BID #10 State the cost to exclude payment and performance bond from your quote.

DEDUCT: ($_____)_____

ALTERNATE BID #1l State the credit to include a Galvalume finish on the standing seam metal roof panels.

DEDUCT: ($_____)_____

ALTERNATE BID #12 State the credit for a standard 5 year limited warranty in lieu of specified special 20 year warranty for weathertightness for SSR panels.

DEDUCT: ($_____)_____

MKS

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Health & Safety Handbook

Issue: 3/13/2023

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CHAPTER 1

INTRODUCTION TO THE MICHAEL KINDER & SONS, INC. SAFETY MANUAL

Section: Program Administration

Reference: N/A

Revised Date: *3/13/2023*

CHAPTER 1

Introduction to the Michael Kinder & Sons, Inc. Safety Manual

1. INTRODUCTION

The objective of any safety program is to eliminate injures to personnel and damage to property for three reasons:

- For humanitarian and moral concerns,
- To reduce costs, and
- For regulatory compliance with IOSHA/OSHA.

This Manual is a Safety Manual; it is an essential part of our Safety Program.

2. TOP MANAGEMENT SUPPORT

How does this take form?

- The establishment of a Company Safety Policy,
- The assignment of responsibility for safety to an individual or department,
- The commitment of manpower, budgets, and time to safety, and
- A requirement that all employees, including management, are responsible for complying with safety requirements and cooperation with the safety director. Willful failure to comply will result in discipline up to and including dismissal.

3. ROLES AND RESPONSIBILITIES

- Management
- Safety Director
- Supervisors, and
- Employees.

4. SAFETY TRAINING AND ORIENTATION

- New employee safety training.
- Weekly toolbox talks training.
- Other hazard specific training.

5. SAFETY AUDIT / INSPECTIONS

Periodic jobsite inspections for hazards and their correction

6. ACCIDENT INVESTIGATIONS

Include searching for the root causes of accidents and injuries followed by their correction or

elimination.

7. RECORD KEEPING

Keeping accurate records of all safety activities is needed to document Michael Kinder & Sons, Inc.'s commitment to the safety program and to demonstrate that the safety program is being used.

8. DISCIPLINARY SYSTEM

A disciplinary system is required to ensure compliance with the safety rules and procedures.

9. CODE OF SAFE PRACTICES

A list of safety rules is needed if all employees are to know what is expected of them.

10. SAFETY COMMUNICATIONS

- Safety requires postings that outline employee and employer rights and obligations.
- Warnings of specific hazards.
- Memoranda explaining procedures.
- Training that makes sure the employee safe practices and procedures are observed.

11. SAFE PROCEDURES

The use of a safety manual ties together all the elements that make an effective safety program.

Michael Kinder & Sons, Inc. believes that job-site safety is crucial in making the company efficient and competitive. An effective safety program reduces cost. It will also make Michael Kinder & Sons, Inc. a better place to work…for everyone.

MICHAEL KINDER & SONS

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CHAPTER 2

SAFETY POLICY

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 2

COMPANY SAFETY POLICY

1. PURPOSE

Michael Kinder & Sons, Inc. establishes this Safety and Health Policy to demonstrate our commitment to the safety and health of our employees and to our intention to comply with all relevant safety and health laws, regulations, and requirements.

2. THE POLICY

It is the policy of Michael Kinder & Sons, Inc. to provide a healthy and safe place of employment for our employees and for the public in all this company's operations. It is also the policy that all employees, including managers, superintendents and foremen, are responsible for safety at all times. It is the responsibility of managers, superintendents, and foremen to conduct our operations in a safe manner and to see that health and safety regulations are followed. The safety director and officers of the company will provide training and direction to assist the supervisors in carrying out these duties.

3. DISCIPLINARY ACTION FOR NON COMPLIANCE TO POLICY

Any officer, manager, superintendent, foreman, or employee who deliberately violates Company Safety Rules or Safety regulations will be subject to discipline up to and including termination.

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CHAPTER 3

ROLES & RESPONSIBILITIES

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 3

ROLES & RESPONSIBILITIES

1. INTRODUCTION

This safety program will be managed in the same way that other successful operations of the company are managed. Top management decides what will be done, who will direct it, and allocates sufficient funds, personnel, materials, and equipment to assure its success. Top management assigns other appropriate safety responsibilities to safety director, project managers, superintendents, foremen, and employees.

Everyone assigned a safety responsibility is held strictly accountable by management to properly carry out that responsibility.

2. THE PRESIDENT / OWNER

- Communicates the importance and commitment of safety in the workplace.
- Approves all goals for the company.
- Approves assignments for personnel.
- Holds the responsible parties accountable for their assignments.
- Approves the budget, materials, equipment, and manpower to support the program.
- Approves incentives to line personnel for successful safety performance.

3. VICE PRESIDENT OF OPERATIONS

- Designates the budget, materials, equipment, and manpower to support the program.
- Actively supports the company's safety program in conversations, written communications, training, meetings, and inspections.
- Designates assignments for personnel.
- Establishes safety goals for the company, at least annually.
- Provides incentives to line personnel for successful safety performance.
- Evaluates the overall performance of the program, at least annually.

4. THE SAFETY DIRECTOR

- Develops, administers, implements, maintains and enforces the company's safety and health program.
- Ensures that all personnel are provided with an appropriate level of safety and health training.
- Advises management, superintendents, foremen, and supervisors on relevant regulations and practices concerning safety and health.
- Trains management and employees in hazard recognition and control.
- Acts as the company's liaison with regulatory agencies and insurance representatives.
- Maintains the required and necessary records for company needs and compliance with regulations.
- Gains and maintains professional expertise by attending training sessions and professional safety meetings.
- Regularly inspects all job-sites and corrects or controls any safety hazards and files a report.

- Inspects tools and equipment to ensure safe operating condition.
- Investigate accidents, injuries, and significant near misses to find the causes and correct or eliminate them.
- Monthly reports of accidents.
- Makes sure all sub- contractors comply with their contracted safety obligations.

5. THE PROJECT MANAGER

- Read and review the Construction Safety Standards and become knowledgeable of federal, state, and local standards.
- Plans all jobs and working assignments with the safety and health of workers in mind.
- To see that, at the time of the pre-award meeting, the name of the subcontractor's safety officer is obtained and that a copy of the sub or trade contractor's safety program is obtained. The project manager will transmit to the safety director the name of the sub or trade contractor's safety officer and a copy of their safety program and /or inform the safety director of the absence of such a program on the part of the sub or trade contractor.
- When visiting the jobsite, report to the superintendent all unsafe acts and conditions.
- Makes sure that all sub-contractors comply with their contracted safety obligations.
- Review all accident reports

6. THE PROJECT SUPERINTENDENT

- Establishes and maintains a safe and healthful working environment for the employees under his/her direction.
- Makes sure that all workers follow the company's safety rules and established procedures.
- Plans all jobs and working assignments with the safety and health of the workers in mind.
- Determine the nearest emergency room or similar facility and post the location, phone number, and directions to facility in a prominent location.
- Make available all necessary personal protective equipment, job safety materials and first aid supplies.
- Instructs a worker in safe work practices.
- Inspects tools and equipment to ensure safe operating conditions and arranges for their repair or replacement when needed.
- Relies on the safety director for advice and expert opinion.
- Notifies the safety director of specific hazardous operations and works with hem/her on methods for completing jobs safely and efficiently.
- Assists the safety director in accident investigations (filling out the appropriate forms), inspections, and all other elements of implementing the company's safety program.
- Disciplines supervisors and workers who fail to comply with the company's safety program.
- Makes sure that all sub-contractors comply with their contracted safety obligations.
- Immediately reports all injuries and near misses to the safety director, and the project manager.
- Be familiar with the laws pertaining to safety and their basic requirements.
- Monitor all toolbox talks.
- Conducts jobsite inspections once a week.
- Displays the required IOSHA posters, emergency information and OSHA 300 log in the month of February.
- Promptly corrects hazards noted during inspections or arranges for the correction of hazards that require parts, mechanical expertise, etc.
- Requires all sub-contractors to maintain job safety in accordance with contracted obligations.
- Provides safety orientation for all workers who are new to the job-site.
- Trains workers in job-site hazards and safe work procedures.

7. THE FOREMAN

- Conducts on-going job-site safety oversight.
- Immediately corrects all hazards observed regardless of jurisdiction.
- Stops unsafe work practices.
- Be familiar with the laws pertaining to safety and their basic requirements.
- Promptly transmits to the superintendent any concerns or suggestions of workers about safety or health matters.
- Has the same list of responsibilities as those assigned to the superintendent.

8. THE EMPLOYEE

- Learns and observes all safety rules.
- Keeps work areas clean and orderly at all times.
- Learns the safe and proper use of tools and machines used in the work.
- Wears the Personal Protective Equipment (PPE) required for the work being performed.
- Inspects all tools, machines, and equipment prior to use.
- Reports safety hazards to the foreman or superintendent immediately.
- Attends and participates in all safety training sessions.
- Immediately reports all injuries, emergencies, accidents and near misses to the foreman or superintendent.
- Assists in accident investigations, as required.
- Corrects safety hazards and conditions under his/her authority.
- Submits safety suggestions and ideas to the foreman, superintendent, or safety director.

SAFETY IS EVERYONE'S BUSINESS! ! !

CHAPTER 4

GENERAL SAFETY RULES

Section: Program Administration

Reference: N / A

Revised Date: 3/13/2023

Chapter 4

GENERAL SAFETY RULES

1. INTRODUCTION

To ensure all employees have a standard safety policy to abide by. The following safety rules will be enforced at all times. Failure to follow these rules will result in disciplinary action on the employee. Rules cannot substitute for sound judgement and safety awareness. Keep both in mind when working.

Every worker in this company is responsible for safety at all times.

2. GENERAL

- Everyone will wear required Personal Protective Equipment (PPE) and appropriate clothing at the job-site.

- Employees will follow these safe practices and procedures and render every possible assistance to safe operations. All unsafe conditions shall be reported to a foreman, superintendent, or the safety director.

- All employees are required to work in a safe manner and follow all safety rules and procedures. Failure to do so will result in disciplinary action up to and including job termination.

- All workers will attend weekly Toolbox talks. Foremen and superintendents will conduct this training for everyone in their charge.

- The use, possession, transportation, solicitation or sale of alcohol or drugs (illegal drugs, non-prescribed controlled drugs, or prescribed drugs used in an illegal manner) by anyone while on company business or premises is absolutely prohibited. In addition, working under the influence of alcohol or drugs, regardless of the degree of impairment, is also prohibited. Violation of these rules will be cause for immediate discharge and referral to local law enforcement agencies.

- Horseplay on the project is considered to be unsafe and will not be tolerated.

- No one will knowingly be permitted or required to work while their ability or alertness is impaired by fatigue, illness, prescribed medication, or other cause that might unnecessarily expose them or someone else to injury.

- No one is permitted to enter manholes, underground vaults, chambers, tanks, silos, or similar structures known as confined spaces, without proper training, certification, equipment, and required permits. A trained, competent person will conduct air quality testing before anyone is permitted to enter a confined space.

- Employees will inspect all tools and equipment before use, to make sure that all guards and safety devices are in place and operating. Defects will be reported to foremen promptly.
- No one is permitted to ride on any machine or vehicle unless it is provided with a stationary

seat and seat belt for each passenger. This includes all construction equipment and motor vehicles.

- Never ride the bucket, scoop, hook, etc. of any piece of equipment. Employee's doing so are subject to disciplinary action and possible job termination.
- Hard-hats are required at all times on the jobsite by all personnel working or visiting the jobsite.
- Eye protection is required at all times on the jobsite by all personnel working or visiting the jobsite.
- Report all injuries, no matter how minor, to the foreman or superintendent immediately, so that first aid or the proper medical care can be arranged promptly.
- Do not throw tools, materials, or trash from buildings or other structures.
- When lifting large or heavy objects the best practice indicates that you should **a)** lift no more than 50 pounds unless using a machine or with the help of another employee, **b)** lift with your legs, not your back, **c**) get help, and **d)** make sure your path is clear.
- Report any damage or misalignment of any scaffold or support structure to the superintendent, immediately.
- Practice good housekeeping; keep work areas clean of debris and orderly at all times. Store, or stack building materials in a safe and orderly manner.
- When respirators are required, workers will be certified and trained in their use.
- Safety Data Sheets (SDS) are maintained at job-site. Workers are encouraged to review these documents whenever desired, alone, or with the foreman or safety director.
- Do not use compressed air or oxygen to blow dust or debris off your body or clothing. Use brushes or brooms.
- Gasoline in amounts of five (5) gallons or less must be stored and transported in approved safety cans.
- Always shut engines off when refueling.
- Never smoke when working near flammable or combustible materials.
- Always store compressed gas cylinders in an upright position, properly separated and with caps on.
- Always check electrical cords for damage before each use. Make sure GFCI protection is in place.
- Obey all posted safety rules and all known Federal, State, and local laws.
- When working on job sites that have more stringent rules all employees shall abide by these rules.
- Appropriate clothing shall be worn at all times. Shirts must cover the shoulder (tank tops are not allowed). All employees shall wear sturdy work shoes.

- No firearms are permitted on the job-site. Violators will be permanently removed from the project.

- Fall protection will be enforced at the 6-foot level. Which includes working over hole openings and or open perimeters or anything that will constitute your feet being 6' above the landing below.

3. USE OF TOOLS AND EQUIPMENT

- Maintain tools and equipment in good operating condition. Report defective or unsafe tools and equipment to the superintendents or foreman.

- Compressor connections are to be secured with a clip, wire, or whip at all times. Bleed pressurized hoses before disconnecting them, Protect pressure hoses as you would electrical cords. Repair defects immediately.

- Use lock-out/tag-out procedures when the possibility exists that equipment, machine, or vehicle may be started/engaged by someone other than the person working on it.

- Operators should never lift anyone with their machine unless it is fitted with a properly engineered and certified lifting dive (man-basket).

4. EXCAVATIONS AND TRENCHES

- Never enter any excavation or trench that is 5 ft. deep or deeper unless its sidewalls have been properly shored, benched or sloped and it has been certified by a competent person.

- Every trench or excavation must be inspected by the foreman or superintendent at the beginning of each shift.

- Make sure that the spoil from the excavation or trench is a minimum of 2 feet away from the edge to eliminate possible pressure on the sidewalls.

- Do not operate heavy equipment above slopes, cuts, banks and cliffs when employees are working below. Move one, or the other.

5. LADDERS AND SCAFFOLDS

- Scaffolds should only be erected under the direction of a competent person.

- All scaffold parts and connections are to be visually inspected for defects during erection and repaired or discarded, as necessary.

- Guardrails will be installed on all working platforms of scaffold that is 6 feet in height or higher. The guardrails will consist of top rail, mid rail and toe boards. If guardrails are not possible, all employees will wear proper fall prevention/protection equipment.

- Step ladders are to be used only when legs are fully extended and firmly placed and employee should never stand on the top or last step of a step ladder. Employee should get a longer ladder if this situation arises.

- Extension ladders and job built ladders shall extend a minimum of 3 feet beyond the landing the employee is accessing.

- Extension ladders and job built ladders shall be secured properly to prevent accidental

displacement.

- Extension ladders and job built ladders should be placed at the proper angle which is called the 4 to 1 rule. Which means every 4 feet the ladder extends up, the bottom of the ladder should be extend out 1 foot.

- **Never** use a ladder with broken, split, or missing rungs.

6. GRINDING, CHIPPING AND CUTTING

- Wear eye and face protection when grinding, cutting, sawing, bush hammering, or stoning concrete.

- Wear hearing protection (earplugs or muffs) when performing any of the above operations.

- Wear proper respirator when doing the above operations.

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CHAPTER 5

EMPLOYEE ORIENTATION AND SAFETY TRAINING

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 5

EMPLOYEE ORIENTATION AND SAFETY TRAINING

1. INTRODUCTION

Michael Kinder & Sons, Inc.'s safety training is the foundation for our successful safety and health program. If we do not provide training, a safe and healthy workplace will be difficult to maintain.

Safety training begins with a safety orientation program when the employee first enters the job-site and continues for as long as Michael Kinder & Sons, Inc. employs them.

IOSHA/OSHA requires that construction companies hold periodic safety training session; this is in the form of a toolbox meeting. This meeting will be held once a week. The best time is Monday morning. This starts the workweek with a reminder that Michael Kinder & Sons, Inc. is serious about safety and that this is the first topic of the new workweek. The Monday morning sessions will be given by the foreman, or superintendents.

2. EMPLOYEE SAFETY ORIENTATION

Every new employee must receive orientation training before starting work. The safety orientation program will include the following topics plus any additional items specific to a project.

- Instruct the new employee that he/she is expected to work safely at all times.

  ⇨ Michael Kinder & Sons, Inc. does not require workers to sacrifice their health or safety to keep their job. But, it is part of the workers responsibility to notice safety hazards and correct or report them to the foreman or the superintendent.

- An extensive review of Michael Kinder & Sons, Inc.'s safety policy.

- Each employee will receive a copy of Michael Kinder & Sons, Inc.'s safety rules.

- Discuss how to report and what to do about any safety hazard they discover.

- Stress to the new employee that all injuries, no matter how slight, must be reported immediately to a supervisor and that disciplinary action will take place for failure to report such injuries.

- Review the Hazard Communication Program and furnish a copy of the program, Hazardous Chemical Inventory, and Safety Data Sheets, if so requested.

- Train the new employee in proper handling and use of any hazardous chemicals to which he/she might be immediately exposed.
- Show the new employee where the Safety Data Sheets, the personal protective equipment, the first-aid supplies, and the emergency telephone numbers are kept.

- Review the Fire Protection Program and the Emergency Action Plan with the employee.

- Review Michael Kinder & Sons, Inc.'s disciplinary policy.

- Issue required Personal Protective Equipment (PPE), and demonstrate its proper use and maintenance.

- The superintendents shall then obtain the signature of the new employee to document the training received, and forward this information on to the safety director.

- **ALL EMPLOYEES ARE TO COMPLETE AND RETURN THE EMPLOYEE ORIENTATION PACKET PRIOR TO STAQRTING WORK.**

3. MANAGER AND SUPERVISOR TRAINING

The safety director shall provide training for the Project Superintendents and Trade Foremen. As a minimum, safety-training sessions shall be conducted on a semi-annual basis for the purpose of instructing the Superintendents and foremen in safety regulations and procedures, and updating first-aid skills.

These sessions shall also provide a format for all Supervisors to discuss accidents and injuries and to determine any corrective actions to be taken. Quarterly and year-to date statistical information may also be presented.

4. TOOL-BOX TALK MEETINGS (JOB SITE SAFETY MEETINGS)

- These meetings will be held weekly every Monday morning or at the beginning of the working day by the foreman or superintendent, and shall be attended by employees of Michael Kinder & Sons, Inc. on the site.

- These toolbox talk sessions will last no more than 10 to 15 minutes or less for one short topic.

- No more than one or two topics shall be covered.

- All subjects should be job or task specific. The foreman or superintendent may identify a hazard present at the job-site or discuss a former accident or injury related to the hazard. The sole purpose of these toolbox talks is to help develop a "team" concept toward safety by providing continuing safety training to all employees, and by providing all employees with the opportunity to voice concerns and by making suggestions for improved conditions.

- The Superintendent from materials provided by the Safety Director will select the topics for the safety meeting. The signatures of attendees, the date, and the length of time spent in training will be recorded and filed in the job-site safety file and in the main safety file at the office.

5. SPECIFIC HAZARD TRAINING

- Hazardous Materials Communications (HAZ-COM) refers to employee exposure to substances that by their nature are harmful. Chemicals should be the usual subjects.

- Excavation/trenching requirements include training for all workers and for "competent person" training (See excavation /trenching).

- Confined space programs are required for all operations that take place in enclosed and hazardous areas including vaults, tanks, silos, sewers, or any place that is difficult to enter or exit and which might contain hazardous gases, liquids, or solids (see confined space).

- Construction lead exposure requires specific training, medical training, medical surveillance, disposal training, and record keeping.

- Ladder safety.
- Asbestos
- Crystalline Silica
- Fall Protection

6. SAMPLE FORM

On the following page is a form for employee safety orientation and training.

EMPLOYEE ORIENTATION

Employee Information Sheet

Today's Date_____/_____/_____Your Primary Language _____

_____,_____ _____
Employee Last Name Employee First Name Middle

_____
Employee Address City State Zip

Employee Phone numbers for regular contact (_____)_____or (_____) _____

Date of Birth _____/_____/_____ Male___Female____Social Security Number __-____- ____

In Case of Emergency Contact _____Relationship to Employee _____

Emergency Phone Numbers (_____) _____or (_____) _____

Circle Your Trade	Carpenter Laborer Finisher Other (List):
Circle Your Current Apprentice Status	1st year 2nd year 3rd year 4 thyear
Home/Local Union (Circle one)	232 213 274 1112 692 83 4 Other (List): _____
Race Circle one (information used for Public Works and Government reporting only) Black Hispanic Asian Pacific Islander American Indian Caucasian Alaska Native	

Please list all licenses or training certificates you have received such as Rough Terrain Operation, First Aid, CPR, Powder Actuated Tool Operation, Fork Truck Operation, OSHA 10-hour Class, Scaffolding Competent Person, etc.,

Training Name	**Training Date**	**Training Provided by**
Rough Terrain Fork Truck Operation		
First Aid		
CPR		
Powder Actuated Tool Use		
Competent Person Scaffolds		
OSHA 10 Hr		
(List Other)		
(List Other)		

Substance Abuse Policy Consent Form

I hereby acknowledge receipt of the Michael Kinder and Sons Company's Substance-Abuse Policy regarding drugs and alcohol.

My signature acknowledges my understanding and concurrence with the procedures outlined in the above referenced policy. It is my consent to submit to medical testing, including but not limited to giving urine, breath, blood, hair and/or saliva sample(s) to be used for drug and alcohol analysis under the conditions outlined in the policy.

In connection with and consistent with the provisions of the Michael Kinder and Sons Company's Substance-Abuse Policy:

(1) I authorize the release of any urine, breath, blood, hair and/or saliva sample(s) and the results of any tests and examinations performed thereon to the Company and any doctor, medical personnel, hospital, medical center, clinic, etc., or any representatives with whom the Company may choose to consult regarding the sample tests or examination results. I will be given an opportunity to explain a positive test result to the Medical Review Officer before the test result is reported to the Company as a verified positive test result.

(2) I understand that the test results may be released by the Company to applicable state unemployment agencies, and to the Company's workers' compensation Insurer, where permitted or required by law. I understand that if I test positive for drugs or alcohol, following an on-the-job accident, I may be ineligible for workers' compensation benefits.

(3) I understand that refusal to submit to any test required by this policy, a positive test result, or refusal to authorize the release of the results is grounds for disciplinary action up to and including termination of employment.

I recognize that the Company's policy on drugs and alcohol does not constitute an expressed or implied contract of employment.

_____ _____

Employee Printed Name Employee Signature

_____ _____

Employee Social Security No. Date

_____ _____

Witness Signature Date

This is to acknowledge that I have received copies of the below listed rules and policies contained in the Michael Kinder and Sons Company Employee Orientation Manual.

Non-Solicitation Policy
Work Hours and Absence Reporting Policy
Payroll Deductions
Personal Phone Call Policy
Disciplinary Policy
Family Medical Leave
Medical Record Policy
Workplace Injury Policy
Jewelry and Tattoo Policy
Substance Abuse Policy
Employee Assistance Program Policy
Equal Employment Opportunity Policy

Project Safety Rules Training
Fall Protection Training
Ladders and Stairways Training
Weekly Safety Meeting Training
Personnel Basket Training
Flammable Storage Training
Personal Protective Equipment Training
Equipment Inspection Training
Barricade Training
Fire Prevention Training
Scaffolding Awareness Training
Infection Control Policy
Emergency Action Plan Training
Confined Space Awareness Training
Hazard Communication Program Training
Licensed and Authorized Operator Only Training

After reading paperwork, please ask questions if any of these items are not adequately explained or if you do not understand. Your signature below indicates that you have read and understand the above listed topics and you agree to comply with these rules and policies. These rules and policies apply to all offices and work sites.

I understand all of these policies, and safety rules and agree to follow them to the best of my ability. I do not have any unanswered questions. If ever there is anything I do not understand or have questions about the above listed rules and policies, I will seek out my immediate Supervisor and obtain the answer prior to starting work. I understand safety is paramount at Michael Kinder and Sons Company, Inc. I will never violate safety rules, practices, or regulations for the sake of expediency.

_____ _____

Printed Full Name of Employee Employee Signature Date

_____ _____

Witness Signature Date

EMPLOYEE ORIENTATION AND EMPLOYMENT RULES

NAME (Print)
_____DATE_____

SOCIAL SECURITY NUMBER_____(**4 number only)**

PROJECT NAME _____

After reviewing paperwork, please ask questions if any of these items are not adequately explained or if you do not understand. Your signature below indicates that you have read and understand the below listed topics and that you agree to comply with these project rules.

Employment Rules, Project Rules, Safety Orientation, General Safety Rules, Project Work Rules, Asbestos Awareness, Lock-out / Tag-out policy, Fire Prevention training, Ladder training, Fall protection Training, Hazard Communication trained, Hearing Protection Trained.

EMPLOYEE SIGNATURE_____

WITNESSED BY_____

MICHAEL KINDER & SONS

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CHAPTER 6

DISCIPLINARY POLICY

Section: Program Administration

Reference: N/A

Revised Date: *3/13/2023*

Chapter 6

DISCIPLINARY POLICY

1. INTRODUCTION

Michael Kinder & Sons, Inc. agrees that safety is important and that all employees should work safely. Safety laws, rules and practices must be strictly enforced. We must as a company demonstrate that Michael Kinder & Sons, Inc. insists on safety in the work place with penalties for repeated or serious resistance to following the rules. This is not the sole responsibility of the safety director. Project managers, superintendents, and foremen will be held responsible for enforcing the rules backed up by the company's disciplinary procedure. Disciplinary action informs employees that Michael Kinder & Sons, Inc. is serious about its Safety and Health Program, and unsafe behavior will not be tolerated.

This procedure shall be progressive and consistent with other disciplinary actions taken by the company. These records are the best evidence of Michael Kinder & Sons, Inc.'s commitment to safety in the event of legal proceedings, IOSHA / OSHA citations, or grievances.
The penalty should fit the infraction. Workers will not be dismissed for not wearing a hard hat unless it is repeated to the point where it becomes an insubordination issue. On the other extreme, an employee that is operating company equipment while intoxicated should be dismissed immediately.

2. RESPONSIBILITIES

Every employee of Michael Kinder & Sons, Inc. is responsible for safety. Safe work practices are necessary to create a safe and productive work environment. It is therefore mandatory that all company, state, and federal OSHA rules and regulations be followed and enforced.

Supervision is required to incorporate training and corrective action in promoting an accident free workplace. Employees 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 employees and discussed.

3. PROGRESSIVE DISCIPLINE GUIDELINES

- Level 1: An oral warning; notation for personnel file
- Level 2: A written warning; copy in personnel file
- Level 3: A written warning; three day suspension, copy in personnel file
- Level 4: A written warning; employment termination, copy in personnel file

In conjunction with the above stated progressive disciplinary guidelines, Michael Kinder & Sons, Inc. will implement a policy of "Zero Tolerance" for safety violations that the Company deems to be flagrant/intentional or eminently dangerous to life and/or health. A violation resulting in an eminent danger is defined as creating a situation that could result in severe consequences to life and/or property. Employees in these situations may be immediately terminated.
Continuous flagrant/intentional violations of basic safety polices (i.e. lack of wearing safety glasses, lack of wearing a hard hat, failure to use fall protection equipment, etc.) may also result in the employee being terminated immediately.

4. APPLICATION TO THE PROGRESSIVE DISCIPLINE GUIDELINES

- Possession or use of intoxicating beverages (or drugs) at the workplace.

  Level 4, for first offense

- Reporting for work under the influence of intoxicating beverages or drugs.

  Level 3, for first offense
  Level 4, for second offense

- Possession, use, or bringing weapons or explosives to the workplace.

  Level 4, for first offense

- Fighting or provoking fighting at the workplace.

  Level 3, for first offense
  Level 4, for second offense

- Smoking in restricted or prohibited areas.

  Level 1, for first offense
  Level 2, for second offense
  Level 3, for third offense
  Level 4, for fourth offense

- Failure to wear or use safety apparel and equipment including hard hats, safety glasses, face shields, safety shoes, hearing protection, etc.

  Level 1, for first offense
  Level 2, for second offense
  Level 3, for third offense
  Level 4, for fourth offense

- Failure to use fall protection equipment.

  Level 1, for first offense
  Level 2, for second offense
  Level 3, for third offense
  Level 4, for fourth offense

- Failure to comply with a foreman's instructions.

  Level 4, for first offense

- Negligence by not taking action or reporting a known unsafe condition, faulty equipment, or an employee under the influence of intoxicating beverages/drugs to the foreman, or superintendent.

Level 1, for first offense
Level 2, for second offense
Level 3, for third offense
Level 4, for fourth offense

- Contributing to unsanitary conditions, poor housekeeping, or failure to perform requested housekeeping.

  Level 1, for first offense
  Level 2, for second offense
  Level 3, for third offense
  Level 4, for fourth offense

- Unsafe operation of equipment, tools, or the use of defective equipment, or failure to inspect defective equipment before use.

  Level 1, for first offense
  Level 2, for second offense
  Level 3, for third offense
  Level 4, for fourth offense

5. SAFETY DISCIPLINE RECORD KEEPING

All cases of disciplinary action will be carefully recorded and filed in the personnel files to ensure the fairness and consistency of this program.

6. TRAINING REQUIREMENTS

This disciplinary program will be reviewed with the appropriate personnel during the rollout of the program. The guidelines to more serious and non-serious violations will be discussed.

7. EMPLOYEE WARNING REPORT

On page 5 is an Employee Warning Report. This report should be filled out and signed by both the employer and the employee for all disciplinary actions.

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EMPLOYEE WARNING REPORT

Name: _____ Date of Warning: _____

Job Title: _____ Time of Warning: _____

Social Security # _____ Location of Occurrence: _____

Level of Violation

☐ Level 1, First Offense ☐ Level 2, Second Offense ☐ Level 3, Third Offense ☐ Level 4, Fourth Offense

Type of violation observed / witnessed

1. ☐ Not Wearing hard Hat
2. ☐ Not wearing Eye, Ear or Face Protection
3. ☐ Not wearing Proper Clothing / Attire
4. ☐ Violation Of Company, Owner Or Local, State Or Federal Safety Rules And /Or Regulations
5. ☐ Horse Play
6. ☐ Not Wearing or Using Fall Protection Equipment
7. ☐ Fighting On Job Site / Owners Premises
8. ☐ Disabling or Unhooking Safety Devices
9. ☐ Housekeeping
10. ☐ Reporting, Consuming, and/or Working Under The Influence Of Alcohol Or Non Prescribed Drugs
11. ☐ Throwing Material From Building
12. ☐ Other

Remarks: (Set forth all facts in detail) _____

Issued By: (please sign)

Name: _____ Date: _____

Title: _____

Employee Signature: _____ Date: _____

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CHAPTER 7

THE COST OF ACCIDENTS

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 7

THE COST OF ACCIDENTS

1. INTRODUCTION

The cost of accidents is high in terms of:

- People
- Regulatory fines & citations.
- Insurance rates/litigation,
- Contracts, and
- Equipment,

2. THIS SAFETY PROGRAM CAN HELP PREVENT INJURIES

Michael Kinder & Sons, Inc. has key people that make the company successful in terms of jobs completed within budget. This means profits. Jobs slow down or stop when a key person is injured and costs escalate. Frequent injuries affect small, medium, and large companies alike.

3. THIS SAFETY PROGRAM CAN HELP REDUCE INSURANCE COSTS

When an employee is injured, the costs are added to Michael Kinder & Sons, Inc. EMR (Experience Modification Rating). Frequent injuries can increase our EMR to levels high enough to significantly raise our worker's compensation insurance rates. Workers' Compensation costs are affected by our company's accident history.

Liability and auto insurance rates go up and profits go down when employees injure other people or damage our property and equipment. A large component of our current insurance rates is the cost of past claims. This cost can be controlled.

Having an effective implemented safety program helps reduce insurance rates and makes Michael Kinder & Sons, Inc. more competitive.

4. THIS SAFETY PROGRAM MAY BE A REQUIREMENT AT BIDDING

Public agencies in many parts of the country now require contractors to show that they have a written, effective, safety program before they are allowed to bid on a new project. Many private owners are beginning to do the same. Certainly, many or most large project owners do this. They do it to protect themselves from the liability incurred by hiring unsafe contractors. This trend is spreading across the country. Safety programs are the price of entry onto the playing field.

5. THIS SAFETY PROGRAM CAN HELP REDUCE IOSHA/OSHA INSPECTION COSTS

The costs generated in dealing with an IOSHA/OSHA inspection can be staggering in terms of management time spent with the inspector, citations, fines, paperwork, and the time in responding to citations, appeals, requests for information, and the cost of legal defense.

Effective safety programs reduce the possibility of inspections by reducing the events that precipitate inspections. Effective safety programs provide positive defenses to citations and reduce fines that may be levied.

IOSHA/OSHA has recently introduced a *Focused Inspection Program*. When an inspector sees a working safety program in place, the inspection generally is limited to looking only for the more serious hazards rather than combing the entire site for each and every possible violation. The result is less time on the site, and fewer minor citations.

6. THE COSTS OF ACCIDENTS

(Example – accidents are much higher) Assuming a profit margin of 10%, the average accident of $2,000 translates into a need to generate at least $20,000 in new sales just to cover one accident.

While we most often focus on direct costs, consider also the hidden indirect costs:

- Loss of experienced/skilled workers,
- Job slowdown/shutdown,
- Loss of customer/new business,
- Overtime to complete jobs,
- Accident investigation cost,
- Hiring, training, or replacing employees,
- Management/supervisor lost time, and code violations/fines.

Indirect costs are not recoverable by insurance, but come directly from **profit**.

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CHAPTER 8

ACCIDENT / INJURY REPORTING

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 8

ACCIDENT / INJURY REPORTING

1. INTRODUCTION

To make sure all superintendents and foreman abide by all safety reporting guidelines (i.e., who to call, when to call, and what to do in case of an emergency).

For all lost time accidents, OSHA Recordable accidents, near misses involving a contractor, and all first aid incidents. (Whether medical attention is needed or not)

2. RESPONSIBILITIES

All accidents resulting in injuries other than first aid are to be reported at the time of occurrence to the safety director. In the event of an accident that is considered to be a near miss, OSHA Recordable, lost time accident, the superintendent will need to complete an accident investigation form and request those craft persons involved to complete a written statement. ***(Please see Accident Report Section of the MKS Superintendent/Foremen's Binder for the appropriate Form/Report)***

ACCIDENT OR INJURY REPORTING PROCEDURES:

Emergency ***(Ambulance Required)***

- In case of serious accident or injury, call 911, state the project address, company name, injured person's name (if known), and type of injury.

- Contact Ty Wyss - Safety Coordinator at Michael Kinder & Sons, Inc.
  Office: 260-744-4359
  Cell: 260-437-9167

For Accidents Requiring Medical Treatment (Emergency and Non-Emergency), the following forms must be completed and emailed, faxed, delivered within 24 hours to the MKS Safety Director.

- **First report of injury / workers comp form**

- **Supervisors Incident Report**

- **Employee Injury Report**

- **Witness Statement (if applicable)**

3. CRISIS MANAGEMENT

The Safety Director will take charge in the event of a major catastrophe.
One or all steps are to be followed:

- Take whatever actions are needed to make workers on the project safe.
- Call for assistance from outside; fire trucks, ambulances, electricians, life flight helicopter, civil defense support, and police.
- Stop work
- Call for site evacuation, if necessary and clear site access roads.
- Issue instructions to subcontractors
- Set up security control at the disaster area. Close gate to all but rescue or police.
- Set up communications center in site trailer. Radio, telephone, etc.
- Make sure subcontractor(s) call IOSHA/OSHA in the event of a fatality of their own. In case of a fatality from Michael Kinder & Sons, Inc., we will notify IOSHA/OSHA.
- The owner or president of Michael Kinder & Sons, Inc. should handle all media requests.
- Other actions considered desirable in the particular situation.

Note: In the event of a major catastrophe outside working hours on Weeknights and Weekends, (if there are security guards, they should have the emergency contact list to notify Michael Kinder & Sons, Inc.).

Emergency Contact List:

Safety and Field Operations
Ty Wyss
Cell: 260-437-9167

VP of Operations
David Michael
Cell: 260-740-2509

CEO
Bill Kinder
Cell: 260-740-2426

CHAPTER 9

OSHA INSPECTION POLICY

Section: Program Administration

Reference: N/A

Revised Date: 3/13/2023

Chapter 9

IOSHA INSPECTION POLICY

1. INTRODUCTION

To give Michael Kinder & Sons, Inc. superintendents a guide to follow during the process of an inspection of their jobsite. Following the procedures outlined in this policy will assist in expediting the inspection process and in minimizing the project exposure to possible IOSHA /OSHA citations.

2. GENERAL

There are five (5) priorities for IOSHA /OSHA inspections:

⇨ Imminent Danger,
⇨ Fatalities / Catastrophes,
⇨ Employee Complaint
⇨ General Schedule, and
⇨ Follow-up inspections.

This policy will apply to all of the above-mentioned inspections that would involve a project or contractor on a Company jobsite.

3. RESPONSIBILITIES

Upon the arrival of an IOSHA/OSHA compliance officer, the superintendent will notify the safety director and the contractor(s) to be inspected.

Michael Kinder & Sons, Inc. should contact the subcontractor to inform them of the presence of the compliance officer. Michael Kinder & Sons, Inc. superintendents and the safety director will then serve as the site contact, escort, and coordinator of the flow of information to the compliance officer. However, **never** speak on behalf of a subcontractor representative.

The appropriate personnel should also be prepared to execute the following:

- Accompany the compliance officer at all times;
- Ensure that additional personnel do not get involved with the inspection unless absolutely necessary;
- Ensure that other personnel understand that only the appropriate personnel are authorized to communicate with the compliance officer.
- Prepare to respond to the compliance officer's questions with respect to Michael Kinder & Sons, Inc. created or controlled hazards;

4. PROCEDURES

- Upon the arrival of the compliance officer, be polite, respect, and cooperative. At this time, the credentials of the compliance officer should be requested. After the confirming the

compliance officer's credentials, the superintendent should ask the compliance officer to identify the purpose (type) of their inspection. It is then appropriate to request the compliance officer to wait a few minutes while the proper subcontractor representatives are notified.

- After the subcontractors' representative(s) are present, the superintendent will make a space/ room available for the compliance officer to hold the opening conference. During the opening conference, the compliance officer will explain how the contractor(s) or project was selected, the purpose of the inspection, complaint, the contractor will be given a copy the complaint (with the employee's name deleted, if the employee has requested anonymity).

- During the inspection, accompany the compliance officer; remember the compliance officer determines the route and duration of the inspection and they have authority to interview employees, privately if they wish, and to examine machinery or equipment. The compliance officer is also empowered to take pictures and samples and to employ reasonable techniques to monitor safety. Michael Kinder & Sons, Inc. superintendent or safety director will also take pictures and samples as near to those of the compliance officer as possible.

- The safety director or superintendent will also take notes during the inspection. Identify areas visited, the machinery, equipment and material examined, employees interviewed, others interviewed or involved in the inspection, and a written description of each alleged hazard.

- After the inspection, the compliance officer will hold a closing conference with the contractor(s) representatives. The inspector is to informally advise Michael Kinder & Sons, Inc. and subcontractors of apparent violations. The closing conference is important to the company and subcontractors. If we agree or the subcontractors agree they have violated the Act or any standards during the closing conference, this admission can be used against the subcontractors and us later. If the compliance officer believes a violation may have occurred, they will state the possible violation at this time. They will also ask how long it will take to correct this/these conditions. Agreeing to have the alleged unsafe conditions corrected within a certain time period becomes the abatement period, assuming receipt of a citation.

5. TRAINING REQUIREMENTS

Michael Kinder & Sons, Inc. superintendents and project managers should be aware of the guidelines to be followed during an inspection and be able to access the guidelines for review.

6. DEFINITIONS

Imminent Danger - First priority is given to situations involving imminent dangers. An imminent danger is any condition where there is reasonable certainty that a danger exists that can be expected to cause death or serious physical harm immediately or before the danger can be eliminated through normal enforcement procedures.

Catastrophe/Fatal Accidents - Second priority is given to investigation of fatalities and accidents resulting in hospitalization of three or more employees. Michael Kinder & Sons, Inc. must report this type of accident to IOSHA within 8 Hours.

Employee Complaint - Third priority is given to formal employee complaints of alleged violations, standards, or of unsafe or unhealthy working conditions.

General Inspection - Fourth priority is given to general inspections. Projects are randomly selected through building permits for these comprehensive inspections.

Follow-up Inspections - The next priority is given to follow-up inspections. Follow-up inspections determine if previously cited violations have been corrected.

For all OSHA Inspections Contact:

Safety and Field Operations Coordinator
Ty Wyss
(260)437-9167

CHAPTER 10

EMERGENCY PROCEDURES

Section: Program Administration

Reference: N / A

Revised Date: 3/13/2023

Chapter 10

EMERGENCY PROCEDURES

1. INTRODUCTION

The purpose of this document is to inform all employees of Michael Kinder & Sons, Inc. and subcontractors of emergency procedures.

2. RESPONSIBILITIES

In the event of an emergency (fire, injury, etc.), requiring the assistance of outside personnel, supervisor's call 911. Upon calling, the supervisor shall state their name, their employers name or subcontractor's name, the location of the emergency, and the type of emergency. The supervisor shall also contact and inform the safety director and the project manager of the incident.

3. PROCEDURES

- For emergencies involving building evacuation all craft persons shall follow posted evacuation routes to a designated rally point. Craft persons shall remain at the rally point until they are accounted for by their supervision and an "all clear" order is given to return to the project.

- Upon notification of severe weather (tornado watch / tornado warning) all craft persons should follow posted emergency routes to a designated shelter area. Craft persons shall remain in the shelter area until they are accounted for by their supervision and the severe weather alert is waived.

- In the occurrence of an emergency, the superintendent shall ensure that all-proper accident reports (see accident/injury reporting chapter 8) are completed and distributed in the required time.

- A list of "key" onsite and home office personnel (with phone numbers) and all subcontractors on the project shall also be developed in order to assist communication in case of a project emergency.

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CHAPTER 11

EMERGENCY ACTION PLAN

Section: Program Administration

Reference: 1926.35 (Subpart C– General Safety and Health)

Revised Date: 3/13/2023

Chapter 11

EMERGENCY ACTION PLAN

1. INTRODUCTION

Michael Kinder & Sons. Inc. is committed to do whatever is reasonable to prevent emergency situations from arising. Implementing a health and safety program is one of our major steps in the right direction.

In this chapter we will outline every person's duties and responsibilities in emergency situations and make sure they know what they are responsible for, what to do, and how to do it.

Michael Kinder & Sons. Inc. also wants to make sure that employees remember what they are to do. This means drills, testing, and periodic re-training until their reaction to emergencies is both swift and appropriate.

2. EMERGENCY ACTION PLAN

Responsibilities

- Coordinate the emergency action plan elements with the safety director.
- Make arrangements with local medical service providers to treat injured workers.
- Post a jobsite emergency telephone list in at least one conspicuous place at the jobsite. This list will include local medical service provider, 911, the local fire dept., local rescue squad, local police dept., the national poison control center, and the safety director.
- Make sure all workers on the jobsite know where this list is posted
- Make sure are trained in emergency procedures
- Make sure enough workers are trained and certified in CPR and first aid to meet IOSHA/OSHA minimum requirements and the needs of the project
- Designate a "safe" (rally point) area where workers can gather/report in the event of an emergency

3. PROCEDURES (In case of Emergency)

- Secure the physical area
- Notify the superintendent / safety director
- Report emergency to rescue squad, fire department, police department, etc.
- Help the injured.
- Evacuate the area if necessary
- Keep on-lookers away

JOBSITE INJURY OR ILLNESS

Determine whether injury/illness is, or is not, and emergency.

