Miller Mechanical

SAFETY AND HEALTH MANUAL

NOVEMBER 2017

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SAFETY MANUAL REVIEW AND UPDATE LOG

Manual Approved and Implemented	AUGUST 2015
Review and Update	AUGUST 2016
Review and Update	NOVEMBER 2017

PART 1

GENERAL SAFETY AND HEALTH MANUAL

Part 1 General Safety and Health Manual is a section of overall safety operations and guidelines to meet OSHA, Insurance and Company Safety objectives. Parts 2 through 7 are sections to back-up and support the overall management and documentation of the Company Safety Program.

Policy Statement

Miller Mechanical (from this point forward referred to as the “Company”) has a moral and business obligation to provide a safe work environment for its employees, subcontractors and the public. It is, therefore, the Company's policy to abide by the Occupational Safety and Health Standards and to initiate and maintain appropriate practices that promote safety in the work environment.

All management and supervisory personnel are charged with the responsibility for planning safety into each work task and for preventing the occurrence of incidents and/or controlling conditions / actions that could lead to occupational injuries or illness. The ultimate success of a safety program depends upon the full cooperation of each individual employee. Management at the Company assumes the responsibility and is prepared to take the necessary actions to see that safety rules and practices are enforced.

Our goal is to totally eliminate accidents from our operations.

Goal and Purpose

The goal of Miller Mechanical is to ensure that safety and health efforts are so successful that accidents and injuries are eliminated.

The purpose of this Safety and Health Manual is to provide a set of policies and requirements that management and employees can use as guidelines in their efforts to ensure a safe working environment and reach the company’s goal of zero accidents and injuries.

Objectives

To reflect management’s commitment to provide a safe and healthy working environment for all employees, subcontractors and vendors.

To establish a set of policies and requirements that management and employees can use as guidelines in their efforts to ensure a safe and healthy working environment.

To initiate immediate corrective action is safety deficiencies are discovered.

To be in compliance with federal, state and local safety and health regulations.

To be in compliance with our clients’ safety and health rules and regulations.

Achieve our goals of …zero injuries
…zero lost time accidents
…zero O.S.H.A. violations

Overview of Safety and Health Manual

This Safety and Health Manual is presented as a guide for achieving a high degree of safety within all areas of the company. It is not intended to cover all situations concerning safety, which may arise. Rather, it is presented to instill in each employee an understanding of the importance of safety and the aspiration that the employee will expand his/her awareness to safety and apply it to all aspects of their work.

The OSHA CFR 29 Part 1910 Book and OSHA CFR 29 Part 1926 Book are used and referenced when additional standards, additional graphs or additional charts are required.

Responsibilities

Management, Project Managers, Supervisors, subcontractors, vendors, visitors and all employees are responsible for the compliance with this Safety and Health Manual.

A summary of each party's responsibilities is outlined below.

Management

It is the responsibility of management to establish rules and programs designed to promote safety and health; to make known to all employees the established rules and programs and to impress upon all employees the responsibility and accountability of each individual to maintain a safe and healthful workplace.

Management will ensure that appropriate safety and health training is provided, that inspections are performed and that accident investigations are conducted and reviewed.

Management will designate a person to administer the Safety and Health Program, which includes the general Safety and Health Manual and any specific Safety and Health Manuals.

Management will observe, enforce and follow all safety rules, regulations and policies.

Safety Officer

1) Answer questions concerning the Safety and Health Manual.
2) Keep all copies of the Safety and Health Manual up-to-date.
3) Keep all documentation concerning the Safety and Health Manual up-to-date.
4) Coordinate the items below

Safety Officer

Name: Steve Lane
Telephone: 770-952-3864
Cell: 813-918-0335

Human Resources Manager

Name: TBD
Telephone: TBD
Cell: TBD

Safety Officer

The Safety Officer is responsible for the complete administration of Miller Mechanical. Safety Manual and the following items.

a) Monitor all job sites / areas for compliance with Miller Mechanical Safety Manual.
b) Assure safety inspections (self & outsiders) are conducted.
c) Disciplinary and enforcement procedures.
d) Safety training to company employees.