If it is an Emergency

- Telephone 911, or rescue squad, immediately
- Give first aid, CPR, etc.
- Restore breathing
- Stop bleeding
- Do not move injured unless in immediate danger
- Designate someone to meet rescue squad at job entrance to guide them directly to the injured person/employee

For Non Emergency

- Give first aid
- Transport person/employee to medical service provider

FIRE

- Call 911, or the fire department (if fire is uncontrollable)
- Clear every one from the immediate area and move to the previously designated rally point
- Alert every one on site of the emergency situation
- Designate someone to meet the fire department and direct them to fire site
- Count all employees and make sure all are safe
- Safely search for any missing personnel
- Report missing personnel to fire fighters. Do not attempt rescue.
- Notify safety director and Michael Kinder& Sons. Inc.'s office of the event

NATURAL DISASTERS

(Earthquake, hurricane, tornado, severe weather, etc.)

Employee's responsibilities

During a Disaster

- Stay at least 15 feet away form windows
- Find shelter under a sturdy structure
- Stay away from free standing objects
- Do not panic or attempt to evacuate

After the Disaster

- Stay put until the superintendent tells you to return to your work area or evacuate to the “Rally Point” area until the “all clear” is given
- Above all, do not panic. Depending on the severity of the disaster. Expect the unexpected.
- Check for leaking fuel and electrical problems
- If the disaster results in fire or injuries, follow the appropriate procedure for the specific problem.

Superintendent’s responsibilities

- Determine casualties, provide assistance, and call the emergency services needed.
- Inspect the site for any possible hazardous conditions including fires, electrical shorts, plumbing leaks, and structural damage.
- Determine if the jobsite is in an appropriate condition for workers to return to work.
- Notify the safety director and Michael Kinder & Sons. Inc. the status at the jobsite concerning injuries, and damage to the project.

Emergency Contact List:

Field Operations Manager
Kyle Mettert
Cell: 260-446-1157

VP of Operations
David Michael
Cell: 260-740-2509

CEO
Bill Kinder
Cell: 260-740-2426

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CHAPTER 12

SUBSTANCE ABUSE POLICY

Section: Program Administration

Reference: Owner

Revised Date: 3/13/2023

Chapter 12

SUBSTANCE ABUSE POLICY

1. INTRODUCTION

The purpose of this policy is to assist in creating a safe work environment and to maintain the excellent reputation of Michael Kinder & Sons, Inc. Michael Kinder & Sons, Inc. is taking all reasonable measures to ensure that drug and alcohol abuse does not jeopardize the safety of other employees.

2. SCOPE

This policy applies to all Michael Kinder & Sons, Inc. employees, subcontractors (who adopt this policy), working on Michael Kinder & Sons, Inc. jobsites. Michael Kinder & Sons, Inc.'s substance abuse screening policy includes annual screenings, random screenings, and probable cause and first visits screening.

3. SUPERINTENDENTS RESPONSIBILITIES

- Prohibiting the unlawful use, possession, consumption, manufacture, and distribution of a controlled substance on its premise.
- Comply with the owner requirements, when the owner requirements are more stringent.
- Subjecting employees to annual testing, testing for probable cause, post accident testing (first visit), and random testing.
- Ensuring that contract specifications include all substance abuse testing requirements.
- All Superintendents are responsible for ensuring that their employees comply with all aspects of Michael Kinder & Sons, Inc.'s substance abuse program.

4. EMPLOYEES RESPONSIBILITIES

Every employee of Michael Kinder & Sons, Inc. has responsibility for the following:

- Report to work fit for duty; including being in the appropriate mental and physical condition necessary to perform work in a safe, competent manner, free of the influence of drugs and alcohol.
- An employee has the obligation of reporting to his employer any medications that may impair his job performance and his or others safety.
- Provide documentation of drug test within the past 12 months at the time of hire and on a continuous basis while employed.

- Consent to and participate in owner/employer required testing and consent to the release of the drug screen results to the employer, and to the IUCSAT database, or for specific purposes as permitted by law.

5. PROCEDURES

All new employees must participate in a substance abuse test during the first available screening when the employee arrives at the jobsite. Employees who have participated in a substance abuse test that fulfills the requirements within a one (1) year period may use the results of that test to satisfy the substance abuse policy. All employees must also possess a valid substance abuse card to verify they have successfully complied with Michael Kinder & Sons, Inc. substance abuse policy within the last 12 months.

All employees of Michael Kinder & Sons, Inc. must also participate in random, probable cause, and first visit substance abuse screens (as previously defined).

All substance abuse testing shall fall under the following guidelines:

- Michael Kinder & Sons, Inc. requires employees who test positive, to seek the services of a Substance Abuse Professional (SAP) for evaluation, and receive counseling and/or rehabilitation, and not be allowed to take another IUCSAT drug test for at least 14 days from the date of the first test. The employee is required to submit a letter from the Substance Abuse Professional to the appropriate personnel, concerning their fitness for duty.

- All substance abuse screenings shall come under the control and supervision of a physician with confidentiality protected in accordance with state law and the "American Medical Association's Code of Ethical Conduct for Physicians Providing Occupational Medical Services" or the Medical Review Officer manual, as developed by The National Institute on Drug Abuse (NIDA).

- All substance abuse screenings shall, at a minimum, be conducted in accordance with the U.S. Department of Health and Human Services "Mandatory Guidelines for the Federal Workplace Drug Testing Programs," as set forth in the Federal Register.

- An employee testing "positive" shall have the right to have the secured portion of the urine sample independently re-tested by a NIDA certified laboratory of their choice at their own expense. If the independent re-test is "negative," the employee shall be allowed to resume work immediately and be reimbursed by their employer for the costs of such independent test. Michael Kinder & Sons, Inc. will also pay up to three (3) days back pay.

- No adverse action or discipline shall be taken against any employee on the basis of any "unconfirmed positive" result of the substance abuse screening. Confirmation of positive results shall be conducted using the GCMS method as recognized by the U. S. Department of Health and Human Services.

- A "positive" substance abuse screen shall mean test levels on both the screening test and confirmatory test that are recognized by the "U.S. Mandatory Guidelines for Federal Workplace Drug Testing Programs." A "positive" alcohol test result shall mean blood alcohol levels are officially recognized as demonstrating alcohol intoxication at or in excess of .04.

- Employees will provide a urine specimen for the substance abuse screen. A "hand held" Breathalyzer unit, similar to those used by law enforcement for field sobriety tests, will be used for the alcohol screen.

6. TRAINING REQUIREMENTS

All employees of Michael Kinder & Sons, Inc. should be familiar with the requirements of the substance abuse screening program.

7. DEFINITIONS

Annual - Not based on a calendar year, but based on 12-month periods with the start of the period reflecting the date the employee began working for Michael Kinder & Sons, Inc..

Confirmation Test - A test, performed by an NIDA-certified laboratory, on the same sample used for the screen test, which involves more complex methodology, is more precise, and is therefore more expensive, for the purposes of confirming or refuting screen test results.

Drugs of Abuse - Amphetamines, Cocaine, PCP-Phencyclidine, Opiates, and THC-Cannabinoids.

First Visit Screening - A screen performed upon an employee's initial visit at a health-care facility due to a work-related injury suffered on the jobsite.

Medical Review Officer - A licensed physician responsible for receiving laboratory results generated by a substance abuse screening program who has knowledge of substance abuse disorders and who received appropriate medical training to interpret and evaluate an individual's medical history and any other relevant biomedical information, as certified by either the American Medical Association (AMA) or the American College of Occupational and Environmental Medicine (ACOEM).

National Institute on Drug Abuse (NIDA) - A Federal government organization, which certifies substance abuse laboratories.

Negative Test - A negative screening obtained if: (1) the screen test indicated the absence of legal or illegal substances in excess of the screen limit, or (2) the screen test indicates the presence of legal or illegal substances in excess of the screen limit but the confirming test indicates the absence of legal or illegal substances in excess of the confirmation limits.

Positive Test (Alcohol) - A positive test result is obtained if substance abuse tests indicate the presence of alcohol at or in excess of the test limit of 0.04% blood alcohol content.

Positive Test (NIDA 5-Panel Screen) - A positive test result is obtained if: (1) substance abuse test results indicated the presence of illegal substances in excess of both the screen and confirmation limits, as verified by a Medical Review Officer, and (2) the Medical Review Officer has determined that the test results do not stem from the use of prescriptions medicines, over-the-counter medicines, food, or any cause than the use of illegal substances.

Pre-Employment - Screening of prospective employees to ascertain whether an applicant is capable of safely performing their duties and of meeting the prerequisites for employment of Michael Kinder & Sons, Inc.

Probable Cause - Probable cause shall be defined as those circumstances, based on objective evidence about the worker's conduct in the workplace, that would cause a reasonable person to believe that the worker is demonstrating signs of impairment due to alcohol or other drugs. In most case, the objective evidence giving rise to probable cause will be observed by at least two individuals, ideally 2 employees working in close proximity, but recognizing that in certain circumstances the observation may be made by only one individual. Examples of objective evidence include when a worker shows signs of impairment such as difficulty in maintaining balance, slurred speech or erratic or atypical behavior.

Random – (still in review process) It is the Company's policy to conduct random mandatory drug testing periodically throughout the year. All employees of Michael Kinder & Sons, Inc. are subject to testing with selections made by random drawing.

NIDA DRUG SCREEN

Drugs of abuse tested in a routine NIDA 5-Panel Screen

TYPE	Preliminary Cut-Off Levels (ng/ml)	Confirmation Levels
Amphetamines	1000	500
Cocaine	300	150
PCP – Phencylidine	25	25
Opiates	2000	2000
THC – Cannabinoids	50	15
Ethanol (Alcohol)	.04% w/vol (enzyme assay)	.04% w/vol (GC/FD)

New drugs, preliminary cut off and confirmation levels may be modified periodically in order to parallel the Department of Transportation and the Commercial Drivers License guideline requirements.

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CHAPTER 13

AERIAL WORK PLATFORMS

Section: Program Administration

Reference: 1926.453 (Subpart L– Scaffolding)

Revised Date: 3/13/2023

Chapter 13

AERIAL WORK PLATFORMS

1. INTRODUCTION

The purpose of this section is to define minimum requirements and responsibilities for the safe use of aerial work platforms.

2. GENERAL

This section applies to all employees of Michael Kinder & Sons, Inc. that may involve the use and operation of any vehicle mounted device that telescopes, articulates, or is used to position personnel in an elevated work position. This includes bucket trucks and platforms fitted to fork trucks.

3. RESPONSIBILITIES

Superintendent

- Act as the competent person for safe work practices during the use of aerial work platforms.
- Ensure all employees who may be required to use an aerial lift as part of their normal job requirements are adequately trained.

4. PROCEDURES

Equipment Specifications

- All articulating work platforms shall be equipped with flashing lights. These lights will be used as follows:

  ⇨ When the vehicle is in motion and the aerial platform is manned.

  ⇨ When the vehicle is being used in areas of heavy congested vehicle traffic.

  ⇨ When the vehicle is being used adjacent to or over railroad tracks.

- All lifts shall be equipped with a reverse signal audible above the surrounding noise level.
- Aerial work platforms to be used to work on electrical conductors must be designed and certified for such work.

- Aerial lifts may be “field modified” for uses other than those intended by the manufacturer provided the modification has been certified in writing by the manufacturer or by an equivalent

entity.

General Requirements

- Only trained and authorized contractor personnel will operate an aerial work platform.

A pre-operational check meeting the manufacturer requirement will be performed. At a minimum, the check shall include the following:

- Operating controls and associated mechanisms for:

  ⇨ Conditions interfering with proper operation.

  ⇨ Excessive component wear and contamination of materials.

  ⇨ Visual and audible safety devices for malfunction.

  ⇨ Hydraulic or pneumatic systems for observable deterioration or excessive leakage.

  ⇨ Fiberglass and other insulating components for visible damage or contamination.

- Electrical apparatus for malfunction, signs of excessive deterioration, dirt, and moisture accumulation.

- Do not operate a machine that is not functioning properly.

- Before operating the equipment, review the written operating procedures including all pertinent safety sections.

- Comply with rated load capacity of the equipment.

- At least 10 feet of clearance shall be maintained when operating aerial work platforms near exposed electrical conductors.

Equipment Operation

- Only trained and authorized contractor personnel shall operate an aerial work platform.

- Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

- Safe operation of aerial work platforms may require the presence of two of more persons. A ground person will be required during the usage of any lift or platform when the following conditions exist:

  ⇨ Welding or burning is performed from the work platform.
  ⇨ Work is performed around vehicular traffic.
  ⇨ Work is being performed adjacent to or over railroad tracks.

- **NOTE:** The ground person must be qualified with the aerial work platform and its operation. In situations where more than one man lift is being used in the immediate area, one ground person may be used to control traffic for all lift activity in the area.

- Maintain a clear visual site line with the ground observer at all times.

- Materials and/or tools can be carried within the confines of the bucket or basket to the extent that they do not impede the mobility of the operator, and do not result in exceeding the weight

limitations of the device.

- Use flagging and barricades to isolate the area below an overhead work area.

- All occupants of an aerial work platform will wear personal fall protection equipment. A full body harness and adjustable lanyard is required.

- Personal fall protection equipment will not be secured to an adjacent structure while the person remains in the aerial work platform, it must be attached to the tie off point provided in the lift.

- Anchorage points for elevated work outside the lift will be elevated and tested prior to leaving the lift. (Anchorage points must be capable of supporting 5000 pounds per person attached.)

- Be aware of operating clearances required before initiating any machine functions. Always look in the direction that the bucket is moving and at any object in the path of the boom.

- Do not mechanically block the foot switch.

5. TRAINING REQUIREMENTS

Only qualified and/or competent operators shall be permitted to operate aerial work platforms.

6. DEFINITIONS

Aerial Work Platforms - Aerial lifts include vehicle mounted aerial devices used to lift personnel to job sites above ground. For example, extensible boom platforms, aerial ladders, articulating boom lifts, vertical towers, or a combination of these.

CHAPTER 14

ASBESTOS

Section: Hazard Evaluation and Control

Reference: 1926.1101 (Subpart Z – Toxic and Hazardous Substances)

Revised Date: 3/13/2023

Chapter 14

ASBESTOS

1. INTRODUCTION

Michael Kinder & Sons, Inc. is committed to providing employees an asbestos-free workplace. It is this company's policy that employees shall not be permitted to work in areas where airborne concentrations of asbestos may occur (during construction, salvage, alteration, roofing repair, maintenance and/or demolition operations). 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.

This chapter applies to all company maintenance and/or construction operations.

2. RESPONSIBILITIES

- Michael Kinder & Sons, Inc. shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of the PEL.
- The employees are responsible for complying with this policy and applicable standards.
- The general contractor shall require any contractors to be in compliance with this standard when necessary.

3. PROCEDURES

Michael Kinder & Sons, Inc. is not required to perform any work involving asbestos or asbestos-like materials. However, if employees suspect the presence of such materials at any work site, they should immediately inform their supervisor. Employees should not touch, remove, demolish, or in any other manner disturb materials that are suspected to contain asbestos. The superintendent will stop work in the affected area and will inform the owner immediately if asbestos is suspected to be present at a job site. Michael Kinder & Sons, Inc. will determine methods to identify and if necessary control or abate the material prior to further operations.

Multi - Employer Site - When a contractor superintendent determines that another contractor onsite is performing asbestos abatement, measures should be taken to prevent other contractors from entering regulated areas. This may be accomplished by using barricades, "danger" tape, and signs.

4. TRAINING REQUIREMENTS

Projects where asbestos products are likely to be a component of existing building materials, the superintendent must communicate to the employees / contractor's the location and nature of such materials. For instance, asbestos material is often found in pipe insulation, fire proofing material, and roofing materials in older buildings. In this example, workers should be informed of this type of information before commencement of operations on pipes, structural steel, or roofs.

Contractor superintendents should know or be trained in recognition and avoidance of asbestos containing materials (ACM and/or PACM). It is important to realize that asbestos containing materials have been used in insulation, floor tiles, ceiling tiles, fire proofing, mastic, roofing materials, boilers, and pipe insulation. The asbestos fibers become hazardous when they become airborne and are inhaled.

5. EXPOSURE PROCEDURE

If exposure to ACM/PACM occurs, the following guidelines shall be followed:

- ⇨ Contact the company safety director immediately
- ⇨ Isolate/demarcate the areas and warn employees
- ⇨ Prepare a fiber release episode report
- ⇨ Exposed employees should be requested to discard all clothing considered contaminated and deposit clothing in labeled impenetrable bags or containers. They must then be requested to shower. A medical surveillance program must also be established for exposed employees.

Any loose debris or material suspected of containing asbestos fibers shall not be disturbed. Michael Kinder & Sons, Inc. employees must maintain a hands-off policy to all material suspected of containing ACM/PACM.

6. DEFINITIONS

Asbestos - Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that has been chemically treated and/or altered.

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

Demolition - The wrecking or taking out of any load and/or non-load supporting structural member and any related razing, removing, or stripping of asbestos products.

Employee Exposure - Exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.

Presumed Asbestos Containing Material (PACM) – Thermal system insulation and surfacing material found in buildings constructed no later tan 1980.

Regulated Area - An area established by the contractor to demarcate areas where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the permissible exposure limit. The regulated area may take the form of (1) a temporary enclosure, or (2) an area demarcated in any manner that minimizes the number of employees exposed to asbestos.

Removal - Taking out or stripping of asbestos or materials containing asbestos.

Renovation - That modifying of any existing structure, or portion thereof, where exposure to airborne asbestos may result.

Repair - Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates where asbestos is present.

Permissible exposure limit (PEL) - The airborne concentration levels of asbestos above which one should not be exposed. The time - weighted average limit for the airborne concentration of asbestosis 0.1 fiber per cubic centimeter of air as an eight- (8) hour time-weighted average (TWA). The excursion limit for the airborne concentration of asbestos is 1.0 fiber per cubic centimeter of air as averaged over a sampling period of thirty (30) minutes.

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CHAPTER 15

CONCRETE AND MASONRY

Section: Hazard Evaluation and Control

Reference: 1926.700 (Subpart Q – Concrete and Masonry Construction)

Revised Date: 3/13/2023

Chapter 15

CONCRETE AND MASONRY

1. INTRODUCTION

The purpose of this policy is to prevent or control the hazards associated with concrete and masonry construction operations.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. safety director will ensure that all supervisors are trained and educated on this concrete and masonry policy.

Supervisors are responsible to verify that safe work practices are followed and to take prompt corrective action if any unsafe acts or conditions are identified. Most important is the enforcement of proper personal protective equipment and fall protection systems.

3. PROCEDURES

General

- Appropriate personal protective equipment (i.e., hard hats, safety glasses, gloves, dust masks, etc.) depending on the nature of exposure to hazards will be worn. Refer to chapter 32 Personal Protective Equipment.

- **Fall Protection – All employees working at heights greater than 6 ft. must wear fall protection equipment or otherwise be prevented from falling by guardrail system. Full body harnesses, with a shock-absorbing lanyard attached to a lifeline or equivalent means.**

- Employees must wear protective head and face equipment when applying a cement, sand, and water mixture through a pneumatic hose. Employees also must wear safety full body harness and shock absorbing lanyard or equivalent fall protection equipment when placing or tying reinforcing steel more than six feet (1.8m) above any working surface.

- Reinforcing Steel - All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement. Exposed reinforcing steel must be bent or covered using manufactured steel reinforced caps and wooden troughs to prevent impalement or injury to workers. These caps and wooden troughs must be able to withstand a 250 lb. down force.

- Riding concrete buckets - Employees are prohibited from riding concrete buckets or working under the buckets while the buckets are being elevated or lowered into position. Whenever practical, elevated buckets must be routed so that the fewest possible employees are exposed to the danger of falling buckets.

- Concrete Buckets - Concrete buckets equipped with hydraulic or pneumatic gates must have positive safety latches or similar safety devices to prevent premature or accidental dumping, and must be designed to prevent concrete from hanging up on top and the sides.

- Pumping systems - Concrete-pumping systems using discharge pipes must be provided with pipe supports designed for 100 percent overload.

  ⇨ Compressed air hoses used on concrete pumping systems also must be provided with positive failsafe joint connectors to prevent separation of sections when pressurized.

- Power concrete trowels - Manually guided powered and rotating type concrete troweling machines must be equipped with an automatic control switch to shut off the power whenever an operator's hands are removed from the equipment handles.

- Bull floats - Bull float handles, when they might contact energized electrical conductors, must be constructed of nonconductive sheath for protection.

- Masonry saws - Blades of masonry saws must be covered with a semicircular enclosure to retain blade fragments. The regulation allows an 180-degree angle of exposure for masonry saws such as diamond or tungsten carbide type (water cooled).

- Lockout / tagout procedures - All potentially hazardous energy sources must be locked out and tagged before performing maintenance or repair on equipment such as compressors, mixers, screens or pumps, to prevent inadvertent operation of the equipment that could cause injury. Tags must read "Do Not Start" or similar language to indicate that the equipment is not to be operated.

Cast-in-place concrete

- Formwork - Formwork must be designed, fabricated, erected, supported, braced, and maintained to support all vertical and lateral loads applied to the formwork.

- Shoring and reshoring - All shoring and reshoring equipment must be inspected prior to erection to ensure that the equipment meets the requirements specified in formwork drawings.

  ⇨ Damaged shoring equipment must not be used.
  ⇨ Erected shoring equipment must be inspected immediately prior to, during, and immediately after concrete placement.
  ⇨ Shoring equipment found to be damaged or weakened after erection must be immediately reinforced.
  ⇨ All base plates, shore heads, extension devices, and adjustment screws must be in firm contact, and secured when necessary, with the foundation and form.

- Removal of formwork - Forms and shores (except those used for slabs on grade and slip forms) must not be removed until the concrete gains sufficient strength to support its weight and superimposed loads. Compliance with the plans and specifications for removal of forms and shores, and proper testing with an appropriate ASTM standard test method can help determine if the concrete has gained sufficient strength.

Precast

- Precast concrete wall units, structural

framing, and tilt-up wall panels must be adequately supported to prevent overturning and to prevent collapse until permanent connections are completed.

- Lifting inserts which are embedded or otherwise attached to tilt-up precast concrete members must be capable of supporting at least two times the maximum intended load applied or transmitted to them. Other lifting inserts must be capable of supporting at least four times the maximum intended load.

- Lifting hardware also must be capable of supporting at least five times the maximum intended load. Only essential employees are allowed under precast concrete members that are being lifted or tilted into position.

Lift-Slab

- Lift-slab operations must be designed by a Registered Professional Engineer (RPE.) who has experience in lift-slab construction. Our company does not anticipate performing lift-slab operations.

Masonry

- A Limited Access Zone (LAZ) must be established whenever a masonry wall is being constructed. The LAZ must be established prior to the start of construction of the wall; must be equal to the height of the wall to be constructed plus four feet; must run the entire length of the wall; and must be established on the side of the wall which will be unscaffolded (Refer to chapter 35 - Scaffolding).

- Only employees actively engaged in constructing the wall must be permitted to enter the limited access zone.

- The limited access zone must remain in place until the wall is adequately supported.

- Masonry walls of over eight feet must be adequately braced to prevent overturning and to prevent collapse. The bracing and the limited access zone must remain in place until permanent supports are in place.

- Proper masonry scaffolding shall be erected and maintained by a competent person (See Scaffolding chapter 35)

4. TRAINING REQUIREMENTS

All employees of Michael Kinder & Sons, Inc. involved in concrete / masonry work will be trained by the company for safe procedures as well as details of this policy. Superintendents will evaluate unsafe acts of employees to determine if the lack of training / understanding is a factor, and will report to the safety director for necessary training to employees as a corrective action.

5. DEFINITIONS

Formwork - The total system of support for freshly placed or partially cured concrete, including the mold or sheeting (form) that is in contact with the concrete as well as all supporting members including shores, reshores, hardware, braces, and related hardware.

Lift Slab - A method of concrete construction in which floor, and roof slabs are cast on or at ground level and, using jacks, lifted into position.

Limited Access Zone (LAZ) - An area alongside the masonry wall, which is under construction, and which is clearly demarcated to limit access by employees.

Precast Concrete - Concrete members (such as walls, panels, slabs, columns, and beams) which have been formed, cast, and cured prior to final placement in a structure.

Reshoring - The construction operation in which shoring equipment (also called reshores or reshoring equipment) is placed, as the original forms and shores are removed, in order to support partially cured concrete and construction loads.

Shore - A supporting member that resists a compressive force imposed by a load.

Vertical Slip Forms - Forms that are jacked vertically during the placement of concrete.

Jacking Operation - The task of lifting a slab (or group of slabs vertically from one location to another (e.g., from the casting location to a temporary (parked) location, or to its final location in the structure), during the construction of a building/structure where the lift-slab process is being used.

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CHAPTER 16

CONFINED SPACE ENTRY

Section: Hazard Evaluation and Control

Reference: 1926. 21(b)(6)(i) (Subpart C– General Safety and Health)

Revised Date: 3/13/2023

Michael Kinder & Sons, Inc. Safety Manual

Chapter 16

CONFINED SPACE ENTRY

1. INTRODUCTION

The purpose of this policy is to establish the minimum requirements for our company to perform activities associated with confined space entry.

2. SCOPE

This procedure applies in its entirety to our company's work in new construction and existing facilities where owner's employees, general contractor's personnel, or others can impact your safety when working in confined spaces.

3. RESPONSIBILITIES

Michael Kinder & Sons, Inc. safety director shall manage the overall confined space entry program and will ensure that supervisory and worker personnel are trained and comply with policy requirements.

- Supervisors receive training and require workers to follow safe work practices relevant to this section.

- Workers know their responsibilities if trained in confined space entry and follow relevant safe operating procedures.

4. PROCEDURES

Planning for entry into a confined space requires preparation of the entry team, equipment and the workspace.

Confined Space Entry

- A confined space found in the work place may have a combination of these three characteristics, which can complicate working in and around these spaces as well as rescue operations during emergencies. Make a survey of your working area. If any of the characteristics listed are identified, review the situation with the safety director before proceeding.

- All permit and non-permit confined spaces must be identified. Employee notification to prevent inadvertent entry must be achieved by Confined Space Training and Certification.

- Types of Hazards Associated with Confined Spaces:

  ⇨ Oxygen deficiency/enriched, less than 19.5% or above 23.5 percent
  ⇨ Combustible/Flammable/Explosive Atmospheres
  ⇨ Toxic Gases or Vapors
  ⇨ Physical Hazards

- Grinding
- Agitators
- Steam
- Falling/Tripping
- Other Moving Parts
- Mulching

⇨ Corrosive chemicals
⇨ Biological
⇨ Unknowns
⇨ Electrical
⇨ Wind
⇨ Lighting
⇨ Weather
⇨ Insecure Footing
⇨ Rodents/Snakes/Spiders

The Ten Basic Rules for Confined Space Entry

- Planning sessions by qualified persons
- Testing of atmosphere
- Ventilation
- Training the Personnel
- Lockout/Tagout
- Standing People/Communication
- Use of Proper Tools and Equipment
- Entry Permit
- Continuous Monitoring of Atmosphere
- Record-keeping

Preparations Required for Confined Space Entry

- Review activity to be performed.
- Complete Confined Space Entry Permit.
- Prepare Space Entry.
- Notify the department likely to be affected by service interruption.
- Post signs put up barriers and tape where necessary.
- Implement lockout/tagout where necessary.
- Empty the space if possible of hazardous materials, clean, wash and purge.
- Ventilate if needed long enough in advance. Verify by testing.
- Review with personnel entering the space that previous testing has been completed.
- Attach "HOT WORK" permit, if required, to confined space entry permit.
- Post EMERGENCY RESPONSE PHONE LIST near by in the event of an emergency.

  ⇨ This list should include inside contacts and outside personnel.

- Atmospheric testing (by Certified Personnel only).
- Oxygen Content Range (by Certified Personnel only)
- Flammable Gases not Greater than 10% of Lower Explosive Limit (LEL).
- Toxicity (Review MSDS's, Permissible Exposure Limit's (PEL's), Threshold Limit Value's (TLV's) and other pertinent data to evaluate exposure)
- Heat Stress potential, if present requires Wet Bulb Globe Temperature (WBGT) testing
- Post confined space entry permit (if required)

Atmosphere Testing and Monitoring

- Initial testing of the confined space is to be conducted by a "qualified person" only. At a minimum all confined spaces must be evaluated for:

  ⇨ Oxygen (O_2) levels
  ⇨ Presence of Carbon Monoxide (CO) gas
  ⇨ Presence of explosive gas or vapor

- Additional tests in confined spaces may be needed because of the function of the confined space. For example:

  ⇨ Hydrogen Cyanide (HCN)
  ⇨ Hydrogen Sulfide (H2S)
  ⇨ Sulfur Dioxide (SO2)

- Continuous Testing in Attended Confined Spaces

  ⇨ Where the space contains or has the potential to contain a hazardous atmosphere, continuous monitoring will be done.

  ⇨ Personnel using continuous monitors will be trained on the use and limitations of the monitor. This training is part of the annual confined space training program.

- Combustible Gases and Dusts Testing

  ⇨ All confined spaces shall be tested for explosive gases and vapors prior to entry, no "HOT WORK" shall be permitted if atmospheric readings are above 10% of the lower explosion limit (LEL). Continuous reading monitors for explosive ranges shall be used on the jobsite in which "HOT WORK" is being conducted in attended confined spaces.

  ⇨ Before "HOT WORK" is conducted in confined spaces which contain combustible dusts, they shall be adequately cleaned by means of washing or "wetting down", or vacuuming with properly grounded equipment. At NO time is compressed air to be used for cleaning of combustible dusts.

5. TRAINING REQUIREMENTS

Initial and refresher (when duties change, hazards in space change or whenever evaluation determines inadequacies in employee's knowledge) training to provide employees understanding, skills and knowledge to do the job safely. Employer certification of training must include employee's name, signature or initials of trainer and date of training.

Authorized Entrants

- Must know the hazards they may face, be able to recognize signs or symptoms of exposure and understand the consequences of exposure to hazards. Entrants must know how to use any needed equipment, communicate with attendants as necessary, alert attendants when a warning symptom or other hazardous condition exists and exit as quickly as possible whenever ordered or alerted (by alarm, warning sign or prohibited condition) to do so.

Attendants

- Must know the hazards of confined spaces, be aware of behavioral effects of potential

exposures, maintain continuous count/identification of authorized attendants, remain outside space until relieved, and communicate with entrants as necessary to monitor entrant status. Attendants also must monitor activities inside and outside the permit space and order exit if required, summon rescuers if necessary, prevent unauthorized entry into confined space, and perform non-entry rescues if required. They may not perform other duties that interfere with their primary duty to monitor and protect the safety of authorized entrants.

Entry Supervisors

- Must know hazards of confined spaces, verify that all tests have been conducted and all procedures and equipment are in place before endorsing permit, terminate entry and cancel permits and verify that rescue services are available and the means for summoning them is operable. Supervisors are to remove unauthorized individuals who enter confined spaces. They also must determine at least when shifts and entry supervisor's change that acceptable condition as specified in permit continue.

Rescue Services

- Will be off-site. Use employee retrieval systems whenever possible. Onsite teams must be properly equipped. They must receive the same training as authorized entrants plus training to use personal protective and rescue equipment and first aid training, including CPR. They must practice simulated rescues at least once every 12 months. Outside rescue services must be made aware of hazards, receive access to comparable permit spaces to develop rescue plans and practice rescues. Employer must provide hospitals or treatment facilities any MSDS's or other information on a permit space hazard exposure situation that may aid in treatment of rescued employees.

Alternative Protection Procedures

- For permit spaces where the only hazard is atmospheric and ventilation alone can control the hazard, employers may use alternative procedures for entry. To qualify for alternative procedures employers must 1) ensure that it is safe to remove the entrance cover; 2) determine that ventilation alone is sufficient to maintain the permit space safe for entry - and work to be performed within the permit-required space must introduce no additional hazards; 3) gather monitoring and inspection data to support 1) and 2); 4) if entry is necessary to conduct initial data gathering, perform such entry under the full permit program; 5) document the determinations and supporting data and make them available to employees. Entry can take place after a) it has been determined safe to remove the entrance cover; b) any openings are guarded to protect against falling and falling objects; c) internal atmospheric testing; d) air remains without hazard whenever any employee is inside the space; e) continuous forced air ventilation has eliminated any hazardous atmosphere; f) space is tested periodically. Employees must exit immediately if a hazardous atmosphere is detected during entry and the space must be evaluated to determine how the hazardous atmosphere developed.

6. DEFINITIONS

Confined or Hazardous Space - A confined or hazardous space is any space having a limited means of access or egress, such as manholes or other restricted opening not designed for continuous human occupancy. Confined or hazardous spaces include, but are not limited to storage tanks, vessels, bins, boilers, ducts, sewers, underground utility vaults, tunnels, pipelines and spaces more than four feet in depth, such as pits, tubs, vaults, caissons and vessels or any

other space which is subject to the accumulation of toxic or flammable contaminants or has potential for an oxygen deficient atmosphere.

Confined Space - Is large enough and so configured that an employee can bodily enter and perform assigned work and has limited or restricted means for entry or exit and the space is not designed for continuous employee occupancy.

Permit-Required Confined Space - A confined space that has one or more of the following characteristics:

⇨ Contains or has a potential to contain a hazardous atmosphere;
⇨ Contains a material that has the potential for engulfing an entrant;
⇨ Has an internal configuration such that an entrant could be trapped or asphyxiated by inward converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
⇨ Contains any other recognized serious safety or health hazard.

Non-Permit Confined Space (Low Hazard) - A confined space that poses no actual or potential atmospheric hazards and if all hazards within the confined space are eliminated without entry into the space, the space may be classified or reclassified as a Non-Permit confined space, for as long as the non-atmospheric hazards remain limited. (Forced air ventilation does not consider elimination of a hazard).

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CHAPTER 17

CRANES AND DERRICKS IN CONSTRUCTION

Section: Hazard Evaluation and Control

Reference: 1926.1400 (Subpart CC – Cranes and Derricks in Construction)

Revised Date: 3/13/2023

Chapter 17

CRANES AND DERRICKS IN CONSTRUCTION

1. INTRODUCTION

The purpose of this policy is to prevent accidents and injury from the use of unsafe crane equipment or from the unsafe operations of cranes or crane equipment.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. safety director shall ensure that company owned cranes are inspected at least annually, a preventative maintenance program for crane equipment is implemented, and documentation is kept to substantiate this.

The superintendent will be responsible for the safe use of crane equipment at the jobsite, and will ensure that the crane operator is trained and qualified for the equipment being used.

The crane operator will ensure that all crane equipment including hoist is inspected daily prior to the first crane lift.

A copy of the daily inspection report must be made available (accessible) upon request to the safety director every day the crane is in use.

This section applies to all employees engaged in crane use or related activities.

3. PROCEDURES

Daily Inspection

- Visually inspect the entire crane for signs of damage, which might cause unsafe operation. Inspect the bridge and cab for loose objects, which might fall to the floor.
- Visually inspect running hoist cable from cable drum to block. If broken wires in a strand are found, have the foreman ask maintenance to check the hoist cables. Ensure that user cables are threaded through their sheaves.
- Visually inspect for hook spread. Be sure safety latch is in place and in working condition.
- Test the alarm.
- Operate each control to determine that it functions properly:
  - ⇨ Bridge control and brake
  - ⇨ Trolley control and brake
  - ⇨ Hoist control and brake

⇨ Handling equipment controls: (Example: Rotator rope grab).

⇨ Check for misalignment, worn points, hose, and cables out of holders or racks, electric cables pinched or worn, and leaking hydraulics.

General Crane Rules

- All cranes must meet the applicable requirements for design, inspection, construction, testing, maintenance, and operation as prescribed in the ANSI B30.5-1968, Safety Code for Crawler, Locomotive and Truck Cranes. However, the written, dated, and signed inspection reports and records of the monthly inspection of critical items prescribed in the ANSI standard are not required. Instead a certification record which includes the date, the crane items inspected, the signature of the inspector, and a serial number or other identifier for the crane inspected.

- Test the hoist brake on the first load lifted on the shift and on successive larger loads during the shift. Test by lifting the load a few inches off the floor and stopping to make sure the brake does not slip.

- Report immediately to your foreman any unsafe condition found during the proportional check and/or during later operations of the crane.

- Know the rated capacity of the crane before operating or attempting any lifting operation.

- Watch for co-workers near or on crane rails. Look down the rails in the direction of travel prior to bridge movement.

- When approaching a pennant streamer across the building, or other stop signal, stop crane immediately. Find out why the warning was given and then proceed only when you are sure of safe operating conditions.

- Before moving a load, make sure that no one is in a position to be injured and that no equipment or material could be damaged by the lift.

- Center the hook over load before any lift is started, this will prevent swinging. Check with rigging personnel to ensure that the load center of gravity has been clearly established.

- Sound crane bell, horn, or siren as you begin to move a load through high traffic areas and intersections.

- NEVER carry a load over co-workers.

- If in doubt about clearing any object -STOP- seek assistance.

- Any time an object is accidentally damaged by your crane, load, or grab, STOP and report it immediately to your foreman.

- When another operator relieves you, report the crane operating condition to the operator relieving you.

- Avoid parking cranes so that control pendants, hooks, grabs, or other lifting devices are left suspended over aisle-ways.

- When internal combustion engine powered equipment exhausts in enclosed spaces, tests shall be made and recorded to see that employees are not exposed to unsafe concentrations of toxic gases or oxygen deficient atmospheres.

- When work on an overhead crane or gantry crane requires the crane to be tagged out. The cranes main electrical disconnect switch shall be tagged and locked in the open position.

- The following situations require cranes adjacent to the work area to be locked/tagged out or blocked when the work area is in the path of the bridges of these cranes:

  ⇨ When working in a JLG, bucket truck, or other personnel-lifting device

  ⇨ When working with a mobile crane

  ⇨ When working on the bridge of a gantry crane or small crane

  ⇨ When working on a ladder or scaffold

  ⇨ When working on any elevated platform or on any equipment

Acceptable Blocking Methods

- Crane stops on each rail with a streamer of pennants draped between the stops. The streamer shall be draped with sufficient slack to hang the pennants at or below the level of the cab of an adjacent crane. When the crane stops are used, the operators of the adjacent crane(s) shall be notified, and a sign, "CAUTION, Crane Stops Up At Column ," shall be hung on a rung of the access ladder(s) to the adjacent crane(s). To caution operators of pendant and radio controlled crane, a caution tag, instead of a sign, shall be attached to the control box of the crane.

- An adjacent crane can be positioned between the work area and other active cranes. The adjacent crane shall have parking brakes set and shall be properly locked out. Locking or blocking adjacent cranes on the same rails shall be required when performing maintenance activities on the overhead crane.

- Blocking is required when a section of the crane rail is electrically de-energized. The blocks shall be placed so the crane electrical pick up shoes do not enter the de-energized zone and lose power.

- When signaling to a crane operator, use standard signals as shown in handout.

- When an operator is at the controls of a crane, he/she shall be aware of any person boarding or leaving a crane. The crane shall not be moved while a person is boarding or leaving the crane.

- Keep aisle-ways unobstructed in the area serviced by pendant or radio controlled cranes.

- Keep a firm grip on the pendant control box.

- Turn off electrical power when you finish using the crane.

- In all cases when the need for a flag person is required, stop and call for assistance.

Special Rules for Radio Controlled Cranes

- The operator shall insure that the transmitter is the correct one for the crane. Tests by sounding alarm, if it does not function, do not test other controls. Turn the key switch to the OFF position and notify your foreman.

- The operator shall wear and have the transmitter attached to a harness or belt when operating the crane.

- The operator shall always take position for the best view of the crane being controlled. NEVER crane blindly. Always keep both the crane and the loads in your sight and stay as close as possible to the load without endangering yourself.

- The maximum operating distance between the operator and the crane load shall be 50 feet. Minimum distance is defined best as to what is safe without standing in the fall path of the load or in the pinch point position.

- Switches of the transmitter shall never be locked in the on position.

- The "battery operated" switch and "off-on" switch shall be turned off when the operator is putting on or taking off the transmitter and belt assembly. This rule also applies when the transmitter is stored. Transmitters shall be stored in a designated protected place when not in use. It is the operator's responsibility to return the transmitter to the designated storage place when not in use.

- When gloves are not required for more compelling safety reasons, they shall not be worn when operating the control box.

- In case of power failure, the operator shall turn the key switch to the OFF position until power is restored.

- If crane fails to respond correctly, the operator shall turn the key operated switch to the OFF position and immediately report the condition to their foreman.

- When crane is down for electrical or mechanical repairs, a designated person on the floor shall be responsible for the power transmitter.

- The spare transmitter shall be kept locked/tagged by an appropriate production foreman. The spare shall not be checked out unless the primary transmitter is turned in for repair. Under no circumstances shall two transmitters be available for use on the same crane.

- The structure of the transmitter boxes shall not be modified in any way. Any modifications shall be approved by a professional engineer with knowledge of the transmitter manufacturer's requirements.

- All transmitters that are inoperative shall be locked and tagged out until cleared for operation by the foreman.

Crane Hand Signals

- Both the signal person and crane operator shall know and use the standard crane signals. Communication between the crane operator and the signal person is essential for the safe operation and movement of the crane while in operation.

- Signal Person

  ⇨ A signal person shall be provided when any point of the operation or movement is not in full and direct view of the operator.

  ⇨ The signal person shall be in a sufficiently lighted area and clearly visible to the operator.

⇨ The signal person shall give signals so that they are easily recognized and identified.

⇨ There shall be only one person to relay all signals to the crane operator although the need for more than one ground guide may be required. Effective communications between the ground guides shall be clear and precise.

Crane Operator

- The crane operator shall respond to the standard operating signals only from one authorized signal person. If more than one signal person is on the floor at the same time, the crane operator shall not lift the load until it has been determined which individual will give the signals. However, the operator shall recognize and obey a STOP signal at all times, no matter who gives it.

- If the signal or order from the person is unsafe, the crane operator shall refuse to make the lift until corrections have been made and the move or load can be lifted safely.

- The crane operator shall not move a load unless signals are clearly given, seen and understood. The operator shall halt the lift or movement in progress if the signal person is not in clear view at all times.

4. TRAINING REQUIREMENTS

Only trained qualified and licensed personnel shall operate crane equipment.

Crane operators must:

- Meet the physical requirements

- Pass a written examination

- Understand and be able to use a load chart

- Calculate loads for the type of crane being operated

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CHAPTER 18

CRANE SAFETY GUIDELINES

Section: Hazard Evaluation and Control

Reference: 1926.1400 (Subpart CC-Cranes & Derricks in Construction)

Revised Date: 3/13/2023

Chapter 18

CRANE REQUIREMENTS

1. A preplanning meeting should be conducted to address all of the pertinent elements required by CFR 1926.1400. A crane preplanning agenda is included in this manual.
2. Prior to the pre-planning meeting, the crane contractor must submit:
   a. Complete the Crane Lift Work Sheet. (See example in Sample Form Section)
   b. Provide Annual Inspection Certificate satisfying OSHA requirements and submit to Michael Kinder & Sons, Inc. before the crane arrives on site. Cranes used for critical, high risk or sensitive lifts shall have an annual inspection within the past three (3) months.
   c. Provide operator qualifications and/or license to Michael Kinder & Sons, Inc. Operators are required to have Certified Crane Operators (CCO) certification or equivalent. Check with local codes for any other specific requirements.
   d. If the crane operator is not a Certified Crane Operator, a letter or other written document from the subcontractor or subcontractor's crane training organization attesting that the "operator has been trained, evaluated and meets the qualification requirements of OSHA 29 CFR 1926.1427.
   e. Submit load chart and load weights verification in writing. Identify maximum radius and capacity.

GENERAL REQUIREMENTS:

1. Cranes shall be used on firm, drained and graded surfaces sufficient to support all crane functions and travel.
2. For each crane set-up, the location of all underground hazards shall be identified and communicated to the subcontractor. These hazards shall be identified to the crane operator/owner, and crew for each crane set-up and location of outrigger pads for underground utilities, voids or soft spots in streets.
3. The subcontractor shall identify the Assembly/Disassembly Director (A/D Director) who must be a qualified and competent person or a competent person assisted by a qualified person.
4. All items identified by 29 CFR 1926.1404 shall be reviewed with the assembly/disassembly crew, by the A/D Director before work begins.
5. Shift, monthly and annual written OSHA inspection reports are to be submitted to the Michael Kinder & Sons, Inc. Superintendent or Safety Manager.
6. Danger tape or barricades must be place to protect pinch points and radius of weights.
7. Landing areas must be identified and communicated to all workers who might be affected.
8. Cranes are not permitted to work within twenty (20) feet of any electrical lines 350 kV or lower, except where lines have been de-energized or visually grounded at the worksite. Voltages higher than 350 kV require greater distances. See OSHA 1926.1410.
9. Safety devices, including but not limited to; crane level indicator, boom/jib stops, outrigger stabilization, and horn must be operation as the required by the standard.
10. Safety devices and operational aids shall not be used as a substitute for professional judgment.
11. Lift routes shall avoid lifting over personnel.
12. Subcontractor to secure a street closure permits, if needed.
13. Notify local helicopter rescue units and establish procedures for shutdown, lay down, downdraft, two way communication, etc.

14. Obtain FAA permit for cranes over 200 feet.
15. Subcontractor shall submit in writing the names of the competent and qualified person for both rigger and signalperson as required before arrival of the crane.
16. Signalperson and Riggers to be trained and evaluated, by the employer, in accordance to 29 CFR OSHA 1926.1430.
17. Review as required: slings, points of attachment, hooks, spreaders, shackles and training.
18. Identify method of communication during picks.
19. Review lay down, staging and shakeout operations.
20. Coordinate with local police and owner security.
21. Develop an emergency plan, if necessary.
22. Fall Protection required for employees working above six (6) feet in unprotected areas. Verification of training required.
23. Anti-two block device required.
24. Use of a suspended person platform (man basket) requires further pre-planning per 29 CFR 1926.1431.
25. Tower Crane requires OSHA pre and post erection inspection with documentation prior to jobsite usage.
26. Tower Crane requires shift, monthly and annual written inspections per 29 CFR 1926.1445 (f).
27. W hen a rescue plan for the crane operators is needed, the subcontractor will be responsible to develop and implement a plan and supply any needed rescue equipment.
28. Cracked or broken window glass in cabs of cranes is prohibited.
29. Use of helicopters must have prior approval from Michael Kinder & Sons, Inc. Safety Department, lift plan submitted and a pre-planning meeting.
30. Helicopter picks shall comply with all applicable regulations of the Federal Aviation Administration.
31. Lifts in the following categories are considered **Sensitive Lifts** and require development of a detailed lift plan to be submitted by the subcontractor and reviewed by the Michael Kinder & Sons, Inc. Safety Department.
    a. Lifts over personnel occupied areas (i.e., buildings, sidewalks, etc.).
    b. Any lift where the payload weight is 20 tons or greater.
    c. Lifts requiring the crane to be set up over or adjacent to underground building structures, transportation tunnels, retaining walls,(i.e. parking garages, etc.)
    d. Lifts where any part of the crane or load encroaches onto or over highway, roadway or railroad rights of way, unless the corridor is shut down to traffic
    e. Drifting operations, i.e., crane lifts where the load is drifted sideways by external means
32. Lifts in the following categories are considered **Critical Lifts and require development of a detailed lift plan to be submitted by the subcontractor and** review by the Michael Kinder & Sons, Inc. Safety Department.
    a. Lifts exceeding 75% of crane rated capacity
    b. Lifts requiring two or more cranes or additional equipment assisting in lifting simultaneously (tandem)
    c. Lifts using any type of equipment to transfer a worker within a personnel basket
    d. Lifts with helicopters over areas defined by the FAA as “congested areas”. W hich are defined as areas people utilize or inhabit (e.g., non-wilderness areas)
    e. Unusual or complex lifts that exceed any site specific or owner requirements
    f. Subcontractors conducting a criteria lift must:
        i. provide Annual Inspection Certificate satisfying OSHA requirements and submit to Michael Kinder & Sons, Inc. before the crane arrives on site. Cranes used for critical lifts shall have an annual inspection within the past three (3) months.
        ii. submit a detailed lift plan reviewed by a Master Rigger
33. Lift Plan shall include, but not limited to:
    a. Position and configuration of the crane
    b. Location of lifts from start to finish

c. Detail on rigging equipment, lifting devices, hardware, etc.
d. Detail on load, how to rig it, what rigging is needed. Stamped drawing, if needed
e. Time line of all the sequences of all lifts

a. CRANE-PREPLANNING AGENDA

1. Scope of Activity & Date of Pick(s):
2. Crane Documentation Submittal Review:
   a. OSHA Annual Inspection
   b. Crane lift work sheet.
   c. Operator qualifications, license or documentation as required
   d. Load Chart – high light the capacity at the furthest radius on load chart
   e. Verified load weights: maximum radius and capacity
   f. Site plan/sketch of location of crane and adjacent hazards
3. Name of Assembly/Disassembly Director: both Qualified Person/Competent Person:
   a. Name of Qualified Person:
   b. Name of Competent Person:
4. Crane Configuration:
   a. Type or Model of Crane
   b. Size of Crane
   c. Length of boom
   d. Length of Jib attachments
   e. Maximum Radius of pick
   f. Configuration for side, back, rubber etc.
   g. Anti-two block device
   h. Weight of Ball and deducts
   i. Capacity of crane at that configuration
5. Setup (Number of setups):
   a. Locations of setups
   b. Arrival
   c. Police Presence verified by:
   d. Street closure & permits by:
   e. Pedestrian Control & signage by:
   f. Duration
   g. Underground Utilities identified and located on sketch
   h. Overhead Utilities
      i. Voltage of overhead power lines: ii. Verified by utility owner/operator:
      iii. Height distance of overhead power lines during traveling
         1. If less than 20 feet, must follow table T iv. Distance during set up
            1. If less than 20 feet, must follow table A
      v. Distance during operation
         1. If less than 20 feet, must follow table A
      vi. All crew, including dedicated spotter(s) must be trained
   i. Mat size and location identified on site plan/sketch.
   j. Any special staging requirements
   k. Truck holding areas
   l. special truck permits or routing requirements
   m. Danger tape or barricade pinch points and radius of weights
   n. Identify and develop a method of communication so that effected workers stay clear of landing zones and paths of travel.
6. Rigging:

a. Weight of heaviest pick: verified by: drawings? Cut sheet? Third Party?
b. Type of slings
c. Identify Points of Attachment
d. Use of hooks, spreaders, shackles, etc.
e. Name of Qualified Riggers: Verify method of evaluation

7. Signaling:
   a. Name of Qualified Signalperson: Verify method of evaluation
   b. Types of signals (Voice or Hand)
   c. Method of signals (radio, squawk box, etc.)
8. Coordination with Air Traffic:
   a. Unit: (Emergency Air Transport, etc.)
   b. Flight path
   c. ETA for incoming
   d. FAA Permit
   e. Flag, light, etc.
   f. Method of communication for laydown/shutdown by whom:
9. Other issues:

b. CRANE REQUIRED DOCUMENTATION

Prior to the arrival of the crane on-site, the following documentation must be supplied:

1. Annual OSHA inspection
2. Operator qualification and/or licenses
3. Any other Operator state mandated additional requirements such as current physicals
4. Post assembly written inspection completed by the qualified person
5. Street closure permits, if required
6. Specific OSHA required documentation for all trainings and evaluations of operators, signalpersons, riggers, A/D Director, competent and qualified personnel
7. A letter on letterhead shall be submitted stating the following have been trained and/or evaluated:
   a. Crane operator
   b. A/D Director (for smaller cranes the crane operator can be the A/D Director)
   c. Qualified rigger
   d. Competent person to complete shift inspection of rigging hardware and slings
   e. Qualified signalperson
   f. Competent person for crane inspection (might be Crane operator)
   g. Competent person for wire rope (crane hoisting line) inspection (Might be Crane operator)
8. For tower crane:
   a. A pre-assembly and post assembly written inspection completed by the qualified person
   b. A post erection third party written inspection
   c. Hazard Analysis work plan for the assembly, disassembly, and any tower section jumps

Required On-Going Documentation

1. Shift inspections

2. Updated annual OSHA inspection
3. Monthly written crane and rigging inspections

c. CRANES & HELICOPTER PADS

A preplanning meeting should be held with all relevant parties to discuss and document the procedures for operations that are effected by helicopter landings. A single point of contact is recommended for interface between the facility and the jobsite.

THIS IS AN EXAMPLE OF AN INCOMING FLIGHT PROCEDURE WHERE HELIPADS COULD BE EFFECTED. EACH JOBSITE IS TO ESTABLISH THEIR OWN SITE SPECIFIC PLAN.

1. Facility contacts Michael Kinder & Sons, Inc. field personnel who in turn notify crane operator that flight is incoming with estimated time of arrival.
2. Crane operator confirms that the pick can be put on hold and places the boom in an agreed upon safe position to allow the helicopter to land. The crane does not move until helicopter is no longer on pad or until advised by the facility/Michael Kinder & Sons, Inc. to start work again.
3. If crane operator is going to be longer than 10 minutes getting into a safe position, he will let the facility/Michael Kinder & Sons, Inc. knows how long it will take to get into the safe position. The Facility will then determine if flight is to be diverted to another facility.
4. **In the event that the crane is operating and the Facility/Michael Kinder & Sons, Inc. cannot make radio contact, the facility is to divert all incoming flights until they can confirm that the crane has acknowledged the incoming flight and the crane is in the safe position.**
5. For long duration jobs, the radio system should be tested on a regulator basis (i.e. test radio via contact with crane operator at 7:00 AM and 12 Noon - Monday thru Friday. On days that are **NOT** normal work days (Sat., Sun., Holiday) a Michael Kinder & Sons, Inc. supervisor will notify the facility prior to the crane starting that the crane operations.
6. At the end of the work shift, the facility needs to be called to say that the work shift has been completed and the crane has been stowed in a safe position.
7. If on a normal workday (Monday thru Friday) the crane is going to shut down due to weather, lack of work, etc., the crane is placed in a safe position and Michael Kinder & Sons, Inc. must contact the facility to inform them that the crane will not be in operation.
8. If helicopter pad is closed due to construction activities, only Michael Kinder & Sons, Inc. Superintendent has the authority to give the facility the clearance that the construction activities that closed the pad are compl

d. CRANE & DERRICK SUSPENDED PERSONNEL PLATFORMS

Use of an employee work platform hoisted by cranes is permitted when the following requirements are met:

1. The use of a suspended personnel platform is prohibited unless it can be determined that no less hazardous means of access to the work are available or practical, except for steel erection. Local regulations may apply further restrictions.
2. The use shall be limited to wind speeds of 20 miles per hour. A qualified person must determine if, in light of weather conditions, it is safe to lift personnel.
3. Platforms should not be used during high winds, electrical storms, snow or other adverse weather conditions, which could endanger workers.
4. The total load must not exceed 50 percent of capacity at the crane's current configuration.
5. A test pick shall be done at each crane set up.
6. The platform must be hoisted a few inches off the ground with the workers, tools and material and inspected by a competent person to ensure the platform is secured and

properly balanced. Any deficiencies found during the trial must be corrected before personnel are hoisted.

7. A proof test must be done prior to any hoisting.
8. A pre-lift meeting of the operator, signal person, employees to be hoisted and the person responsible for the task to be performed must be held and documented with sign-off and submitted to Michael Kinder & Sons, Inc..
9. A Crane Lift W ork Sheet and test pick to be completed for each configuration change or new set up is to be completed and submitted to Michael Kinder & Sons, Inc..
10. Subcontractors must have on site documentation of crane lifting capacity.
11. The stability of the footing should be verified during the full cycle operational test.
12. Pre-lift plans showing boom angle and maximum intended load should be prepared for each group of lifts.
13. A firm footing, uniformly level with 1 percent, or one foot in 100 feet, should be provided for cranes. Outriggers for cranes should be appropriately used during hoisting.
14. The load line on which the platform is suspended should have control load lowering. A "free fall option" should not be used with suspended work platforms.
15. Lifting bridles for platforms shall consist of four legs attached so that stability of the platform is ensured. The bridle shall be secured by a shackle, master link or attached by a closed hook, which cannot be opened due to position of the load on the hook. Eye must have thimbles.
16. The platform should be enclosed with a guardrail system, including a top rail of approximately 42 inches, a mid rail and a toe board. The guardrail system should withstand a load of at least 200 pounds applied in any direction.
17. The suspension system shall be designed to minimize tipping of the platform due to movement of employees occupying the platform.
18. Signals should be visible or audible to the crane operator at all times.
19. Except for steel erection, use of a crane to hoist personnel is only allowed when other means are more hazardous or not possible (due to structural design or worksite conditions).
20. When stationary, all brakes must be engaged.
21. Equipment must have properly functioning devices, that is, boom angle indicators, hoist limiting devices, anti-two-block devices and controlled load lowering devices. Equipment must not be operated if these devices are not working. A personnel platform cannot be directly attached to a luffing jib.
22. The platform must support its own weight and five times the maximum load and meet other structural requirements (e.g., guardrails, welds, grab rails, access gates/doors, headroom, and overhead protection).
23. Rated capacity must be conspicuously posted on the platform.
24. Hoisting must be in a slow, controlled, cautious manner with no sudden movements.
25. All body parts must be kept inside during hoisting, except the signal person giving direction.
26. The platform must be secured to the structure before it is exited or entered.
27. W hen the signalperson is not in the platform, employees being hoisted must be in direct communication with the operator or signal person.
28. Hoisting personnel is generally prohibited near power lines see cfr1926.1400 for details.

e. RIGGING REQUIREMENTS

GENERAL:

1. Review job requirements prior to lift.
2. Use only approved slings, chains, cables and accessories.
3. Know the weight of the heaviest pick and the rated capacity of the slings.
4. Use only slings that exceed the anticipated weight of the heaviest pick.
5. Custom designed lifts, clamps or lifting accessories must be designed, marked to indicate the safe working load and proof tested to 125% of their rated load.
6. Use approved, rated skip pans for loose parts and small material.
7. Do not overload skip pans so that loose parts can dislodge during the lift.
8. Store rigging equipment properly (loosely coiled in a dry place away from sunlight).

9. Rigging equipment shall only be used for the activity for which it was intended.
10. Rigging equipment shall be inspected prior to each use to ensure that it is safe to use.
11. Defective equipment shall be removed from service.
12. Rigging equipment shall not be loaded in excess of its recommended safe working load.
13. Rigging equipment, when not in use, shall be removed from the immediate work area so as not to present a tripping hazard to employees.
14. Makeshift fasteners, formed from bolts, rods, wire, etc., shall not be used.
15. Wire rope cables shall not be secured by knots for any purpose.
16. Wire rope cables, used in hoisting, lowering or pulling loads, shall consist of one continuous piece without knots or splices.
17. When U-bolt wire rope clips are used to form eyes or loops in any load bearing cable, follow manufacture recommendations as to the minimum number of clips to use. Clips shall be applied so that the "SADDLE" portion of the clip is not in contact with the dead end of the cable.
18. Hooks used for lifting shall be equipped with a safety latch.

INSPECTIONS:

1. All inspection criteria must follow 29 CFR 1926.251.
2. Inspect all materials and rigging equipment before each use.
3. A competent person designated by the employer shall inspect slings, all shackles, attachments and rigging equipment for damage or defects before each use.
4. Damaged or defective slings shall be immediately removed from service**.** (This means whenever the colored safety thread is exposed in nylon slings or when chains or chokers are cracked or split, kinked, birdcaged, etc.)
5. Hooks, rings, links, couplings, shackles or attachments shall have the rated capacity at least equal to the slings, chain or cables.
6. Homemade or makeshift equipment shall not be used.
7. Rated capacity shall be marked by the manufacturer on the sling, chain, cable, shackle or hook.
8. All rigging equipment shall be identifiable as to their use, capacity and manufacture via a tag or the OSHA tables. Chain slings must also have a logbook with periodic and annual inspections recorded.
9. W ire rope shall not be used if, in any length of eight diameters, the total number of visible broken wires exceeds 10% of the total number of wires, or if the rope shows other signs of excessive wear, corrosion or defect.
10. Nylon slings shall not be shortened with knots, bolts, or other makeshift devices.
11. Nylon slings shall be protected from sharp edges.
12. Shock loading is prohibited.

RAISING AND LANDING MATERIALS:

1. Know the weight of the material to be lifted, the capacity of the crane and the appropriate slings and rigging hardware and the structural integrity of the landing zone.
2. Be sure truck motor is off and wheels chocked before rigging.
3. Be sure the material to be rigged is stable and evenly distributed before lifting.
4. Keep hands, feet and fingers clear of the load as the slings are being tightened.
5. Only one worker should be signaling the operator at a time.
6. Land materials on blocking without pinching or catching the slings.
7. Keep walkways and egress clear when landing materials.
8. Be sure the load is stable before you remove the slings (chock pipe if necessary).
9. Do not pull a sling from under a load if the load is resting on a sling.
10. Use tag lines to move and position loads.
11. Do not stand under loads or direct loads over other workers.

TRAINING REQUIREMENTS:

1. Qualified Riggers shall be trained on the materials, methods, equipment, techniques, communication and other items as is necessary for safe performance of their specific

tasks.

2. All local criteria for cranes and rigging shall be applied.
3. Each employer shall submit in writing the list of Qualified Riggers.
4. Qualified rigger requirements vs. certified rigger:
    a. 1926.1401 "qualified rigger" is defined as: *a rigger who meets the criteria for a qualified person*. In addition, the definition for a "qualified person" is *a person who is identified by their employer and, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.*
    b. A qualified rigger is required:
        i. during assembly/disassembly of cranes,
        ii. when employees are engaged in hooking, unhooking, or guiding the load, iii. in the initial connection of a load to a component or structure and
        iv. when employees are within the fall zone.
    c. Certified Rigger, by an accredited agency, shall meet the definition of a Qualified Rigger
5. The employers must verify the training and evaluation of each Rigger either through:
    a. A worker who has been trained and demonstrated competence through oral or written and practical testing by a third party such as the local Joint Apprentice Training Committee (JATC) might meet the definition of a Qualified Rigger.
    b. A Certified Rigger, by an accredited agency (such as NCCCO or CIC), shall meet the definition of a Qualified Rigger,
    c. The employer must verify the competence of the Qualified Rigger. Documentation must be available upon request.
    d. If a rigger demonstrates lack of knowledge, the employer must not allow the individual to continue working as a signal person until retraining is provided and a reassessment is made that confirms that the individual meets the Qualification Requirements.

f. SIGNALING REQUIREMENTS

GENERAL:

1. A Qualified Signal person is required when:
    a. the operator is not in full view of the load area or load travel, or
    b. when the travel view is obstructed or whenever the operator or load handler determines one is needed,
    c. when operating within less than 20 feet of energized electrical lines acting as a Spotter
2. Qualified Signalpersons can use hand signals, voice, and audible signals.
3. ANSI Standard signals are to be used at all times unless they do not meet the needs of the lift.
4. Non-standard hand signals must be agreed upon ahead of time. New non-standard signals must be equally effective and comply with a national consensus standard.
5. Signals must be appropriate to the conditions and the ability to transmit them must be maintained at all times.
6. Operations must stop if interference interrupts transmission of signal.
7. Only one person can give signals at a time, except when a safety problem requires an emergency stop.
8. All signal directions must be given from the operator's perspective.
9. If one signal person is signaling for more than one crane/derrick, they must be able to identify the one to which they are signaling.
10. Signaling devices must be tested before operations and use dedicated channels.
11. Operators must be able to receive signals hands-free.
12. Voice signals must be coordinated and include three elements in this order:

a. Function, direction
b. Distance and/or speed
c. Function, stop command

13. Communication must be in a common language.
14. Hand signal charts must be posted near the operation or on the vehicle.

TRAINING REQUIREMENTS:

1. A Qualified Signalperson shall:
    a. Know and understand the type of signals used.
    b. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.
    c. Be competent in the application of the type of signals used.
    d. 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.
    e. Know and understand the relevant requirements of § 1926.1419 through § 1926.1422 and § 1926.1428.
    f. Demonstrate, through an evaluation process, that he/she meets the requirements above through an oral or written test, and a practical exam.
2. The employers must verify the training and evaluation of each Signalperson either through:
    a. **Third Party Qualified Evaluator:** A worker who has been trained and demonstrated competence through oral or written and practical testing by a third party such as the local Joint Apprentice Training Committee (JATC) shall meet the definition of a Qualified Signalperson after the employer verifies the training and evaluation. Documentation must be available upon request.
    b. **Employer Qualified Evaluation:** A worker who has been trained and demonstrated competence through oral or written and practical testing. Documentation of such evaluation must be available upon request.
    c. Each employer shall submit in writing the list of Qualified Signalpersons.
    d. Certified Signalperson, by an accredited agency (such as NCCCO or CIC), shall be the definition of a Qualified Signalperson.
    e. If a signalperson demonstrates lack of knowledge, the employer must not allow the individual to continue working as a signal person until retraining is provided and a reassessment is made that confirms that the individual meets the Qualification Requirements.

CHAPTER 19

DEMOLITION

Section: Hazard Evaluation and Control

Reference: 1926.850 (Subpart T – Demolition)

Revised Date: 3/13/2023

Chapter 19

DEMOLITION

1. INTRODUCTION

The purpose of this policy is to protect contractor employees and the general public from undue exposure to hazards associated with demolition operations.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. superintendent will be responsible for providing direction and guidance to all subcontractors during the demolition operation.

3. PROCEDURES

- Employees will be required to wear durable gloves, eye protection, and long-sleeved shirts in addition to their standard Personal Protective Equipment (PPE) when performing selective demolition operations.

- Prior to beginning demolition operations, an engineering survey will be made by a qualified person. This survey must determine the condition of the framing, floors, and walls, and will also determine the possibility of an unplanned collapse of any part of the structure. Adjacent structures will be checked for structural integrity. Written evidence of the results of this survey is to be given to the owner, or his authorized representative; and a copy of this report is to be placed in the job file at the Contractor's Corporate Office.

- Prior to beginning demolition operations, we will 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, we must as a company employ a testing agency that can identify and/or verify areas suspected of containing these materials prior to their disturbance during the demolition operation. A copy of the results of this testing is to be retained in the job file at the Contractor's Corporate Office.

- When employees and subcontractors are required to work in a building that has been damaged by fire, flood, explosion, or similar types of events, the walls and/or floors are to be braced and/or shored.

- All electric, gas, water, steam, sewer, and other service lines must be shut off, capped, or otherwise controlled outside the building line before demolition work is started. Any utility company whose services are affected will be notified in advance.

- If electric, gas, water, steam, sewer, or other utilities are necessary during demolition; their lines must be temporarily relocated and protected.

- Before demolition begins, the building will be checked to determine whether any hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in pipes, tanks, or other equipment on the property. If such substances are found or their presence is suspected, the hazard must be eliminated before demolition is started.

Any hazardous glass fragments must be removed.

- All floor and wall openings that pose a threat of being fallen through must be protected.

- If debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped will be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the project openings. Signs must be posted at each level, warning of the hazard of falling materials. Removal of the debris from the lower area must not be permitted until debris handling from above has ended.

- Floor openings not used, as material drops will be covered with material that can withstand the weight of any potential load. The floor opening cover will be secured to prevent it from being accidentally moved.

- Demolition of exterior wall construction and floor construction will begin at the top of the structure and proceed downward, except for the cutting of holes in floors or walls for chutes and material drops, preparation of storage space, and similar preparatory work. Each story of exterior wall and floor construction will be removed and dropped into the storage space prior to removing exterior walls and floor construction in the story below.

- 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 being protected, and will be capable of sustaining a load of 150 pounds per square foot.

Chutes

- No material will be dropped outside the exterior walls of a structure unless the landing area is effectively protected.

- Materials, chutes, or sections at an angle of more than 45 degrees from the horizontal will be entirely enclosed, except for openings equipped with closures at or about floor level where materials are inserted. The openings will not exceed 48 inches in height as measured along the wall of the chute. At all stories below the top floor, openings not being used will be kept closed or covered.

- 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.

- When operations are not in progress, the area surrounding the discharge end of a chute must be securely closed off.

- 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.

- Any space between the chute and the openings in the floor through which the chute passes will be covered.

- 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.

  ⇨ Chutes will be designed and constructed strong enough to sustain the impact of materials or debris loaded in them.

- Removal of Materials through Floor Openings

  ⇨ Openings cut in a floor for debris disposal should be no larger than 25 percent of the total floor area, unless the lateral supports of the removed flooring remains in place. Floors weakened or otherwise made unsafe by demolition operations can be safely sustained.

- Removal of Walls, Masonry Sections, and Chimneys

  ⇨ Masonry walls or other sections of masonry are not to be allowed to fall in masses that exceed the floor's safe load capacities.

  ⇨ 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.

  ⇨ Demolition personnel will not work on the top of a wall during hazardous weather conditions.

  ⇨ Structural or load-supporting members on any floor will not be cut or removed until all stories above such a floor have been demolished and removed. This provision does not prohibit the cutting of floor beams for the disposal of debris or for the installation of equipment.

  ⇨ Floor openings within 10 feet of any wall being demolished will be planked solid except when employees are kept out of the area below.

  ⇨ 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.

  ⇨ Walkways or ladders will be provided so that demolition workers can safely reach or leave any scaffold or wall.

  ⇨ 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.

- Manual Removal of Floors

  ⇨ Openings cut in floors will extend the full span of the arch between supports. Before demolishing a floor arch, debris and other material will be removed from the arch and other adjacent floor area. Planks not less than 2 inches by 10 inches in cross section, full size undressed, will be used to stand on while breaking down floor arches between beams. The planks will be placed so that a safe support is provided for the workers if the arch between the beams collapses. The open space between planks must not exceed 16 inches.

  ⇨ Safe walkways, not less than 18 inches wide, formed of planks, not less than 2 inches thick, if wood, and of equivalent strength, if metal, will be provided so that workers can reach any point without walking on exposed beams.

  ⇨ Stringers of ample strength will be installed to support the flooring planks, and the ends of such stringers will be supported by floor beams or girders, and not by floor arches alone.

⇨ Planks will be laid together over solid bearings with the ends overlapping at least 1 foot.

⇨ When floor arches are being removed, workers will not be allowed in the area directly below. Such an area will be barricaded so that access is prevented.

⇨ Demolition of floor arches will not be started until the arches and surrounding floor area for a distance of 20 feet have been cleared of debris and any other unnecessary materials.

- Removal of Walls, Floors and Material with Equipment

⇨ Mechanical equipment will not be used on floors or working surfaces unless the floor or surface is strong enough to support the imposed load.

⇨ Floor openings must have curbs or stop-logs to prevent equipment from running over the edge.

- Storage

⇨ The storage of waste material and debris on any floor will not exceed the allowable floor loads.

⇨ In buildings that have wooden floors, the flooring boards will be removed from not more than one floor above grade to provide storage space for debris, provided that falling material does not endanger the stability of the structure.

⇨ When wood floor beams brace interior walls of freestanding exterior walls, the beams will be left in place until other equivalent support can be installed to replace them.

⇨ Floor arches, to an elevation of not more than 25 feet above grade, may be removed to provide storage area for debris provided that such removal does not endanger the stability of the structure.

⇨ Storage space into which debris is dumped will be blocked off, except for opening necessary for debris removal. The openings will be kept closed at all times when debris or material is not being removed.

- Removal of Steel Construction

⇨ When floor arches have been removed, planning will be provided by those responsible for raising the steel framing.

⇨ Steel construction must be dismantled column length by column length and tier by tier.

⇨ Structural members being dismembered are not to be overstressed.

- Demolition using Mechanical Equipment

⇨ When demolition balls and clam shovels are 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.

⇨ The weight of the demolition ball must not exceed 50 percent of the crane's rated load, based on the length of the boom and the maximum angle of operation at which the ball

will be used; or it will not exceed 25 percent of the nominal breaking strength of the line by which it is suspended, whichever is less.

⇨ The ball will be attached to the load line with a swivel-type connection to prevent twisting of the load line, and attached so that the weight cannot become accidentally disconnected.

⇨ 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 employee will be allowed to work where such hazards exist until these hazards are corrected by shoring, bracing, or other effective means.

6. TRAINING REQUIREMENTS

- Michael Kinder & Sons, Inc. superintendents, with the help of the safety director, are responsible for training their employees in demolition operations.

- Michael Kinder & Sons, Inc. superintendents and their subcontractors are to provide training in the recognition of hazardous materials per the training requirements found in the Hazard Communication section.

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CHAPTER 20

ELECTRICAL SAFETY

Section: Hazard Evaluation and Control

Reference: 1926.400 (Subpart K – Electrical)

Revised Date: 3/13/2023

Chapter 20

ELECTRICAL SAFETY

1. INTRODUCTION

Electricity surrounds our lives completely. We are aware only of the things it does for us. Hundreds of workers are electrocuted daily. Most of them survive the incident. The reasons for these types of accidents are many. The primary reason is the construction worker's lack of respect for electricity!

The only way to control electrical power on the job-site is through training and inspection.

Employees must be trained in the dangers of using electricity and how to avoid it. Tools and equipment should be inspected frequently for potential defects in their electrical components and systems.

When a tool shows a defect in its electrical system, it should be repaired or replaced immediately.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. superintendents and the safety director evaluate field operations for compliance with safe work practices associated with electrical hazards.

Michael Kinder & Sons, Inc. superintendents, along with the safety director, shall evaluate the potential for electrical hazards at each jobsite and ensure that field personnel follow existing safe work procedures.

3. PROCEDURES

In order to protect all employees from electrical hazards and/or working on or near exposed energized parts, all employees and subcontractor personnel shall follow the following company policy.

All employees and subcontractors will utilize Ground Fault Circuit Interrupters (GFCI's) to protect themselves on all construction sites.

Ground Fault Circuit Interrupters

- Temporary wiring on a construction job shall be guarded by the use of Ground Fault Circuit Interrupters (GFCI) to protect employees and subcontractors. This requirement is in addition to any other requirements for equipment grounding conductors.

- All 120 volt, single-phase, 15 and 20 ampere receptacle outlets on construction sites which are not a part of the permanent wiring of the building or structure and which are in use by employees should, under ideal conditions, have approved Ground Fault Circuit Interrupters to provide protection for those employees and subcontractors.

- Receptacles on a two-wire, single-phase portable or vehicle mounted generator rated not more than 5kW, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with GFCI.

Reporting

- Any electrical equipment found to be unsafe should be reported, tagged "DO NOT USE", and turned in for repair or replacement.

- Reporting and alerting co-workers will prevent possible electrical contact. Notify jobsite employees and subcontractors of all identified electrical hazards.

Test Equipment

- Only qualified persons shall use test equipment and shall verify that the hazard has been de-energized. If the circuit to be tested is over 600 volts, nominal, the test equipment shall be checked for proper operation.

Warning Signs

- Warning signs are posted where employees and or subcontractors may be exposed to high voltage electrical hazards. Never remove or damage this signage. When guarding, isolating, insulating, or grounding protective measures have been taken, “unqualified employees” shall not remove them.

Temporary Lighting

- Must be equipped with bulb covers to prevent damage to bulbs and exposure to workers.

- Cords must be kept clear of all walking, traffic, and working areas,

- Must be inspected daily and broken or burned-out bulbs replaced.

Power Tools

- Insure that all electric power tools are grounded. Electric power tools shall be equipped with a proper ground plug (three-prong) or be of double insulation construction.

- Never use the electrical supply cord to carry electric power tools. Carry the tool by its proper handle.

- Power hand tools shall be carefully inspected before use. Check blades, chucks, tool assembly, guards, and electrical cords.

- When working in wet conditions, make sure cords are not lying in water.

Housekeeping

- Housekeeping duties that require an employee to perform activities near electrical hazards shall not use electrically conductive cleaning materials (steel wool, metalized cloth, and silicon carbide as well as any conductive liquid solutions). Pay close attention to materials used to ensure they wouldn’t contribute to a potential explosion.

Conductive Apparel

- All contractor employees shall take special care in the use of conductive apparel (such as watch bands, bracelets, rings, key chains, or metal headgear and glasses).

Connecting/Starting/Energizing Electrical Equipment

- At no time shall any employee connect, start, or energize electrical equipment while standing in water.

Personal Protection Equipment

- Superintendents shall provide personal protection equipment to safeguard "qualified personnel" where potential electrical hazards are present.

- All employees shall wear eye and face protective equipment when necessary to protect them from electric arcs or flashes or from flying objects.

4. TRAINING REQUIREMENTS

Electrical hazards (except lockout/tagout) will be addressed in toolbox talks, safety newsletters and daily work instructions (at a minimum).

5. DEFINITIONS

Grounded - Connected to earth or to some conducting body that serves in place of the earth.

Ground-Fault Circuit Interrupter - A device for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the over-current protective device of the supply circuit.

Guarded - Covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers, casings, barriers, rails, screens, mats, or platforms to remove the likelihood of approach to a point of danger or contact by persons or objects.

Qualified Person - A recognized degree, certificate, professional standing, or extensive knowledge, training, and experience enabling successful demonstration of ability to solve or resolve problems relating to the subject matter, the work, or the project.

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CHAPTER 21

EXCAVATIONS AND TRENCHING

Section: Hazard Evaluation and Control

Reference: 1926.650 (Subpart P – Excavations)

Revised Date: 3/13/2023

Chapter 21

EXCAVATIONS AND TRENCHING

1. INTRODUCTION

Excavations, trenching, and shoring operations are among the most hazardous of all construction operations. Michael Kinder & Sons, Inc. will get all employees involved in trenching and excavating to acknowledge that the hazards are real and as a company will take positive steps in eliminating them.

This policy is to establish standard guidelines to comply with OSHA 1926.650 and perform work safely in and around excavations.

2. RESPONSIBILITIES

The assigned competent person is responsible for all aspects of safe trenching and excavation. These responsibilities include (but are not limited to) the following:

- Observe soil for cracks or fissures.
- Assure that implementation of shielding, shoring, benching, sloping, or other means to protect employees and the public from cave-in accidents is in place.
- Ensuring proper barricades are erected to prevent pedestrians or motorists from accidentally entering a trench or excavation.
- Ensuring that employees do not enter trenches that are not shored or braced.
- Removing employees from trenches or excavations whenever conditions are such that craft person's safety is jeopardized.

3. PROCEDURES

Before excavating (Jobsite Preplanning):

Before opening any excavation, efforts shall be made to identify and eliminate any potential hazards such as:

- Underground Utilities
- Groundwater
- Adjacent Exposure
- Falls
- Unstable Soil
- Hazardous Atmospheres
- Vibration

Excavations greater than five feet in depth must be safeguarded from cave-in by the use of a protective system such as:

- Sloping
- Benching
- Shielding
- Shoring

  ⇨ When choosing a system the tables and charts found in the OSHA standard 1926.650 should be referenced. If manufactured systems are used the employees may rely on the data supplied by the manufacturer. Shoring and shielding systems must be used, installed, repaired and removed in accordance with the manufacturer's written instruction or the direction of a professional engineer.

  ⇨ Call or verify that a call has been made to all Local Utility Companies 24 hours before digging to locate any and all underground installations. This contact should be documented.

During Excavation

- Adequate protection must be provided to protect employees from falling rock, soil, or other materials and equipment. Keep all loose material at least 2 feet from the edges of the excavation.

- Employees should not be permitted to work in excavations where water has accumulated or is accumulating unless adequate precautions have been taken. Diversion ditches, dikes, or other means must be used to prevent surface water from entering an excavation and to provide drainage to the adjacent area. Pump water from the trench before allowing craft persons to enter the area. A competent person to ensure proper operation shall monitor the water removal equipment and operations.

- Before an employee enters an excavation greater than 4 feet in depth, a competent person must test the atmosphere to determine if oxygen deficiency or a hazardous atmosphere exists or could reasonably exist. Emergency rescue equipment must be readily available and must be attended when hazardous atmosphericconditions exist or may develop.

- Employees should not be permitted under loads that are handled by lifting or digging equipment. Employees should not be allowed to work in the excavation above other employees unless the lower level employees are adequately protected. IOSHA requires hard hats when in trenches.

- Sufficient means for exiting excavations 4 feet deep or more must be provided and must be within 25 feet of lateral travel for employees. This can usually be accomplished by providing ladders or an earth ramp.

- Employees exposed to public vehicular traffic must wear warning vests or other suitable garments made of reflective or high-visibility material.

Daily Inspections

- Daily inspections are performed of excavations, the adjacent areas, and protective systems prior to the start of work and as conditions change by a competent person. All excavations greater than five (5) feet in depth must be constructed under the supervision of a competent person.

- This is done to identify possible cave-in sites, failure of protective shoring or bracing systems, or other hazardous conditions before the start of work and as needed throughout the work shift.

- Inspections shall also be done after every rainstorm or other hazard increasing event.

4. TRAINING REQUIREMENTS

The designated "competent person" shall train employees in the avoidance of excavation and trenching hazards through the use of tool box talks and daily work instructions.

5. DEFINITIONS

Competent Person - One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminatethem.

Excavation - Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Hazardous Atmosphere - An atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful. May cause death, illness, or injury.

Protective System - A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield or shoring systems, and other systems that provide the necessary protection.

Trench (Trench Excavation) - A narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

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CHAPTER 22

FALL PROTECTION

Section: Hazard Evaluation and Control

Reference: 1926.500 (Subpart M – Fall Protection)

Revised Date: 3/13/2023

Chapter 22

FALL PROTECTION

1. INTRODUCTION

The purpose of this policy is to protect employees of Michael Kinder & Sons, Inc. from the hazards of falls from elevated areas/surfaces.

2. RESPONSIBILITIES

These fall protection guidelines will also apply to floor, roof, or wall openings and has been written to protect employees from the possibility or danger of personnel or materials falling through these openings.

All employees are required to follow these strict guidelines on fall protection. Disciplinary action will be strictly enforced on employees negligent to wear fall arrest equipment when conditions are warranted.

3. REQUIREMENTS

The Company Safety Director will ensure that all superintendents are trained and educated on fall protection policies and procedures.

Superintendents must instruct personnel in the use of fall protection equipment and procedures.

All sub-contractor employees are required to follow safe work practices related to fall protection.

Superintendents must evaluate and control the worksite hazards associated with floor, roof, and floor openings and must instruct workers to avoid exposure to the hazards and/or provide the physical means to prevent such exposures.

4. PROCEDURES

Pre Project Planning - A systematic evaluation of the building structure, openings and skylights, and fall exposures must be made prior to construction or demolition operations. Pre project planning for safety is best performed in conjunction with the safety department, the project management team, and other appropriate experts. A written site-specific fall prevention plan may be appropriate for particularly hazardous projects.

Compliance with Fall Protection Requirements:

Fall protection for employees is required whenever there is a potential for fall exposure of six (6) feet or more. Existing regulations allow alternative systems to protect employees from fall-related accidents.

- Guardrail Systems
- Controlled Access Zones
- Safety Net Systems
- Safety Monitoring Systems
- Personal Fall Arrest Systems
- Covers (for holes in roofs, etc.)

Superintendents will implement the most suitable form of fall protection systems for each project, task, and employee. Decisions and action required to implement fall protection must occur prior to operations.

The following are examples of each of the seven- (7) types of fall protection systems that must be used when employees are working at or above six 6-foot elevations:

Guardrail Systems

- The top edge of the guardrail shall be 42 inches (+/-3 inches) above the walking/working level. Mid-rails shall be installed between the top edge of the guardrail system and the walking/working surface.

- Mid-rails shall be installed at a height halfway between the top edge of the guardrail system and the walking/working surface.

- Guardrail systems shall be capable of withstanding without failure, a force of at least 200 pounds in any outward or downward direction, at any point along the top edge.

- When the 200-pound test load is applied in a downward direction, the top edge of the guardrail shall not deflect to a height less than 39 inches above the walking/working level. Guardrail system components selected and constructed will be deemed to meet this requirement.

- Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the mid-rail or other member.

- Guardrail systems shall be so surfaced as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

- If wire rope is used for top rails, it shall be flagged at not more than 6-foot intervals with high-visibility material.

- When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place.

- When guardrail systems are used at holes, they shall be erected on all unprotected sides or edges of the hole

- When guardrail systems are used around holes used for the passage of materials, the hole shall have not more than two sides provided with removable guardrail sections to allow the

passage of materials. When the hole is not in use, it shall be closed over with a cover, or a guardrail system shall be provided along all unprotected sides or edges.

- When guardrail systems are used around holes that are used as points of access (such as ladder-ways), they shall be provided with a gate, or be so offset that a person cannot walk directly into the hole.

- Guardrail systems used on ramps and runways shall be erected along each unprotected side or edge.

- Manila, plastic or synthetic rope being used for top rails or mid-rails shall be inspected as frequently as necessary to ensure that it continues to meet the strength requirements of 200 pounds and 150 pounds.

Personal Fall Arrest Systems

- Personal fall arrest systems and their use shall comply with the provisions set forth below. Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. NOTE: The use of a body belt in a positioning device system is acceptable.

- Connectors shall be made of drop forged, pressed or formed steel, or equivalent materials.

- Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.

- Dee-rings and snap-hooks shall be proof-tested to a minimum tensile load of 5,000 pounds without cracking, breaking, or taking permanent deformation.

- Snap-hooks shall be sized to be compatible with the member to which they are connected to prevent unintentional disengagement of the snap-hooks by depression of the snap-hooks keeper by the connected member, or shall be a locking type snap-hook designed and used to prevent disengagement of the snap-hooks by the contact of the snap-hooks keeper by the connected member.

- **Only locking type snap-hooks shall be used.**

- Unless the snap-hook is a locking type and designed for the following connections, snap-hooks shall not be engaged:

  ⇨ directly to webbing, rope or wire rope;
  ⇨ to each other;
  ⇨ to a de-ring to which another snap-hooks or other connector is attached;
  ⇨ to a horizontal lifeline; or
  ⇨ to any object which is incompatibly shaped or dimensioned in relation to the snap-hooks such that unintentional disengagement could occur by the connected object being able to depress the snap-hooks keeper and release itself.

- On suspended scaffolds or similar work platforms with horizontal lifelines, which may become vertical lifelines, the devices used to connect to a horizontal lifeline shall be capable of locking in both directions on the lifeline.

- Horizontal lifelines shall be designed, installed, and used, under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.

 Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.

- When vertical lifelines are used, each employee shall be attached to a separate lifeline.

- Lifelines shall be protected against being cut or abraded.

- Self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less shall be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.

- Self-retracting lifelines and lanyards which do not limit free fall distance to feet or less, rip-stitch lanyards, and tearing and deforming lanyards shall be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position

- Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses shall be made from synthetic fibers.

- Anchorage's used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or shall be designed, installed, and used as follows:

- As part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.

- Personal fall arrest systems, when stopping a fall shall:

  ⇨ Limit maximum arresting force on an employee to 900 pounds when used with a body belt;

  ⇨ Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;

  ⇨ Be rigged such that an employee can neither free fall more than 6 feet, nor contact any lower level;

  ⇨ Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and

  ⇨ Have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.

- The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.

- Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.

- Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

- Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

- Personal fall arrest systems shall not be attached to guardrail systems, nor shall they be

attached to hoists.

- When a personal fall arrest system is used at hoist areas, it shall be rigged to allow the movement of the employee only as far as the edge of the walking/working surface.

Positioning Device Systems

- Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet.
- Positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds, whichever is greater.
- Connectors shall be made of drop forged, pressed or formed steel, or equivalent materials.
- Connectors shall have a corrosion-resistant finish and all surfaces and edges shall be smooth to prevent damage to interfacing parts of this system.
- Connecting assemblies shall have a minimum tensile strength of 5,000 pounds.
- Dee-rings and snap-hooks shall be proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or taking permanent deformation.
- Snap-hooks shall be sized to be compatible with the member to which they are connected to prevent unintentional disengagement of the snap-hooks by depression of the snap-hooks keeper by the connected member, or shall be a locking type snap-hooks designed and used to prevent disengagement of the snap-hooks by the contact of the snap-hooks keeper by the connected member. As of January 1, 1998, only locking type snap-hooks shall be used.
- Unless the snap-hooks is a locking type and designed for the following connection, snap-hooks shall not be engaged:

  ⇨ directly to webbing, rope or wire rope;
  ⇨ to each other;
  ⇨ to a de-ring to which another snap-hooks or other connector is attached;
  ⇨ to a horizontal lifeline; or
  ⇨ to any object which is incompatibly shaped or dimensioned in relation to the snap-hooks such that unintentional disengagement could occur by the connected object being able to depress the snap-hooks keeper and release itself.

- Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration. Defective components shall be removed from service.
- Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.

Safety Net Systems

- Safety nets shall be installed as close as practicable under the walking/working surface on which employees are working, but in no case more than 30 feet (9.1 m) below such level. When nets are used on bridges, the potential fall area from the walking/working surface to the net shall be unobstructed.
- Safety nets shall extend outward from the outermost project of the work surface as follows:

Vertical Distance from Working Level to Horizontal Plane of Net	Minimum Required Horizontal Distance of Outer Edge of Net from the Edge of the Working Surface
Up to 5 Feet	8 Feet
More Than 5 Feet Up to 10 Feet	10 Feet
More Than 10 Feet	13 Feet

- Safety nets shall be installed with sufficient clearance under them to prevent contact with the surface or structures below when subjected to an impact force equal to the drop test specified in the next section.

- Safety nets and safety net installations shall be drop-tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place. The drop-test shall consist of a 400 pound bag of sand 30 $\pm$ 2 inches in diameter dropped into the net from the highest walking/working surface at which employees are exposed to fall hazards, but not from less than 42 inches above that level.

- If it is unreasonable to perform the drop-test, a designated competent person shall certify that the net and net installation is in compliance by preparing a certification record prior to the net being used as a fall protection system. The certification record must include an identification of the net and net installation for which the certification record is being prepared; the date that it was determined that the identified net and net installation were in compliance with paragraph 4 of this section and the signature of the person making the determination and certification. The most recent certification record for each net and net installation shall be available at the jobsite for inspection.

- Defective nets shall not be used. Safety nets shall be inspected at least once a week for wear, damage, and other deterioration. Defective components shall be removed from service. Safety nets shall also be inspected after any occurrence, which could affect the integrity of the safety net system.

- Materials, scrap pieces, equipment, and tools which have fallen into the safety net shall be removed as soon as possible from the net and at least before the next work shift.

- The maximum size of each safety net mesh opening shall not exceed 36 square inches nor be longer than 6 inches on any side, and the opening, measured center-to-center of mesh ropes or webbing, shall not be longer than 6 inches. All mesh crossings shall be secured to prevent enlargement of the mesh opening.

- Each safety net (or section of it) shall have a border rope for webbing with a minimum breaking strength of 5,000 pounds.

- Connections between safety net panels shall be as strong as integral net components and shall be spaced not more than 6 inches apart.

Warning Line Systems

- The warning line shall be erected around all sides of the roof work area.

- When mechanical equipment is not being used, the warning line shall be erected not less than

6 feet from the roof edge.

- When mechanical equipment is being used, the warning line shall be erected not less than 6 feet from the roof edge which is parallel to the direction of mechanical equipment operation, and not less than 10 feet from the roof edge which is perpendicular to the direction of mechanical equipment operation.

- Points of access, materials handling areas, storage areas, and hoisting areas shall be connected to the work area by an access path formed by two warning lines.

- When the path to a point of access is not in use, a rope, wire, chain, or other barricade, equivalent in strength and height to the warning line, shall be placed across the path at the point where the path intersects the warning line erected around the work area, or the path shall be offset such that a person cannot walk directly into the work area.

- Warning lines shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:

  ⇨ The rope, wire, or chain shall be flagged at not more than 6-foot intervals with high-visibility material;

  ⇨ The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches from the walking/working surface and its highest point is no more than 39 inches from the walking/working surface;

  ⇨ After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;

  ⇨ The rope, wire, or chain shall have a minimum tensile strength of 500 pounds and after being attached to the stanchions, shall be capable of supporting, without breaking, the loads applied to the stanchions;

  ⇨ The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

  ⇨ Mechanical equipment on roofs shall be used or stored only in areas where employees are protected by a warning line system, guardrail system, or personal fall arrest system.

Controlled Access Zones

- When used to control access to areas where leading edge and other operations are taking place the controlled access zone shall be defined by a control line or by any other means that restricts access.

- When control lines are used, they shall be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge, except when erecting pre-cast concrete members.

- When erecting pre-cast concrete members, the control line shall be erected not less than 6 feet nor more than 60 feet or half the length of the member being erected, whichever is less, from the leading edge.

- The control line shall extend along the entire length of the unprotected or leading edge and

shall be approximately parallel to the unprotected or leading edge.

- When used to control access to areas where overhand bricklaying and related work are taking place:

  ⇨ The controlled access zone shall be defined by a control line erected not less than 10 feet (3.1 m) nor more than 15 feet from the working edge.

  ⇨ The control line shall extend for a distance sufficient for the controlled access zone to enclose all employees performing overhand bricklaying the related work at the working edge and shall be approximately parallel to the working edge.

  ⇨ Additional control lines shall be erected at each end to enclose the controlled access zone.

  ⇨ Only employees engaged in overhand bricklaying or related work shall be permitted in the controlled access zone.

  ⇨ Control lines shall consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:

    - Each line shall be flagged or otherwise clearly marked at not more than 6-foot (1.8 m) intervals with high-visibility material.

    - Each line shall be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the walking/working surface and its highest point is not more than 45 inches (50 inches when overhand bricklaying operations are being performed) from the walking/working surface.

    - Each line shall have a minimum breaking strength of 200 pounds.

    - On floors and roofs where guardrail systems are in place, but need to be removed to allow leading edge work to take place, only that portion of the guardrail necessary to accomplish that day's work shall be removed.

Safety Monitoring Systems

- The superintendent shall designate a competent person to monitor the safety of employees and the superintendent shall ensure that the safety monitor complies with the following requirements:

- The safety monitor shall be competent to recognize fall hazards;

- The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;

- The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employees being monitored;

- The safety monitor shall be close enough to communicate orally with the employee; and

- The safety monitor shall not have other responsibilities, which could take the monitor's attention from the monitoring function.

- No employee, other than an employee engaged in roofing work (on low-sloped roofs) or an employee covered by a fall protection plan, shall be allowed in an area where an employee is

being protected by a safety monitoring system.

- Each employee working in a controlled access zone shall be directed to comply promptly with fall hazard warnings from safety monitors.

Covers

- 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 cover.

- 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.

- All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.

- All covers shall be color-coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard. NOTE: This provision does not apply to cast iron manhole covers or steel grates used on streets or roadways.

Floor Openings and Floor Holes:

- Floor openings shall be guarded by using a standard railing and toe board.

- All floor holes shall be covered with material that is capable of supporting the maximum weight load intended.

All Ladder-ways Floor Openings or Platforms

- Ladder-ways shallbe guarded with standard railings and toe-boards.

- Platforms shall be guarded with standard railings and toe-boards.

Hatchways and Chute Floor Openings

- Hatchways shall be guarded with hinged cover and standard railings with only one exposed side. The hinged cover shall be closed or side shall be guarded with removable standard railings.

- Chutes shall be guarded with removable standard railings and toe-board on not more than two sides of the opening and a fixed standard railing and toe-board. All standard railings shall be kept in place when the chute is not in use.

Skylights, Pits and Trap-Door Floor Opening

- Skylights shall be guarded with fixedstandard railings on all sides.

- Pits and trap doors shall be guarded with floor opening covers or standard railings on all exposed sides by removable standard railings.

5. TRAINING REQUIREMENTS

The Safety Director and/or competent person shall provide training for each employee to recognize the hazards of falling and shall train each employee in the following procedures:

- The nature of fall hazards in the work area;

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

- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used;

- The role of each employee in the safety monitoring system when this system is used;

- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;

  ⇨ The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection;

  ⇨ The role of employees in fall protection plans;

  ⇨ The standards contained in the subpart.

- When the Safety Director has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the Safety Director should retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

  ⇨ Changes in the workplace render previous training obsolete; or

  ⇨ Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or

  ⇨ Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retrained the requisite understanding or skill.

- Superintendents will train craft persons in the avoidance of floor, roof, and wall opening hazards through the use of toolbox talks and dailywork instructions.

6. DEFINITIONS

Anchorage - A secure point of attachment for lifelines, lanyards or deceleration devices.

Body Harness - Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Controlled Access Zone (CAZ) - An area in which certain work (i.e., overhand bricklaying) may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.

Deceleration Device - Any mechanism, such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the

energy imposed on an employee during fall arrest.

Floor Hole - Any opening measuring less than 12 inches, but more than 1 inch at its least dimension.

Floor Opening - Any opening measuring more then 12 inches at its least dimension.

Guardrail System - A barrier erected to prevent employees from falling to lower levels.

Handrail - Single bar on brackets attached on a wall, ramp or stairway, used to prevent tripping.

Lanyard - A flexible line of rope, wire, or strap, which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.

Leading Edge - The edge of a floor, roof, or form work for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or form work sections are placed, formed, or constructed. A leading edge is considered to be an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Lifeline - A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorage's at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low Slope Roof - A roof having a slope less than or equal to 4 in 12 (vertical to horizontal).

Lower Levels - Those areas or surfaces to which an employee can fall. Such areas or surfaces include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits, tanks, material, water, equipment, structures, or portions thereof.

Opening - A gap or void 30 inches (76-cm) or more high and 18 inches (48 cm) or more wide, in a wall or partition, through which employees can fall to a lower level.

Personal Fall Arrest System - A system used to arrest an employee in a fall from a working level. It consists of an anchorage; connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Roof - The exterior surface on the top of a building. This does not include floors or form work, which, because a building has not been completed, temporarily become the top surface of a building.

Roofing Work - The hoisting, storage, application, and removal of roofing materials and equipment, including related insulation, sheet metal, and vapor barrier work, but not including the construction of the roof deck.

Rope Grab - A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

Safety Monitoring System - A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

Standard Railing - Vertical barrier to protect and prevent persons from falling into, through or from wall openings, ramps, platform or other areas where a fall hazard exists.

Steep Roof - A roof having a slope greater than 4 in 12 (vertical to horizontal).

Toe-board - A low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.

Unprotected Sides and Edges - Any side or edge (except at entrances to points of access) of a walking/working surface, (i.e., floor, roof, ramp, or runway) where there is no wall or guardrail system at least 39 inches [1.0 m] high.

Walking/Working Surface - Any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, form work and concrete reinforcing steel but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.

Wall Hole - Any opening less than 30 inches but not less than 1 inch high of unrestricted width.

Wall Opening - Any opening at least 20 inches high and 18 inches wide.

Warning Line System - A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of a guardrail, body belt, or safety net systems to protect employees in the area.

Work Area - The portion of a walking/working surface where job duties are being performed.

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CHAPTER 23

FIRE PROTECTION AND PREVENTION

Section: Hazard Evaluation and Control

Reference: 1926.150 (Subpart F – Fire Protection and Prevention)

Revised Date: 3/13/2023

Chapter 23

FIRE PROTECTION AND PREVENTION

1. INTRODUCTION

Construction related fires are often ignited by smoldering materials from welding or sawing operations that burst into flames after everyone has left the job for the day. The fire can burn for hours undetected with no one in the vicinity.

Fire requires three elements: FUEL, HEAT, and OXYGEN to begin and maintain burning.

If we remove any of these prior to ignition, the fire won't start. If you remove any of them after ignition, burning will stop. It is far less destructive, far less dangerous, and far less expensive to stop fires before they begin rather than after they start.

2. RESPONSIBILITIES

The primary responsibility for fire protection and prevention rests with the superintendent. The superintendent must ensure that fire extinguishers are available, hot work permits are implemented where applicable, employees are trained, a fire protective program has been developed, and an alarm system for evacuation purposes is in place.

3. PROCEDURES

Fire Protection

- All firefighting equipment will be conspicuously located, accessible, inspected periodically, maintained at all times, replaced immediately when defective, and approved for the location and hazards.

- A fire extinguisher rated 2A (or 55 gallon drum with 2 fire pails) will be provided for each 3000 square feet of the protected building. Travel distance to the nearest fire extinguisher shall not exceed 100 feet.

- On multi-story buildings, at least one fire extinguisher will be located adjacent to each stairway on each floor.

- The superintendent will establish a fire alarm system (telephone, siren or similar device) whereby employees and the local fire department can be alerted in case of fire. The telephone number of the local fire department will be posted in jobsite trailers.

- A fire extinguisher, rated not less than 10B, shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas are being used on the jobsite. This requirement does not apply to the integral fuel tanks of motor vehicles.

Fire Prevention

- Internal combustion engines will be located so that the exhausts are well away from combustible material.

- Smoking will be prohibited in vicinity of potential fire hazards. Fire hazard areas will be conspicuously posted "No Smoking or Open Flame".

4. TRAINING REQUIREMENTS

Michael Kinder & Sons, Inc. will provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with beginning stage fire fighting.

Michael Kinder & Sons, Inc. will provide fire protection education upon initial employment and at least annually thereafter.

5. DEFINITIONS

Fire Protection Training - The process of making our employees proficient in the operation of equipment, including respiratory equipment.

Fire watch - Is a person assigned to monitor high fire-potential operations including welding, cutting, and sawing in conditions that create a likelihood of fire. This person is to be trained in fire extinguisher use, how to prevent fire, and what to do in the event of an emergency situation.

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CHAPTER 24

FLAMMABLE MATERIALS and COMBUSTIBLE LIQUIDS

Section: Hazard Evaluation and Control

Reference: 1926.152 (Subpart F - Fire Protection and Prevention)

Revised Date: 3/13/2023

Chapter 24

FLAMMABLE MATERIALS
And COMBUSTIBLE LIQUIDS

1. INTRODUCTION

The purpose of this policy is to ensure the proper handling and storage of flammable and combustible liquids.

2. GENERAL

This section applies to all employees and operations.

3. PROCEDURES

Indoor Storage of Flammable and Combustible Liquids

- No more than 25 gallons of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet.

Storage Outside Buildings

- **Storage of containers (not more than 60 gallons each) shall not exceed 1,100 gallons in any one pile or area. Piles or groups of containers shall not be nearer than 20 feet to a building.**

- Within two hundred feet of each pile of containers there shall be a twelve-foot wide access way to permit approach of fire control apparatus.

- The storage area shall be graded in a manner to divert possible spills away from buildings or other exposures, or shall be surrounded by a curb or earth dike at least twelve inches high. When curbs or dikes are used, provisions shall be made for drainage of accumulations of ground or rainwater, or spills of flammable or combustible liquids accessible to operation under fire conditions.

Fire Control for Flammable or Combustible Liquid Storage

- At least one portable fire extinguisher, having a rating of not less than 20-B units, shall be located outside of, but not more than ten feet from the door opening into any room used for storage of more than sixty gallons of flammable or combustible liquids.

4. TRAINING REQUIREMENTS

Training in the use of fire extinguishers is one way to heighten awareness of fire hazards. Training will ensure that the fire extinguishers will be properly used in the event of an emergency. Fire protection training will include extinguishing fires with equipment that is due for recharge for hands on experience.

3. DEFINITIONS

Approved - The purpose of this subpart, means equipment that has been listed or approved by a nationally recognized testing laboratory such as Factory Mutual Engineering Corp., or Underwriters' Laboratories, Inc., or Federal agencies such as Bureau of Mines, or U.S. Coast Guard, which issue approvals for such equipment.

Closed Container - A container so sealed by means of a lid or other device that neither liquid nor vapor will escape from it at ordinary temperatures.

Combustible Liquids - Any liquid having a flash point at or above 140ºF. (60ºC) and below 200ºF. (93.4ºC).

Combustion - Any chemical process that involves oxidation sufficient to produce light or heat.

Fire Brigade - An organized group of employees that are knowledgeable, trained, and skilled in the safe evacuation of employees during emergency situations and in assisting in firefighting operations.

Flammable - Capable of being easily ignited, burning intensely, or having a rapid rate of flame spread.

Flammable Liquids - Any liquid having a flash point below 140ºF and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100ºF.

Flash Point - The temperature at which it gives off vapor sufficient to form an ignitable mixture with the air period after air.

Liquefied Petroleum Gas (LPG and LPG Gas)- Material which is composed predominantly of any of the following hydrocarbons, or mixtures of them, such as propane, propylene, butane (normal butane or ISO-butane), and butylenes.

Portable Tank - A closed container having a liquid capacity of more than 60 U.S. gallons and not intended for fixed installation.

Safety Can - An approved closed container of not more than 5 gallons capacity, having a flash-arresting screen, spring-closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure.

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CHAPTER 25

HAND AND POWER TOOLS

Section: Hazard Evaluation and Control

Reference: 1926.300 (Tools - Hand and Power)

Revised Date: 3/13/2023

Chapter 25

HAND AND POWER TOOLS

1. INTRODUCTION

The purpose of this policy is to provide for the safe usage of hand and power tools. This applies to all employees and operations.

2. RESPONSIBILITIES

- The superintendent is responsible for the safe condition and maintenance of all tools and equipment to be used by all employees.
- When necessary, superintendents shall be able to explain:

  ⇨ Each step of a job or task
  ⇨ What is to be done and why
  ⇨ What hazards are involved
  ⇨ How to perform the job safely
  ⇨ Capacities and limitations of equipment

- The superintendent shall ensure that employees know how to safely use tools they are required to work with.

3. PROCEDURES

- Know the application, limitation, and potential hazards of the tool used.
- Select the proper tool for the job.
- Remove adjusting keys and wrenches before turning on tools.
- Do not use tools with frayed cords or loose or broken switches.
- Keep guards in place and in working order.
- Have ground prongs in place or use tools marked "double-insulated."
- Maintain working areas free of clutter.
- Keep alert to potential hazards in the working environment such as damp locations or the presence of highly combustible materials.
- Dress properly to prevent loose clothing from getting caught in moving parts.
- Use safety glasses, dust or facemasks, or other protective clothing and equipment when necessary.

- Do not surprise or distract anyone using a power tool.

- Hammers with broken or cracked handles, chisels and punches with mushroomed heads, wrenches with sprung jaws, or bent or broken wrenches should not be used.

- Most hand-held electrical tools must be equipped with a "dead-man" or "quick-release" control so that power is shut off automatically whenever the operator releases the control.

- When magazine-fed, explosive powder actuated hand tools covered by the OSHA standards are inspected, the tool is not considered loaded until the magazine feeds the tool, even though the magazine is in the tool. However, operator's instructions must provide guidelines for removing the magazine when the tool is left unattended. OSHA does not consider explosive powder loads to be a part of the firing cycle until single loads are fed into the ram or firing chamber. A separate operation on the part of the operator has to be made to place the load into the firing position.

- Portable circular saws must be equipped with guards above and below the base plate or shoe. The lower guard must retract when the blade is in use and automatically return to the guarding position when the tool is withdrawn from the work.

- When the use of a chain saw blade guard prevents performing a particular work function or offers a more serious hazard than that of using an unguarded chain saw, omission of the guard is not a violation. However, in a one-direction movement of the saw with no other obstructions to guard, a chain saw blade guard is required.

- All hand-held portable electrical equipment must have its frame grounded or be double insulated and identified as such tool.

4. TRAINING REQUIREMENTS

Michael Kinder & Sons, Inc. will provide training or retraining on safe tool usage and maintenance to employees not familiar with a certain type of tool.

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CHAPTER 26

HAZARD COMMUNICATION

Section: Hazard Evaluation and Control

Reference: 1926.59/1910.1200 (Subpart D - Occupational Health)

Revised Date: 3/13/2023

Chapter 26

HAZARD COMMUNICATION

1. INTRODUCTION

This Hazard Communication Program, hereafter referred to HAZCOM, has been established in order to comply with OSHA standard 1926.59 which went into effect on May 23, 1988.

Michael Kinder & Sons, Inc. has developed this program to ensure employees are informed of hazardous chemicals and materials present in the work environment. Every effort will be made to instruct employees in safe work practices when handling or otherwise working with chemical substances. All communication will be in English due to the fact that all employees speak and understand English.

2. SCOPE

This program will be in effect at all places of employment including the offices and jobsites. A copy of this program is to be located at all offices and jobsites and will be accessible to all employees, their designated representatives, owners, subcontractors, and emergency personnel.

3. RESPONSIBILITIES

Michael Kinder & Sons, Inc. Safety Director is responsible for establishing and over seeing the implementation of this program and makes himself/herself accessible to all employees regarding HAZCOM.

The project Superintendent is the designated HAZCOM Coordinator on each jobsite. The safety Director will be responsible for overseeing HAZCOM on projects that do not have a Field Superintendent. The Safety Director should be an employee's first contact when information is needed regarding HAZCOM.

The Project Superintendent will be responsible for:

- Assuring that copy of this HAZCOM program is on the jobsite.
- Assuring that Safety Data Sheets (SDS) for all hazardous materials are on the job.
- Assuring that all employees are trained in HAZCOM and that this training is documented.
- Assuring that all subcontractors have submitted a copy of their HAZCOM Program and SDS for all their hazardous materials they bring onto the jobsite.

4. SAFETY DATA SHEETS

Safety Data Sheets (SDS) are documents supplied by the chemical product manufacturers to provide necessary technical information needed to safely use the product. Safety Data Sheets (SDS) may be obtained from the Michael Kinder & Sons, Inc. Safety Director or by calling the 3E Company at 1-800-451-8346.

The SDS contains the following valuable information.

- Chemical
- Identification
- Hazardous Ingredients

- Physical Data
- Fire and Explosion Data
- Health Hazards
- Reactivity Data
- Spill or Leak Procedures
- Special Protection
- Special Precautions

Copies of SDS for all hazardous chemical products used on the jobsite shall be maintained with this HAZCOM program on the jobsite. Project Managers and/or Superintendents will request SDS when ordering products for which SDS have not been obtained. Do not throw away SDS when the product has been removed from the jobsite. They should be maintained with the HAZCOM program, as the product would probably be reintroduced on the future jobs.

The Project Manager, in conjunction with the jobsite Superintendent, will be responsible for obtaining copies of SDS from subcontractors for all products they are using.

5. HAZARD DETERMINATION AND PRODUCT WARNING

Michael Kinder & Sons, Inc. will rely on the manufacturer's warning labels and Safety Data Sheets (SDS) as a source of information regarding the hazards associated with a product and required safety precautions. Michael Kinder & Sons, Inc. does not have the technical expertise to verify the accuracy of this information.

Hazardous substances used on Michael Kinder & Sons, Inc. jobsites will have a label on them warning of the product hazards. Since chemical manufactures are required to label their containers, and the majority does, we will use these labels as our primary means of warning.

Portable containers containing hazardous substances are not required to be labeled if all the following is met:

- For immediate use only.
- Obtained from a labeled container.
- Used exclusively by the employee making the transfer.
- Less than five gallons.

Employees are not to remove or deface labels. If a container of a hazardous substance does not have a label or the label is unreadable, the jobsite HAZCOM coordinator should be contacted to rectify the problem. A copy of the SDS can be affixed to the container to serve as a warning label. This will assist employees in easy identification of the material, hazards associated with the material, and proper safety precautions.

6. LIST OF HAZARDOUS CHEMICAL PRODUCTS

A list of all chemical products used at the jobsite will be maintained with this HAZCOM program. The list will be updated as new products are introduced to the jobsite.

Subcontractors should supply their own list when submitting their HAZCOM program and update it as new products are introduced.

7. EMPLOYEE TRAINING

All employees are required to be trained; relating to the OSHA Hazard Communication Standard (1926.59) and the chemical products they are working with or exist in their work environment. It will be the Project Superintendent's responsibility for training employees in HAZCOM. The general training requirement listed below must be covered with the Michael Kinder & Sons, Inc. employees and periodically thereafter with all employees as a refresher. HAZCOM orientation received from other employers will not be considered adequate.

General Training Requirements includes (but are not limited to the following):

- OSHA Hazard Communication Standard (1926.59)
- Michael Kinder & Sons, Inc. HAZCOM program requirements
- Labeling system
- Availability and interpretation of SDS
- Use of personal protective equipment
- Storage and handling requirements

In cases where hazardous chemical products are introduced to the job for a non-routine task, the following training will take place for all those exposed:

- Proper application of the product
- Hazards associated with the product
- Symptoms associated with over exposure
- Personal protective equipment required
- Storage and handling procedures
- Emergency procedures

HAZCOM training will be reiterated periodically through weekly toolbox talks. At least once a month a toolbox meeting should be held relating to HAZCOM. Reviewing SDS provides excellent content for these talks.

8. SUBCONTRACTOR COMPLIANCE WITH OUR PROGRAM

Requirements of subcontractors are set forth in OSHA Standard 1926.59. All subcontractors must comply with this standard on all jobsites.

9. PROCEDURES

All containers of hazardous materials located at the jobsite, and not previously labeled by the manufacturer, will be labeled by the superintendent and/or Safety Director.

All employees shall be aware of the potentially hazardous materials used by other contractors on jobsites. These materials will be identified with warning labels and SDS's and listed on the contractor's Hazardous Chemical list.

To understand the potential dangers of chemicals on jobsites, employees will follow these HAZCOM written program guidelines:

Labeling Policy

- Warning Labels
    - Never mix chemicals that are not properly labeled.
    - Never assume an unlabeled container is harmless.
    - Never assume an unlabeled container is harmless.
    - Never remove a label unless you immediately replace it with another label.

- Labels must be legible with the identity or name of the chemical.
- Labels must display appropriate hazard warning (i.e., "flammable" or "explosive").
- Labels must provide name and address of the chemical manufacturer.
- Portable containers do not have to be labeled.
- Pipes are not considered containers and do not have to be labeled.
- How to maintain Safety Data Sheets.

The three main categories of information on a Safety Data Sheet (SDS) that are applicable to our operations include:

PRODUCT INFORMATION – The product information section includes:

- Basic information about the material:
  - It's name (the chemical name will be the same as the one on the warning label)
  - The manufacturer's name, address and telephone number
  - The preparation date or date of last revision
  - Emergency telephone numbers

- The ingredients of the material and their hazards, unless the ingredients are trade secrets. In that case, only hazards will be listed.

Specific exposure limits:

- Permissible exposure limit (PEL)
- Threshold limit value (TLV)
- Short-term exposure limit (STEL)

The PEL and TLV are maximum concentrations of the substance that a person can be Exposed to an average over an eight-hour workday. The STEL is the acceptable amount of a Substance you can be exposed to over a 15-minute period.

- Potential and Health Hazards. This section of the SDS will cover issues such as:
  - Whether the material is flammable, corrosive, or toxic
  - How hazards enter the body and affect personal health

EXPOSURE SITUATIONS – What to do in the event of an accidental exposure.
Specifically this section lists:

- First aid measures
- A response procedure for spills or leaks.
- Firefighting section will include information such as flash point, auto ignition temperature, flammable limits, lower explosive limit (LEL), and upper explosive limit (UEL).
- Cleanup methods for spills or leaks

HEALTH PREVENTION AND PROTECTION – The SDS provides instructions on how to safely handle and store hazardous materials. Follow the directions in this section to:

- Minimize direct contact with hazardous materials.
- Reduce fire hazards or other reactions.
- Prevent releases of hazardous materials.
- Learn conditions (such as excessive heat, direct sunlight, or vibration) to avoid when storing chemicals.
- Use engineering or administrative controls to mitigate potential hazardous conditions.

- Use personal protective equipment (PPE).

- Identify physical and chemical properties of hazardous material including:

  - Appearance
  - Evaporation rate
  - Melting and boiling points
  - Odor
  - Stability or instability of the material
  - Conditions and other materials that can cause dangerous reactions with the chemical
  - Hazardous substances that may be released when the material decomposes

- As a part of the hazard communication program requirements for multi-employer jobsites, each contractor's HAZCOM Program must include:

  - Listing of all chemical products used at or stored on the jobsite.
  - Labeling of all containers of all chemicals used except for very small containers filled by the person using the material, which must then be used/emptied by that person during the same work shift.
  - Copy of the subcontractor's HAZCOM Program and SDS for hazardous chemicals used on the jobsite. These documents will be located at the HMIC.
  - Identify operations or tasks in the employee's work area that use hazardous chemicals.
  - Communication with other Subcontractors on the site regarding hazardous substances.
  - Properly training all construction employees before they work with hazardous substances/chemicals and when new substances/chemicals are introduced on the worksite.

- A list of all chemicals used or stored at the jobsite will be assembled, maintained, and updated in a timely fashion to show the chemicals actually in use or in storage. This list will be maintained in a file at the HMIC and will be available to the subcontractor's employees upon request.

- No material identified, as hazardous waste will be placed in standard construction debris dumpsters.

- Hazardous waste will be classified by the regulations published by the U.S. Environmental Protection Agency and by the Lance Pollution Control Division of the Sate Board of Health.

- All hazardous waste will be disposed of at an approved Hazardous Waste Management Facility.

- The Superintendent, Foreman or individual ordering the material should request that the SDS for the material be shipped along with the product.

- All employees shall have access to the SDS binder whenever desired. An employee can identify the SDS binder for the particular project he/she is working by asking the project superintendent. The binder can be found within the jobsite office at the HMIC.

- The label is broken down into 4 categories. They are as follows:

  - Health (Blue)
  - Flammability (Red)
  - Reactivity (Yellow)
  - Personal Protection (White)

- Health, Flammability, and Reactivity all have four levels of severity. Listed below is a brief description of each level of severity:

  - 0 – minimal hazard
  - 1 – slight hazard
  - 2 – moderate hazard
  - 3 – serious hazard
  - 4 – sever hazard

- The Personal Protection category uses the index below to show what personal protective equipment should be worn while handling material:

- All containers of material that could be considered hazardous that does not already contain a label shall be properly labeled.

- In the event a employee/subcontractor is required to perform a non-routine task or wok in conditions which may pose a potential hazard, the following procedure will be used. A job hazard analysis will be completed to identify all potential hazards and means of controlling the hazards. Job analysis and surveys will be conducted by qualified technicians, if the situation necessitates. In all other situations, the job analysis will be performed by the Contractor Project Manager and the Project Superintendent.

- However, when working near unlabeled pipes, necessary precautions will be exercised to avoid contact with contents of piping. Demolition of existing piping will not occur until all sources of material being piped are capped off and clearly identified. Pipes and lines will be evacuated by personnel trained to handle materials involved if the situation necessitates.

- In addition to annual employee re-orientation, weekly safety meetings are held to inform and to discuss all aspects of the job safety elements. However, if a hazardous situation arises, not previously addressed, the hazard and all safety considerations will be communicated to the employees prior to the start of work.

- Michael Kinder & Sons, Inc. employees will not be exposed to asbestos. To insure that the employees are safe from asbestos exposure, Michael Kinder & Sons, Inc. shall use the following procedure:

Identify the areas containing Asbestos

- Prior to the start of work, a site plan identifying the locations of asbestos contained within the scope of work

- If Michael Kinder & Sons, Inc. cannot provide this information, than the company must persuade the owner to employ a testing agency that will identify the locations of asbestos.

Abatement of Asbestos

NO Employees will be asked to enter into an area that has been abated without the employing of a testing agency to determine if the area is clean and free from all asbestos and potential exposure from future work.

Abatement of Lead

See the chapter on Lead of this manual for the policy regarding discovery, testing, abating, and working safely in lead contaminated environments.

10. DEFINITIONS

Chemical - Any element, chemical compound, or mixture of elements and/or compounds.

Combustible Liquid – Any liquid having a flash point at or above 100 degrees F (37.8 C), but below 200 degrees F (93.3 C), except any mixture having components with flash points of 200 degrees F (93.3 C), or higher, the total volume of which make up 9 percent or more of the total volume of the mixture.

Container – Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.

Liquid Flammable – Any liquid having a flash point below 100 degrees F (37.8 C), except any mixture having components with flash points of 100 degrees F (37.8 C) or higher, thee total of which make up 99 percent or more of the total volume of the mixture.

Hazardous Chemical – Any chemical that is physical or a health hazard.

Hazard Materials Information Center (HMIC) – A specific location in the contractor's onsite office where contractors shall store and maintain their own Hazard Communication Program and SDS's for contracted work.

Health Hazard - A chemical for which there is statistically significant evidence that acute or chronic health effects may occur in exposed employees. The term "Health Hazard" includes chemicals which are carcinogens, toxic, or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizes, hepatoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietc system, and agents which damage the lungs, eyes, or mucous membranes.

Label – Any written, printed, or graphic material, displayed on or affixed to containers of hazardous chemicals.

Safety Data Sheet (SDS) – Written or printed information concerning a hazardous chemical.

Physical Hazard – A chemical for which there is scientifically valid evidence that it is a combustible liquid, compressed gas, explosive, flammable, organic peroxide, oxidizer, pyrophoric, unstable (reactive), or water-reactive.

Work Area – A room or defined space in a workplace where hazardous chemicals are produced or used and where employees are present.

Workplace – An establishment, jobsite, or project, at on geographical location containing one or more work areas.

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CHAPTER 27

HOISTING AND RIGGING

Section: Hazard Evaluation and Control

Reference: N / A

Revised Date: 3/13/2023

Chapter 27

HOISTING AND RIGGING

1. INTRODUCTION

The purpose of this policy is to provide safety requirements and guidance on the usage of slings, chokers, cables, etc.

2. SCOPE

This program is intended as a working guide for training workers in the fundamentals of safe rigging and hoisting. The information covers not only ropes and knots but also hoisting equipment from cranes to chain falls and rigging hardware from rope clips to spreader beams. Equally important is the attention paid to every point to correct procedures for inspection, maintenance and operation.

Knowledge of the equipment and materials with which we work is one of the most important factors in health and safety. Each item has been designed and developed to serve a specific purpose. Recognizing its capabilities and limitations not only improves efficiency but also minimizes hazards and helps prevent accidents.

3. RESPONSIBILITIES

The information provided below is essential to ensure all loads are handled safely on the jobsites. The following shall be adhered to and extra caution shall take place when cranes are handling the loads. You shall allow extra time for pre-lift planning. An extra 5 minutes of pre-planning can save a life or prevent serious injuries.

4. SAFE OPERATING PROCEDURES

SLINGS

After the hoist rope, the sling is the most commonly used piece of rigging equipment. Observe the following precautions with slings:

- Never use damaged slings
- Inspect slings regularly to ensure their safety.
- Check wire rope slings for the following

  ⇨ Kinking
  ⇨ Wear
  ⇨ Abrasion
  ⇨ Broken wires
  ⇨ Work or cracked fittings
  ⇨ Loose seizing and slices
  ⇨ Crushing
  ⇨ Flattening
  ⇨ Rust or corrosion

- Pay special attention to the areas around thimbles and other fittings
- Slings should be marked with an identification number and their maximum capacity on a flat ferrule or permanently attached ring.
- Avoid sharp bends, pinching and crushing. Use loops and thimbles at all times. Corner pads that prevent the sling from being sharply bent or cut can be made from split section of large-diameter pipe, corner saddles, padding, or blocking.
- Never allow wire rope slings, or any wire rope, to lie on the ground for long periods of time or on damp or wet surfaces, rusty steel, or near corrosive substances.
- Rigging equipment not in use shall be removed from the immediate work area so as not to present a hazard.
- Avoid dragging slings out from underneath loads.
- Keep wire rope slings away from flame cutting and electric welding.
- Never make slings from discarded hoist rope.
- Avoid using single-leg wire rope slings with hand-spliced eyes. The load can spin causing the rope to unlay and the splice to pull out.
- Never wrap a wire rope completely around a hook. The sharp radius will damage the sling.
- Avoid bending the eye section of wire rope slings around corners
- Ensure that the sling angle is always greater than 45 degrees. When the horizontal distance between the attachment points on the load is less than the length of the shortest sling leg, then the angle is greater than 60 degrees and generally safe.

5. RIGGING, LIFTING, AND LANDING LOADS

- Rig loads to prevent any parts from shifting or dislodging during the lift. Suspended loads should be securely slung and properly balanced before they are set in motion.
- Keep the load under control at all times. Where personnel may be endangered by a rotating or swaying load, use one or more taglines to prevent uncontrolled motion.
- Loads must be safely landed and properly blocked before unhooked and unslung.
- Lifting beams should be plainly marked with their weight and designed working loads, and should only be used for their intended purpose.
- Never wrap the hoist rope around the load. Attach the load to the hook by slings or other rigging devices adequate and suitable to the load being lifted.
- The load line should be brought over the load’s center of gravity before the lift is started.
- Keep hands away from pinch points as slack is being taken up.
- Wear gloves when handling wire rope

- Make sure that everyone stands clear when loads are being lifted, lowered, and freed of slings. As slings are being withdrawn, their hooks might catch under the load and suddenly fly loose.

- Before making a lift, check to see that the sling is properly attached to the load.

- Never work under a suspended load unless it has been adequately supported from below and all conditions have been approved by the foreman in charge of the operation.

- Never make temporary repairs to a sling. Procedures for proper repair should be established and followed.

- Secure the unused legs of a multi-leg sling before it is lifted.

- Never point-load a hook unless it is designed and rated for such use.

- Make sure that the load is free before lifting and that all sling legs are taking the load.

- When using two or more slings on a load, ensure that they are all made from the same material.

- Prepare adequate blocking before loads are lowered. Blocking can help prevent damage to slings.

- **OPERATORS:** Avoid impact loading caused by sudden jerking during lifting and lowering. Take up slack on the sling gradually. Avoid lifting or swinging the load over workers.

- Hooks on ball assemblies, load blocks, or other attachments shall be of a type that can be closed and locked, eliminating any throat opening.

6. WIRE ROPE

The rope must possess enough strength to take the maximum load that may be applied, with a factor of safety of at least 5 to 1, and 10 to 1 when used to carry personnel.

- Wire ropes that are supplied as rigging on cranes must possess factors of safety as follows:

  ⇨ Live or running roped that wind on drums or pass over sheaves; 3.5 to 1 under operating conditions, 3 to 1 when erecting the boom.
  ⇨ Pendants or standing ropes; 3 to 1 under operating conditions, 2.5 to 1 when erecting the boom
  ⇨ The rope must withstand repeated bending without failure of the wires from fatigue
  ⇨ The rope must resist abrasion
  ⇨ The rope must withstand distortion and crushing.
  ⇨ The rope must resist rotation.
  ⇨ The rope must resist corrosion.

The number of wires in a rope is an important factor in determining a rope's characteristics. But the arrangement of the wires in the strand is also important.

- **BASIC TYPES**

  ⇨ **Ordinary** – all wires are the same size
  ⇨ **Warrington** – outer wires are alternately larger and smaller
  ⇨ **Filler** – small wires fill spaces between larger wires

⇨ **Seale** – wires of outer layer are larger diameter than wires of inner layer

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CHAPTER 28

HOUSEKEEPING AND SANITATION

Section: Hazard Evaluation and Control

Reference: 1926.25, 1926.51 (Subpart C – General Safety & Health)

Revised Date: 3/13/2023

Chapter 28

HOUSEKEEPING AND SANITATION

1. INTRODUCTION

The purpose of this policy is to establish requirements for maintaining proper housekeeping, availability of drinking water, and sanitation on jobsites.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. Project Managers or Superintendents are responsible for monitoring and implementation of this policy.

3. PROCEDURES

Housekeeping

- During the course of construction, alteration, or repairs, form and scrap lumber with protruding nails, and all other debris, shall be kept cleared from work areas, passageways, and stairs in and around buildings or other structures.
- Combustible scrap and debris shall be removed at regular intervals during the course of construction. Safe means shall be provided to facilitate such removal.
- Containers shall be provided for the collection and separation of waste, trash, oily and used rags, and other refuse. Containers used for garbage and other oily, flammable, or hazardous wastes, such as caustics, acids, or harmful dusts shall be equipped with covers. Garbage and other waste shall be disposed of at frequent and regular intervals.
- The storage of material must not create hazards. Bags, bundles, and other containers or materials must be stacked, blocked, interlocked, and limited in height so that they do not slide or collapse. Storage areas must be kept free from the accumulation of materials that may cause tripping, fire, explosion, or harboring of rats and other pests.

Potable Water

- An adequate supply of portable water shall be provided in all places of employment.
- Portable containers used to dispense drinking water shall be capable of being tightly closed and equipped with a tap. Water shall not be dipped from containers.
- Any container used to distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose.
- Where single service cups (to be used once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.
- Safe drinking water must be provided in all places of employment. The use of a common drinking cup is forbidden.

Sanitation

- Receptacles for waste food must be covered and kept in a clean and sanitary condition.
- Beverages or food must not be stored or consumed in a toilet room or in any area exposed to toxic materials.
- Restrooms must be kept in a clean and sanitary condition.
- Separate toilet facilities must be provided for each sex. If only one person at a time uses a toilet room and the door can be locked from the inside, separate facilities are not required.

  ⇨ Toilets shall be provided for employees according to the following table:

NUMBER OF EMPLOYEES	MINIMUM NUMBER OF FACILITIES
20 or Less	1 Toilet Seat & 1 Urinal
20 or More	1 Toilet Seat and 1 Urinal per 40 Workers
200 or More	1 Toilet Seat and 1 Urinal per 50 Workers

Washing Facilities

- Whenever employees are engaged in the application of paints, coatings, herbicides, or insecticides or other operations where contaminants may be harmful, adequate washing facilities must be readily available.
- Employees working with toxic substances should wash and, where necessary, change from contaminated clothing before eating, drinking, or smoking.

4. TRAINING REQUIREMENTS

Michael Kinder & Sons, Inc. Superintendents are to instruct their employees in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.

5. DEFINITIONS

Potable Water - Water that meets the quality standards prescribed in the US. Public Health Service, Drinking Water standards, or water that is approved for drinking purposes by the state or local authority having jurisdiction.

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CHAPTER 29

LEAD

Section: Hazard Evaluation and Control

Reference: 1926.62 (Subpart D – Occupational Health)

Revised Date: 3/13/2023

Chapter 29

LEAD

1. INTRODUCTION

To determine and define minimum company requirements and responsibilities for the development and implementation of a lead exposure control program designed to protect employees from occupational hazards during the performance of work activities.

This section applies to all construction work where an employee may be occupationally exposed to lead.

2. RESPONSIBILITIES

Whenever a potential for lead to be present is determined (either the construction manager's provide information or possible presence of lead is suspected) the construction project manager and / or construction superintendent will require an analysis of suspect materials, i.e., structural steel, door frames and other painted surfaces.

3. PROCEDURES

- Notify the safety director for assistance in determining appropriate action following a lead hazard analysis.
- Determine which materials that will be disturbed during demolition or renovation that may contain lead. Contact the building owner to determine the age of the building and other important information.
- Develop a written plan which identifies the suspected lead containing material to be analyzed.
- Determine if lead is present on these materials by utilizing the test kits and follow the specific instructions in their proper use.
- Document where the above testing confirms the presence of lead.
- Coordinate with the safety director the collection and lab analysis of samples of these materials containing lead. (Likely this will require the use of an Industrial Hygiene consultant). The lab results will provide information on the concentration of lead present.
- Develop a written plan which details what activities will disturb the lead containing material, i.e., welding, cutting, burning, manual demolition, corrosive blasting, etc.
- Conduct an initial assessment utilizing an Industrial Hygiene consultant who will collect personal and general area samples of airborne concentrations of lead during each different activity that disturbs lead containing material. During this collection period and prior to

receiving the test results it is necessary to assume that the exposure is above the PEL. All appropriate personal protective equipment shall be used. This step may not be necessary if there exists objective data (current to within 12 months) that demonstrates the intended work to be performed will not generate airborne concentrations at or above the action level of 30 ug/m^3 over an 8-hour period.

- Michael Kinder & Sons, Inc. does not anticipate that the type of work generally performed will create an employee exposure greater than the action level. Michael Kinder & Sons, Inc. is responsible for the verification of the representative air sampling.

Performing any task noted under "Exposure Monitoring" requires that we the employer communicate information concerning lead hazards according to our Hazard Communication Program including requirements of warning signs and labels, MSDS's and training on the hazards and means of controlling the hazards associated with lead exposure (Review 1926.62 Appendix A).