Safety Administrator (Human Resources Manager)

The Safety Administrator is responsible for providing complete support to the Safety Officer and the complete Safety Program, including the following items:

a) Administrative support for all safety related items and activities.
b) Maintain OSHA 301, 300 & 300A forms current.
c) Monitor Motor Vehicle Reports (MVR).
d) Monitor Safety Training Requirements.
e) Safety Board information upkeep.
f) Publish Safety Information.
g) Employee safety training records.
h) Employee orientation packages.
i) Insurance coordinating.
j) Accident Tracking.

Project Managers

Project Managers are responsible for maintaining safe and healthful working conditions under their supervision.

a) Project Managers will review all written warnings and take appropriate disciplinary action.

b) Project Managers are responsible for requiring conformance to safety and health standards by subcontractors.

c) Project Managers are responsible for providing the general public, protection from company operations.

Project Managers and Supervisors

Project Managers and Supervisors are responsible for coordinating their safety efforts with each other.

a) Project Managers and Supervisors are responsible for pre - planning the job site(s).

b) Project Managers and Supervisors are responsible for reviewing all Accident Reports.

c) Project Managers and Supervisors are responsible for seeing that preventative measures are taken to ensure that Accidents do not occur.

d) The Project Managers and Supervisors are responsible for issuing verbal warnings and written warnings when safety and health rules, regulations or company polices are violated and submitting reports for review to the Safety Officer.

Supervisors

Supervisors are responsible for maintaining safe and healthful working conditions on their job site(s).

a) Supervisors are responsible for carrying out the planning of the Project Managers and making the Project Managers aware of any new conditions or hazards that may arise.

b) Supervisors will continually conduct (at least daily) inspections of job site(s) material or equipment. The Supervisors conducting these inspections must be capable of identifying existing and predictable hazards in the work environment, of identifying working conditions which are unsanitary, hazardous, or dangerous to employees, and of identifying unsafe behavior. In addition, Supervisors must have the authority to take prompt corrective measures to eliminate or control hazards and correct unsafe behavior.

c) Supervisors will ensure that prompt medical attention for any injured employee is available, and will report all accidents and injuries to Project Managers and/or the Safety Officer.

d) Supervisors will ensure personnel protective equipment is available and is being used correctly. Training on PPE is provided, on the job site, by the Supervisors.

e) Supervisors are responsible for filling out the Accident Report within 24 hours of the Accident.

f) Supervisors are responsible for having the appropriate up-to-date SDS sheets on the job site.

g) Supervisors are responsible for all weekly safety training. All weekly safety training shall be documented & maintained at each job site or main office.

h) Supervisors are responsible for ensuring all safety rules & regulations are adhered, to on the job site, by ALL employees, workers, visitors, subcontractors, etc.

i) Supervisors are responsible for submitting Accident Reports and reviewing all Accidents with the Safety Officer.

Drivers

Drivers are expected to drive safely at ALL times. Drivers will abide by all federal and state laws regarding the safe operation of vehicles on public roads.

Drivers must meet the requirements outlined in the section “Rules for Drivers”.

Operators

Operators are expected to operate their equipment safely at ALL times.

Operators of heavy equipment must meet the requirements in the section “Rules for Operators”.

Employees

It is the responsibility of all employees to work safely to ensure their own safety as well as the safety of coworkers and others. Employees are encouraged to ask for assistance when unsure about how to safely perform any task.

a) Employees are required to report any unsafe acts or conditions to their supervisor. Management will not take any reprimand against employees for such notifications.

b) Employees are required to attend and participate in all safety meetings and/or safety training sessions that the company conducts.

c) Employees are responsible for using and maintaining all personal protective equipment that is provided by the employer or the employee.

d) Employees shall follow all OSHA and company safety rules, regulations and/or policies.

e) Employees are required to sign an “End of Week - Employee Injury Statement”.

Subcontractors, Vendors and Suppliers

All subcontractors, vendors and suppliers shall abide by all safety rules.

All subcontractors, vendors and suppliers are required to provide competent persons and/or adequate supervision to perform all activities for Miller Mechanical. in the safest manner possible.

The Miller Mechanical Safety Manual and the OSHA standards are the minimum requirements.