Exposure Monitoring

- Until Michael Kinder & Sons, Inc. performs an initial exposure assessment and documents that employees are not exposed above the PEL, we must treat employees performing certain operations as if they were exposed above the PEL. This means providing respiratory protection, protective work clothing and equipment, change areas, hand washing facilities, biological monitoring, and training as required by the standard for the following tasks:

  ⇨ Abrasive blasting, rivet busting, or welding, cutting, or burning on any structure where lead-containing coatings or paint are present;

  ⇨ Cleanup activities where dry expendable abrasives are used;

  ⇨ Power tool cleaning;

  ⇨ Manual demolition of structures (i.e., dry wall), manual scraping, manual sanding, and use of heat gun where lead-containing coatings or paints are present;

  ⇨ Lead burning;

  ⇨ using lead-containing mortar or spray painting with lead-containing paint; and

  ⇨ Any other task the employer believes may cause exposures in excess of the PEL.

Initial Assessment

- An initial assessment is required when performing the above tasks in the presence of lead.

- The purpose of this initial assessment is to determine if any employee may be exposed to lead at or above the action level.

- While the initial assessment is conducted and before the actual employee exposure is determined, Michael Kinder & Sons, Inc. will provide interim protection according to the following guidelines and Table 1 for Respiratory Protection:

  <u>Task:</u>

  ⇨ For manual demolition of structures
  ⇨ Heat gun applications (i.e., dry wall)

⇨ Power tool cleaning with dust
⇨ Manual scraping collection system
⇨ Manual sanding
⇨ Spray painting with lead paint

Assume not in excess of 10 x PEL or 500 ug/m^3
(Refer to Table 1 for Respiratory Protection).

Task:

⇨ Lead containing mortar is used
⇨ Lead burning
⇨ Rivet busting
⇨ Power tool cleaning without dust collection systems
⇨ Cleanup where dry expendable abrasives are used
⇨ Abrasive blasting enclosure movement and removal

Assume exposure in excess of 500 ug/m^3 but less than 1250 ug/m^3
(Refer to Table 1 for Respiratory Protection)

Task:

⇨ Abrasive blasting
⇨ Cutting and torch burning
⇨ Welding

Assume > 2500 ug/m^3
(Refer to Table 1 for Respiratory Protection)

During the initial assessment the following interim protection is required:

- Appropriate respiratory protection - refer to type of task and the assumed exposure level from the above listing. Then refer to Table 1 for appropriate respiratory protection.

- Appropriate personal protective clothing and equipment to prevent contamination of the employee and the employee's garments such as:

  ⇨ Coveralls or similar full bodywork clothing.
  ⇨ Gloves, hats and shoes or disposable shoe coverlets.
  ⇨ Face shields, vented goggles, or other equipment.

  NOTE: Need to provide clean protective clothing weekly (daily to employees who exposure is > 200 ug/m^3).

- All protective clothing is to be removed at the completion of the work shift in designated change areas and placed in a closed container to be sent for cleaning or disposal.
- Provide separate storage facilities for protective work clothing and for street clothes to prevent cross contamination.

- Contaminated clothing, which is to be cleaned, shall be properly labeled and the agency to clean the clothing shall be properly notified (contact the safety director for specific instructions).
- No food, beverages, tobacco products or cosmetics are allowed in areas where lead exposure is present.

- Washing facilities need to be available. Showers should be provided where feasible.

Employees shall wash their hands and face prior to eating, drinking, smoking, applying cosmetics, or before leaving for the day.

- The employer will make available initial medical surveillance to all employees occupationally exposed on any day to lead at or above the action level. This medical surveillance consists of blood sampling and analysis for leads and zinc protoporphyrin levels.

- While conducting the initial assessment every effort shall be made to limit the duration of work activity by any employee to one day or less.

Exceptions to requiring initial assessment testing:

- If there is lead exposure monitoring data obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the process, types of material, control methods, work practices, and environmental conditions used and prevailing in the current operations the safety director will determine if this data will satisfy the initial assessment testing requirements.

- If objective data, demonstrating that a particular product or material containing lead or a specific process, operation or activity involving lead cannot result in employee exposure at or above the action level during processing, use or handling, employers may rely upon such data instead of implementing initial monitoring.

What to do when the initial assessment results are determined:

- Negative Initial Determination - If the initial assessment indicates no employees are exposed to airborne concentrations of lead at or above the action level then a written record of such determination will be made to include: date of determination, location within the worksite, and name and social security number of each employee monitored.

- All control measures utilized during the initial assessment such as ventilation/housekeeping, and removal procedures must be maintained for the duration of the project even if the project results are less than the action level.

- A competent person will need to be aware of changes in the environment or work activity that may warrant further analysis.

  NOTE: Further exposure determination need not be repeated unless there is:

  ⇨ Change of equipment
  ⇨ Change of process
  ⇨ Change of control
  ⇨ Change of personnel
  ⇨ A new task

- Within 5 working days after the completion of the exposure assessment, the employer will notify each employee in writing of the results that represent that employee's exposure.

- Positive Initial Monitoring - If the air monitoring indicates any employee exposure at or above the action level, the employer will conduct monitoring which is representative of the exposure for each employee in the workplace who is exposed to lead.

- If the initial determination reveals employee exposure at or above the action level but below the PEL, the employer will perform monitoring at least every 6 months until at least 2 consecutive measurements taken at least 7 days apart, are below the action level, at which time monitoring may be discontinued. The safety director will make this decision on this

issue.

- If the initial determination reveals exposure above the PEL, the company will perform monitoring quarterly until at least 2 consecutive measurements taken 7 days apart, are below the PEL. If the tests remain at or above the action level then monitoring will be on a 6-month basis. If these tests are below the action level then monitoring may be discontinued. The safety director will make the decision on this issue.

Lead exposure exceeding the PEL

Compliance Program

- Prior to each job where a employee exposure exceeds the PEL, the employer must establish and implement a written compliance program to reduce their employee's exposure to the PEL or below. The compliance program must provide for frequent and regular inspections of job sites, materials, and equipment by a competent person. Written programs must be revised and updated at least every six months.

- Engineering, Work Practice, and Administrative Controls

  ⇨ The lead in construction standard requires employers to use - when feasible - engineering, work practice and administrative controls to reduce and maintain employee lead exposure to or below the PEL. When all feasible controls have been instituted but are not sufficient to reduce their employee's exposure to or below the PEL, they must be used to reduce exposure to the lowest feasible level **and supplemented by respirators.**

  ⇨ Engineering controls reduce employee exposure in the workplace either by removing or isolating the hazard or isolating the craft person from exposure through the use of technology. Under the lead in construction standard, mechanical ventilation may be used to control lead exposure. If used, the employer must evaluate, as necessary, the mechanical performance of the system in controlling exposure to maintain its effectiveness.

  ⇨ Work practice controls reduce the likelihood of exposure by altering the manner in which a task is performed. Safe work practices under the lead in construction standard include but are not limited to maintaining separate hygiene facilities (i.e., change rooms, showers, hand washing facilities, and lunch areas) and requiring proper housekeeping practices (i.e. cleanup methods).

Respirators

- The employer must provide respiratory protection and must ensure its use when:

  ⇨ An employee's exposure to lead exceeds the PEL;
  ⇨ Engineering and work practice controls are not sufficient to reduce exposure levels to or below the PEL; or
  ⇨ An employee requests a respirator.

- An appropriate respirator, which has been approved by the Mine Safety and Health Administration (MSHA) and NIOSH must be selected to protect against lead dust, fumes, and mists.
- Any employee required to wear a respirator will be evaluated and trained under the Respiratory Protection Program of the safety manual.

Medical Surveillance

The employer is required to make available medical exams to their employees exposed at or above the action level for more than 30 days per year. The medical surveillance program must be performed by or under the supervision of a licensed physician as follows:

- At least annually for each employee whose blood lead level within the past 12 months was at or above 40 ug/dl;
- When the employee has developed signs or symptoms commonly associated with lead intoxication;
- When the employee is pregnant; and
- When medically appropriate for employees removed from lead exposure due to a sustained health risk or following a final medical determination.

Medical exams must include the following information:

Detailed work and medical histories, with particular attention to past lead exposure (occupational and non-occupational), personal habits (smoking and hygiene), and past gastrointestinal, hematologic, renal, cardiovascular, reproductive, and neurological problems;

- a thorough physical exam, with particular attention to gums, teeth, hematologic, gastrointestinal, renal, cardiovascular, and neurological systems; evaluation of lung function if respirators are used;
- a blood pressure measurement; a blood sample and analysis to determine blood lead level, hemoglobin and hematocrit determinations, red cell indices, exam of peripheral smear morphology, zinc protoporphyrin, blood urea nitrogen, and serum creatinine;
- a routine urinalysis with microscopic exam; and
- any lab or other test the examining physician deems necessary.

Medical Removal Protection

- Superintendents must remove their employees with lead exposure at or above the action level each time:
  - ⇨ a periodic and follow-up blood sampling test indicates a blood lead level at or above 50 ug/dl; or
  - ⇨ a final medical determination indicates a detected medical condition that increases health risks from lead exposure.

4. TRAINING REQUIREMENTS

- Michael Kinder & Sons, Inc. will inform employees about lead hazards according to the requirement of OSHA's Hazard Communication standard for the construction industry, 29 CFR 1926.59, including, but not limited to, the requirements for warning signs and labels, material safety data sheets (MSDS's), and employee information and training.
- It is our policy that Michael Kinder & Sons, Inc. and subcontractors provide a training program and ensure participation by all their employees subject to exposure to lead or lead compounds at or above the action level on any day. Initial training must be provided prior to initial job

assignment. Training must be repeated at least annually and must include the following:

- ⇨ The content of the standard and its appendices;
- ⇨ The specific nature of operations that could lead to lead exposure above the action level;
- ⇨ The purpose, proper selection, fit, use, and limitations of respirators;
- ⇨ The purpose and a description of the medical surveillance program, and the medical removal protection program;
- ⇨ The engineering and work practice controls associated with employees' job assignments;
- ⇨ The contents of the compliance plan in effect;
- ⇨ Instructions to their employees that chelating agents must not be used routinely to remove lead from their bodies and when necessary only under medical supervision; and
- ⇨ The right to access records under "Access to Employee Exposure and Medical Records," 29 CFR 1910.20 and 29 CFR 1926.62.

- This training will be documented and provided in the job file and the employee personnel file.
- All materials relating to the training program and a copy of the standard must be made readily available to all their employees.
- Refer to Table 1 on page 9 for Respiratory Protection from Lead Aerosols.

Table 1 – Respiratory Protection for Lead Aerosols	
Airborne concentration of lead or condition of use	Required respirator[1]
Not in excess of 500 μg/m^3.	2 Mask air-purifying respirator with high efficiency filters. [2,3]
	2 Mask supplied air respirator operated in demand (negative pressure) mode.
Not in excess of 1,250 μg/m^3.	Loose fitting hood or helmet powered air purifying respirator with high efficiency filters.[3]
	Hood or helmet supplied air respirator operated in a continuous-flow mode - e.g., type CE abrasive blasting respirators operated in a continuous-flow mode.
Not in excess of 2,500 μg/m^3.	Full face piece air purifying respirator with high efficiency filters.[3]
	Tight fitting powered air purifying respirator with high efficiency filters.[3]
	Full-face piece supplied air respirator operated in demand mode.
	2 Mask supplied air respirator operated in a continuous-flow mode.
	Full-face piece self-contained breathing apparatus (SCBA) operated in demand mode.
Not in excess of 50,000 μg/m^3.	2 Mask supplied air respirator operate din pressure demand or other positive-pressure mode.
Not in excess of 100,000 μg/m^3.	Full-face piece supplied air respirator operated in pressure demand or other positive-pressure mode - e.g., type CE abrasive blasting respirators operated in a positive-pressure mode.
Greater than 100,000 μg/m^3 unknown concentration, or fire fighting	Full-face piece SCBA operated in pressure demand or other positive-pressure mode.
[1] Respirators specified for higher concentration can be used at lower concentrations of lead. [2] Full-face piece is required if the lead aerosols cause eye or skin irritation at the use concentrations. [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.	

5. DEFINITIONS

Action Level (AL) - An employee exposure, without regard to the use of respirators, to an airborn concentration of lead of 30 ug/m^3 averaged over an 8-hour period.

Permissible Exposure Limit (PEL) - The permissible exposure limit, or PEL, sets the maximum worker exposure to lead. No employee may be exposed to lead at airborne concentrations greater than 50 ug/m^3 averaged over an 8-hour period without the appropriate personal protective equipment.

Competent Person - One who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

Lead - Metallic lead, all inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.

CHAPTER 30

LIGHTING

Section: Hazard Evaluation and Control

Reference: 1926.56 (Subpart D - Occupational Health - Illumination)

Revised Date: 3/13/2023

Chapter 30

LIGHTING

1. INTRODUCTION

The purpose of this policy is to provide adequate lighting for employees and operations on Michael Kinder & Sons, Inc. jobsites.

2. RESPONSIBILITIES

The Safety Director shall evaluate field operations for compliance with safe work practices associated with electrical hazards.

The Safety Director shall ensure all employees working on Michael Kinder & Sons, Inc. job-sites have been properly trained.

3. PROCEDURES

- Fixture wires shall be suitable for the voltage, temperature, and location of use. A fixture wire that is used as a grounded conductor shall be identified.
- Temporary lights shall not be suspended by electrical cords unless the cords and lights are designed for this means of suspension.
- A box shall be used whenever a change is made to a raceway system or a cable system that is metal clad or metal sheathed.
- Flexible cords and cables shall be protected from damage.
- Branch circuits shall originate in a power outlet or panel-board. Runs of open conductors shall be located where the conductors will not be subject to physical damage, and the conductors shall be fastened at intervals not exceeding ten feet. No branch-circuit conductors shall be laid on the floor.
- Task lighting is used per the individual contractor's specifications.
- All jobsites will utilize Ground Fault Circuit Interrupters (GFCI) to protect all craft persons on all projects.
- General lighting shall be of sufficient illumination to maintain a minimum of five (5) foot-candles.

4. TRAINING REQUIREMENTS

Electrical hazards shall be addressed in toolbox talks, safety newsletters, and daily work instructions (at a minimum).

5. DEFINITIONS

Competent Person - A person who has extensive knowledge, training, and experience enabling successful demonstration of ability to solve or resolve problems relating to the subject matter, the work, or the project.

General Lighting - Construction areas, ramps runways, corridors, offices, shops, and storage areas shall be lighted to not less than the minimum illumination intensities (minimum of five (5) foot-candles).

Grounded - Connected to earth or to some conducting body that serves in place of the earth.

Ground-Fault Circuit Interrupter - A device for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the over-current protective device of the supply circuit.

Guarded - Covered, shielded, fenced, enclosed, or otherwise protected by means of suitable covers, casings, barriers, rails, screens, mats, or platforms to remove the likelihood of approach to a point of danger or contact by persons or objects.

Task Lighting - Additional lighting to be used if general lighting is not sufficient. Examples include but are not limited to tri-pods and lamps.

Temporary Lighting - Electrical continuity of metal raceways, cable armor, and other metal enclosures for conductors shall be metallically joined together into a continuous electric conductor and shall be so connected to all boxes, fittings, and cabinets as to provide effective electrical continuity.

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CHAPTER 31

LOCKOUT / TAGOUT

Section: Hazard Evaluation and Control

Reference: 1926.417 (Subpart K - Lockout / Tagout - Electrical)

Revised Date: 3/13/2023

Chapter 29

LOCKOUT / TAGOUT

1. INTRODUCTION

To prevent the activation of equipment when it is installed, repaired or being adjusted and to control hazardous energy sources by means of lockout / tagout procedures.

2. SCOPE

Valves, switches and other mechanical or electrical equipment must be properly locked and tagged out of service to prevent the system from operating while installation, maintenance or repair work is in progress.

3. RESPONSIBILITIES

- The Safety Director, Project Manager, and Superintendent shall survey field operations to determine if workers are required to perform tasks that may expose them to hazards associated with energized equipment.

- The program procedures must clearly outline the scope, purpose, authorization, rules, and techniques to be used for the control of hazardous energy, and the methods of compliance including:

  ⇨ A specific statement of the intended use of the procedures.
  ⇨ Steps for shutting down, isolating, blocking, and securing machines or equipment to control hazardous energy.
  ⇨ Steps for the placement, removal, and transfer of lockout or tagout devices and the responsibility for them.
  ⇨ Requirements for testing a machine or equipment to determine and verify the effectiveness of lockout/tagout devices, and other energy control measures.

- The energy control program also must include procedures for conducting periodic inspections of the program (at least annually), to ensure that it meets the standard's requirements.

- Michael Kinder & Sons, Inc. must ensure that before any of the employees perform any servicing or maintenance on a machine or equipment, the machine or equipment is isolated and rendered inoperative.

- The Safety Director will ensure that employee training has been accomplished; written certification will show employee names and dates of training.

4. PROCEDURES

Lockout/Tagout procedures for all equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device when it is locked or tagged out.

Application

S**TEP 1: Preparation**

- Lockout and tagout procedures should only be carried out by "authorized employees". Before implementing the lockout/tagout procedure you must fully understand:

  ⇨ the type and magnitude of the energy to be controlled
  ⇨ the methods of controlling the hazardous energy
  ⇨ the means of controlling the hazardous energy

STEP 2: Notification

- Before the application of lockout or tagout devices, notify all affected personnel using the ten-day notice form provided by the owner in the MCOR requirements. Tell craft personnel that the energy control procedure is going to be used and the reasons why.

STEP 3: Shutdown

- Shut down equipment in an orderly manner. This may simply mean to turn off the equipment. When the equipment is part of a production or manufacturing process all parts of the operation must be considered. An orderly shutdown will avoid increased hazards when the equipment is de-energized.

STEP 4: Isolation

- Locate all of the energy isolating devices. Operate the energy isolating devices so that the equipment is completely isolated from the energy source. When complete, all devices will be in the "safe" or "off" position.

STEP 5: Application of Locks and Tags

- Attach locks and/or tags to the energy-isolating device so the device is held in the "safe" or "off" position. Separate locks or tags must be used for each authorized employee. Tags must be securely attached to the energy-isolating device so that they can not be accidentally detached during use. If you are not able to attach the tag directly to the energy isolating device, put it as close as safely possible. Place the tag in a position that will be immediately obvious to anyone attempting to operate the device.

STEP 6: Control Stored and Residual Energy

- Relieve, disconnect and restrain all stored or residual energy. Remember, hazardous energy can be found in springs, elevated machine members, capacitors, rotating flywheels, hydraulic systems, air, gas, steam and water pressure. This energy must be dissipated or restrained. Some common methods to restrain or dissipate stored energy are repositioning, blocking, and bleeding down systems.

STEP 7: Verification

- Check to be sure that all personnel are in a safe location. Verify that the equipment is

properly isolated and all hazardous energy is safely controlled. Operate push buttons and other controls to verify isolation. Check circuits with electrical meters. Inspect springs, pressure gauges, the location of moving parts and other sources of stored energy. Return operating controls to the "neutral" or "off" position after the test. Once you are absolutely sure the energy is isolated and safely controlled, proceed with the maintenance and service activities. WARNING: Some machinery and equipment can re-accumulate stored energy even after the system has been de-energized. If there is a possibility of stored energy building to a hazardous level, continue verification until maintenance or service is completed or until the possibility of accumulation no longer exists.

Release of Energy Controls

STEP 1: Inspection

- Inspect the work area. Be sure all non-essential items such as tools, parts, and cleaning supplies have been removed. Check to be sure that all machine and equipment components are ready for operation. Be certain all affected employees have been safely positioned or removed.

STEP 2: Notification

- Notify all affected employees that the lockout/tagout devices are being removed.

STEP 3: Remove Locks And Tags

- Remove locks and tags. The authorized employee who applied them should only remove the lockout or tagout devices.

- If the authorized employee who applied the lockout or tagout device is not available to remove it, that device may be removed under the direction of the employer, provided that specific procedures and training for such removal have been developed, documented, and incorporated into the employer's energy control program. The employer must demonstrate that the specific procedure provides equivalent safety to the removal of the device by the authorized employee who applied it.

5. TRAINING REQUIREMENTS

General Training

- Authorized employees must be trained to recognize:

  ⇨ Applicable hazardous energy sources;
  ⇨ The type and magnitude of the energy present in the workplace; and
  ⇨ The methods and means of necessary for energy isolation and control.

- All other employees, whose work operations may be in an area where energy control procedures may be used, must be instructed about the energy control procedure. Training should emphasize that any attempts to restart or reenergize machines or equipment that are locked or tagged out is prohibited.

Tags

- When tagout systems are used, employees also must be trained in the limitations of tags. Training must convey the following information:

- Tags are essentially warnings affixed to energy isolating devices, and do not physically restrain energy controls as do locks.

- Only an authorized person may remove a tag that is attached to an energy isolation means. Tags must never be bypassed, ignored, or otherwise defeated.

- Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations may be in the area in order to be effective.

- Tags must be made of materials that will withstand the environmental conditions encountered in the workplace.

- Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

- Tags must be securely attached to an energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

Retraining

- Retraining must be provided for all authorized and affected employees whenever there is a change in their job assignments; a change in machines, equipment, or processes that present a new hazard; or when there is a change in the energy control procedures.

- If during an inspection a contractor employer finds that there are deviations from or inadequacies in their employees' knowledge or use of the energy control procedures, employees must be retrained.

- Retraining must reestablish employee proficiency and introduce new or revised control methods or procedures.

6. DEFINITIONS

Affected Employee - An employee whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

Authorized Employee - A person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing, servicing, or maintenance covered under this section.

Capable of being Locked Out - An energy isolating device is capable of being locked out if it has a hasp or other means of attachment to which, or through which, a lock can be affixed, or it has a locking mechanism built into it.

Energy Isolating Device - A mechanical device that physically prevents the transmission or release or energy, including but not limited to the following: a manually operated electrical circuit breaker, a disconnect switch, a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy.

Energy Source - Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

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

Lockout Device - A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

Servicing and/or Maintenance - Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. The activities include lubrication, cleaning or un-jamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or startup of the equipment or release of hazardous energy.

Tagout Device - A prominent warning device, such as a tag and a means of attachment, which can be securely fastened to an energy isolating device in accordance with an established procedure to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

CHAPTER 32

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Section: Hazard Evaluation and Control

Reference: 1926.95 (Subpart E - Personal Protective Equipment)

Revised Date: 3/13/2023

Michael Kinder & Sons, Inc. Safety Manual

Chapter 32

PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. INTRODUCTION

The purpose of this policy is to provide safety requirements and policy guidance on the usage of personal protective equipment (PPE).

2. SCOPE

This section is applicable to all employees who perform tasks requiring PPE to include: equipment for eyes, face, head, arms, legs, clothing and protective shields. All safety equipment must meet American National Standards Institute (ANSI) Standards and shall carry markings of approval.

3. RESPONSIBILITIES

Superintendents will verify that a job hazard analysis has been done through a written certification that identifies the workplace evaluated, the person certifying the evaluation, and the date of the assessment. These job hazard analyses apply specifically to OSHA regulations covering eye and face protection, head protection, foot protection, and hand protection.

- Job hazard analyses will determine whether employees are exposed to hazardous conditions. If hazardous conditions exist, or are likelyto exist, it is imperative to:

  ⇨ Choose the type of PPE that will protect affected employees;

  ⇨ Notify affected employees about the kind of equipment needed;

  ⇨ Choose PPE that properly fits each affected employee; and

  ⇨ Train each affected employee in the usage and care of PPE.

- All PPE will be kept clean and in good condition. **Any defective or damaged PPE shall not be used.** In cases where employees provide their own equipment, Superintendents will ensure that the equipment is of the right typeand is properly maintained.

- Personal protective equipment will not be used as a substitute for instituting engineering or administrative controls in a hazardous workplace. If and when controls cannot be implemented, or if they are in the process of being implemented, appropriate personal protective equipment will be provided.

4. PROCEDURES

Eye and Face

- Safety glasses with side shields are to be worn **at all times**. Employees who wear prescription glasses must have eye protection that meet ANSI Z87.1 Standards.

- Employees must use eye and face protection when they are exposed to hazards such as flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. The protective equipment must be marked to identify the manufacturer.

- Protective eye and face devices bought after July 5, 1994 must comply with ANSI Z87.1 - 1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection."

- Equipment bought before July 5, 1994 must comply with ANSI Z87.1-1968, "USA Standard for Occupational and Educational Eye and Face Protection."

- In order to protect employees from harmful light radiation, each craft person must use equipment with filter lenses that have a shade number appropriate for the work being performed. Different work operations will require different protective shade levels.

- In general, eye protection and face shields must be appropriate for the particular hazards to which the employees are exposed. Visors are appropriate for those operations where splashing is a hazard. In high heat environments, a special wire screen visor may be worn that allows the heat to dissipate and permits maximum vision for the wearer. Goggles are recommended in situations involving dust, flying particles, sparks, noxious gases, corrosive liquid splashes, and radiation from welding.

- Cup goggles provide added protection where there is the combined hazard of flying particles and severe impact. Some cup goggles also provide ventilation, protection against dust hazards in cement plants, foundries, and compressed air operations. When worn in conjunction with a face shield, cup goggles provide good protection against acids, caustics, and chemicals, and are recommended for abutting, hot metal casting, and hot metal bath dipping. Face shields are not recommended for use by themselves as basic eye protection since they do not provide impact protection; instead they should be worn over basic eye protection.

- Eye and face equipment should be comfortable, easy to clean, and capable of being disinfected. The fit must be snug enough to protect properly and not restrict the movement of the wearer.

- A cleaning station should be conveniently located where eye protection is used extensively, and the station should be supplied with defogging materials, wiping tissues, and a trash receptacle.

- Eye protection should be cleaned regularly and checked daily for cracks, scratches, pits, or fading. Badly chipped, scratched, or pitted lenses indicate that the surface is broken and should not be used. Safety glasses should be evaluated periodically to ensure that the optical density provided is still at the desired wavelength.

- In addition to providing employees with appropriate eye protection, easily accessible emergency eyewash stations should be provided.

Head

- Hard hats are to be worn on the head at all times throughout all phases of this project. Hard

hats are to be worn with the bill protecting the face and in accordance with pertinent safety standards.

- Hard hats bought after July 5, 1994 must comply with ANSI Z98-1986, "American National Standard for Personal Protection - Protective Headwear for Industrial Workers-Requirements."

- Hard hats purchased before July 5, 1994 must comply with the ANSI Z98.1-1969, "American National Standard Safety Requirements for Industrial Head Protection."

Foot

- Hard-soled leather shoes are to be worn at all times. Steel-toed boots are recommended but not mandatory.

- Protective footwear purchased after July 5, 1994 must comply with ANSI Z41-1991, "American National Standard for Personal Protection - Protective Footwear." Protective footwear purchased before July 5, 1994 must comply with ANSI Z41.1-1967, "USA Standard for Men's Safety-Toe Footwear."

- Concrete/masonry workers shall wear rubber protective boots when applying cement.

Hand

- Leather gloves must be worn during demolition work. Hazards from which hands need to be protected include skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperatures.

High Visibility

- High visibility attire must be worn at all times.

Electrical Protective Equipment

- Electrical protective equipment, such as insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber, must meet the following requirements:

  ⇨ Blankets, gloves, and sleeves must be produced without seams and must be marked according to their class. Markings on gloves must be on the cuff.

  ⇨ Equipment must be capable of withstanding the a-c proof-test voltage or the d-c proof-test voltage specified by OSHA. The proof-test must reliably show that the equipment can withstand the voltage involved in the work. The test must be applied continuously for 3 minutes for equipment other than matting and for 1 minute for matting. Gloves must be able to withstand the a-c proof-test after a 16-hour soak.

  ⇨ The equipment must be free of harmful irregularities and must be kept in safe and reliable condition.

- Insulating equipment must be inspected before use every day and immediately after any incident that might cause damage to it. Insulating gloves must be given an air test in addition to a daily inspection.

- Protector gloves need to be worn over insulating gloves. They are not necessary, however, with Class O gloves in situations requiring a high level of dexterity, or when the employer can show that the possibility of damage to the gloves is small and the class of glove being used is

one class higher than that required for the voltage to which the employee is exposed.

5. TRAINING REQUIREMENTS

- Michael Kinder & Sons, Inc. employees should be trained to know the following:

  ⇨ When personal protective equipment is necessary

  ⇨ What equipment is necessary

  ⇨ How to put on, take off, and wear the equipment

  ⇨ The useful life of the equipment, and how to maintain and dispose of it

  ⇨ The limitations of the equipment

- Before using the equipment in a work situation, the employees must show that they can use it properly. If it appears that a contractor employee does not have the requisite skill in using the equipment, he/she must be retrained. Retraining employees must be done when changes in the workplace or in the equipment make past training obsolete.

- Written certification must show that each affected employee has been trained and understands the applicable PPE training. The certification will include the name of each employee trained, the date of the training, and the subject of the certification.

- The training provisions apply specifically to IOSHA's regulations covering eye and face protection, head protection, foot protection, and hand protection.

7. DEFINITIONS

PPE - Personal Protective Equipment.

Foot & Leg Protection - Fully extended boots, which provide protection for the legs. Safety-toe footwear for contractor employees shall meet the requirements and specifications in American National Standard for Men's Safety-Toe Footwear, Z41.1-1967. ANSI certified footwear is typically available through manufacturers and distributors of safety related equipment.

Body Protection - Fire-resistive coats and protective trousers shall be at least equivalent to the requirements of the National Fire Protection Association (NFPA) standard NFPA No. 1971-1975, "Protective Clothing for Structural Fire Fighting."

Hand Protection - Protective gloves or gloves system that will provide protection against cut, puncture, and heat penetration.

Head, Eye, and Face Protection - Head protection shall consist of a protective head device with ear flaps and chin strap which meet the performance, construction, and testing requirements of the National Fire Safety and Research Office of the National Fire Prevention and Control Administration. Protective eye and face devices shall be used when performing operations where the hazards of flying or falling materials that may cause eye and face injuries are present.

Back Protection - Support braces do provide additional protection against strains to the lower back and are recommended during tasks that require heavy or awkward lifting.

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CHAPTER 33

POWERED INDUSTRIAL TRUCKS

Section: Hazard Evaluation and Control

Reference: 1926.600 (Subpart O - Motor Vehicles)

Revised Date: 3/13/2023

Chapter 33

FORKLIFT SAFETY

1. INTRODUCTION

The purpose of this policy is to provide requirements and responsibilities for driver, traffic and vehicle controls to reduce personal injury, vehicle and property damage.

2. SCOPE

This section applies to all employees on all projects, and to vehicles used for business purposes.

3. RESPONSIBILITIES

- All motor vehicle operators will wearseat belts (if equipped - ROPS).
- Superintendent/foreman shall ensure that all motor vehicle operators are properly licensed/certified.
- Motor vehicle operators will have in their possession applicable vehicle licenses at all times.
- No employee is allowed to operate a forklift unless he/she has beentrained.

4. PROCEDURES

- Only licensed, trained and authorized drivers will operate a powered vehicle.
- Trucks shall not be driven towards or up to anyone standing in front of a fixed object.
- Personnel shall not be permitted to ride on vehicles unless a designated safe place is provided.
- Keep arms and legs from between the uprights of a fork truck.
- Keep arms, legs and all parts of the body inside the running lines of buggies, tractors, and trucks.
- When a fork truck is left unattended, the load engaging means will be fully lowered, controls neutralized, the power off, and brake set. If parked on an incline, the wheels shall beblocked.
- A fork truck may be left with engine running if the operator is within 15 feet and in view of the truck, provided the load engaging means is lowered, the controls in neutral, and the brake is set to prevent movement.
- Forks of trucks shall not be used for opening and closing freight doors. Approved fork attachments are permissible.
- When loading or unloading railroad cars, trucks and trailers; set brakes and properly place wheel chocks to prevent movement.

- Fixed jacks will be used when a semi trailer is disconnected from the tractor.
- When lifting personnel on fork truck, use an approved safety platform or cage only when it is firmly secured to the lifting carriage.
- The right of way shall be yielded to ambulances, fire trucks, and other emergency vehicles.
- If the load carried obstructs the view of the driver, the driver shall be required to travel with the load trailing. When this is not possible, a flag person will be used. The flag person shall always be in sight of the driver and use hand and arm signals to direct the driver. The driver shall stop the vehicle anytime the flag person is not in clear view.
- Railroad tracks will be crossed by fork trucks at an angle whenever possible.
- When ascending or descending grades, the loaded fork truck will be driven with the load upgrade.
- Never pack vehicles or set equipment and materials closer than six feet from the nearest rail or railroad track.
- Stunt driving and horseplay will not be permitted.
- Slow down on wet or slippery surfaces.
- Fuel tanks shall not be filled while engine is running.
- Report all accidents involving personal injury, equipment, or material damage to your foreman. Do not remove your vehicle from the scene of an accident without proper authorization.
- Vehicles will be checked prior to use on a given shift to assure safe operating condition of brakes, parking brakes, steering mechanism, horn, and tires.
- Vehicles without lights will not be driven on streets after dusk.
- Vehicles will stop before entering building.
- Vehicles will be checked prior to use to assure safe operating condition.
- Vehicles without lights will not be driven on any street after dusk.
- Back up alarms will be installed on all bi-directional equipment.

5. INSPECT BEFORE USE

- Inspect the forklift thoroughly before operating it the first time each day.
- Any needed repairs must be completed before the forklift can be used.
- When inspecting check each of the following:

  ⇨ Tires
  ⇨ Lights
  ⇨ Fuel System
  ⇨ Battery

⇨ Steering
⇨ Controller
⇨ Horn
⇨ Lifting System
⇨ Brakes
⇨ Back-up Alarm

6. TRAINING REQUIREMENTS

- Contractor personnel operating powered industrial trucks shall be properly trained and licensed.

- Training shall consist of; formal instruction, practical training and operator evaluation.

  ⇨ Formal Instruction includes lecture, discussion, videos and written material.
  ⇨ Practical Training involves instructor demonstration and trainee exercises.
  ⇨ Operator Evaluation requires a critique to be done by the instructor.

- All trainers must have the knowledge and ability to teach and evaluate operators.

- Training program shall list all minimally-required items including; load capacity, instructions, distance, refueling/recharging, ramps, visibility, balance/counter-balance, etc.

- Certification must include operator name, training date, evaluation date and trainer name.

- Recertification will be required at least every three years.

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CHAPTER 34

RESPIRATORY PROTECTION

Section: Hazard Evaluation and Control

Reference: 1926.103 (Subpart E – Personal Protective Equipment)

Revised Date: 3/13/2023

Michael Kinder & Sons, Inc. Safety Manual

Chapter 34

RESPIRATORY PROTECTION

1. INTRODUCTION

The purpose of this policy is to provide employees with information on the safe and proper use of respirators.

2. SCOPE

This procedure applies to Michael Kinder & Sons, Inc. operations and employees who may be required to use respiratory protection in the course of their employment.

3. RESPONSIBILITIES

- The Safety Director will maintain written medical, operating, and training procedures for the safe use of respirators in dangerous atmospheres and monitors the employer's respiratory protection program frequently.

- The Superintendents will ensure that craft persons use appropriate respiratory equipment applicable to the hazardous atmosphere present and shall consult with the Safety Director in the selection of respirators.

- Employees will follow all procedures related to the safe use of respirators including but not limited to:

  ⇨ Selection of respiratory equipment.
  ⇨ Maintenance of respiratory equipment.
  ⇨ Personal hygiene (sharing).

4. PROCEDURES

- When working in areas where the potential exists for overexposure to air contaminated with harmful dusts, fogs, mists, gases, smokes, sprays, or vapors, employees will be required to wear the appropriate respirator.

- Employees may be required to wear respiratory protection as part of their job, must be medically qualified by a physician to do so. Because of this, pulmonary function tests will be required for each employee on an annual basis. Additionally, the employee will complete the Respiratory Form questionnaire to assist in the medical evaluation. This form is to be made part of the affected employee's medical file.
- All job classifications; operations and/or areas where respiratory protection devices must be used to prevent employees' overexposure against specific health risks will be identified. This may be accomplished by one more of the following:

⇨ Review of company operations, processes and procedures.
⇨ Industrial hygiene monitoring results.
⇨ Information contained on Material Safety Data Sheets (MSDS).

Air Purifying

- Air purifying respirators only "purify" contaminants from the ambient air. They add NO oxygen. Because of this, air purifying respirators can only be used when the identify and concentration of the contaminant is known, the oxygen content in the air is at least 19.5%, there is no periodic monitoring of the work area, the respirator assembly is approved for protection against the specific contaminant and concentration level, and the type of respirator has been fit-tested on the employee.

- Disposable Dust Respirators - Approved disposable dust respirators provide protection against nuisance dusts and sometimes asbestos. It is difficult to fit-test, obtain, and maintain a good face-piece to face seal.

- Half-Mask Respirators - Two cartridges are used to filter the air and discarded once the use of limits are reached. The half-mask respirators have approved cartridges for pesticides, organic vapors, dusts, mists, fumes, acid gases, ammonia, and several combinations.

- Full-Face Respirator -The entire face is protected by this form of respirator. It gives 10 times the protection of a half-mask. The full-faced mask also uses cartridges or canisters, which filter out hazardous contaminants from the air. Filters are available for the same materials as for the half-mask, with several additional ones available.

- Powered Respirators - Powered respirators give no breathing resistance. They are used with half, full-face masks, special helmets, airline supplied or self-contained breathing apparatus (SCBA).

Maintenance and Care

Inspection

Respirators must be inspected regularly (during cleaning and on a monthly basis) and all worn or defective parts shall be replaced. Respirator inspection shall include, but will not be limited to:

- Inspect the inside sealing surface for cracks or distortions (if they are found, the face piece must be disregarded);

- The valves must be inspected for severe distortion which would cause them not to seal properly (faulty valves must be replaced);

- If headbands are severely over-stretched, frayed or mutilated, they must be replaced;

- Inspect to insure that the filter element is secured tightly to the face piece.

- Respirators shall be inspected routinely before and after each use.

Cleaning

Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure the respirator is clean and in good operating condition. Specific information and procedures for cleaning and disinfecting of respirators is included in the Respiratory Form.

Repair

Only competent and/or qualified persons shall do replacement or repair with specific parts designed for the respirator.

Storage

- Shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals.
- Store the respirator so that the face-piece and exhalation valves rest in a normal position. Do not hang the respirator by its straps.
- Respirators placed at workstations for emergency use should be quickly accessible at all times and stored in compartments built for that purpose. The compartments should be clearly marked.

Selection

Potential areas of exposure previously identified shall be reviewed by Michael Kinder & Sons, Inc. to determine appropriate respiratory protection.

Only a competent person who has been trained will make proper selection of respiratory protection on the specific hazards and the requirements of the standard. Respirators shall be selected only after each of the following has been considered:

- Identity of the substance(s) present in the work environment.
- The physical state of the contaminant.
- The PEL and toxicity of the substance.
- Exposure measurements showing the concentrations likely to be encountered.
- The protection factor listed for the respirator.
- The possibility of an oxygen deficient atmosphere.
- Any limitations or restrictions applicable to the types of respirators being considered.

Selection of respirators shall be made in accordance with the most current American National Standard Institute Practices for Respiratory Protection Z88.2.

Identification of gas mask canisters for half or quarter mask respirators being used can be determined on the label or the color-coding scheme as described in the OSHA standards.

Use

Craft personnel required to wear respiratory protection must be clean-shaven, as facial hair will not allow a proper seal.

Every respirator wearer shall perform the following test before using the respirator:

- Close off the inlet ports of the respirator with the palms.
- Inhale so that the face piece collapses slightly and hold breath for 10 seconds.

- If the face piece remains collapsed and no inward leakage is noticed, the fit is considered tight adequate.

5. TRAINING REQUIREMENTS

All employees required to use respiratory protective equipment must be instructed in the proper use of the equipment and its limitations. Employees should have an opportunity to handle the respirator, wear it in normal air for a period of time to become familiar with it and practice adjusting it.

Training will be performed upon initial employment and annually thereafter for those employees who may be required to wear respirators as part of their normal job. This training shall include at a minimum:

- Nature of the respiratory hazard and what may happen if the respirator is not used properly.
- Engineering and administrative controls being used and the need for the respirator as added protection.
- Reason for the selection for a particular respirator.
- Proper use and limitations of the respirator.
- Proper maintenance and storage.
- Proper method for handling emergency situations.
- Fit-Testing.

Qualitative Fit Testing - Accurate results rely on the individual being tested. Each individual being tested has different sensory levels for detection of a smell or a taste. Irritant smoke may be considered the best option for qualitative testing but it can cause respiratory problems in some individuals who are more sensitized.

- Choose appropriate testing media:
  - ⇨ Irritant Smoke
  - ⇨ Isoamyl Acetate (banana oil)
  - ⇨ Saccharin
  - ⇨ Other
- Choose proper mask.
- Perform a negative or positive fit check.
- Attach High Efficiency Particulate Air (HEPA) filters to chosen face mask.
- Allow the user to smell a weak concentration of irritant smoke.
- In a separate room or fit test booth:
  - ⇨ Activate smoke tube.
  - ⇨ Begin with only a small amount of smoke.

⇨ Allow user to adjust the mask if they smell smoke.
⇨ Slowly add more smoke and ask the test subject to perform the following tests for one minute each:

- Deep breathing
- Turn head side-to-side while breathing normally
- Nodding head up-and-down while breathing normally
- Talking
- Jogging in place
- Normal breathing
- Have the user read the Rainbow Passage below

RAINBOW PASSAGE

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and it ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- The test subjects may want to keep his eyes closed during this smoke test. If so, have them talk about anything they like.

- If the test subject does not smell smoke, they have passed the test and can be allowed to wear that in approved atmospheres.

- Fill out test form and card.

Quantitative: Relies on a sensitive device inside the face piece which records actual numerical levels of contaminants inside and outside of the respirator.

6. DEFINITIONS

Respiratory Hazards - The normal atmosphere consists of 78% nitrogen, 21% oxygen, 0.9% inert gases and 0.04% carbon dioxide. An atmosphere containing toxic contaminants, even at very low concentrations, could be a hazard to the lungs and body. A concentration large enough to decrease the percentage of oxygen in the air can lead to asphyxiation, even if the contaminant is an inert gas.

Oxygen Deficiency -The body requires oxygen to live. If the oxygen concentration decreases, the body reacts in various ways. Death occurs when the concentration is decreased to 6%.

- Physiological effects of oxygen deficiency are not apparent until the concentration decreases to 16%. The various regulations and standards dealing with the respirator use recommends that concentrations ranging from 16 - 19.5% be considered indicative of an oxygen deficiency. Such numbers take into account individual physiological response, errors in measurement, and other safety consideration. In hazardous material response operations 19.5% oxygen in air is considered the lowest "safe" working concentrations.

- An oxygen-enriched atmosphere is also recognized as a physical hazard and an explosion hazard. Enriched oxygen atmospheres ($0_2 \exists$ 23%) increase the likelihood of combustion and possible explosion.

Aerosols - Aerosol is a term used to describe fine Particulates (solid or liquid) suspended in air.

Particulates ranging in diameter from 50 to 30 microns are deposited in the nasal and pharyngeal passages. The trachea and smaller conducting tubes collect Particulates 1-5 microns in diameter. For Particulates to diffuse from the bronchioles into alveoli they must be less than 0.5 microns in diameter. Larger Particulates reach the alveoli due to gravity. The smallest Particulates may never be deposited in the alveoli and so may diffuse back into the conducting tubes to be exhaled.

Aerosols can be classified in two ways: by their physical form and origin and by the physiological effect on the body.

Physical Classification

- Mechanical Dispersoid: liquid or solid particle mechanically produced.
- Condensation Dispersoid: liquid or solid particle often produced by combustion.
- Spray: visible liquid mechanically dispersed.
- Fume: extremely small solid condensation Dispersoid.
- Mist: liquid condensation Dispersoid.
- Fog: mist dense enough to obscure vision.
- Smoke: liquid or solid organic particles resulting from incomplete combustion.
- Smog: mixture of smoke and fog.

Physiological Classification

- Nuisance: no lung injury but proper lung functioning inhibited.
- Inert Pulmonary Reaction Causing: non-specific reaction.
- Pulmonary Fibrosis Causing: effects ranging from nodule production in lungs to serious diseases such as asbestosis.
- Chemical Irritation: irritation, inflammation, or ulceration of lung tissue.
- Systemic Poison: diseases in other parts of the body.
- Allergy-Producing allergic hypersensitivity reactions such as itching or sneezing.