Safety and Health Procedures

The safety and health goal and objectives will be realized by implementation of policies outlined under the following headings:

- Accountability
- Enforcement - Progressive Discipline Procedures
- Bidding / Estimating
- Pre - Planning
- Employee Participation
- Site Safety Inspections
- Accident Investigations and Prevention
- Personal Protection Equipment
- New & Re - Hired Employee Orientation
- Safety Training
- Technical Support
- Documentation

Accountability

Project Managers and Supervisors are accountable for improving the safety performance of personnel under their supervision.

A Safety Committee will be established.

It is the duty of the Safety Committee to see that the company has the cleanest safety record possible. The Safety Officer is always available to consult with any employee who has safety concerns. The Safety Officer shall answer any questions an employee may have and resolve any safety problems that arise.

If any employee has knowledge of any existing safety hazard, and they have brought it to their supervisor's attention without results, please respond to the Safety Officer, and the situation will be investigated.

This safety program is presented as a guide for achieving a high degree of safety within all areas of the company. It is not intended to cover all situations concerning safety, which may arise. Rather, it is presented to instill in each employee an understanding of the importance of safety and the aspiration that the employee will expand his/her awareness to safety and apply it to all aspects of their work.

Enforcement - Progressive Discipline Procedures

Project Managers, Supervisors, or any employee found violating any of the safety and health policies outlined in the Safety and Health Manual, or participating in any other hazardous activity on the job site or while performing activities for the company, will be subject to the following progressive discipline procedures.

First Violation: A written warning, followed by an explanation and/or training.

Second Violation: A written warning, management review of written warning; followed by one of the following actions:
- Suspension, without pay
- Subject to termination

Third Violation: Subject to termination

Exceptions:

1. The progressive discipline procedures will be suspended if an employee commits a gross violation of these Safety and Health Manuals or participates in an unsafe act that poses an immediate danger to the life and health of themselves or other employees.

2. If an employee commits a substance abuse violation, (as described in the Substance Abuse Program) the employee is subject to the disciplinary measures outlined under the Substance Abuse Program.

Bidding / Estimating

Bidding / estimating will include consideration for the elimination or control of safety and health hazards, and all items in the company Safety and Health Manual.

Pre - Planning

The pre - planning of jobs will include attention to the elimination or control of safety and health hazards, and all items in the company Safety and Health Manual.

Employee Participation

Employees are encouraged to make the company aware of any safety and health issues or concerns.

Employees are encouraged to make recommendations for the elimination or control of safety and health hazards.

All safety and health issues brought up by the employees will be reviewed and responded to by management in a timely manner.

Site Safety Inspections

Site safety inspections will be conducted on a regular basis to determine job site hazards, methods to eliminate or control the hazards and ensure that safe work practices are being implemented.

Accident Investigation and Accident Prevention

Accidents and Incidents will be investigated to prevent future mishaps. The purpose of an accident investigation is fact finding, not fault finding; however, the cause of the accident must be reported objectively.

a) All Accidents and Incidents must be reported to the Safety Officer.
b) An Accident Investigation Report must be filled out for each Accident by the Supervisor of the employee involved in the Accident.
c) All Accidents and Incidents will be reviewed by the Safety Officer to determine future prevention measures.

Definitions:

Accident: An “accident” is one in which 1) a fatality occurs, or 2) an individual in the accident immediately receives medical treatment, whether on-site or away from the accident scene, 3) a driver of a commercial motor vehicle receives a citation for a moving traffic violation arising from an accident or 4) there is damage to company property, the property of others or public property.

Incident: An “incident” or “near miss” is an event that could have resulted in an accident.

Personal Protective Equipment (PPE)

All employees will be trained on the proper use and maintenance of personal protective equipment.

New and Re-Hired Employee Orientation

The Safety and Health Manual will be reviewed with all new hired and/or re-hired employees prior to beginning work. New hired and/or re-hired employees will be required, prior to beginning work, to sign a statement of employee understanding regarding the Safety and Health Manual.

New employees will be required to view the NAPHCC video on the hazardous materials program.

Safety Training

Safety training will be documented and entered into employee's personnel files and safety records.

Company Wide Safety Training

Company wide safety training will be conducted on an annual basis, or as deemed necessary by the Safety Officer. These safety training meetings will cover company wide safety and health topics as well as OSHA required safety training.

Project Managers and Supervisors Safety Training

Project Managers and Supervisors meetings will be conducted on a regularly scheduled basis. Some of the topics for these meetings will focus on their responsibility as outlined in the Safety and Health Manual.

They will be trained on hazard identification, hazard control and training other employees, subcontractors and vendors on safe work practices and procedures.

On - Site Safety Training

On - site safety training will cover such topics as:

a) Safety rules and/or regulations.
b) Site specific hazards.
c) Safe work practices.
d) Procedures being used to eliminate specific hazards.
e) Safety training on personal protective equipment.
f) Other safety topics the Supervisors or the Safety Officer deem necessary.

Weekly Safety Training

Supervisors are responsible for weekly safety training on site specific safety and health hazards.

Supervisors document each session topic and attendance is recorded.

Specialized and/or Specific Safety Training

Specialized safety training will be conducted on an "as needed" basis by the company for specific job related functions.

Technical Support

Outside technical support, for assistance, to eliminate or control safety and health hazards will be provided on an "as needed" basis by the company.

Documentation

All documentation relating to the Safety and Health Manual will be kept up-to-date and filed in such a manner that it will be readily accessible. Project Managers and Supervisors are required to file all appropriate documentation in a timely manner with the Safety Officer.

Emergency and First Aid

Supervisors, with the aid of the Safety Officer, will determine the emergency phone numbers for each job site. Supervisors will communicate the emergency numbers in such a manner that every employee on a job site will be aware of the location of the emergency phone numbers.

Job sites should have at least 1 (one) person trained in emergency 1st Aid & CPR.

Emergency Procedures

Supervisors should instruct employees on emergency procedures for the specific job site before work begins. Although the emergency procedures at each job site may vary somewhat, the basic procedures are as follows:

- Don't panic.
- If needed, call for help / 911.
- Provide the dispatcher with detailed information.
- In case of a trench cave in or confined space accident, do not attempt to rescue unless trained in rescue procedures.
- Provide first aid if qualified to do so.
- Don't move injured person unless his or her life is in danger from sources other than the injury.
- Secure the site.
- Shut down the equipment, if necessary.
- Account for everybody on the site.
- Notify the Safety Officer of emergency within 1 (one) hour.

Fire

In the event of a fire the procedures are:

- Use fire extinguisher to put out small fires.
- Evacuate the work area.
- Call fire department / 911.
- Meet at designated location.
- Notify the Safety Officer of the fire within 1 (one) hour.

First Aid

First aid for minor injuries can be administered on the job site. If the injury requires immediate medical treatment beyond first aid, Supervisors will call the appropriate emergency number to receive immediate medical treatment.

If the injury does not require immediate medical treatment, but does require medical treatment beyond first aid, the Supervisors shall arrange transportation for the employee to the appropriate emergency medical facility.

If the injury is minor, and first aid treatment is required by the Supervisors, appropriate action should be taken to prevent exposure to blood borne pathogens and the exchange of body fluids.

All employees must notify their supervisor and/or the Safety Officer of any first aid uses or occurrences.

Accident Reporting and Record Keeping

- All accidents must be reported to the Safety Officer or the main office within 1 hour.
- All eye, neck, back and knee accidents / injuries require immediate medical attention, no matter how minor.
- Accident reports must be 100% complete and turned in to Safety Officer within 24 hours of accident.
- All accidents require:

    a) OSHA 301 Form and Company Accident Form
    b) First Report of Accident Form (per specific state insurance requirements)
    c) Substance Abuse Results Form (if applicable)

The company will maintain an OSHA 300 form (log and summary or equivalent) of all recordable injuries and illnesses resulting in a fatality, hospitalization, lost workdays, medical treatment, and/or loss of consciousness.

The previous year OSHA 300 A summary shall be posted by February 1 of each year.

The OSHA 300, (log and summary), the OSHA 301, (supplementary record or company accident report), shall be retained for five years following the end of the year to which it relates.