Gaseous Contaminants - Gases and vapors are filtered to some degree through the respiratory tract. The conducting tubes in route to the alveoli absorb soluble gases and vapors. Not all will be absorbed and so along with insoluble gases, finally diffuse into the alveoli, where they can be directly absorbed into the bloodstream. Gaseous contaminants can be classified chemically and physiologically.

Chemical Classification:

- Acidic: acids react with water to form acids.
- Alkaline: bases react with water to form bases.
- Organic: compounds ranging from methane to chlorinated organic solvents.
- Organometallic: organic compounds containing metals.
- Hydrides: compound in which hydrogen is bonded to another metal.
- Inert: no chemical reactivity.

Physiological Classification:

- Irritants: corrosive substances, which injure and inflame tissue.
- Asphyxiate: substances that displace oxygen or prevent the use of oxygen in the body.
- Anesthetics: substances, which depress the central nervous system, causing a loss of sensation or intoxication.
- Systemic Poisons: substances that can cause disease in various organ systems.

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CHAPTER 35

SCAFFOLDING

Section: Hazard Evaluation and Control

Reference: 1926.450 (Subpart L - Scaffolding)

Revised Date: 3/13/2023

Chapter 35

SCAFFOLDING

1. INTRODUCTION

The purpose of this policy is to establish minimum requirements and responsibilities for the proper erection and use of scaffolding. Michael Kinder & Sons, Inc. will provide adequate materials and training to ensure safe working conditions while working from scaffolds, and during the erection and dismantling of scaffolds. All scaffolding shall conform to IOSHA/OSHA requirements in sections 1926.450 – Subpart L.

This chapter applies to all employees and operations.

2. RESPONSIBILITIES

The “Competent Person” is responsible for training employees who will be involved in the erection and dismantling of scaffolding.

The “Competent Person” is responsible for determining the feasibility and safety of providing fall protection for personnel erecting or dismantling scaffolding.

3. PROCEDURES

General Requirements

All scaffolds are to conform to the appropriate general requirements listed here along with the additional requirements listed under the section for the specific type of scaffold being used either supported scaffolds or suspension scaffolds.

Capacity

- Scaffolds and scaffold components shall be capable of supporting, without failure, its own weight and at least 4 times the maximum intended load.
- Each suspension rope, including hardware used on non-adjustable suspension scaffolds shall be capable of supporting without failure, at least 6 times the maximum intended load.
- The stall load of any scaffold hoist shall not exceed 3 times its rated load.
- Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design.

Scaffold Platform Construction

- Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports.
- Each platform unit shall be installed so that the space between adjacent units and the space

between the platform and the uprights is no more than 1 inch wide, except where the employee can demonstrate that a wider space is necessary.

- Each scaffold walkway shall be at least 18 inches wide.

- The front edge of all platforms shall not be more than 14 inches from the face of the work, unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used.

- Each end of a platform, unless cleated or otherwise restrained by hooks or equivalent means, shall extend over the centerline of its support at least 6 inches.

- Each end of a platform 10 feet or less in length shall not extend over its supports more than 12 inches.

- Each platform greater than 10 feet shall not extend over its support more than 18 inches.

- On scaffolds where platforms are abutted to create a long platform, each abutted end shall rest on a separate support surface.

- On scaffolds where platforms are overlapping to create a long platform, the overlap shall occur only over supports, and shall not be less than 12 inches unless the platforms are nailed together or otherwise restrained to prevent movement.

- At all points of a scaffold where the platform changes direction, any platform that rests on a bearer at an angle other than a right angle shall be laid first, and platforms which rest at right angles over the same bearer shall be laid second.

- Wood platforms shall not be covered with opaque finishes.

- Scaffold components manufactured by different manufacturers shall not be intermixed unless the components fit together without force and the user maintains the scaffold's structural integrity. Scaffold components manufactured by different manufacturers shall not be modified in order to intermix them unless a competent person determines the resulting scaffold is structurally sound.

- Scaffold components made of dissimilar metals shall not be used together unless a competent person has determined that the galvanic action will not reduce the strength of any component to a level below that which is required by the standard.

Access

- When scaffold platforms are more than 2 feet above or below a point of access, portable ladders, hook-on ladders, attachable ladders, stair-towers, ramps, walkways, integral prefabricated scaffold access, or direct access from another scaffold, structure, personnel hoist, or similar surface shall be used.

- Portable, hook-on, and attachable ladders shall be positioned so as not to tip the scaffold.

- Hook-on and attachable ladders shall be positioned so that their bottom rung is not more than 24 inches above the scaffold supporting level.

- When hook-on and attachable ladders are used on a supported scaffold more than 35 feet high, they shall have rest platforms at 35-foot maximum vertical intervals.

- Hook-on and attachable ladders shall be specifically designed for use with the type of scaffold

used.

- Hook-on and attachable ladders shall have a minimum rung length of 11 ½ inches.

- Hook-on and attachable ladders shall have uniformly spaced rungs with a maximum spacing between rungs of 16 inches.

Stairway-type Ladders shall:

- Be positioned such that their bottom step is not more than 24 inches above the scaffold supporting level.

- Be provided with rest platforms at 12-foot maximum vertical intervals.

- Have a minimum step width of 16 inches except that mobile scaffold stairway-type ladder shall have a minimum step width of 11 ½ inches.

- Have slip-resistant treads on all steps and landings.

- Stair-towers shall be positioned such that their bottom step is not more than 24 inches above the scaffold supporting level.

- A stair-rail consisting of a top rail and a mid-rail shall be provided on each side of each scaffold stairway.

- The top rail of each stair-rail system shall also be capable of serving as a handrail, unless a separate handrail is provided.

- Handrails, and top-rails that serve as handrails, shall provide an adequate handhold for employees grasping them to avoid falling.

- Stair-rail systems and handrails shall be surfaced to prevent injury to employees from punctures or laceration, and to prevent snagging of clothing.

- The ends of stair-rail systems and handrails shall be constructed so that they do not constitute a projection hazard.

- Handrails and top-rails that are used as handrails shall be at least 3 inches from other objects.

- Stair-rails shall not be less than 28 inches nor more than 37 inches from the upper surface of the stair-rail to the surface of the tread, in line with the face of the riser at the forward edge of the tread.

- A landing platform at least 18 inches wide by at least 18 inches long shall be provided at each level.

- Each scaffold stairway shall be at least 18 inches between stair-rails.

- Treads and landings shall have slip-resistant surfaces.

- Stairways shall be installed between 40 degrees and 60 degrees from horizontal.

- Guardrails meeting the standards requirements shall be provided on the open sides and ends of each landing.

- Riser heights shall be uniform, within 3 inches, for each flight of stairs.

- Tread depth shall be uniform, within 3 inches, for each flight of stairs.

Integrated Prefabricated Scaffold Access Frames shall:

- Be specifically designed and constructed for use as ladder rungs.
- Have a rung length of at least 8 inches.
- Not be used as work platforms when rungs are less than 11 ½ inches in length, unless affected employee uses fall protection, or a positioning device, which complies with 1926.502.
- Be uniformly spaced within each frame section.
- Be provided with rest platforms at 35-foot maximum vertical intervals on all supported scaffolds more than 35 feet high.
- Have a maximum spacing between rungs of 16 inches. Non-uniform rung spacing caused by joining end frames together is allowed, provided the resulting spacing does not exceed 16 inches.
- Steps and rungs of ladder and stairway type access shall line up vertically with each other between rest platforms.
- Direct access to or from another surface shall be used only when the scaffold is not more than 14 inches horizontally and not more than 24 inches vertically from the other surface.

Effective September 2, 1997, access for employees erecting and dismantling supported scaffolds shall be in accordance with the following:

- Michael Kinder & Sons, Inc. will provide safe means of access for each employee erecting or dismantling a scaffold where the provision of safe access is feasible and does not create a greater hazard. The jobsite will have a competent person determine whether it is feasible or would pose a greater hazard to provide, and have employees use a safe means of access. This determination shall be based on site conditions and the type of scaffold being erected or dismantled.
- Hook-on or attachable ladders shall be installed as soon as scaffold erection has progressed to a point that permits safe installation and use.
- When erecting or dismantling tubular welded frame scaffolds, (end) frames with horizontal members that are parallel, level and are not more than 22 inches apart vertically may be used as climbing devices for access, provided they are erected in a manner that creates a usable ladder and provides good hand hold and foot space.
- Cross-braces on tubular welded frame scaffolds shall not be used as a means of access or egress.

Use

- Scaffolds and scaffold components shall not be loaded in excess of their maximum intended loads or rated capacities, whichever is less.
- A competent person before each work shift shall inspect scaffolds and scaffold components for visible defects, and after any occurrence which could affect a scaffold's structural integrity.

- Any part of a scaffold damaged or weakened so that its strength is less than that required by this standard shall be immediately repaired or replaced, braced to meet those provisions, or removed from service until repaired.

- Scaffolds shall not be moved horizontally while occupied by employees, unless they have been designed by a registered professional engineer specifically for such movement or, for mobile scaffolds, where the provisions of 1926.452(w) are followed.

The clearance between scaffolds and power lines shall be as follows: Scaffolds shall not be erected, used dismantled, altered, or moved such that they or any conductive material handled on them might get closer to exposed and energized lines than as follows:

INSULATED LINES	
Less than 300 volts	⇨ Minimum Distance 3 feet
330 volts to 50 kV	⇨ Minimum Distance 10 feet
More than 50 kV	⇨ Minimum Distance 10 feet plus 4 inches for each1 kV over 50 kV OR 2 times the length of the line insulator, but never less than 10 feet
UNINSULATED LINES	
Less than 50 kV	⇨ Minimum Distance 10 feet
More than 50 kV	⇨ Minimum Distance 10 feet plus 4 inches for each 1 kV over 50 kV **OR** 2 times the length of the line insulator but never less than 10 feet

- Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling or alteration. Such activities shall be performed only be experienced and trained employees selected for such work by the competent person.

- Employees shall be prohibited from working on scaffolds with snow, ice, or other slippery material except as necessary for removal of such materials.

- Where swinging loads are being hoisted onto or near scaffolds such that the loads might contact the scaffold, tag lines or equivalent measures to control the loads shall be used.

- Work on or from scaffolds is prohibited during storms or high winds unless a competent person has determined that it is safe for employees to be on the scaffold and those employees are protected by a personal fall arrest system or windscreens. Windscreens shall not be used unless the scaffold is secured against the anticipated wind forces imposed.

- Debris shall not be allowed to accumulate on platforms.

- Makeshift devices, such as but not limited to boxes and barrels, shall not be used on top of scaffold platforms to increase the working level height of employees.

Ladders shall not be used on scaffolds to increase the working level height of employees, except on large area scaffolds where employees have satisfied the following criteria:

- When the ladder is placed against a structure, which is not part of the scaffold.

- The platform units shall be secured to the scaffold to prevent their movement.

- The ladder legs shall be on the same platform or other means shall be provided to stabilize the ladder against unequal platform deflection.

- The ladder legs shall be secured to prevent them from slipping or being pushed off the platform.

- Platform shall not deflect more than 1/60 of the span when loaded.

Fall Protection

- Each employee on a scaffold more than 10 feet above a lower level shall be protected from falling to that lower level.

- Michael Kinder & Sons, Inc. will have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. Michael Kinder & Sons, Inc. requires fall protection to be used for employees erecting or dismantling supported scaffolds where the installation and use of such protection is feasible and does not create a greater hazard.

- Personal fall arrest systems used on scaffolds shall be attached by a lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member.

- Guardrail systems installed to meet the requirements of the section shall comply with the following provisions:

  ⇨ Guardrail systems shall be installed along all open sides and ends of platforms.

  ⇨ Guardrail systems shall be installed before the scaffold is released for use by employees other than erection/dismantling crews.

  ⇨ The top edge height of top-rails or equivalent member on supported scaffolds manufactured or placed in service after January 1, 2000 shall be installed between 38 inches and 45 inches above the platform surface. The top edge height on supported scaffolds manufactured and placed in service before January 1, 2000, and on all suspended scaffolds where both a guardrail and a personal fall arrest system are required shall be between 36 and 45 inches.

  ⇨ When mid-rails, screens, mesh, intermediate vertical members, solid panels, or equivalent structural members are used, they shall be installed between the top edge of the guardrail system and the scaffold platform.

  ⇨ Each toprail or equivalent member of a guardrail system shall be capable of with standing, without failure, a force applied in any downward or horizontal direction at any point along its top edge of at least 100 pounds for guardrail systems installed on single-point adjustable suspension scaffolds or two-point adjustable suspension scaffolds, and at least 200 pounds for guardrail systems installed on all other scaffolds.

  ⇨ Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along the mid rail or other member of at least 75 pounds for guardrail systems with a minimum 100 pound top rail capacity, and at least 150 pounds for a guardrail system with a minimum 100 pound top rail capacity, and at least 150 pounds for a guardrail system with a minimum 200 pound top rail capacity.

  ⇨ Guardrails shall be surfaced to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

  ⇨ The ends of all rails shall not overhang the terminal posts except when such overhang

does not constitute a projection hazard to employees.

⇨ A competent person shall inspect Manila or plastic rope being used for top-rails or mid-rails as frequently as necessary to ensure that it continues to meet the strength requirements of this section.

⇨ Cross bracing is acceptable in the place of a midrail when the crossing point of the two braces is between 20 inches and 30 inches above the work platform or as a toprail when the crossing point of the two braces is between 38 inches and 48 inches above the work platform. The end points at each upright shall be no more than 48 inches apart.

Falling Object Protection

- In addition to wearing hard hats each employee on a scaffold shall be provided with additional protection from falling hand tools, debris, and other small objects through the installation of toe boards, screens, or guardrails systems, or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects.

- Where there is danger of tools, material, or equipment falling from a scaffold and striking employees below, the following provisions apply:

  ⇨ The area below the scaffold to which objects can fall shall be barricaded, and employees shall not be permitted to enter the hazard area.

  ⇨ A toe-board shall be erected along the edge of the platforms more than 10 feet above lower levels for a distance sufficient to protect personnel below.

  ⇨ Where tools, materials, or equipment are piled to a height higher than the top edge of the toe-board, paneling or screening extended from the toe-board or platform to the top of the guardrail shall be erected for a distance sufficient to protect personnel below.

  ⇨ A guardrail system shall be installed with openings small enough to prevent passage of potential falling objects.

  ⇨ A canopy structure, debris net, or catch platform strong enough to withstand impact forces of the potential falling objects shall be erected over personnel below.

- <u>Where used, toe-boards shall be</u>:

  ⇨ Capable of withstanding, without failure, a force of at least 50 pounds applied in any downward or horizontal direction at any point along the toe-board.

  ⇨ At least three and one-half inches high from the top edge of the toe-board to the level of the walking/working surface. Toe-boards shall be securely fastened in place at the outermost edge of the platform and have not more than 3 inch clearance above the walking/working surface. Toe-boards shall be solid or with openings not over one inch in the greatest dimension.

Criteria for Supported Scaffolds

- Supported scaffolds with a height to base width ratio of more than four to one (4:1) shall be restrained from tipping by guying, tying, bracing, or equivalent means.
- Guys, ties, and braces shall be installed according to the scaffold manufacturer's

recommendations or at the closest horizontal member to the 4:1 height and be repeated vertically at locations of horizontal members every 20 feet or less thereafter for scaffolds 3 feet wide or less, and every 26 feet or less thereafter for scaffolds greater than 3 feet wide.

- The top guy, tie or brace of completed scaffolds shall be placed no further than 4:1 height from the top. Such guys, ties and braces shall be installed at each end of the scaffold and at horizontal intervals not to exceed 30 feet.

- Supported scaffold poles, legs, posts, frames, and uprights shall be on base plates, mud sills or other adequate firm foundations.

- Supported scaffold poles, legs, posts, frames, and uprights shall be plumb and braced to prevent swaying and displacement.

Criteria for Suspension Scaffolds

- All suspension scaffold support devices, such as outrigger beams, cornice hooks, parapet clamps, and similar devices, shall rest on surfaces capable of supporting at least 4 times the load imposed on them by the scaffold operating at the rated load of the hoist.

- Suspension scaffold outrigger beams, when used, shall be made of structural metal or equivalent strength material, and shall be restrained to prevent movement.

- Inboard ends of suspension scaffold outrigger beams shall be stabilized by bolts or other direct connections to the floor or roof deck, or they shall have their inboard ends stabilized by counterweights, except for masons' multi-point adjustable suspension scaffold outrigger beams which shall not be stabilized by counterweights.

- Suspension scaffold outrigger beams shall be:

  ⇨ Provided with stop bolts or shackles at both ends.

  ⇨ Securely fastened together with the flanges turned out when channel iron beams are used in place of I-beams.

  ⇨ Installed with all bearing supports perpendicular to the centerline.

  ⇨ Set and maintained with the web in a vertical position.

  ⇨ When an outrigger beam is used, the shackle or clevis with which the rope is attached to the outrigger beam shall be placed directly over the centerline of the stirrup.

- Suspension scaffolds support devices such as cornice hooks, roof hooks, roof irons, parapet clamps, or similar devices shall:

  ⇨ Made of steel, wrought iron, or material or equivalent strength.

  ⇨ Supported by bearing blocks.

  ⇨ Secured against movement by tiebacks installed at right angles to the face of the building or structure, or opposing angle tiebacks shall be installed and secured to a structurally sound point of anchorage on the building or structure.

  ⇨ Tiebacks shall be equivalent in strength to the hoisting rope.

- When winding drum hoists are used on a suspension scaffold, they shall contain not less than

four wraps of the suspension rope at the lowest point of scaffold travel.

- The use of repaired wire rope as suspension rope is prohibited.

- Wire suspension ropes shall not be joined together except through the use of eye splice thimbles connected with shackles or cover-plates and bolts.

- The load end of wire suspension ropes shall be equipped with proper size thimbles and secured by eyes-splicing or equivalent means.

- Ropes shall be inspected for defects by a competent person prior to each work shift and after every occurrence which could affect a rope's integrity.

- Swaged attachments or spliced eyes on wire suspension ropes shall not be used unless they are made by the wire rope manufacturer or qualified person.

- When wire rope clips are used on suspension scaffold:

  ⇨ There shall be a minimum of 3 wire rope clips installed with the clips a minimum of 6 rope diameters apart.

  ⇨ Clips shall be installed according to the manufacturer's recommendations.

  ⇨ Clips shall be retightened to the manufacturer's recommendations after the initial loading.

  ⇨ Clips shall be inspected and retightened to the manufacturer's recommendations at the start of each workshift thereafter.

  ⇨ U-bolts clips are used, the U-bolt shall be placed over the dead end of the rope, and the saddle shall be placed over the live end of the rope.

- Suspension scaffold power-operated hoists and manual hoists shall be tested and listed by a qualified testing laboratory.

- Gasoline-powered equipment and hoists shall not be used on suspension scaffolds.

- Gears and brakes of power-operated hoists used on suspension scaffolds shall be enclosed.

- In addition to the normal operating brake, suspension scaffold power-operated hoists and manually operated hoists shall have a braking device or locking pawl which engages automatically when a hoist makes either of the following uncontrolled movements: an instantaneous change in momentum or an accelerated over-speed.

- Manually operated hoists shall require a positive crank force to descend.

- Two-point and multi-point suspension scaffolds shall be tied or otherwise secured to prevent them from swaying, as determined to be necessary based on an evaluation by a competent person.

- Devices whose sole function is to prevent emergency escape and rescue shall not be used as working platforms.

- Suspension ropes supporting adjustable suspension scaffolds shall be of a diameter large enough to provide sufficient surface area for the functioning of brake and hoist mechanisms.

- Suspension ropes shall be shielded from heat-producing processes. When acids or other

corrosive substances are used on a scaffold, the ropes shall be shielded, treated to protect against the corrosive substances, or made of a material that will not be damaged by the substance being used.

- Suspension scaffold hoists and non-walk-through stirrups may be used as end guardrails, if the space between the hoist or stirrup and the side guardrail or structure does not allow passage of personnel to the end of the scaffold.

- To reduce the possibility of welding current arcing through the suspension wire ropes when performing welding from suspension scaffolds the following precautions shall be taken, as applicable:

  ⇨ An insulated thimble shall be used to attach each suspension wire rope to its hanging support. Excess suspension wire rope and any additional lines independent lines from grounding shall be insulated.

  ⇨ The suspension wire rope shall be covered with insulating material extending at least 4 feet above the hoist.

  ⇨ Each hoist line shall be covered with insulated protective covers.

  ⇨ In addition to a work lead attachment required by the welding process, a grounding conductor shall be connected from the scaffold to the structure.

  ⇨ If the scaffold grounding lead is disconnected at any time, the welding shall be shut off.

  ⇨ An active welding rod or UNINSULATED welding lead shall not be allowed to contact the scaffold or its suspension system.

4. TRAINING REQUIREMENTS

Each employee who performs work while on a scaffold must be 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.

Each employee involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold must be trained by a competent person to recognize any hazards associated with the work in question.

When there is reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the employee shall be retrained so that the requisite proficiency is regained.

5. DEFINITIONS

Competent Person - One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Supported Scaffolds - One or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support. Examples include mobile scaffold, stationary scaffold, mason scaffold, and pump jack scaffold.

Suspension Scaffolds - One or more platforms suspended by ropes or other non-rigid means from an overhead structure(s). Examples include catenary scaffold, float (ship) scaffold, and masons' multi-point adjustable suspension scaffold.

CHAPTER 36

SIGNS, SIGNALS AND BARRICADES

Section: Hazard Evaluation and Control

Reference: 1926.200 (Subpart G – Signs, Signals and Barricades)

Revised Date: 3/13/2023

Chapter 36

SIGNS, SIGNALS AND BARRICADES

1. INTRODUCTION

The purpose of this policy is to provide guidance on usage of signs, signals and barricades.

2. GENERAL

This chapter applies to all employees and subcontractors.

3. PROCEDURES

Danger Signs

- Danger Signs are to be used only where an immediate hazard exists. Subcontractor employees must be instructed that danger signs indicate such immediate danger that special precautions are necessary. The signs should be red, black, and white.

Caution Signs

- Caution signs are used only to warn against potential hazards or to caution against unsafe practices.
- The standard background color for caution signs is yellow. Any letters used against the yellow background must be black.
- Safety Instruction Signs such as "Walk - Don't run," and "Report all Unsafe Conditions to your Foreman," should have a white background and a green panel with white letters.
- Biological Hazard Signs are used to warn of the actual or potential presence of a biological hazard and to identify equipment, containers, areas, materials, or combinations of all these when they contain or are contaminated with hazardous biological agents. Biohazard signs are used only to identify infectious agents presenting a risk or potential risk to humans. The sign should display the biohazard symbol in a fluorescent orange or orange-red on a contrasting background of any color. Wording used on the sign to identify the hazard must never be written over the symbol.

DOT Markings

- For non-bulk packages not intended for reshipment, they subcontractor's compliance with hazard communication labeling requirements will be considered sufficient.
- Subcontractors must retain Department of Transportation labeling, markings, or placards on any packages, containers, motor vehicles, or transport vehicles that contain hazardous materials when they arrive at the jobsite, until the packaging is sufficiently cleaned of residue and purged of vapors.

- Markings, placards, and labels must be maintained in a manner that ensures they remain readily visible to subcontractor employees.

Safety Color Codes

- Red must be used to denote "danger." Safety cans or other portable containers of flammable liquids having a flash point at or above 80 degrees Fahrenheit should be painted red with the name of the contents lettered on a clearly visible yellow band or stenciled in yellow on the container.

- Red should be used for danger signs. Red lights should be provided at barricades and at temporary obstructions.

- Emergency features of machinery also should be painted red. These include emergency stop bars on hazardous machines such as rubber mills, wire blocks, and flat work ironers. Stop buttons or electrical switches used for emergency stopping of machines also should be red.

- Yellow should be used for designating caution and for marking physical hazards that could cause striking against, stumbling, falling, tripping, and the possibility of being caught in between. Solid yellow with suitable contrasting background can be used in whatever combination that attracts the most attention in a particular environment.

Guardrails and Barricades

- Subcontractor shall provide guardrails, barricades, fences, foot ways and other devices necessary to protect personnel and employees at the site, and the public, against hazards on or adjacent to the construction site. Remove fences when directed.

- Temporary barricades and other work required for the protection of the public, the construction personnel, existing buildings and the new building construction, shall be constructed and maintained by the Subcontractor during the period of construction.

- Erect barricades as required by applicable laws at excavations, slab edges, slab openings and other building hazards. Remove and legally dispose of barricades when directed.

- All construction of this nature shall conform to the requirements of the local building code.

4. Training Requirements

- Danger Signs - All subcontractor employees must be instructed that danger signs indicate that there is immediate danger and that special precautions are necessary.

- Caution Signs - All subcontractor employees must be instructed that caution signs indicate a possible hazard against which proper precautions should be taken.

- Safety Instruction Signs - These should be used where there is a need for general instructions and suggestions relative to safety measures.

5. Definitions

Signs - Used to warn of danger or to caution, to identify as in the marking of firefighting equipment

or exits, or to prohibit certain activities, such as smoking or eating. May also be used to mark load limits or rating capacities, for direction of people or vehicles, or to provide some general information or instructions to employees.

Labels - Used to warn of toxic or flammable contents, as well as other potential hazards.

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CHAPTER 37

STAIRWAYS AND LADDERS

Section: Hazard Evaluation and Control

Reference: 1926.1050 (Subpart X – Stairways and Ladders)

Revised Date: 3/13/2023

Michael Kinder & Sons, Inc. Safety Manual

Chapter 37

STAIRWAYS AND LADDERS

1. INTRODUCTION

The purpose of this policy is to provide procedures for the construction use and inspection of stairways and ladders at the jobsite.

This chapter applies to all employees that use ladders and stairways on jobsites.

2. RESPONSIBILITIES

All superintendents are responsible for ensuring their craft persons use ladders according to the rules and procedures described in this chapter.

A competent person shall inspect all stairways and ladders weekly.

3. PROCEDURES

- Ladders shall be inspected by a competent person for visible defects on a weekly basis, and after any occurrence that could affect their safe use. The inspection includes but is not limited to the following:

  ⇨ Cracked or missing cleats.
  ⇨ Cracked side rails.
  ⇨ Decaying and rotted wood.
  ⇨ Installation of rubber feet.
  ⇨ Nonconductive.
  ⇨ Slope requirements.
  ⇨ Handrail requirements.
  ⇨ Landing requirements.
  ⇨ Construction requirements.
  ⇨ Tie-off requirements.
  ⇨ 3-foot extension requirements.

- When transporting, ladders should be carried in the horizontal position to avoid contact with overhead electrical conductors.

- If a stairway or ladder does not pass the weekly inspection, it should be removed until the necessary repairs can be made. If for some reason the stairway or ladder cannot be removed, it must be "TAGGED-OUT" of service until the necessary repairs can be made. DO NOT USE AN UNSAFE STAIRWAY OR LADDER!!

- A stairway or ladder shall be provided at all personnel points of access when there is a break in elevation of 19" or more to gain access to different levels of the building structure, and no ramp, runway, sloped embankment, or personnel hoist is provided.

  ⇨ Each ladder shall be capable of supporting 4 times its maximum intended load.

⇨ Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced.

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

- Ladder side rails shall extend 3 feet above the landing surface to which the ladder is used to gain access, or when such an extension is not possible the ladder shall be secured from movement at its top to a rigid support that will not deflect, a grasping device, such as a grab-rail, shall be provided to assist contractor employees in mounting and dismounting the ladder.

⇨ Ladders shall be maintained free of oil, grease, and other slipping hazards.

⇨ Ladders shall only be used on level stable surfaces, unless secured to prevent accidental displacement.

⇨ Ladders placed in passageways, doorways, or driveways shall be completely secured, or the area shall be completely barricaded to keep activities away from the ladder.

⇨ The areas around the top and base of the ladder shall be kept clear.

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

⇨ The top or top step shall not be used for a step on a stepladder.

⇨ Ladders with defects **SHALL BE PLAINLY MARKED - "DO NOT USE" AND REMOVED FROM SERVICE.**

⇨ Contractor employees shall use at least one hand to grasp the ladder when ascending or descending.

⇨ Contractor employees shall not carry any objects or loads that could cause the employee to lose balance and fall.

Portable Ladder Safety Rules

- Always inspect ladders before using, or tag out defective ladders. Inspect for the following:

⇨ Broken or damaged cleats or grippers.
⇨ Rungs not tightly joined to the side rails.
⇨ Broken or split side rails.
⇨ Loose or damaged hinge spreaders.
⇨ Angle brackets must not be broken.

- Straight ladders will be equipped with cleats or grippers. When in use, the ladder will be lashed at the top and secured at the bottom whenever possible.

- Barricades or a watch person shall guard ladders placed in doors or aisle ways of hazardous areas. Warning signs will be posted.

- Straight ladders will be placed at the proper angle. The distance from the wall to the base of the ladder will be one fourth of the working length of the ladder.

- Straight ladders used for accessing an upper landing surface will have the side rails of the ladder extended at least three feet above the landing.

- Stepladders higher than ten feet will be secured or held by another person. Do not stand on

the top step or cap of the ladder.

- Always face the ladder when ascending and descending. Use both hands. All tools or equipment will be hauled up or down by the use of a hand line.
- Do not overreach and always keep your belt buckle inside the side rails. Ladders will not be moved, shifted, or extended while occupied by anyone.
- Ladders must not be used as scaffolding.
- Do not splice ladders together to make them longer.
- Do not leave ladders unattended unless they are secured in place.
- Remove grease, oil, and other debris from your hands and feet before climbing.
- Only one person shall be on a ladder at any given time.
- Always clean and return ladders after use to the same storage area where they came from.

Stairways

- Shall be used whenever the horizontal distance is more than a quarter of the vertical distance (working distance).
- If metal pan stairs are to be used during construction, the pans shall be fitted with wood.
- All parts of stairways and ladders shall be free of hazardous projections. **NEVER USE DOUBLE-HEADED NAILS FOR THE CONSTRUCTION OF STAIRWAYS, LADDERS, HANDRAILS, BARRICADES, ETC.**
- Slippery conditions such as ice, snow, grease or oil shall be corrected prior to using ladders or stairways. NO EXCEPTIONS.

Spiral Stairways

- Shall never be used unless it is or will become a permanent part of the structure.

4. TRAINING REQUIREMENTS

- All new employees must be trained on ladder safety during their orientation. Existing employees shall be re-trained annually or as needed in the following areas:
- The nature of fall hazards in the work area.
- The correct procedures for erecting, maintaining, and disassembling the Fall Protection System to be used.
- The proper construction, placement, and care in handling of all ladders and stairways.
- The maximum intended load carrying capacities of ladders used.
- The Safety Director shall ensure that a Competent Person in the above-mentioned training requirements has trained each employee.

5. DEFINITIONS

Cleat - A ladder crosspiece of rectangular cross section placed on edge upon which a person may step while ascending or descending a ladder.

Double-Cleat Ladder - A ladder similar in construction to a single-cleat ladder, but with a center rail to allow simultaneous two-way traffic for employees ascending or descending.

Equivalent - Alternative designs, materials, or methods that the employer can demonstrate will provide an equal or greater degree of safety for employees than the method or item specified in the standard.

Extension Trestle Ladder - A self-supporting portable ladder, adjustable in length consisting of a trestle ladder base and a vertically adjustable extension section, with a suitable means for locking the ladders together.

Failure - Load refusal, breakage or separation of component parts. Load refusal is the point where the structural members lose their ability to carry the loads.

Fixed-Ladder - A ladder that cannot be readily moved or carried because it is an integral part of a building or structure. A *side-step fixed ladder* is a fixed ladder that requires a person getting off at the top to step to the side of the ladder side rails to reach the landing. A *through fixed ladder* is a fixed ladder that requires a person getting off at the top to step between the side rails of the ladder to reach the landing.

Handrail - A rail used to provide employees with a handhold for support.

Individual-Rung/Step Ladders - Ladders without a side rail or center rail support. Such ladders are made by mounting individual steps or rungs directly to the side or wall of the structure.

Job-Made Ladder - A ladder that is fabricated by employees, typically at the construction site, and is not commercially manufactured. This definition does not apply to any individual-rung/step ladders.

Ladder Stand - A mobile fixed size self-supporting ladder consisting of a wide flat tread ladder in the form of stairs. The assembly may include handrails.

Lower Levels - Those areas to which an employee can fall from a stairway or ladder. Such areas include ground levels, floors, roofs, ramps, runways, excavations, pits, tanks, material, water, equipment, and similar surfaces. It does not include the surface from which the employee falls.

Maximum Intended Load - The total load of all employees, equipment, tools, materials, transmitted loads, and other loads anticipated to be applied to a ladder component at any one time.

Nosing - That portion of a tread projecting beyond the face of the riser immediately below.

Point of Access - All areas used by employees for work related passage from one area or level to another. Such open areas include doorways, passageways, stairway openings, studded walls, and various other permanent or temporary openings used for such travel.

Portable Ladder - A ladder that can be readily moved or carried.

Riser Height - The vertical distance from the top of a tread to the top of the next higher tread or platform/landing or the distance from the top of a platform/landing to the top of the next higher tread or platform/landing.

Side-Step Fixed Ladder - See definition above on "Fixed Ladder."

Single-Cleat Ladder - A ladder consisting of a pair of side rails, connected together by cleats, rungs, or steps.

Single-Rail Ladder - A portable ladder with rungs, cleats, or steps mounted on a single rail instead of the normal two rails used on most other ladders.

Spiral Stairway - A series of steps attached to a vertical pole and progressing upward in a winding fashion within a cylindrical space.

Stair-rail System - A vertical barrier erected along the unprotected sides and edges of a stairway to prevent employees from falling to lower levels. The top surface of a stair-rail system may also be a "handrail".

Step Stool (Ladder Type) - A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap.

Through Fixed Ladder - See definition above on "Fixed Ladder."

Tread Depth - The horizontal distance from front to back of a tread (excluding nosing, if any).

Unprotected Sides and Edges - Any side or edge (except at entrances to points of access) of a stairway where there is no stair rail system or wall 36 inches (.9 m) or more in height, and any side or edge (except at entrances to points of access) of a stairway landing, or ladder platform where there is not wall or guardrail system 39 inches (1 m) or more in height.

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CHAPTER 38

STEEL ERECTION

Section: Hazard Evaluation and Control

Reference: 1926.750 (Subpart R – Steel Erection)

Revised Date: 3/13/2023

Chapter 38

STEEL ERECTION

1. INTRODUCTION

The purpose of this policy is to provide guidance to employees and subcontractors with minimum requirements and responsibilities for safe steel erection operations.

This chapter applies to all employees and subcontractors and their employees and operations.

2. RESPONSIBILITIES

The basic responsibility for safe steel erection operations rests with the superintendent in charge of the steel erection operation.

The superintendents will not allow personnel to work on the open steel during high winds or when the steel is slippery from ice or snow.

3. PROCEDURES

- No steel erection will begin without a written Notice to Commence Steel Erection from Michael Kinder & Sons, Inc.

General Requirements

- Except for connectors and employees working in controlled decking zones, any employees engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 15 feet above a lower level will be protected from fall hazards.

Perimeter Safety Cables

- On multi-story structures, perimeter safety cables will be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed.

Connectors

- Each connector who is on a walking/working surface with an unprotected side or edge more than two stories or 30 feet above a lower level, whichever is less, must be protected from fall hazards.

Controlled Decking Zone (CDZ)

- A controlled decking zone may be established in that area of the structure over 15 and up to 30 feet above a lower level where metal decking is initially being installed and forms the leading edge of a work area.

- Bolt buckets will be tied off to steel members to prevent accidental dislodging. During bolt-up activities, all steps will be taken to protect workers below form falling objects.

- Employees will not be permitted to work above vertically protruding reinforcing steel until it has been protected against potential impalement.

- Work will be planned so that no load will be swung over the public or other workers.

- All steel deliveries will be coordinated with Michael Kinder & Sons, Inc. project management to ensure maintenance of traffic around the project.

- A safety railing of ½ inch wire rope or equal shall be installed, approximately 42 inches high, around the periphery of all temporary planked or temporary metal-decked floors of tier buildings and other multi-floored structures during structural steel assembly.

- Perimeter cable installed by the steel erector will remain in place unless otherwise instructed by Michael Kinder & Sons, Inc. Training records indicating workers have received required steel erection training will be maintained at the project and available for review by Michael Kinder & Sons, Inc..

<u>During connecting, the following should be adhered to:</u>

- When connectors are working together, only one person shall give signals. That person will make sure the others working on the job are in the clear. Each employee shall select a position to avoid being struck by a swinging load.

- When connectors are working at the same connecting point, they shall connect one end of the structural member before going out to connect the other end, and then only one connector shall go out to connect the other end.

- Whenever possible, the connectors shall straddle the beam instead of walking along the top flange.

- During the final placing of solid web structural members, the load shall not be cut loose from the load line until the members are secured with not less than two bolts, or the equivalent, at each connection, to keep members from rolling and to sustain anticipated loads. Bolts shall be drawn up wrench-tight.

- When columns are being set on base plate or shims, and before the column is cut loose from the load line, either the nut on the anchor bolts shall be drawn down tight or temporary guys shall be affixed.

- A piece shall never be cut loose from the load line until the required minimum number of bolts have been installed; a wrench or drift pin in the hole shall not be used as a substitute for the bolts.

- Design criteria for any multi-lift device that may be used on Michael Kinder & Sons, Inc. projects will be available for review by Michael Kinder & Sons, Inc.

- At no time shall any employee be allowed to ride the headache ball, hook, or load.

- Permanent floors must be installed so there is not more than eight stories between the erection floor and the uppermost permanent floor, except when structural integrity is maintained by the design.

- During skeleton steel erection, a tightly planked temporary floor must be maintained within two stories or 30 feet, whichever is less, below and directly under that portion of each tier of beams on which any work is being performed.

- Temporary floor is used in steel erection, when not in use as a floor, must be properly bundled and braced to prevent movement until ready for use at the next tier.

- During skeleton steel erection, where tightly planked temporary floor cannot be maintained,

and where scaffolds are not used, safety nets must be maintained whenever the potential fall distance exceeds two stories or 25 feet.

- A safety railing of ½ inch wire rope or equivalent must be installed around the perimeter of all temporarily floored buildings, approximately 42 inches high, during structural steel assembly.

- When placing structural members, the load must not be released from the hoisting line until the member is secured by at least two bolts, or the equivalent, at each connection, drawn up wrench tight.

4. TRAINING REQUIREMENTS

Employee training in the selection and use of personal fall arrest systems is imperative. Before equipment is used, employees must be trained in the use of the system. This should include the following: application limit, proper anchoring and tie off techniques, estimation of free fall distance, including determination of deceleration distance, and total fall-distance to prevent striking a lower level, methods of use, and inspection and storage of the system. (See Fall Protection for supplemental training guidance).

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CHAPTER 39

TRAFFIC CONTROL

Section: Hazard Evaluation and Control

Reference: 1926.200 (Subpart G – Signs, Signals and Barricades)

Revised Date: 3/13/2023

Chapter 39

TRAFFIC CONTROL

1. INTRODUCTION

The purpose of this policy is to provide requirements for traffic control, for all employees working at Michael Kinder & Sons, Inc. jobsites.

2. RESPONSIBILITIES

When operations are such that signs, signals, and barricades do not provide the necessary protection on or adjacent to a highway or street, flagmen or other appropriate traffic controls shall be provided.

3. PROCEDURES

- Signaling directions by flagmen shall conform to American National Standards Institute D6.1-1971.
- Hand signaling by flagmen shall be by use of red flags at least 18 inches square or sign paddles, and in periods of darkness, red lights.
- Flagmen will be provided with and shall wear a “High Visibility” warning garment while flagging. Warning garments worn at night shall be of reflectorized material.

4. DEFINITIONS

Barricade - Means on obstruction to deter the passage of persons or vehicles.

Signs - Are the warnings of hazard, temporarily or permanently affixed or placed, at locations where hazards exist.

Signals - Are moving signs, usually attached to a piece of equipment or part of a structure, to warn of existing or immediate hazards.

Tags - Are temporary signs, usually attached to a piece of equipment or part of a structure, to warn of existing or immediate hazards.

CHAPTER 40

WELDING AND CUTTING

Section: Hazard Evaluation and Control

Reference: 1926.350 (Subpart J – Welding and Cutting)

Revised Date: 3/13/2023

Chapter 40

WELDING AND CUTTING

1. INTRODUCTION

The purpose of this policy is to provide guidelines in the proper use of welding and cutting operations. Welding and Cutting operations are, by their nature, very hazardous. Michael Kinder & Sons, Inc. will only hire trained and certified welders for our operations. The risk of using untrained workers is too high.

Pressurized gas cylinders must be handled with care and stored safely at all times. They must be kept clear of sources of heat, including the sun. Oxygen must be stored separately from other gases. Valves and meters must be protected and kept in proper working order at all times. Cylinders must be treated as if they were full at all times. There should be no difference between full and empty cylinders in our storage and handling procedures.

This section applies to all employees and sub-contractors engaged in welding and cutting operations.

2. RESPONSIBILITIES

Michael Kinder & Sons, Inc. superintendents must ensure that unloading operations of compressed gas and cylinders are performed by reliable personnel properly instructed. Employees and sub-contractors using compressed air equipment should be familiar with the appropriate operating and maintenance instructions.

When required, the superintendent must issue hot work permits for hot work operations, which include electric or gas welding, cutting, brazing, or similar flame or spark-producing operations, conducted on or near a covered process. The permit must document that fire protection is adequate prior to beginning hot work operations, indicate the date authorized for hot work, and identify the object on which hot work is to be performed. The permit must be kept on file until completion of the hot work operations.

3. GENERAL PRACTICES

Personal Protective Equipment

- Wear Protective eye-wear, goggles, helmet, or glasses, at all times when welding. Sunglasses are not permitted at any time.
- Cover all exposed skin to prevent burns. Leather or wool is best. Never wear polyester (it's flammable).
- Keep clothing free of all flammable substances, especially solvents, grease, fuels etc.
- Do not wear clothing with cuffs. Keep pockets covered and closed.
- Wear flameproof gloves or gauntlets.

- Wear high top, fully laced, strongly-made, leather shoes or boots.
- Wear respirators rated for the hazards present in closed atmospheric conditions.

Welding and Cutting Operations

- Clear all combustible material from the area around your work for at least 35 ft. This includes wood-shavings, paper, grass, twigs, etc.
- If combustibles cannot be moved, cover them with flame-retardant material and set a “fire-watch”.
- Cover any cracks in floors or walls to prevent sparks or slag from getting into them.
- If combustible material is stored on the opposite side of the metal wall, move the material away from the wall. If the material cannot be moved, set a “fire-watch”.
- A “fire-watch” shall be set if combustible material is 35 feet away or greater, but is easily ignitable.
- Shut down ventilation systems or close ducts if sparks or slag can get into them.
- When welding in open air, shield the work from the wind to prevent sparks blowing downwind.
- Set a “fire-watch” during work and for ½ hour following the work.
- Fire-watch must have fire extinguisher on hand.
- Any cutting or burning of lead base metals, zinc, cadmium, mercury, beryllium or exotic metals or paints shall have proper ventilation or respiratory protection.
- Defective or damaged equipment shall be taken out of service until it can be repaired by qualified personnel.
- If cutting and welding operations cannot be done safely, the operations shall not be performed.

4. CUTTING AND GAS WELDING

Oxygen/Fuel Gas Apparatus

- There is no such thing as an empty cylinder. All gas cylinders are to be stored and handled as if full.
- Cylinders will be stored in dry, well-ventilated areas, in a vertical position, with a chain or other restraint holding them in place.
- Do not accept delivery of cylinders from supplier unless valves are capped.
- Do not accept delivery of cylinders unless accompanied by the MSDS for the gas contained inside, unless the MSDS is already on file.
- Only use cylinders constructed and maintained in accordance with Interstate Commerce Commission regulations.

- Cylinder caps should be kept in place except when cylinder is in use. Caps should be replaced when cylinder in not in use. “In use” means in the welding rig or cradle secured in a vertical position.

- Store gas cylinders at least 20 ft. from sources of heat, flame, or fire.

- Do not allow the temperature of enclosed storage areas to exceed 125 degrees F.

- Store oxygen cylinders at least 20 ft. from fuel gases 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 ½ hour.

- Do not store cylinders near elevators, shafts, gangways or stairways.