Within 8 hours after its occurrence, an employment accident which is fatal to one (1) or more employees shall be reported either orally or in writing, to the nearest OSHA Area Coordinator. Also, within 24 hours after its occurrence, any employment accidents which result in inpatient hospitalization, amputation, or loss of an eye to one (1) or more employees shall be reported either orally or in writing, to the nearest OSHA Area Coordinator. 1-800-321-OSHA (1-800-321-6742)

Modified - Work Program

In the interest of eliminating lost time injuries and reducing Workers Compensation Insurance costs, Miller Mechanical may use a "Modified - Work Program" for injured employees. The intent of this program is to have injured workers with physical restrictions continue to work performing a modified work task within their physical limitations. It is not to be construed as a “make work” program.

Subcontractor Selection

Safety and health performance will be one of the criteria used to select subcontractors. The safety and health guidelines outlined below will be used to evaluate subcontractors.

a) Insurance Certificate
b) Safety and Health Manual
c) Substance Abuse Program

Safety and Health Manual Revision

The Safety and Health Manual is a working document and will be revised and updated as necessary. At a minimum, the Safety and Health Manual will be reviewed and updated on an annual basis.

Safety Bulletin Board

A “Safety Bulletin Board” will be established with up-to-date and current safety information. Many other safety related items will be available in the “Safety Bulletin Board” area.

Distribution of the Safety and Health Manual

Up-to-date copies of the Safety and Health Manual will be available to all employees, subcontractors and vendors through the Safety Officer. In addition, Project Managers and Supervisors will have up-to-date copies of the Safety and Health Manual.

Glossary of Common Terms

A

Absolute
A chemical substance that is not mixed or is pure. An example is Absolute Alcohol which is ethyl alcohol containing not more than 1% water.

Acute Effect
An adverse effect on a human or animal body with severe symptoms developing rapidly and coming quickly to a crisis. Also see *"chronic effect".*

Acute Toxicity
The adverse effects resulting from a single dose of or exposure to a substance.

B

Boling Point
The temperature at which a liquid changes to a vapor. Usually expressed in degrees Fahrenheit. Boiling points of some common liquids.

Water…….212 F

Gasoline……100 F

Propane…….-44 F

Butane……..….31 F

C

Ceiling Limit
The maximum allowable exposure limit for an airborne substance that people may be exposed to, but which may not be exceeded even momentarily.

CAA
Clean Air Act; Federal regulation enacted to regulate and reduce air pollution.

Carcinogen
A substance capable of causing or producing cancer in people or animals.

Chronic Effect
An adverse effect on a human or animal with symptoms which develop slowly over a long period of time or which recur frequently. See also *"acute effect".*

Chronic Toxicity
Adverse effects resulting from repeated doses of or exposure to a substance over a relatively prolonged period of time.

Combustible
Defines materials that burn at a set temperature. Solids such as wood and paper are commonly referred to as ordinary combustibles. Liquid combustibles are liquids that have flash point (maybe thought of as an ignition temperature) of 100 F or higher.

D

Decomposition
Breakdown of material or substance into parts or elements.

Dermal
Used on or applied to the skin.

Dermal Toxicity
Adverse effects resulting from skin exposure to a substance.

E

EPA

U.S. Environmental Protection Agency; Federal Agency with environmental protection regulatory and enforcement authority.

F

Flammable Liquids

Liquids that produce vapors that may ignite at a known temperature (flashpoint). Flammable liquids are divided into three classes; I, II, III. Class I liquids are most flammable. Class III liquids are the least.

G

Gram

Measure of mass or weight.

H

Hazardous Material

Any substance or mixture of substance that have the capability of having an adverse effect on the health or safety of a human.

I

Ignitable

Capable of being set on fire.

Incompatible

Materials which could cause dangerous reactions from direct contact with one another.

Ingestion

Consuming something by mouth.

Inhalation

Breathing in of a substance such as a gas, vapor, dust, or mist.

K

L

LD

Lethal dose – the amount of a substance which will kill an animal or human.

LEL

Lower explosive limit – the minimum amount of a substance in air that can be ignited.

M

Melting Point

The temperature at which a solid substance changes to a liquid.

N

NFPA

National Fire Protection Association – An international voluntary organization to promote an improve fire protection and prevention. NFPA recommended practices have been adopted as fire codes in many communities.

NIOSH

National Institute for Occupational Safety and Health – Federal agency that researches workplace environments that may cause injury or adverse health effects. Recommends standards to OSHA.