- Do not store oxygen with other combustible materials including petroleum-based products of any type, carbides, etc.

- Contact between oxygen and any petroleum-based product can result in fire/explosion. It does not require heat!

- Make sure the contents are clearly marked on all cylinders.

- Never drop, roll, skid, or puncture a gas cylinder.

- Do not raise cylinders to upper levels with chain or rope slings. Use cradles, only.

- Never force connections that do not fit.

- Inspect the entire welding rig before use each day.

- Shield other workers and the public from welding light, flashes, sparks, slag, and molten metal.

- Ventilate welding operations to protect welders, helpers and others from airborne contaminants created by the welding process. Use natural or mechanical ventilation, depending on location and circumstances.

- Light torches with strike or friction lighters, only. Never use matches, cigarettes or hot metal.

- Purge or bleed each hose, individually, before lighting the torch for the first time each day.

- Do not use overly worn or patched hoses.

- Wear dark glasses or a face-shield during all welding/cutting operations.

Regulators and Gauges

- Regulator or reducing valves must be installed on all compressed gas cylinders to maintain an even flow of gas to the torch.

- Use only regulators listed as registered with UNDERWRITERS LABORATORIES (UL) or FACTORY MUTUAL LABORATORIES.

- Flashback arresters should be installed on all regulators.

- Make sure gauges are correct for the gas contained in the cylinder.

- I.e. do not use acetylene gauge on oxygen cylinder.
- Never convert fuel regulator for use on oxygen cylinder or vice versa.
- Never use an oxygen hose on a fuel cylinder or vice versa.
- Use only correct wrenches for attaching regulators to cylinders. Never use pipe wrenches or pliers.
- If a regulator is equipped with a hand-wheel, never attempt to turn it with a hammer or by hitting it with a wrench.
- Do not repair regulator unless fully qualified and certified.
- Watch the indicator on the regulator after closing torch valves. If needle creeps upward replace the regulator, immediately.
- Leave valve wrenches connected to valve while welding.
- Cylinder valves are to be opened only when active in use.
- Do not force cylinder valves open or closed.

Acetylene

- Creates flame of about 6,000 degrees when burned with oxygen.
- Ignites easily when mixed with oxygen or air.
- Is supplied in gas cylinders or generated on site.
- Is generated by mixing water and carbide.
- Do not accept delivery of damaged carbide drums or cans.
- Protect drums and cans in storage from all damage. Remove damaged containers from the premises immediately.
- Do not allow water to come into contact with stored carbide at any time.
- Never allow acetylene cylinders to lie on their sides. This creates corrosion of internal valve parts.
- Never allow acetylene regulator to discharge as flow greater that 15 psi (pounds per square inch)

Oxygen

- Never use combustible oil or grease to lubricate oxygen cylinder fittings or valves.
- Never use oxygen cylinder fittings or valves for other gas cylinders.
- Oxygen regulators should be equipped with a safety release valve to prevent flying parts if diaphragm ruptures.
- Never use oxygen to operate pneumatic tools, to blow out lines, or clean dust off clothing.

Connections and Hoses

- Replace leaking, broken, torn, burned, and worn-out hoses. If only damaged in one spot, cut out the damage and splice the hose together.
- Never repair bad spots in hoses with tape.
- Test for leaks by submerging hose sections in water or by spraying soapy water on the suspected area and looking for bubbles.
- **Never test for leaks by lighting a flame!**
- Use approved bronze or brass fittings, only.
- Never use any petroleum-based product, such as white lead, grease, pipe-compound, etc. to make connections.
- Attach flashback arresters at either end or both ends of the hose, depending on the type of arrester used.
- Use the proper type and size of hose for the job.
- Use the correct color coding for hoses:

  ⇨ **Green for oxygen,**
  ⇨ **Red for acetylene, and**
  ⇨ **Black for air/inert gas.**

- Place hoses where they will not be damaged by other workers, tools, machines, or vehicles.

5. ELECTRIC ARC WELDING

- Inspect both the lead cable and work cable for damage, daily.
- Inspect electrode holders for loose or damaged connections.
- You may splice a lead to repair it. Never use tape.
- Never splice weld-lead within 10 ft. of holder, replace the lead.
- Never coil the electrode cable around your body.
- Always review the composition of fluxes, welding rods and coatings.
- Protect yourself from exposure to toxic substances.
- Ground both the frame of the welder and the metal you are welding.
- Do not attach the ground to pipes carrying gas or flammable liquids or to electrical conduits. Ground as close to the machine as possible.
- Do not weld in wet conditions unless you take precautions.
- Do not allow metal parts in contact with the electrode to touch your skin, damp clothing, or wet clothing. Make sure your work-gloves are dry at all times.

- Do not cool electrode holders by dousing them in water.
- Disconnect the welder from the power sources when changing the electrodes.

5. TRAINING REQUIREMENTS

Employees of Michael Kinder & Sons, Inc. (engaged in welding and cutting) should know the chemical and physical hazards of working with compressed air and gas. Correct usage of Personal Protective Equipment and First Aid (See First Aid/CPR) is required.

A preventive maintenance checklist should be tailored to each operation. Some of the items may include:

- Are pulleys and belts on compressors and motors completely guarded?
- Are flexible cords or plugs on electric motors periodically checked and replaced if in a deteriorated condition?
- Do the relief valves operate properly?
- Are air tanks drained regularly?
- Is the pressure relief device and gauge in good operating condition?
- Are employees properly trained in handling gas cylinders?
- Are unloading operations performed by reliable persons properly instructed?
- Are employees trained in the proper use of personal protective equipment?
- Are employees instructed in the proper first aid procedures?

6. DEFINITIONS

Acetylene - The widest flammable range known and is classified as an asphyxiate. It may contain dangerous amounts of phosphine and arsine when generated directly from calcium carbide. Under certain conditions it can form compounds with silver, mercury, or copper that explode spontaneously. An unstable compound, acetylene may explode even under low pressures. The safe maximum pressure is 15 pounds per square inch for small diameter piping systems. Acetylene can be stored in cylinders at a pressure of 250 pounds per square inch at 70°F. The cylinders contain a porous material and acetone to absorb acetylene in a stabilized condition.

Ammonia - A colorless, lighter than air gas with a piercing odor. It is highly irritating to the eyes, skin, and respiratory tract. The National Institute for Occupational Safety and Health (NIOSH) lists 81 occupations with potentially hazardous exposures to ammonia. They range from acetylene workers and farmers to tanners and wool scours. The substance is widely used as a fertilizer and refrigerant.

Anhydrous Ammonia - A pure dry gases. Liquid anhydrous ammonia is this gas compressed into a liquid. Ammonium hydroxide is gaseous ammonia dissolved in water. Anhydrous ammonia is flammable; and though it's flammable; and though its flammable range is very high, ammonia fires and explosions are not uncommon. The chief hazards of ammonia are freeze burns severe eye injury, and death from inhalation of high concentrations.

Carbon Dioxide - An odorless, colorless, and heavier than air, is toxic when high percentages are

present and can cause death when encountered in asphyxiating concentrations. This gas is not flammable and is in common use as a fire-extinguishing agent. Because of its ability to displace oxygen, it will smother the fires of petroleum, coal, and wood; but the fires of magnesium, sodium, potassium, and metal hydrides will burn rapidly in an atmosphere of carbon dioxide.

Chlorine - Is not flammable, but it can react with organic compounds such as petroleum products, ethers, and alcohol's with explosive violence. It is a corrosive, very irritating gas. If mixed with acetylene, it will explode when exposed to sunlight. Only slightly soluble in water, chlorine reacts with water to form hypochlorous and hydrochloric acids, which eat into iron and steel. Never use water on a chlorine leak. Iron and steel are not affected by dry chlorine at lower temperatures; however, the metals used in chlorine systems must be kept dry at all times.

Compressed gases - Used for industrial purposes are contained in high-pressure cylinders. Gases can be combustible, flammable, explosive, poisonous, corrosive, or all of these.

Fluorine - A pale yellow, corrosive, and poisonous gas that attacks all but a few materials. Fluorine and acetylene mixtures also may explode if exposed to light.

Hot Work – Any work which includes, but is not limited to, the use of burning or welding equipment, brazing equipment, explosion proof elctric motors, chippers, drills, saws, extension cord, sand-blasting, spray painting, exploxive activated tools, hot plates, phone flash bulbs, and non-explosion prooof floor, strucnt lights, amaintenance, consstruction or jovb operation where the heat used or generatied is of sufficient energy to cause th eignition of nany flammable or combustible liauidm, gas or other material.

Hydrogen - The lightest of all elements is both colorless and odorless. Its flammable range is almost as wide as that of acetylene. A mixture of 10 to 65 percent in air will explode if ignited. Hydrogen is classified as an asphyxiate.

- Some chemical reactions produce hydrogen as a byproduct. A lead-acid battery will produce hydrogen when being charged. Many electroplating processes also produce hydrogen. Some chemicals used to remove scale from the waterside of boilers manufacture hydrogen. Whatever the operation, it is important to know whether hydrogen will be produced, and measures must be taken to prevent its accumulation and ignition. This is accomplished by proper ventilation and elimination of possible sources of ignition.

- Storing hydrogen is difficult. This gas tries to find its way out of confinement and will seek the smallest opening in a pipe or container. Pipe threads and stems must be tight, because a high-pressure hydrogen leak can ignite spontaneously, the cause being the friction of its own escape. All flammable gas leaks are dangerous and particularly so when, as in the case of hydrogen, they can be neither seen nor smelled.

Oxygen - Although oxygen supports combustion, it does not burn. Oxygen is considered a hazardous element because flammable materials burn must faster in oxygen, and oxygen can quickly combine with other elements and compounds to produce spontaneous ignition. When oxygen comes into contact with oil, grease, or fuel oils, the result can be a sudden and violent fire. Employees involved in the handling of this gas must take every precaution to prevent the combination. Liquid oxygen can be equally dangerous if not handled properly. A burning cigarette dropped into liquid oxygen will produce a flame two feet high, and even shredded metal will burn if exposed to it. Open flames and smoking must never be allowed near oxygen storage areas.

MICHAEL KINDER & SONS

PLAN | DESIGN | BUILD

Section 41 A

Written Silica Exposure Control Program

Section: Hazard Evaluation & Control

Reference: 1926.1153 Subpart Z Respirable Crystalline Silica

Revised Date: 3/13/2023

Section 33 A

Written Silica Exposure Control Program

1.0 Applicability and Scope

1.1 Applicability

This Written Exposure Control Plan (Plan) applies to Michael Kinder & Sons, Inc. personnel who are potentially exposed to airborne concentrations of respirable crystalline silica (silica) because of their work activities or proximity to the work locations where airborne silica is being emitted. This Plan also applies to Michael Kinder & Sons, Inc. superintendents, foremen, or safety personnel who may be responsible for overseeing a subcontractor's operations that have the potential to expose personnel to airborne concentrations of silica at or above regulatory and industry action levels and exposure limits.

1.2 Scope

This Plan describes the hazards associated with projects involving potential exposure to airborne concentrations of silica and the issues to be addressed during these projects. These projects include, but are not limited to:

- Use of stationary masonry saws used to cut concrete, tile, concrete masonry block, sheet rock, gypsum fiber roof board, or any other product containing quartz.
- Handheld power saws used to cut concrete, asphalt, concrete masonry block, sheet rock, gypsum fiber roof board, or any other product containing quartz.
- Walk-behind saws used to cut concrete or asphalt.
- Rig-mounted or free standing core saws or drills (including impact and rotary hammer drills) used to penetrate concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Jackhammers and handheld powered chipping tools used to demolish or modify concrete, concrete masonry block, or any other structural component or product containing quartz.
- Vehicle mounted hammers or chipping tools used to demolish concrete, concrete masonry block, or any other structural component or product containing quartz.
- Handheld grinders or cut-off wheels used for mortar removal or cutting/grinding of concrete, concrete masonry block, sheet rock, gypsum fiber roof board, or any other structural component or product containing quartz.
- Walk-behind milling machines or bead blasters used for surfacing activities on concrete, concrete masonry block, asphalt, or any other product containing quartz.
- Installation or demolition of sheet rock, including mudding, taping, texturizing activities with quartz containing materials.
- Hand or power tool sanding of painted surfaces. Current latex paint products contain quartz and the painted substrate (sheet rock, concrete masonry block, concrete) contains quartz.
- Drivable asphalt milling machines used to mill asphalt roadways or walkways.
- Ball mills or crushing equipment used to size products containing quartz.
- All housekeeping operations associated with the activities described above.

Michael Kinder & Sons, Inc. employees who work in proximity to silica-related operations must be aware of safe work practices and take all necessary precautions associated with avoiding and minimizing airborne silica exposure.

2.0 Regulatory Review

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1153: Respirable Crystalline Silica (Construction Industry) and 29 CFR 1910.1053: Respirable Crystalline Silica (General Industry), contain regulatory requirements specific to respirable crystalline silica. This Written Exposure Control Plan is developed in accordance with the requirements in 29 CFR 1926.1153(g).

3.0 Project Planning

3.1 Training Requirements

Michael Kinder & Sons, Inc. employees who anticipate working on projects where they could be exposed to airborne silica will be provided training in silica hazards in accordance with the Michael Kinder & Sons, Inc. program established to comply with the hazard communication standard (29 CFR 1910.1200). Each employee will have access to labels on containers of crystalline silica and safety data sheets, and be provided information on the health hazards of silica including cancer, lung effects, immune system effects, and kidney effects. In addition, Michael Kinder & Sons, Inc. employees will be provided training and information regarding specific activities identified in this Plan that could result in airborne silica exposure, and the specific engineering controls, work practices and respiratory protection requirements to mitigate the potential airborne silica exposures. This training will provide a discussion of silica hazards, initial exposure determination either by complying with 29 CFR 1926.1153 Table 1 requirements or air monitoring, specific engineering and work practice control measures, personal protective equipment (PPE), and medical surveillance requirements. The training will also identify the Michael Kinder & Sons, Inc. competent person for silica exposure identification and determination of control requirements. All Michael Kinder & Sons, Inc. employees will be provided with access to a copy of 29 CFR 1910.1153 and be trained on the contents of 29 CFR 1926.1153.

3.2 Medical Surveillance Requirements

Michael Kinder & Sons, Inc. shall institute medical surveillance for any employees required by this Plan to wear a respirator 30 or more days per year. Initial medical surveillance consists of medical and work history with emphasis on: past, present, and anticipated exposure to silica, dust and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history; a physical examination with emphasis on the respiratory system; chest X-ray (a single posterio-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film (no less than 14 x 17 inches and no more than 16 x 17 inches) or digital radiography systems), interpreted and classified according to the International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader; a pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course; testing for latent tuberculosis infection; and any other tests deemed appropriate by the Occupational Medicine Provider. Subcontractors are responsible for implementing a medical surveillance program for their employees.

2.3 Competent Person Requirements

Michael Kinder & Sons, Inc. shall identify a competent person to inspect and oversee all activities with potential airborne silica exposure. Subcontractors working on projects within the scope of this Program shall appoint a competent person capable of executing the duties described herein. The competent person must have training in the inspection of work areas and equipment and in the determination of safe working conditions. This person shall have a working knowledge of the 1926.1153 standards, shall be capable of identifying airborne silica hazards, shall determine the need for initial and additional exposure monitoring, shall recommend and implement engineering and

work practice controls, shall establish levels of PPE, and shall have the authority to take action to eliminate hazards and correct incidences of noncompliance.

2.4 Planning Activities

Projects where anticipated activities involve concrete cutting, grinding, sandblasting, drilling, coring, or other abrasive operations are treated as potential sources for airborne silica exposure. Additionally, existing structures and materials such as sheetrock, any painted surfaces with low volatile organic compounds, tile, brick, or some insulation products may contain silica. Likewise, new material installation may involve silica-containing mortar, paints, or insulation. Where process knowledge indicates the presence of silica, Michael Kinder & Sons, Inc. will either implement all controls required by 1926.1153 Table 1- Exposure Control Methods for Selected Construction Operations or conduct an initial determination in accordance with 29 CFR 1926.1153(d)(2).

3.0 Project Execution

3.1 Safe Work Practices

The requirements of this section are to be followed by Michael Kinder & Sons, Inc. employees, who may be exposed to airborne concentrations of silica at or above the regulatory limits.

3.1.1 Exposure Assessment

Michael Kinder & Sons, Inc. will either comply with and implement all controls required by 1926.1153 Table 1- Exposure Control Methods for Selected Construction Operations or conduct an initial determination in accordance with 29 CFR 1926.1153(d)(2). Michael Kinder & Sons, Inc. personnel must detail the specific activities that they perform with potential for airborne silica exposure and identify all requirements specified in 1926.1153 Table 1 or describe the exposure assessment they will perform to determine airborne silica exposure levels and the required interim control measures that will be used to protect employees until the exposure levels have been established and final control measures can be identified. If not following 1926.1153 Table 1 requirements or performing an activity with potential airborne silica exposure not identified in Table 1 the exposure assessment must contain elements listed below.

- An exposure assessment is required when employees may be exposed to airborne silica at or above the action level in order to determine the extent to which employees are exposed and the appropriate exposure controls required.
- An initial determination of exposure shall be made at the beginning of operations. The determination shall consist of the collection of personal air samples representative of a full shift including at least one sample for each job classification in each work area, either for each shift, or for the shift with the highest exposure level.
- During the initial determination, until such time that actual airborne concentrations are determined, personnel shall be protected by respiratory protection based on task- specific anticipated airborne concentrations of silica as illustrated in Table 2 below:
- During the initial determination, and in addition to the levels of respiratory protection required, personnel shall be provided with protective clothing and equipment, hygiene facilities, and training.
- Whenever a change in equipment, process, controls, or personnel occurs, or a new task has been initiated, an additional exposure assessment is required.
- When an assessment determines that exposure has occurred above the action level but below the PEL, additional monitoring shall be required at least every 6 months. Additional monitoring shall continue until such time that the monitoring results fall below the action level on two separate occasions at least 7 days apart.
- When monitoring yields results above the PEL, then quarterly monitoring is required. In addition, the quarterly monitoring may be suspended when additional monitoring results fall below the action level on two separate occasions at least 7 days apart.

- Where the competent person can clearly demonstrate, in the absence of air monitoring data, that a work activity will not create airborne silica concentrations in excess of the action level, then air monitoring may be unwarranted. Where a negative initial determination is reached without air monitoring, the competent person must develop a written explanation as to why exposures are not expected to exceed the action level.

3.1.2 Communication of Hazards

- Each employee shall be provided training and demonstrate knowledge and understanding of the following:
    - Health hazards associated with exposure to respirable crystalline silica
    - Specific tasks that could result in exposure to respirable crystalline silica
    - Specific measures that are required to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and required use of respiratory protection
    - The contents of the 29 CFR 1926.1153
    - The identity of the competent person
    - Purpose and description of the medical surveillance program
- A written compliance program shall be made available to all affected employees.
- In addition, notification to owners, contractors, and other personnel working in the area shall be made.

3.1.3 Control Methods

- Engineering and work practice controls, including administrative controls, shall be implemented to reduce and maintain employee exposure to silica at or below the PEL, to the extent that such controls are feasible.
- Where all feasible engineering and work practice controls that can be instituted are not sufficient to reduce employee exposure to or below the PEL, such controls shall be used, nonetheless, to reduce employee exposure to the lowest feasible level (and in conjunction with respiratory protection).
- Respiratory protection shall be selected based on guidance in 1926.1153 Table 1 or based on a Certified Industrial Hygienist's or competent person's assessment of the potential airborne exposure that may be created by the means and methods of work (high energy operations with high airborne dust generation or low energy operations with low dust generation).
- When using mechanical ventilation to control exposure, regularly evaluate the system's ability to effectively control exposure.
- If administrative controls are used to limit exposure, establish and implement a job rotation schedule that includes employee identification as well as the duration and exposure levels at each job or work station where each affected employee is located.
- A written compliance program shall be established and implemented prior to the start of operations within the scope of this Written Compliance Plan. The written program shall outline the plans for maintaining employee exposure below the PEL.
- Maintain all surfaces as free as possible from accumulations of silica. Select methods for cleaning surfaces and floors that minimize the likelihood of silica becoming airborne (such as using a HEPA vacuum).
- If vacuuming is the method selected, specialized vacuums with HEPA filtration are required. Methods to use and empty vacuums in a manner that minimizes the reentry of silica into the workplace shall be described and used. Use of household vacuums with HEPA filters are not allowed at any time for the collection of dust or debris that contains silica.
- Never use compressed air to remove silica from any surface unless it is used in conjunction with a ventilation system designed to capture the airborne dust created while using the compressed air.

- Employees shall not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in any areas where exposure to silica is above the PEL (in other words, regulated areas).
- Do not allow employees to leave the workplace wearing any protective clothing or equipment that is required to be worn during their work shift without HEPA vacuum removal of dust.
- Where feasible, install shower facilities and require employees who work in regulated areas to shower at the end of their work shift. Also provide an adequate supply of cleaning agents and clean towels.
- Provide hand washing facilities for use by employees working in regulated areas. Furthermore, require employees to wash their hands and face at the end of the work shift and prior to eating or entering eating facilities, drinking, smoking, or applying cosmetics.
- Eating facilities or areas shall be provided for employees working in regulated areas. These facilities shall be maintained free of silica contamination and shall be readily accessible to those employees.

3.2.5 Personal Protective Equipment (PPE)

Respiratory protection must be used for the following conditions:

- During periods when employee exposure to airborne silica exceeds the PEL
- For work operations where engineering and work-practice controls are not sufficient to reduce employee exposure to or below the PEL
- During periods when an employee requests a respirator
- During periods when respirators are required to provide interim protection while conducting initial exposure assessments
- Powered air-purifying respirators (PAPR) shall be provided to employees who request such a respirator to use where it will provide adequate protection.
- Employees shall be provided, at no cost, protective work clothing and equipment including cotton coveralls or similar full-body clothing, gloves, hats, shoes or disposable shoe coverlets, face shields, vented goggles, or other appropriate PPE.

TABLE 1: SPECIFIED EXPOSURE CONTROL METHODS

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
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
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.	• Outdoors: None • Indoors/Enclosed area: **APF 10**	• Outdoors: APF 10 • Indoors/Enclosed area: **APF 10**
Handheld power saws *(for cutting fiber-cement board, with a 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 percent or greater efficiency.	None	None
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.	• Outdoors: None • Indoors/Enclosed area: **APF 10**	• Outdoors: **APF 10** • Indoors/Enclosed area: **APF 10**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
maintain tool in accordance with manufacturer's instructions to minimize dust emissions.			
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
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
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 percent or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	None	None
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 percent or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	**APF 10**	**APF 10**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
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. **OR** • Operate from within an enclosed cab and use water for dust suppression on drill bit.	None	None
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. • When used indoors or in an enclosed area. **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 percent or greater efficiency and a filter-cleaning mechanism.	• Outdoors: None • Indoors/Enclosed area: **APF 10**	• Outdoors: APF 10 • Indoors/Enclosed area: **APF 10**
Handheld grinders for mortar removal *(i.e., tuckpointing)*	• 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 percent or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	**APF 10**	**APF 25**
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. • 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.	None	None
		• Outdoors: None • Indoors/Enclosed area: None	• Outdoors: None • Indoors/Enclosed area: **APF 10**

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
	• Dust collector must provide 25 cfm or greater of airflow per inch of wheel diameter and have a filter with 99 percent or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.		
Walk-behind milling machines and floor grinders	• Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. • 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. • 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 percent 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.	None	None
Small drivable milling machines *(less than half-lane)*	• Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.	None	None
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. • Operate and maintain machine to minimize dust emissions. • For cuts of 4 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. • Operate and maintain machine to minimize dust emissions. **OR**	None	None

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	> 4 hours/shift
	• Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant. • Operate and maintain machine to minimize dust emissions.		
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). • 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.	None	None
Heavy equipment and utility vehicles used: • To abrade or fracture silica-containing materials *(e.g., hoe-ramming, rock ripping)* OR • During demolition activities involving silica-containing materials	• Operate equipment from within an enclosed cab. • 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
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. OR • When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None	None

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CHAPTER 42

FIRST AID and CPR

Section: Medical Program

Reference: 1926.23, 1926.50 (Subpart C & D)

Revised Date: 3/13/2023

Chapter 42

FIRST AID and CPR

1. INTRODUCTION

The purpose of this policy is to treat minor injuries and to give basic first aid treatment to employees with more serious injuries until medical assistance arrives or while the employee is transported to a medical facility.

2. GENERAL

All Superintendents will be certified in first aid and CPR so at least one first aid trained person is at the jobsite at all times.

3. RESPONSIBILITIES

- Michael Kinder & Sons, Inc. will provide a first aid kits for all jobsites. The superintendent is responsible for ensuring that the kit is properly stocked and maintained.
- Only trained first aid personnel shall administer first aid at the jobsite.
- Michael Kinder & Sons, Inc. Safety Director is responsible for ensuring that this company's on-site first aid kit is properly stocked and maintained in accordance with ANSI (Z 308.1 - 1978). This first aid kit will also contain equipment and materials to be compliant with 29 CFR 1910.1030 - Blood borne Pathogens, including mouth-to-mouth resuscitation devices, powdered bleach, and latex disposable gloves.
- In the absence of a clinic or doctor that is reasonably accessible in terms of time and distance, at least 1 person from the company will be trained and certified to provide first aid and cardiopulmonary resuscitation (CPR).

4. PROCEDURES

Basic Rules of First Aid:

- The first rule is that if you do not know how to give it, do not try to. You may do more harm than good. It's important to know not only what to do, but also what **NOT** to do.
- If required, administer the following life saving procedures:

  ⇨ Open the airway.

  ⇨ Look, listen, and feel for breathing.

  ⇨ Check the pulse.

  ⇨ Stop the bleeding and protect the wound.
  ⇨ Treat for shock.

  ⇨ Do not move the injured person unless you know that moving him will not worsen the

injury.

⇨ Keep the injured person lying down.

⇨ Do not give liquids to the unconscious.

⇨ All first aid treatments will be recorded on a first aid log at the jobsite.

⇨ During the summer months drink plenty of water (small amounts and frequently). Once heavy sweating has started, it is very difficult to drink an amount of water that is equal to the amount lost by sweating, about one quart per hour.

⇨ Do **NOT** take in an excessive amount of salt.

⇨ At times of high humidity and high temperature or when returning to a hot area, pace your work until you become acclimated to existing conditions.

⇨ Phone numbers of physicians, hospitals, and ambulances will be posted in a conspicuous place at the jobsite.

5. TRAINING REQUIREMENTS

Michael Kinder & Sons, Inc. will be providing first aid and CPR training classes for those employees designated by the company.

6. DEFINITIONS

First Aid - Emergency treatment administered to an injured or sick person before professional medical care is available.

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CHAPTER 43

Hearing Conservation

Section: Medical Program

Reference: 1926.52 (Hearing Conservation)

Revised Date: 3/13/2023

Chapter 43

HEARING CONSERVATION PROGRAM

1 Introduction

It is the policy of this company to institute an occupational hearing conservation program for our construction workers to prevent any temporary or permanent noise-induced hearing loss to employees, and to comply with the federal OSHA standard found at 29 CFR 1926.52.

This written hearing conservation plan serves as a record of the details of the hearing conservation program in place at this company. We have this program in place to protect the hearing of all workers in the company. Elements of the hearing conservation program include:

- Monitoring,
- Audiometric testing program,
- Hearing Protection,
- Training and Information, and
- Record keeping.

The corporate safety director has overall responsibility for coordinating safety and health programs in this company. The corporate safety director is the person having overall responsibility for the Hearing Conservation Program. The corporate safety director will review and update the program, as necessary.

2 MONITORING

Where host employer monitoring has been done, the results of that monitoring will be used. If host monitoring has not been done, Michael Kinder & Sons, Inc. 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.

3 GENERAL GUIDELINES

a. Where an employee would be exposed to noise in excess of 85 dBA, Michael Kinder & Sons, Inc. will provide hearing protection (i.e., ear plugs, ear muffs, etc.), 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. The following guidelines shall be used:

   - Ear protective devices inserted in the ear shall be fitted or determined individually by competent persons.
   - Plain cotton is not an acceptable protective device.

   Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in the following Table of this section.

b. When employees are subjected to sound levels exceeding those listed in the following Table, feasible administrative or engineering controls will be utilized. If such controls fail to reduce sound levels within the levels of the table, personal protective equipment as required in this section, shall be provided and used to reduce sound levels within the levels of the table.

c. In all cases where the sound levels exceed the values shown herein, a continuing, effective hearing conservation program will be administered.

PERMISSIBLE NOISE EXPOSURES

Duration Per Day (Hours)	Sound Level (dBA)
8……..	90
6……..	92
4……..	95
3……..	97
2……..	100
1 ½ ……..	102
1……	105
½ ……	110
¼ or less……...	115

d. When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each.

e. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

f. The Safety Director is responsible for the administration of this program; and will use a sound meter (Dosimeter) to test locations when deemed necessary especially in enclosed spaces.

g. When other tradesman or visitors to the jobsite are exposed to noise levels exceeding the limits stated above, they will be offered ear plugs (hearing protection devices) for protection.

4 ENGINEERING CONTROLS

After it is determined that noise exposure above 85 dBA 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:

- Noise reducing baffles
- Compartmentalization
- Installing noise reducing gears
- Installing rubber pads under machinery

5 ADMINISTRATIVE CONTROLS

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).

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.

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

6 HEARING CONSERVATION PROGRAM

a. 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.

b. 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.

c. Audiometric testing will be performed at least annually (by a licensed or certified audiologist, otolaryngologist or physician) and 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.

7 RECORDKEEPING

a. Michael Kinder & Sons, Inc. will maintain an accurate record of all employee exposure measurements and audiometric testing results. These records will reflect:

- The name and job classification of the employee
- The date of the audiogram
- The name of the examiner
- The date of the last calibration of the audiometer
- The employee's most recent noise exposure evaluation
- The accurate records of background sound pressure levels in the test room

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

- Noise exposure measurements – two years
- Audiometric test records – duration of employment

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

8 HEARING PROTECTION TRAINING

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

i. The effects of noise on hearing.

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

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

iv. 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. The Assistant Secretary and the Director will be provided access to the records.

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CHAPTER 44

UNIVERSAL PRECAUTIONS

Section: Medical Program

Reference: 1910.1030 (Subpart Z – Toxic and Hazardous Substances)

Revised Date: 3/13/2023

Chapter 44

UNIVERSAL PRECAUTIONS

1. INTRODUCTION

The purpose of this policy is to reduce the risk of exposure to bloodborne pathogens by employees who perform first aid and / or CPR.

This policy applies to all employees who have been trained in first aid and CPR.

2. RESPONSIBILITIES

Superintendents are responsible for making all reasonable efforts to protect their employees from infectious body fluids.

3. PROCEDURES

It is inevitable that personnel will encounter blood or some other body fluid on a construction site. The following control measures will be utilized when body fluid is encountered on the jobsite:

- Barricade, mark, or section off any area that contains spilled blood or body fluid until it can be cleaned and decontaminated. The spill should be cleaned up as soon as possible and before returning to regular duties.

- Only first aid/CPR-trained personnel are considered qualified to wear the appropriate personal protective equipment prior to assisting the injured party. Personal protective equipment includes:

  ⇨ Disposable gloves
  ⇨ Eye protection
  ⇨ Body gown
  ⇨ Disposable shoe covers
  ⇨ One way resuscitation device (used to restore breathing)

- All of the above equipment will be considered part of the first aid kit.

- All body fluids shall be considered contaminated and shall be cleaned up and disposed of properly. The following procedures will be used for cleaning and removal of body fluids:

  ⇨ Personal protective equipment as described above will be worn during the operation.
  ⇨ Puncture resistant containers will be used to store the contaminated material.
  ⇨ Containers will be labeled as contaminated, using the Orange Biohazard symbol.
  ⇨ Containers will be taken to servicing facility such as a hospital or clinic, for proper

disposal.

- The company is responsible for making available, at no cost to the first aid/CPR-trained employee, a Hepatitis B Vaccination. This employee is not required to have the vaccination, but if he/she refuses the vaccination, he/she must sign the declination form. This form will be kept in the employee's personnel file in the Corporate Office. The vaccination will be available at no cost to the employee at a future date if he/she decides to have it.

- For the safety and well being of employees, Superintendents shall make it mandatory that those employees who have been exposed to body fluids must see the Company Doctor for a follow-up evaluation and possibly laboratory tests. Upon evaluation, the Doctor may recommend that the employee have the Hepatitis B vaccination. This recommendation will be followed, and the employee will be required to have the vaccination.

- When dealing with body fluids of any kind, it should be considered contaminated. A contaminated material is hazardous and will be labeled as such, placing the Orange Biohazard symbol on the container containing fluid.

- The company will keep records on those employees who have been exposed to body fluids for up to 30 years after employment is discontinued.

4. TRAINING REQUIREMENTS

- The company will make arrangements to provide instruction to first aid / CPR certified employees in the proper methods of reducing this risk of exposure.

- This policy will be reviewed during your New Hire Orientation and during annual re-orientations.

- All employees who are certified in first aid and CPR should be trained in the company's policies and procedures relating to reducing the risks of exposure related to bloodborne pathogens.

5. DEFINITIONS

Occupational Exposure - Reasonably anticipated skin, eye, mucous membrane, or parenteral (needle stick, puncture) contact with blood or other potentially infectious materials that may result from the performance of an employee's duties. This regulation was initially written to protect workers in the emergency response and health care profession. OSHA has found an application in the construction industry. According to OSHA those individuals assigned with the responsibility of administering first aid on the job site are occupationally exposed or have the potential of being exposed to human blood and body fluid.

Bloodborne Pathogens - Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Contaminated Sharps - Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination - The use of physical or chemical means to remove, inactivate, or destroy Bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls - Controls (e.g., sharps disposal containers, self-sheathing needles) that

isolate or remove the Bloodborne pathogens 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.

Hand washing Facilities - A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV - Hepatitis B virus.

HIV - Human immunodeficiency virus.

Occupational Exposure - Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Parenteral - Piercing of mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Personal Protective Equipment - Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function, as protections against a hazard are not considered to be personal protective equipment.

Regulated Waste - Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state.

Compressed - Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Source Individual - Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

Universal Precautions - An approach to infection control. All human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other Bloodborne pathogens.

CHAPTER 45

DISPOSAL OF WASTE METERIALS

Section: Environmental

Reference: 1926.252 (Subpart H, Subpart Z)

Revised Date: 3/13/2023

Chapter 45

DISPOSAL OF WASTE MATERIALS

1. INTRODUCTION

Michael Kinder & Sons, Inc. is committed to providing employees a safe workplace. It is this company's policy that employees shall not be permitted to work in areas where hazardous waste or contaminated water and soil may be present. It is also in the company's policy not to create these conditions. Therefore, the purpose of this program is to; establish a procedure to identify contaminated areas and implement control measures to prevent employee exposure to those areas, and identify procedures for proper disposal of waste created by Michael Kinder & Sons, Inc.

This chapter applies to all company maintenance and/or construction operations.

2. RESPONSIBILITIES

- Michael Kinder & Sons, Inc. shall ensure that no employee is exposed to concentrations in excess of the PEL.
- Michael Kinder & Sons, Inc. shall ensure that all waste is disposed of in a proper manner.
- The employees are responsible for complying with this policy and applicable standards.
- The general contractor shall require any contractors to be in compliance with this standard when necessary.

3. PROCEDURES

Existing or Suspected Contamination Areas

Michael Kinder & Sons, Inc. is not required to perform any work involving contamination. However, if employees suspect the presence of such materials at any work site, they should immediately inform their supervisor. Employees should not touch, remove, demolish, or in any other manner disturb materials that are suspected to contain contamination. The superintendent will stop work in the affected area and will inform the owner immediately if contamination is suspected to be present at a job site. Michael Kinder & Sons, Inc. will determine methods to identify and if necessary control or abate the material prior to further operations.

Multi - Employer Site - When a contractor superintendent determines that another contractor onsite is performing abatement, measures should be taken to prevent other contractors from entering regulated areas. This may be accomplished by using barricades, "danger" tape, and signs.

Waste produced by Michael Kinder & Sons, Inc.

All Waste produced by Michael Kinder & Sons, Inc. shall be disposed of in a proper manner. Where applicable, LEED principals shall be used for general refuse, lumber, drywall, concrete/masonry materials, metals, etc.

- All waste shall be disposed of in the correct dumpster/bin for LEED projects.
- At a minimum, work areas shall be cleaned at the end of the shift.
- Never pour chemicals down a sink, floor or any other drain. Dispose of these materials in accordance with all Federal, State, Local and Owner requirements.
- All solvent waste, oily rags and flammable liquids shall be kept in fire resistant covered containers until removed from the worksite.

4. TRAINING REQUIREMENTS

Projects where contaminated products are likely to be a component of existing building materials, the superintendent must communicate to the employees / contractor's the location and nature of such materials. For instance, contaminated soil may be found while excavating an area prior to installing new footers for a building. In this example, workers should be informed of this type of information before commencement of operations.

Contractor superintendents should know or be trained in recognition and avoidance of contaminated materials. It is important to realize that contamination may be hidden during the initial operations, and only be uncovered later in that or other operations.

On LEED jobsites, all employees should be trained in the proper disposal procedures for that jobsite. This can be done through a toolbox talk or other equivalent means.

5. EXPOSURE PROCEDURE

If exposure to contaminated materials occurs, the following guidelines shall be followed:

⇨ Contact the company safety director immediately
⇨ Isolate/demarcate the areas and warn employees
⇨ Prepare an incident notification/investigation report
⇨ Exposed employees should be requested to discard all clothing considered contaminated and deposit clothing in labeled impenetrable bags or containers. They must then be requested to shower. A medical surveillance program must also be established for exposed employees.

Any loose debris or material suspected of containing contamination shall not be disturbed. Michael Kinder & Sons, Inc. employees must maintain a hands-off policy to all material suspected of contamination.

6. DEFINITIONS

Demolition - The wrecking or taking out of any load and/or non-load supporting structural member and any related razing, removing, or stripping of products.

Employee Exposure - Exposure to contamination that would occur if the employee were not using personal protective equipment.

Regulated Area - An area established by the contractor to demarcate areas where concentrations of contamination exceed or can reasonably be expected to exceed the permissible exposure limit. The regulated area may take the form of (1) a temporary enclosure, or (2) an area demarcated in any manner that minimizes the number of employees exposed to material.

Removal - Taking out or stripping of materials containing contamination.

Permissible exposure limit (PEL) - The airborne concentration levels of contaminate above which one should not be exposed.

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Michael Kinder & Sons, Inc.
Incident Reporting

The following four (4) forms are to be used by foremen for reporting incidents involving employees and/or property of the company:

1. **Supervisor's Report (Report 1)** – This three page form is the basic form to report an incident to upper management and must be forwarded within twenty-four (24) hours of the incident.

   It must contain all of the information that can be immediately collected to answer the questions: Who is involved, What is involved, What happened (describe property & equipment involved), Where did this happen, When did this happen and Why did it happen (as far as you can determine). This form can be used to also report a subcontractors incident.

2. **Employee Injury Report Report (Report 2)** – This two page report is to be completed by anyone and everyone who suffers an injury as a result of the incident (a separate report from each injured party). This report is to be forwarded as soon as the injured employee is able t complete it.

3. **Medical Evaluation/Return to Work Report (Report 3)** Each injured employee is to be given a blank copy of this form to take to the treating medical facility. It informs them how to process the fee for their services, about our Return Work (RTW) program and allows them to inform us in regards to the injured employee's ability to participate in the RTW program. Our Drug Free Workplace program (IUCSAT) requires that all employees involved in an incident are to be DRUG TESTED and this form allows you to inform the medical facility that a drug test is to be performed by checking the block.

4. **Witness Statement (Report 4)** – Each witness should be asked to complete a copy of this two-page form so that they can help us determine how the incident occurred.

The **Supervisor's Report** must be forwarded as soon as possible with as much information as possible. The other listed reports and follow-up reports can be submitted as they are completed. All of the pages of a report are to be forwarded but blank copies of a report are not to be sent (for example, if there are no witnesses, do not send blank copies of a witness report).

All reports are to be forwarded to: Ty Wyss, Safety & Field Operations Coordinator
Fax: (260) 446-1157
Email: field@kinderandsons.com
kmettert@kinderandsons.com

Michael Kinder & Sons, Inc.
Ph: (260) 744-4359
Fax: (260) 456-1351

AUTHORIZATION FOR TREATMENT

Injured's Name:_____is authorized to receive treatment for:

_____
(Injury / Illness Date) (Time employee left the jobsite)

Job Name: _____

Job Number: _____

Employee must submit to drug screen urinalysis per IUCSAT Substance Abuse Policy.

_____
(Foreman's Signature) Date

Additional Information:

_____

_____

_____

Attn: Health Care Provider
Contact MKS with diagnosis, special instructions, etc.
Ty Wyss, Safety and Field Operations Coordinator
(260) 437-9167

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Michael Kinder & Sons, Inc.
Supervisors Incident Report (Report 1)

☐ **Injury** ☐ **Employee** ☐ **Subcontractors Employee**
☐ **Property Damage** ☐ **Injury & Property Damage**

SECTION I: JOBSITE INFORMATION

A. ACCIDENT INFORMATION

Jobsite name:_____ Date of Incident:_____ Time of Incident: _____
Location at jobsite:_____ Start Time:_____ am/pm
Foreman's Name:_____ Project Manager's Name: _____

B. WORK SURFACE INVOLVED (Check all that may apply)

☐ Ladder ☐ Scaffolding ☐ Swing Stage ☐ Scissor Lift ☐ Boom Lift
☐ ☐ Concrete ☐ Asphalt ☐ ☐ Mud ☐ Gravel ☐ Sand
☐ ☐ Wet ☐ Snow Covered ☐ ☐ Icy ☐ Dry ☐ Clear
☐ Obstructed by Debris ☐ Obstructed by Material

SECTION II: EMPLOYEE INFORMATION

A. DEMOGRAPHICS

Employee's Name:_____ Job Title:_____ Gender:_____
Social Security No:_____ Date of Birth:_____ Age: _____

B. TYPE OF INJURY

☐ Fracture ☐ Puncture ☐ Strain ☐ Pinched Nerve
☐ Laceration/Cut ☐ Contusion ☐ Dislocation ☐ Foreign Body
☐ Severed ☐ Bruise ☐ Electrical Shock ☐ Insect/Animal Bite

C. BODY PART EFFECTED (Check all that may apply)

☐ Left	☐ Head	☐ Forehead	☐ Face	☐ Knee	☐ Shin/Calf
☐ Right	☐ Nose	☐ Ear	☐ Eye	☐ Fingers:	☐ Toes:
☐ Both	☐ Shoulder	☐ Chest	☐ Abdomen	☐ Thumb	☐ Great
☐ N/A	☐ Bicep	☐ Elbow	☐ Groin	☐ Index	☐ Index
☐ Thigh	☐ Forearm	☐ Wrist	☐ Hand	☐ Middle	☐ Middle
☐ Ankle	☐ Neck	☐ Upper Back	☐ Mid Back	☐ Ring	☐ Fourth
☐ Foot	☐ Lower Back	☐ Buttocks Hip Little	☐ Little	☐	☐

D. CONTRIBUTING EVENT

☐ Operation Tool/Equipment ☐ Climbing
☐ Carrying ☐ Cutting With
☐ Install/Remove ☐ Lift/Push/Pull
☐ Standing/Walking ☐ Cleaning
Other (Describe)

E. INJURING ACTION

☐ Fall_____Ft. ☐ Lifting ☐ Struck By: _____
☐ Electrical Shock ☐ Caught Between
Other: _____

F. PERSONAL PROTECTIVE EQUIPMENT IN USE (Check all that may apply)

☐ None ☐ Hard Hat ☐ Safety Glasses ☐ Gloves ☐ Respirator/Dust Mask
☐ Harness ☐ Lifeline ☐ Rope Grab ☐ Welding Mask ☐ Tie-Off Adapter
☐ Face Shield ☐ Lanyard ☐ Retractable Lifeline ☐ Steel Toe Shoes ☐ Other_____

SECTION III: WITNESSES

A. Name:_____ Phone Number: _____
Address_____ City, State, Zip _____
Employer Name:_____ Phone Number: _____
Location in relation to incident: _____

B. Name:_____ Phone Number: _____
Address_____ City, State, Zip _____
Employer Name:_____ Phone Number: _____
Location in relation to incident: _____

SECTION IV: MEDICAL TREATMENT

A. First Aid Treatment Administered On Site:
Did claimant receive First Aid treatment on site? ☐ Yes ☐ No
If yes, who performed assistance? _____
Did claimant lose consciousness? ☐ Yes ☐ No ☐ Dazed

B. TRANSPORTED FROM SITE:
Was claimant transported from the site for medical treatment? ☐ Yes ☐ No
☐ By Ambulance ☐ Company provided transportation ☐ by claimant

C. TRANSPORTED TO:
Name of Facility:_____ Date of First Treatment: _____
Address:_____
Phone Number: _____

SECTION V: ANALYSIS

1. Did you see the incident occur? ☐ Yes ☐ No
If yes, explain:_____

2. Did you personally observe the injuries? ☐ Yes ☐ No
If yes, explain: _____

3. Did the injured employee report the injury to you? ☐ Yes ☐ No
If no, who did report the injury? _____

4. Was the incident immediately reported to you? ☐ Yes ☐ No
When was it reported: _____
If no, explain: _____

5. What were you initially told:_____
_____
_____

6. Did you gather any information? ☐ Yes ☐ No
If yes, what was gathered and from what source? _____
_____

7. Are you convinced that the incident is being accurately reported? ☐ Yes ☐ No
If no, explain: _____
_____

8. What corrective action has been taken to prevent further incidents of this nature? _____

_____

_____

9. Can you add any information to this report? _____

_____

10. Did claimant return to work? ☐ Yes ☐ No
    If yes, Provide date returned: _____ ☐ Full Duty ☐ Restricted Duty
    If no, give estimated date of return: _____ ☐ Full Duty ☐ Restricted Duty

11. Identify Accident Causes: (Check all that may apply)

☐ Inattention	☐ Failure to wear eye protection	☐ Failure to use Safety Belt/Lanyard
Horseplay	Improper Lifting Techniques	Taking an Unsafe Position
Improper Dress	Improper Use of Tools	Using Unsafe Equipment
☐ Housekeeping	☐ Improper or Lack of Guarding	☐ Disregard for Instructions
☐ Weather (Wind, Ice)	☐ Defective Equipment	☐ Design or Construction Defects
☐ Making Safety Devices Inoperative		

12. Were any company rules (safety or otherwise) violated? ☐ Yes ☐ No
    If yes, was the employee disciplined for the infraction? ☐ Yes ☐ No
    Are such disciplinary measures on record? ☐ Yes ☐ No

13. Did you take pictures? ☐ Yes ☐ No
    If yes, when and of what? _____

Report Submitted By:
Name: _____
Title: _____

Signature: _____
Date: _____

☐ ☐ ☐
☐ ☐ ☐

This form must be sent to the MKS Safety Director within 24 hours.