O

OSHA

Occupational Safety and Health Administration – part of the U.S. Department of Labor, it is responsible for developing and enforcing workplace safety standards.

Oxidation

Chemical reaction in which a substance combines with oxygen. Rusting material is a form of oxidation.

Oxidizer

Chemical or chemical compound which rapidly releases oxygen under a variety of conditions.

P

PEL

Permissible exposure limit: an exposure limit established by OSHA. It is the amount of a material that a human may be exposed to during a normal work day.

PPM

Parts per million – a unit of measurement.

R

Reaction

A chemical change or transformation.

Reactivity

The tendency of a substance to undergo a chemical reaction with the release of energy in the form of heat.

S

Sensitizer

A substance which on a first exposure has little to no affect or reaction in people, but over time with repeated exposure produces a reaction such as an allergy.

T

Toxicity

The amount of a material which causes an adverse reaction in people.

U

Unstable

Material that could easily change into another material or which may easily decompose in an often violent manner.

V

Vapor

Liquid that is changing to a gas producing a mixture in air.

Vapor Density

The weight of a set volume of a chemical vapor compared to an equal volume of air.

W

X

Y

Z

ADD TO END OF PART I

Glossary of Common Terms

A

Absolute

A chemical substance that is not mixed or is pure. An example is Absolute Alcohol which is ethyl alcohol containing not more than 1% water.

Acute Effect

An adverse effect on a human or animal body with severe symptoms developing rapidly and coming quickly to a crisis. Also see *"chronic effect"*.

Acute Toxicity

The adverse effects resulting from a single dose of or exposure to a substance.

B

Boiling Point

The temperature at which a liquid changes to a vapor. Usually expressed in degrees Fahrenheit. Boiling points of some common liquids.

Water.....212° F

Gasoline.....100° F

Propane.....-44° F

Butane.....31° F

C

Ceiling Limit

The maximum allowable exposure limit for an airborne substance that people may be exposed to, but which may not be exceeded even momentarily.

CAA

Clean Air Act; Federal regulation enacted to regulate and reduce air pollution.

Carcinogen

A substance capable of causing or producing cancer in people or animals.

Chronic Effect

An adverse effect on a human or animal with symptoms which develop slowly over a long period of time or which recur frequently. See also *"acute effect"*

TAB26

Chronic Toxicity
Adverse effects resulting from repeated doses of or exposure to a substance over a relatively prolonged period of time.

Combustible
Defines materials that burn at a set temperature. Solids such as wood and paper are commonly referred to as ordinary combustibles. Liquid combustibles are liquids that have a flash point (maybe thought of as an ignition temperature) of 100° F or higher.

D

Decomposition
Breakdown of a material or substance into parts or elements.

Dermal
Used on or applied to the skin.

Dermal Toxicity
Adverse effects resulting from skin exposure to a substance

E

EPA
U.S. Environmental Protection Agency; Federal Agency with environmental protection regulatory and enforcement authority.

F

Flammable Liquids
Liquids that produce vapors that may ignite at a known temperature (flashpoint). Flammable liquids are divided into three classes; I, II, III. Class I liquids are most flammable. Class III liquids are the least.

G

Gram
Measure of mass or weight.

H

Hazardous Material
Any substance or mixture of substances that have the capability of having an adverse effect on the health or safety of a human.

I

Ignitable
Capable of being set on fire

Incompatible
Materials which could cause dangerous reactions from direct contact with one another.

Ingestion
Consuming something by mouth

Inhalation
Breathing in of a substance such as a gas, vapor, dust, or mist.

K

L

LD
Lethal dose – the amount of a substance which will kill an animal or human.

LEL
Lower explosive limit – The minimum amount of a substance in air that can be ignited.

M

Melting Point
The temperature at which a solid substance changes to a liquid.

N

NFPA
National Fire Protection Association – An international voluntary organization to promote and improve fire protection and prevention. NFPA recommended practices have been adopted as fire codes in many communities.

NIOSH

National Institute for Occupational Safety and Health – Federal agency that researches workplace environments that may cause injury or adverse health effects. Recommends standards to OSHA.

O

OSHA

Occupational Safety and Health Administration – part of the U.S. Department of Labor, it is responsible for developing and enforcing workplace safety standards.