Michael Kinder & Sons, Inc.
Employee Injury Report (Report 2)

(TO BE COMPLETED BY THE INJURED EMPLOYEE)

SECTION I. CLAIMANT INFORMATION

A. DEMOGRAPHICS

Employee Name: _____ Phone Number: _____
Social Security Number: _____ Date of Birth:_____Age:_____M/F
Single/Married/Divorced/Widowed _____ Number of Dependent: _____
Street Address: _____
City:_____State:_____County:_____Zip:_____
Job Title:_____Start Time:_____am/pm Date of Hire: _____

SECTION II: ACCIDENT INFORMATON

A. JOB INFORMATION

Jobsite name:_____Date of Incident:_____Time of Incident: _____
Location at jobsite: _____
Foreman's Name:_____Project Manager's Name: _____
To whom did you report this incident? _____
When was it reported? Date:_____ Time:_____am/pm

B. PRECIPITATING ACTION

What activity were you performing at the time of the incident? _____
_____
(Example: Installing drywall, walking, climbing scaffold, etc)

C. INJURING ACTION

☐ Fall_____Ft. ☐ Lifting_____Lbs ☐ Struck By _____
☐ Caught In Between_____ ☐ Electrical Shock ☐ Other _____

D. Description of Incident: (Give Details) _____
_____
_____

E. WORK SURFACE INVOLVED (Check all that may apply)

☐ Ladder	☐ Scaffolding	☐	☐ Swing Stage	Scissor Lift	Boom Lift
☐ Concrete	☐ Asphalt	☐	☐ Mud	Gravel	Sand
☐ Wet	☐ Snow Covered	☐	☐ Icy	Dry	Clear
☐ Obstructed by Debris	☐ Obstructed by Material				

F. BODY PART EFFECTED (Check all that may apply)

☐ Left	☐ Head	☐	☐ Forehead	☐ Face	☐ Knee	Shin/Calf
☐ Right	☐ Nose	☐	☐ Ear	☐ Eye	☐ Fingers:	Toes:
☐ Both	☐ Shoulder	☐	☐ Chest	☐ Abdomen	☐ Thumb	Great
☐ N/A	☐ Bicep	☐	☐ Elbow	☐ Groin	☐ Index	Index
☐ Thigh	☐ Forearm	☐	☐ Wrist	☐ Hand	☐ Middle	Middle
☐ Ankle	☐ Neck	☐	☐ Upper Back	☐ Mid Back	☐ Ring	Fourth
☐ Foot	☐ Lower Back		☐ Buttocks Hip Little	☐ Little	☐	☐

G. TYPE OF INJURY

☐ Fracture	☐ Puncture	☐ Strain	☐ Pinched Nerve
☐ Laceration/Cut	☐ Contusion	☐ Dislocation	☐ Foreign Body
☐ Severed	☐ Bruise	☐ Electrical Shock	☐ Insect/Animal Bite

H. PERSONAL PROTECTIVE EQUIPMENT IN USE (Check all that may apply)

☐ None	☐ Hard Hat	☐ Safety Glasses	☐ Gloves	Respirator/Dust Mask
☐ Harness	☐ Lifeline	☐ Rope Grab	☐ Welding Mask	Tie-Off Adapter

Face Shield ☐ Lanyard ☐ Retractable Lifeline ☐ Steel Toe Shoes
Other (Specify) _____

I. How could this incident have been avoided? _____
_____
_____

SECTION III: WITNESSES

A. Name:_____ Phone Number: _____
Address_____ City, State, Zip _____
Employer Name:_____ Phone Number: _____
Location in relation to incident: _____

B. Name:_____ Phone Number: _____
Address_____ City, State, Zip _____
Employer Name:_____ Phone Number: _____
Location in relation to incident: _____

SECTION IV: MEDICAL TREATMENT

A. First Aid Treatment Administered On Site:
Did claimant receive First Aid treatment on site? ☐ Yes ☐ No
If yes, who performed assistance? _____
Did claimant lose consciousness? ☐ Yes ☐ No ☐ Dazed

B. TRANSPORTED FROM SITE:
Was claimant transported from the site for medical treatment? ☐ Yes ☐ No
☐ By Ambulance ☐ Company provided transportation ☐ by claimant

C. TRANSPORTED TO:
Name of Facility:_____ Date of First Treatment: _____
Address:_____
Phone Number: _____

SECTION V: RELEASE

By signing this incident report, I authorize any person, physician or medical facility which provides medical services to me, to disclose pertinent information in relation to the alleged injury to Michael Kinder & Sons, Inc. or their agents, to render a decision in my claim.

Signature:_____ **Date:** _____

Michael Kinder & Sons, Inc.
Medical Evaluation/Return to Work Report (Report 3)

(Send this form to the treating facility with the injured employee)

Medical Professional:
We ask that you provide the necessary medical services to the following employee who has claimed an injury/illness while in our employ on:_____at_____am/pm

Employee Name:_____DOB: _____

☐ **This employee is required to submit a specimen for a post-accident drug/alcohol test per the IUCSAT Agreement**

Rather than disabling our employees during recovery, we employ a "Return to Work" program whereby we will modify their work assignment to be compatible their capabilities as directed by the treating physician until it is determined that they are fully recovered to return to their previous work assignment. So, we ask that you please complete the lower portion of this form, make a copy for your records and send it back to us with the employee. You may direct all questions, correspondences, reports and billing to the following for proper disposition:

Michael Kinder & Sons, Inc.
Attention: Ty Wyss
(260) 744-4359 – Office
(260) 437-9167 – Cell
field@kinderandsons.com

NOTE: This is not an acceptance of liability

RETURN TO WORK EVALUATION

Medical Facility:_____ Phone Number: _____
Attending Medical Provider: _____
This patient arrived for treatment on:_____at_____am/pm
Diagnosis: _____

This employee is:

☐ **Not able to perform any work at this time because _____**

☐ **Able to return to work, regular duty:** ☐ **Immediately** ☐ **On: _____**

☐ **Able to return to work light duty:** ☐ **Immediately** ☐ **On: _____**

Restrictions: _____
_____
_____

Next Appointment:_____at_____am/pm

Attending Medical Professional:_____Date: _____

Michael Kinder & Sons, Inc.
Incident Report (Report 4)
WITNESS STATEMENT

SECTION I: JOBSITE INFORMATION

Subject of Incident: _____
Jobsite Name:_____Date of Incident:_____Time of Incident:_____am/pm
Location at Jobsite: _____

SECTION II: WITNESS INFORMATION

Witness Name:_____Phone Number: _____
Employer Name:_____Employer Phone Number: _____

SECTION III: ACCIDENT INFORMATION

A. Where were you in relation to the claimant at the time of the accident? (I.E. In front, behind, etc)

_____
_____

B. Give approximate distance between you and the claimant at the time of the accident?

_____
_____

C. Describe exactly what you saw, in your own words:

_____
_____
_____

D. Did the claimant appear injured? ☐ Yes ☐ NO
Explain: _____
_____
_____

E. Describe the apparent cause of the injury:

_____
_____
_____
_____

F. State the body part involved: (Be as specific as possible)

_____
_____

G. State the nature of the injury (I.E. Burn, sprain, cut, etc)

_____
_____

H. Did you speak to the claimant at or near the time of the incident? ☐ Yes ☐ No
If yes, state what was said by both parties:

I. Did you offer any assistance? ☐ Yes ☐ No
If yes, describe the assistance that was provided:

J. Have you had any subsequent discussions with the claimant? ☐ Yes ☐ No
If yes, state what was said and when:

K. Please add any additional comments that you may have regarding this incident:

Witness Signature: **Date:**

This form must be sent to the MKS Safety Director once it has been completed.

Michael Kinder & Sons, Inc.
Incident Report (Report 4)
WITNESS STATEMENT

SECTION I: JOBSITE INFORMATION

Subject of Incident: _____
Jobsite Name: _____ Date of Incident: _____ Time of Incident: _____ am/pm
Location at Jobsite: _____

SECTION II: WITNESS INFORMATION

Witness Name: _____ Phone Number: _____
Employer Name: _____ Employer Phone Number: _____

SECTION III: ACCIDENT INFORMATION

A. Where were you in relation to the claimant at the time of the accident? (I.E. In front, behind, etc)

_____
_____

B. Give approximate distance between you and the claimant at the time of the accident?

_____
_____

C. Describe exactly what you saw, in your own words:

_____
_____
_____

D. Did the claimant appear injured? ☐ Yes ☐ NO
Explain: _____
_____
_____

E. Describe the apparent cause of the injury:

_____
_____
_____
_____

F. State the body part involved: (Be as specific as possible)

_____
_____

G. State the nature of the injury (I.E. Burn, sprain, cut, etc)

_____
_____

H. Did you speak to the claimant at or near the time of the incident? ☐ Yes ☐ No
If yes, state what was said by both parties:

I. Did you offer any assistance? ☐ Yes ☐ No
If yes, describe the assistance that was provided: _____

J. Have you had any subsequent discussions with the claimant? ☐ Yes ☐ No
If yes, state what was said and when: _____

K. Please add any additional comments that you may have regarding this incident:

Witness Signature: _____ **Date:** _____

This form must be sent to the MKS Safety Director once it has been completed.

Michael Kinder & Sons, Inc.
(260) 744-4359

CERTIFICATION OF JOB SITE HAZARD ASSESSMENT

(Mandatory – To be completed before job starts)

JOB NAME:_____ JOB NUMBER:_____ DATE: _____

ITEM#	POTENTIAL HAZARDS	YES	NO	N/A
1	Noise Exposure Above 90 dBA			
2	Flying Particles – Chipping & Grinding			
3	Harmful Rays, Sparks, Flying Particles – Burning			
4	Harmful Rays, Sparks, Flying Particles – Welding			
5	Airborne Dust			
6	Hazardous Gasses & Vapors (Oxygen, Acetylene, Propane, Etc.)			
7	Chemical Burns			
8	Concrete Poisoning			
9	Falls grater than 6' – Wall Forming			
10	Falls greater than 6' – Roofing			
11	Falling or flying objects – Overhead			
12	Working Near or Over Water			
13	Cranes – Stable Footing			
14	Scaffolds – Falls greater than 10' (6' on more stringent jobs)			
15	Lull / Forklift Operations (Certification)			
16	Contact with Power Lines			
17	Excavations / Trenches			
18	Other:			

ITEM#	PREVENTIVE EXPOSURE METHODS (ACTION PLAN / PPE) ON "YES" ANSWERS.

_____

Foreman – Signature Date

MKS
MICHAEL KINDER & SONS
PLAN | DESIGN | BUILD

Construction Start-Up Safety Checklist

Jobsite: _____ **Job #:** _____
Foreman: _____ **Project Manager:** _____ **Start-Up Date:** _____

Check items off as you bring them onto the jobsite. Most of these items should be on site before beginning work. If additional items are needed or specific to the jobsite, list them under the *other section.*

Programs/Documentation/Notices

- ☐ Corporate Safety Manual
- ☐ Site-specific Project Safety Plan (when applicable)
- ☐ State/Federal OSHA Safety Standards for Construction (29 CFR 1926)
- ☐ Written Hazard Communication Program and SDSs for all hazardous chemicals on site
- ☐ Toolbox Talk Manual
- ☐ OSHA 300A Summary of Injuries/Illnesses posted February 1st through April 30th (may be kept at corporate office)
- ☐ OSHA Safety Poster
- ☐ State/Federal Employee Right-to-Know Poster
- ☐ Crane Hand Signal Poster
- ☐ Emergency Phone List
- ☐ Closest Hospital Information and Directions conspicuously posted
- ☐ Employee Safety Orientation Documentation (may be kept at corporate office)
- ☐ Employee Training Documentation (may be kept at corporate office)
- ☐ Subcontractor Documentation:
  - Safety Program
  - Written Hazard Communication Program and all SDSs for chemicals brought on site
  - Hazard-Specific Work Plans

Blank Forms/Paperwork

- ☐ Injury/Illness Report
- ☐ Workmen's Compensation Injury Forms
- ☐ Safety Violation Notice

Employee Materials/Equipment

- ☐ Properly sized and stocked First Aid Kit/Cabinet
- ☐ PPE
  - Hardhats
  - Safety Glasses/Goggles
  - Hi-Viz Vests
  - Ear Plugs
  - Gloves
  - Dust Masks

Jobsite Materials/Equipment

- ☐ Fire Extinguishers mounted in easily accessible locations throughout the jobsite
- ☐ Various jobsite warning signs, including Construction Area Warning signs posted at all entrances
- ☐ Barricades, fencing or other ways to keep the public off the jobsite
- ☐ Caution/warning tape
- ☐ Dumpsters, trash cans and/or other means for disposing of wastes and keeping the jobsite clear of housekeeping hazards
- ☐ GFCI protection devices if GFCI protected electrical service is not provided/available

Other

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Emergency Action Plan

In the case of emergency requiring evacuation of the project, either:

FIRE, SERIOUS ACCIDENT, STRUCTURAL COLLAPSE, EXPLOSION, HAZARDOUS SPILL OR PRACTICE EVACUATION

The following warning will sound:

***ONE SIGNAL**: Total Evacuation of building. All workers report to their supervisors in parking area.*
***TWO SIGNALS**: Emergencies – All personnel report to MKS Trailer.*

If this warning sounds, SHUT DOWN all equipment.
All personnel on the project are to proceed IMMEDIATELY by the SAFEST IDENTIFIABLE ROUTE to the SAFE ASSEMBLY POINT

And REMAIN there, so ALL personnel can be ACCOUNTED FOR

DO NOT RETURN to the project until the project manager has given the OFFICIAL CLEARANCE

MEDICAL FACILITIES LOCATED AT:

When calling 911, READ THE FOLLOWING TO THE DISPATCHER:

We have an emergency at…
We need help from Ambulance/Fire/Police…
Directions to the emergency are…
If available, our phone number is…
The medical problem seems to be…
Send someone outside to meet the emergency services

EMERGENCY TELEPHONE NUMBERS:

Dial 911 for:

FIRE, AMBULANCE, POLICE, GAS, CHEMICAL SPILLS

PHONE NUMBERS MAY DIFFER – CHECK YOUR LOCAL DIRECTORY

SAFETY COORDINATOR IS: Ty Wyss (260) 437-9167

FIRST AID KITS AND FIRE EXTINGUISHER'S LOCATED AT MKS OFFICE TRAILER AND VARIOUS LOCATIONS THROUGHOUT THE JOB SITE.

Michael Kinder & Sons, Inc.
Designated Medical Facilities

MKS uses designated medical facilities for the treatment of work-related injuries. Employees are provided with written information regarding their rights under Worker's Compensation laws at the time of hire. In the event an injury occurs, employees are required to immediately notify management or the injured employee's supervisor.

Preferred Designated Medical Facilities

RediMed Business Health Services
315 E. Cook Road
Fort Wayne, IN 46825
(260) 969-2013 (main office)

BHS Clinic Bluffton
1980 N. Main St.
Bluffton, IN 46714
(260) 353-2190
Fax: (260) 353-2191
Mon-Fri: 8 a.m.-4:30 p.m.

BHS Clinic South
5976 W. Jefferson Blvd.
Fort Wayne, IN 46804
(260) 436-2273
Normal hours of operation:
Monday-Friday, 7 a.m.-7 p.m.
Closed Saturday and Sunday

Business Health Extended is open:
Monday -Thursday 7 p.m.-7 a.m.
Friday 7 p.m.-Saturday 8 a.m.
Saturday & Sunday, 8 p.m.-8 a.m.

BHS Clinic North
315 E. Cook Road
Fort Wayne, IN 46825
(260) 489-7334
Monday-Friday, 7 a.m.-5 p.m.
Closed Saturday and Sunday

DeKalb Business Health
Medical Arts Center West
1310 E. Seventh St., Suite F
Auburn, IN 46706
(260) 925-9511
(260) 925-7626 fax
Monday-Friday, 8 a.m.-5 p.m.

Supervisors/Foremen Procedures:

- If appropriate, and properly trained, provide First-Aid treatment.
- If medical treatment is needed, the employee should be referred to the closest MKS Designated Medical Facility (see above locations). ***If it is an emergency, call 911 or transport the employee to the nearest emergency facility.***
- Contact Ty Wyss at (260) 437-9167 to report the injury.
- If possible, or if there is any question as to whether or not the employee should drive, accompany the employee to the doctor's office.
- The supervising Foreman must complete the Supervisor's Incident Report form and provide to Ty Wyss for processing. Note: The form must be completed and returned to the Safety Director within 24 hours.
- **If you have any questions as to how to proceed, or if the employee refuses treatment, contact Ty Wyss immediately.**
- Please communicate an Red Flags when reporting the injury:
    - A delayed report
    - A new employee
    - Injuries not consistent with assigned duties
    - Injuries not consistent with the facts of the accident
    - Injuries occurring at the beginning or end of the work shift
    - Any un-witnessed injury
    - An injury report following an announcement of impending reduction in force or other employee perceived threat to job security

WORKER'S COMPENSATION NOTICE

Your employer is required to provide for payment of benefits under the Worker's Compensation Act of the State of Indiana.

Any employee who is injured while at work should report the injury immediately to their supervisor, employer, or designated representative.

The worker's compensation insurance carrier or the administrator for:
Michael Kinder & Sons is:

Motorists Insurance Group
471 E. Broad Street
Columbus, OH 43215
Phone: (614) 225-8211

For more information about rights or procedures under the Indiana worker's compensation system, call or write:

Worker's Compensation Board of Indiana
Ombudsman Division
402 W. Washington St., Rm W196
Indianapolis, IN 46204
(317) 232-3808
1-800-824-2667

Form 2.1

SDS

2,{] HOURS TADAY

7 DAYS AWEEX

365 DAYS AYEAR

00 451 346

7 2 7 3

INF0 YOU SNOULD NAVE \INEN CALLING:

•Pr0duct Name •Pr0duct Number •Manufacturer Name

• Manufacturer Ph0fl9 NUmber •UPC C0d9

3E COMPANY

A Verisk Analytics Company

3207 Grey Ha¥t CoMrl, tuite 200, Carls6ad, CA 92010 7:760-602-8700 I: 760-602-8888

Michael Kinder & Sons, Inc.

Permit #	Date

CONFINED SPACE ENTRY PERMIT

DESCRIPTION

Permit #:_____ Subcontractor:_____

Supervisor:_____ Location:_____

Type: ☐ Non-Permit ☐ Permit Date and Time of Entry: / / AM/PM

Location of Confined Space:_____

Type of Confined Space: ☐ Tank ☐ Pipe ☐ Manhole ☐ Tunnel ☐ Vault ☐ Other:_____

Work Description/Purpose of Entry:_____

Hazards:_____

VERIFICATIONS

	Date	Entry Supervisor's Initials
Lockout/Tagout (electrical, mechanical, hydraulic, etc.)		
Purged, Cleaned, Drained, and Ventilated		
Employee Training		

SPECIAL REQUIREMENTS (COMPLETED AND REVIEWED PRIOR TO ENTRY)

	Required	Verified		Required	Verified
Safety Department Notified	☐	☐	Hot Work Permit Required	☐	☐
Adequate Access	☐	☐	Fire Extinguisher Available	☐	☐
Adequate Lighting (low voltage)	☐	☐	Lifelines Required	☐	☐
Attendant Required	☐	☐	Harnesses Required	☐	☐
Warning Signs Posted at Access	☐	☐	Respirators Required (Type:)	☐	☐
Ventilation Required	☐	☐	Air Supplied Respirators Required	☐	☐
Authorized Entry Log at Access	☐	☐	Protective Clothing Required	☐	☐
Rescue Equip./Services Available	☐	☐	Communications Equipment	☐	☐
Rescue Team Required	☐	☐	Continuous Air Monitoring	☐	☐
Other:	☐	☐	Other:	☐	☐

Attendant(s) Name(s): _____

AIR MONITORING

Make:_____ Model:_____ ID#_____

Field Calibration Date:_____ Calibrated By:_____

Atmosphere Checked By:_____

Contaminants	Permissible Levels	1st Check*	Time	2nd Check*	Time	3rd Check*	Time
% Oxygen (O2)	19.5% to 23.5%						
LEL	Less than 10%						
Carbon Monoxide (CO)	Less than 35 ppm						
Hydrogen Sulfide (H2S)	Less than 10 ppm						
Other:							

***1st CHECK TO BE COMPLETED PRIOR TO ENTRY**

IN CASE OF EMERGENCY, CALL:_____ **OR** _____

AUTHORIZATION

Entry Supervisor:_____ Date:_____

Michael Kinder & Sons, Inc.

Permit # **Date**

EXCAVATION PERMIT

EXCAVATION INFORMATION

Location: _____

Permit #: _____ Date: _____

Company Name: _____ Shift: _____

Excavation Location: _____

Excavation Length

Width & Depth: _____

Soil Classification: ☐ Type A ☐ Type B ☐ Type C

NOTE: Trenches over 4 feet deep will use a protective system.

Protective Systems Used: ☐ Yes ☐ No

Type: ☐ Shielding (Box) ☐ Sloping ☐ Shoring ☐ Benching ☐ Other:

Weather: _____

Competent Person: _____ Person Completing Report: _____

EXCAVATION REQUIREMENTS

YES	NO	N/A	GENERAL
☐	☐	☐	Protective system used in any trench/excavation greater than 4 feet deep
☐	☐	☐	Spoils, materials & equipment set back ≥ 2 feet from the edges of the excavation
☐	☐	☐	Engineering designs for sheeting &/or manufacturer's data on trench box capabilities on site
☐	☐	☐	Adequate signs posted and barricades provided
☐	☐	☐	Employee training conducted prior to beginning work
YES	**NO**	**N/A**	**UTILITIES**
☐	☐	☐	Utility company contacted & given 24 hours notice &/or utilities already located & marked
☐	☐	☐	Utility locations (overhead & underground) reviewed with operator & employees
☐	☐	☐	Utilities protected, supported or removed when excavation opened
YES	**NO**	**N/A**	**WET CONDITIONS**
☐	☐	☐	Employees protected from water accumulations (continuous dewatering)
☐	☐	☐	Inspection made after every rainstorm
YES	**NO**	**N/A**	**HAZARDOUS ATMOSPHERES**
☐	☐	☐	Air monitored for methane gas prior to entering trench/excavation
☐	☐	☐	Air monitoring & ventilation provided for potentially hazardous atmospheres
☐	☐	☐	Emergency equipment available where hazardous atmospheres could or do exist
YES	**NO**	**N/A**	**ENTRY & EXIT**
☐	☐	☐	Ladders no further than 25 feet from ANY employee in ANY direction
☐	☐	☐	Ladders extend 3 feet above excavation edge and secured
☐	☐	☐	Wood ramps constructed of uniform material thickness & cleated together at bottom
☐	☐	☐	Employees protected from cave-ins where entering/exiting the excavation
NOTE: Items marked NO above MUST be corrected prior to any employee entering the excavation.			

APPROVAL

_____ _____

MKS Foreman or Safety Representative Date

Michael Kinder & Sons, Inc.

Date	Expires

HOT WORK PERMIT

HOT WORK INFORMATION

Location: _____

Company Name: _____ Shift: ☐ 1st ☐ 2nd ☐ 3rd

Location of Work: _____

Floor/Level/Elevation: _____

Description of Work: _____

Any Special Precautions: _____

Employees Performing Work:

Name: _____ Signature: _____

_____ _____

_____ _____

_____ _____

_____ _____

Fire Watch:

Name: _____ Signature: _____

HOT WORK REQUIREMENTS

Hot Work Activities:

1. Hot work activities include any spark-producing activity that includes welding, burning, and grinding.

Requirements:

1. Each foreman will complete permit and have authorized prior to performing any hot work activities.
2. Foreman will instruct employees as to work being performed, precautions to be taken, how to use a fire extinguisher correctly, emergency procedures in case of fire, and the duties of a fire watch.
3. Work area must be clear of combustible and/or flammable material within a 35' radius. If these materials are immovable, then fire blankets or other fire-resistive material must protect them.
4. A ten-pound, or larger, dry-chemical fire extinguisher must be in immediate vicinity of work area.
5. Sparks and slag shall be confined to the work area. When working in elevated area, protect areas below from sparks and slag.

Fire Watch Duties:

1. Continually check work area and all adjacent areas (above, below, around) to ensure free of fire during work activities, during breaks and for ½ hour after completed activities.
2. Trained in the proper use of a fire extinguisher and how to summon fire department or brigade.

Fire Extinguisher Use – Follow the P.A.S.S. method:

1. Pull the pin on the extinguisher.
2. Aim the extinguisher nozzle at the base of the fire.
3. Squeeze the handle.
4. Sweep the base of the fire.

Return Permit to MKS Supervisor When Work Is Completed.

_____ _____

MKS Foreman or Safety Representative Date

Michael Kinder & Sons, Inc.

NOTE: Communicate daily to all workers in the crew and post in a conspicuous location in the work area.

DAILY PRE-TASK SAFETY PLAN

SUBCONTRACTOR:__FOREMAN NAME: _____

DATE: _____

JOB NAME: _____

TASK DESCRIPTION: _____

	LIST ALL THE STEPS OF THE JOB (Use additional paper if needed)		IDENTIFY ALL SPECIFIC HAZARDS FOUND		HOW WILL YOU CONTROL THE HAZARDS?
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	
6		6		6	
7		7		7	

HAZARD IDENTIFICATION TIPS

What permits are required for this task?

☐ Confined Space ☐ Hot Work ☐ Lockout/Tagout

☐ Other _____

Is there a potential fire, explosion, toxic or radioactive release hazard?

☐ YES ☐ NO

Are there any MSDSs that might need to be reviewed for hazardous substances that might be present on the job site?

☐ YES ☐ NO

HAZARD EVALUATION TIPS

Use the following categories to assist you in a proper evaluation of all the hazards that have been identified. Can any of the following conditions occur with the hazards that have been identified?

☐ Contracting Temperature Extremes
☐ Contracting Electrical Current
☐ Environmental/Airborne Release
☐ Moving Object/Equipment
☐ Hazardous Substance
☐ Obstruction/Interference
☐ Struck By
☐ Struck Against
☐ Fall/Slip/Trip
☐ Caught In/Between
☐ Material Handling
☐ Other

HAZARD CONTROL TIPS

Use the following categories to assist you in determining the proper control methods for all the hazards that have been identified and evaluated.

☐ Ventilation of exposure area
☐ Isolation of hazard from worker
☐ Substitution of hazard with less severe one
☐ Elimination of hazard
☐ Change of work methods
☐ Good work practices
☐ Personal protective equipment
☐ Other

HOUSEKEEPING

Was site cleaned up and secured after work?

☐ YES ☐ NO

EVACUATION ROUTE

What is your evacuation route assembly point?

_____

_____

EMERGENCY NUMBERS

Emergency Phone: _____

Emergency Radio: _____

Fire: _____

Other: _____

SIGNATURES

Superintendent: _____

Foreman: _____ General Foreman: _____

Crew Members: _____ _____

Use back of form if additional space is required

_____ _____

Michael Kinder & Sons, Inc.

DAILY FORKLIFT SAFETY INSPECTION REPORT

Inspection by: _____ **Date:** _____
(Licensed Forklift Operator)

Hour Meter: _____ **Unit Number:** _____

Project Name: _____ **Project #:** _____

INSPECTION CRITERIA

	M	T	W	TH	F	S	Comments
1. Forks free of damage.	☐	☐	☐	☐	☐	☐	
2. Forks of appropriate capacity and match.	☐	☐	☐	☐	☐	☐	
3. Engine oil.	☐	☐	☐	☐	☐	☐	
4. Hydraulic fluid.	☐	☐	☐	☐	☐	☐	
5. Fuel, engine coolant and brake fluid.	☐	☐	☐	☐	☐	☐	
6. Hydraulic leaks.	☐	☐	☐	☐	☐	☐	
7. Condition of hydraulic hoses.	☐	☐	☐	☐	☐	☐	
8. Tire pressure.	☐	☐	☐	☐	☐	☐	
9. Tire condition.	☐	☐	☐	☐	☐	☐	
10. Tire ballast.	☐	☐	☐	☐	☐	☐	
11. Lugs tight.	☐	☐	☐	☐	☐	☐	
12. Seat belt.	☐	☐	☐	☐	☐	☐	
13. Back-up alarm.	☐	☐	☐	☐	☐	☐	
14. Horn.	☐	☐	☐	☐	☐	☐	
15. Lights and signals.	☐	☐	☐	☐	☐	☐	
16. Load chart visible to operator.	☐	☐	☐	☐	☐	☐	
17. Fire extinguisher.	☐	☐	☐	☐	☐	☐	
18. Mirrors.	☐	☐	☐	☐	☐	☐	
19. Roll Over Protective Structure.	☐	☐	☐	☐	☐	☐	
20. Frame level Indicator.	☐	☐	☐	☐	☐	☐	
21. Boom angle indicator.	☐	☐	☐	☐	☐	☐	
22. Operator's Manual available.	☐	☐	☐	☐	☐	☐	
23. Evidence of structural damage.	☐	☐	☐	☐	☐	☐	
24. Floorboard free of debris.	☐	☐	☐	☐	☐	☐	
25. Gauges working properly.	☐	☐	☐	☐	☐	☐	
26. Service brake.	☐	☐	☐	☐	☐	☐	
27. Parking brake.	☐	☐	☐	☐	☐	☐	
28. Steering (All modes).	☐	☐	☐	☐	☐	☐	
29. Transmission.	☐	☐	☐	☐	☐	☐	
30. Hydraulic controls (Function test and cycle):	☐	☐	☐	☐	☐	☐	
Boom/Mast - Up& Down.	☐	☐	☐	☐	☐	☐	
Boom - Extend & Retract.	☐	☐	☐	☐	☐	☐	
Fork Tilt - Forward & Backward.	☐	☐	☐	☐	☐	☐	
Frame Level - Left & Right.	☐	☐	☐	☐	☐	☐	
Carriage Tilt - Left & Right.	☐	☐	☐	☐	☐	☐	
Traverse - Forward & Backward.	☐	☐	☐	☐	☐	☐	
Fork Side Shift - Left & Right.	☐	☐	☐	☐	☐	☐	
Outriggers - Up & Down.	☐	☐	☐	☐	☐	☐	

SIGNATURES

Inspector's Signature: _____ Date: _____

Foreman's Signature: _____ Date: _____

Michael Kinder & Sons, Inc.

WEEKLY CRANE SAFETY INSPECTION CHECKLIST

Unit Number: _____

Hour Meter: _____

Operator Name: _____ Date: _____

CHECKS	OK	N/A	REPAIR
	Check Appropriate Box Below:		
Hoist Cable	☐	☐	☐
Boom Cable	☐	☐	☐
Sheaves	☐	☐	☐
Hook	☐	☐	☐
Limit Switches, Boom, Stops, Pins & Keepers	☐	☐	☐
Hydraulic Control & Cylinder	☐	☐	☐
Leaks	☐	☐	☐
Hoist Brakes	☐	☐	☐
Steering Mechanism	☐	☐	☐
Lights	☐	☐	☐
Operating Controls	☐	☐	☐
Windshield Wipers	☐	☐	☐
Horn	☐	☐	☐
Back-up Alarm	☐	☐	☐
Fire Alarm	☐	☐	☐
Mirrors	☐	☐	☐

ADJUSTMENT OR REPAIRS NEEDED: _____

Operator Signature: _____

TURN IN DAILY TO SUPERVISOR

Michael Kinder & Sons, Inc.

WEEKLY CRANE SAFETY INSPECTION CHECKLIST

Unit Number:_____ Equipment Type: _____

Hour Meter:_____ Job Location: _____

Operator Name:_____ Date: _____

CHECKS Check Appropriate Box Below:	OK	N/A	REPAIR
Hoist Cable Has Been Shortened as to Manufacturer's Recommendation	☐	☐	☐
Sheaves	☐	☐	☐
Hook	☐	☐	☐
Anemometer Functioning	☐	☐	☐
Manufacturer's Maximum safe Operating Wind Speed Posted in Cab	☐	☐	☐
Travel Limit and Overload Protection Switches Functioning	☐	☐	☐
Jib Does Not Cross Over Cab or other Tower Crane	☐	☐	☐
Lateral Clearance of 1 Foot From Any Obstruction	☐	☐	☐
Vertical Clearance of 3 Feet From Any Obstruction	☐	☐	☐
360º Rotation Clearance From Any Obstruction	☐	☐	☐
Hoist Brakes	☐	☐	☐
Counterweights clearly marked and weight entered in Equipment Record	☐	☐	☐
Lights	☐	☐	☐
Operating Controls	☐	☐	☐
Windshield	☐	☐	☐
WindShield Wipers	☐	☐	☐
Horn	☐	☐	☐
Two-Way Communications Tested	☐	☐	☐
Clean and Free of Concrete	☐	☐	☐
Base Free of Debris and Water	☐	☐	☐
Operating Manual and Records	☐	☐	☐
All Ladders and Walkways in Good Condition	☐	☐	☐

ADJUSTMENT OR REPAIRS NEEDED: _____

Operator Signature: _____

TURN IN DAILY TO SUPERVISOR

MKS
MICHAEL KINDER & SONS
PLAN | DESIGN | BUILD

Weekly Jobsite Safety Inspection

Helping To Stop Accidents Before They Happen !!!

Date & Time: _____ **Project:** _____

Inspector: _____ **Site Foreman:** _____

MKS Job Number: _____ **Project Manager:** _____

In the Status Box Please Enter One Of The Following Codes:

S = Satisfactory / Yes U = Unsatisfactory / No NA = Not Applicable

For Unsatisfactory Items Please Indicate Problem And Action On The Corrective Action Chart At The End Of This Form.

A. General	Status
1. Are the public and other trades adequately protected from any dangers posed by our work?	
2. Are the general work areas neat and orderly?	
3. Is trash being placed in proper receptacles?	
4. Does the foreman know the location of the closest hospital?	
5. Have all employees taken part in a Pre-Task Plan discussion for their particular work task within the last week?	
6. Do all employees have access to potable water?	
7. Is a first aid kit available?	
8. Are SDS readily available to all employees on site?	
9. Are all flammable liquids stored in approved safety cans?	
10. Are all flammable liquid storage containers labeled appropriately?	
11. Is a fire extinguisher readily available, inspected monthly, and maintained annually?	
12. Are all employees protected from accidental injury or impalement by sharp or slender objects (protruding nails, rebar, etc.)?	
B. Slip, Trip, and Fall Prevention	
1. Are all unattended holes, and similar openings protected with barricades or fencing, or covered securely with plywood or similar?	
2. Are all hoses, cords, cables, nylon strapping, metal banding, shovels, rakes, etc., placed neatly outside of common employee travelways?	
3. If hose, cable, cord, etc., must cross a common employee travelway is it securely fastened in such a manner as to prevent tripping?	
4. Are all excavations where crews are not actively working protected either by barricades, fencing, or parked machine?	
5. Are employees working on retaining walls higher than 6' protected by guardrails or a personal fall arrest system?	
C. Ladder Safety	
1. If an employee is using a ladder have then been trained in ladder safety?	
2. Does the ladder extend at least 3' above the upper landing?	
3. Is the ladder positioned such that the 'run' of the ladder is about 1/4 of the 'rise'?	
4. Is the ladder in good working condition?	
5. Is the ladder securely fastened, either by embedment into earth or some type of rope or cable?	
6. Stepladders are being used only in the open position?	
7. Are all ladder rungs free from grease and oil?	
8. Are employees facing the ladder and maintaining three points of contact?	

D. Personal Protective Equipment (PPE)	
1. Are hard hats being worn by all employees?	
2. Are work boots being worn by all employees?	
3. Are jeans, canvas, or similar long pants being worn by all employees?	
4. Are gloves, traffic vests, earplugs, safety glasses, and similar PPE readily available to all employees?	
5. Is hearing protection being worn where required?	
6. Are gloves being worn where required?	
7. Are traffic vests being worn where required?	
8. Are safety glasses being worn where required?	
9. Is all utilized and available PPE in good working condition?	
E. Trenching and Excavation	
1. Is the work being performed by a “Preferred Subcontractor”?	
2. Has the competent person inspected the excavation prior to any employee entering?	
3. Has a MKS Excavation Permit been filled out?	
4. Is the crew aware of all potential existing utilities in the work area?	
5. Is the crew aware of all overhead electrical lines in the work area?	
6. Has the competent person inspected the trench prior to an employee entering?	
7. Are all excavations 5’ or greater in depth protected from cave-in by proper shoring or sloping?	
8. Are the sides of all trenches properly sloped?	
9. Trench Box Safety	
a. Is the tabulated data sheet on site for this trench box?	
b. Is the excavation no greater than 2’ below the bottom of the trench box?	
c. Does the trench box extend at least 18” above the top of the vertical sides of the trench?	
10. Are spoils kept at least 2 feet away from the trench edge?	
11. Is a ladder present in all excavations 4’ or greater in depth?	
12. If a ladder is used is it positioned such that no employee has to travel greater than 25’ to access it?	
13. Is the trench protected from water accumulation?	
F. Hand & Power Tools	
1. Are shafts and handles of all tools free from cracks and in good working condition?	
2. Are all tools stored neatly and protected from damage?	
3. Are the proper tools being used for the job?	
4. Are all power cords and extension cords free from cuts, frays, or other damage?	
5. Have the employees operating a power tool been trained on that specific tool?	
6. Are all impact tools free from splinters or mushrooms?	
7. Are all damaged or malfunctioning tools tagged out?	
8. Are all guards on tools in place and working properly?	
9. Are GFCI’s used for all portable electric tools?	
G. Heavy Equipment	
1. Are all backup alarms functioning properly?	
2. Are all seat belts functioning and being used?	
H. Material Handling and Rigging	
1. Are employees using proper lifting techniques when lifting objects manually?	
2. Are machines being used to lift heavy objects?	
3. Do all chains and straps have a legible capacity rating tag?	
4. Are all chains and straps being used according to their capacity rating?	
5. Do hooks used for lifting have a safety latch in place?	
6. Are tag lines available and being used when appropriate?	
7. Employees are not allowed underneath any overhead load?	
8. Are lifting chains being rigged properly?	
9. Are loads that have the potential to swing during movement being secured?	
10. Are all lifting apparatus stored neatly and protected from weather and other damage?	

I. Other Areas (Please Fill In As Necessary)	
1.	
2.	
3.	
4.	

Corrective Action Chart			
Item Number	**Problem / Action**	**Person Responsible**	**Correction Verification**

Corrective Action Chart Usage:

Item Number: *The letter and number of the problem item. i.e. G-1 for a machine not having a functioning back-up alarm.*

Problem / Action: *What is unsatisfactory about the item and how it will be addressed.*

Person Responsible: *Who is responsible for addressing the problem item.*

Correction Verification: *The date and initials of who verified that the problem was resolved.*

Michael Kinder & Sons, Inc.
Scaffolding Inspection Checklist

Date Inspected:	Time:
Location of Scaffold:	
Inspected by (designated competent person):	

SCAFFOLD SAFETY INSPECTION CHECKLIST – Use this list to remind yourself of what to look for in order to prevent accidents. Check each item as you see them:

BEFORE USING THE SCAFFOLD-

☐ Has this work location been examined before the start of work operations and have all the appropriate precautions been taken? e.g. checking for: overhead objects, falling or tripping hazards, uneven ground, opening onto a door.

Will fall protection be required when using this scaffold?

Has the scaffold been setup according to manufacturer's instructions?

General Rules for All Scaffolds	**YES**	**NO**	**Not Applicable**
Scaffold components can support at least four times their maximum intended load.	☐	☐	
Scaffold is fully planked- No more that 1" gap between planks.	☐	☐	
Platform is at least 18 inches wide (12 inches on pump jacks).	☐	☐	
Guardrails are used or personal fall arrest system is used, if work height is >10 feet. Guardrail system: Toprail Midrail Toeboard, Posts	☐	☐	
Scaffold is 14" or less from face of work, if workers remove front guardrails (18" for plasterers). ☐ ☐ ☐ ☐	☐	☐	
Planks do not extend past the ends of the scaffold frames more than 12 inches. Min 6"	☐	☐	
Casters are locked before work begins.	☐	☐	
Work platform free of clutter, mud, snow, oil or any tripping hazard.	☐	☐	
Minimum power line clearance (10 feet)	☐	☐	
If the scaffold is defective, has it been removed from service and tagged out?	☐	☐	
General Rules for Supported Scaffolds			
☐ Height to base width ratio is: Less than 4:1 (no guying, ties, or braces required)	☐	☐	
Over 4:1 scaffolds are restrained from tipping by guying, tying, or bracing.	☐	☐	
All scaffold frames and uprights use base plates (mud sills required if on dirt)	☐	☐	
Footings are level, sound, and rigid. No settling has occurred.	☐	☐	
Unstable objects such as blocks, bricks, buckets, etc. are not used as work platforms or to support scaffolds.	☐	☐	
Are riggers secured and installed correctly?	☐	☐	
General Rules for Access			
No more than 2' step up or down or a 14" step across to get on or off a platform.	☐	☐	
Ladder first rung is not more than 24" above the ground.	☐	☐	
Hook-on and attachable ladders are designed for the scaffold.	☐	☐	
Add-on ladders must have a rung length of at least 11 ½"	☐	☐	
Built in ladders (part of the scaffold frames) must have a rung length of at least 8".	☐	☐	
Rungs line-up vertically for the entire height of the scaffold.	☐	☐	
Cross braces are not used for climbing up or down from the scaffold.	☐	☐	

Inspected By:_____ **Date:** _____