Oxidation

Chemical reaction in which a substance combines with oxygen. Rusting material is a form of oxidation.

Oxidizer

Chemical or chemical compound which rapidly releases oxygen under a variety of conditions.

P

Permissible exposure limit: an exposure limit established by OSHA. It is the amount of a Material that a human may be exposed to during a normal work day.

PPM

Parts per million – a unit of measurement.

R

Reaction

A chemical change or transformation

Reactivity

The tendency of a substance to undergo a chemical reaction with the release of energy in the form of heat.

S

Sensitizer

A substance which on a first exposure has little to no affect or reaction in people, but over Time with repeated exposure produces a reaction such as an allergy.

TAB26

T

Toxicity
The amount of a material which causes an adverse reaction in people.

U

Unstable
Material that could easily change into another material or which may easily decompose in an often violent manner.

V

Vapor
Liquid that is changing to a gas producing a mixture in air.

Vapor Density
The weight of a set volume of a chemical vapor compared to an equal volume of air.

W

Y

Z

PART 2

JOB SITE SPECIFIC SAFETY RULES

Part 2 Jobsite Specific Safety Rules is a section of specific safety rules and regulations (OSHA 1926) for the construction job site. Please refer to Part 4 Specific Safety and Health Policies, Programs and Plans for additional safety policies and in-depth, detailed procedures on certain safety issues and work task.

Abrasive Grinding

Abrasive wheel bench or stand grinders must have safety guards strong enough to withstand bursting wheels. [1926.303(b) & (c)(1)]

Adjust work rest on grinders to a clearance not to exceed 1/8 inch between rest and wheel surface. [1926.303(c)(2)]

Inspect abrasive wheels before mounting. [1926.303(c)(7)]

Always leave wheel in safe working condition for next user.

Access / Egress

Do not jump on or off equipment and/or vehicles.

Use only safe means of access / egress to and from work areas. Safe means includes ladders, ramps and stairs. Jumping from or to work areas is not allowed, nor is sliding down cables, ropes or guy-wires.

Keep all equipment, vehicles, footwear, access areas, etc., clean at all times.

Aerial Lifts

All modifications to any aerial lift, must have written approval from the manufacturer. [1926.453(a)(2)]

Employees shall have adequate training and proper authorization prior to operating any Aerial Lift. [1926.453(b)(2)(ii)]

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. [1926.453(b)(2)(iv)]

A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift. [1926.453(b)(2)(v)]

Never remove the guardrail while the aerial lift is in use. Always use the safety chain while the aerial lift is in use.

Never disconnect the back up alarm on an aerial lift.

Never dismount the aerial lift until it is all the way down.

Always alert other employees on the aerial lift prior to changing the height or the position of the aerial lift.

Use extreme caution when using the aerial lift on uneven surfaces.

Use extreme caution to avoid head injuries from overhead objects when lifting aerial lift.

Air Tools

Secure pneumatic tools to hose in a positive manner to prevent accidental disconnection. [1926.302(b)(1)]

Install and maintain safety clips or retainers on pneumatic impact tools to prevent attachments from being accidentally expelled. [1926.302(b)(2)]

The manufacturer’s safe operating pressure for all fittings shall not be exceeded. [1926.302(b)(5)]

Clothing

All clothing shall be maintained in good shape and worn correctly.

No clothing shall be worn at work that has excessive holes.

No clothing shall be excessively loose, no “hanging” clothes, no “baggy” pants, etc.

Compressed Air, use of

Compressed air used for cleaning purposes may not exceed 30 psi, and then only in conjunction with effective chip guarding and personal protective equipment. [1926.302(b)(4)]

The use of compressed air to clean off yourself or other workers is not allowed.

Compressed Gas Cylinders

Put valve protection caps in place before compressed gas cylinders are transported, moved or stored. [1926.350(a)(1)]

Compressed gas cylinders shall be secured by a cart, chain, etc. at all times. [1926.350(a)(7)]

Cylinder valves will be closed when work is finished and when cylinders are empty or being moved. [1926.350(a)(8)]

Compressed gas cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried. [1926.350(a)(9)]

Oxygen and fuel gas cylinders (in storage), shall be separated by a five - foot high non - combustible wall. The wall must have a fire resistance rating of at least one - half hour or a 20-foot separation. [1926.350(a)(10)]

No damaged or defective cylinders shall be used. [1926.350(c)(3)]

Oxygen and fuel gas regulators must be in proper working order while in use. [1926.350(h)]

Concrete and Masonry Construction

No construction loads shall be placed on the structure until the structure is capable of supporting the load. [1926.701(a)]

All protruding reinforced steel onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement. [1926.701(b)]

No employee shall work under concrete bucket while the bucket is being elevated or lowered into position. [1926.701(e)(1)]

Only authorized employees shall be allowed in the “limited access zone” of masonry walls construction. [1926.706(a)(1) thru (a)(5)]

All employees requited to enter into areas of concrete and masonry construction shall have received the appropriate training to be able to recognize any and all hazards they may be exposed to and to protect themselves from such hazards.

Confined Spaces

All employees required to enter into confined spaces must be instructed as to the nature of the hazards involved, the necessary precautions to be taken, and in the use of required protective and emergency equipment.

The employer shall comply with requirements set forth by Subpart AA for practices and procedures to protect employees engaged in construction activities at a worksite with one or more confined spaces.

Confined Space means a space that:

- Is large enough and so configured that an employee can bodily enter it;
- Has limited or restricted means for entry and exit; and
- Is not designed for continuous employee occupancy.

Before it begins work at a worksite, each employer must ensure that a competent person identifies all confined spaces in which one or more of the employees it directs may work, and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary. [1926.1203(a)]

Each employer who identifies, or receives notice of, a permit space and has not authorized employees it directs to work in that space must take effective measures to prevent those employees from entering that permit space, in addition to complying with all other applicable requirements of this standard. [1926.1203(c)]

If any employer decides that employees it directs will enter a permit space, that employer must have a written permit space program that complies with 1926.1204 implemented at the construction site. The written program must be made available prior to and during entry operations for inspection by employees and their authorized representatives. [1926.1203(d)]

When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, or some indication that the initial evaluation of the space may not have been adequate, each entry employer must have a competent person reevaluate that space and, if necessary, reclassify it as a permit-required confined space. [1926.1203(f)]

The employer must provide training to each employee whose work is regulated by this standard, at no cost to the employee, and ensure that the employee possesses the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this standard. This training must result in an understanding of the hazards in the permit space and the methods used to isolate, control or in other ways protect employees from these hazards, and for those employees not authorized to perform entry rescues, in the dangers of attempting such rescues. [1926.1207(a)]

No employee of this company may enter any confined space without proper training to perform a confined space entry or without an unauthorized permit signed by the project superintendent or site foreman.

Cranes

The controlling entity must: ensure that ground preparations necessary to meet the requirements in paragraph (b) of this section are provided. [1926.1402(c)(1)]

Assembly / Disassembly must be supervised by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons (“A / D director”). [1926.1404(a)(1)]

Upon completion of assembly, the equipment must be inspected by a qualified person to assure that it is configured in accordance with manufacturer equipment criteria. [1926.1412(c)(1)]

Employers must ensure that the operators of cranes have qualification or certification prior to use.

At / near any Power lines, before the beginning of any equipment operation, the employer must identify the work zone and assess the hazards.

Power line safety for equipment operations including assembly and disassembly must be adhered to.

A competent person must begin a visual inspection prior to each shift the equipment will be used, which must be completed before or during that shift. The inspection must consist of observation for apparent deficiencies. Taking apart equipment components and booming down is not required as part of this inspection unless the results of the visual inspection or trial operation indicate that further investigation necessitating taking apart equipment components or booming down is needed. Determinations made in conducting the inspection must be reassessed in light of observations made during operation. [1926.1412(d)(1)]

A competent person must begin a visual inspection prior to each shift the equipment is used, which must be completed before or during that shift. The inspection must consist of observation of wire ropes (running and standing) that are likely to be in use during the shift for apparent deficiencies, including those listed in paragraph (a)(2) of this section. Untwisting (opening) of wire rope or booming down is not required as part of this inspection. [1926.1413(a)(1)]

The employer must comply with all manufacturer procedures applicable to the operational functions of equipment, including its use with attachments. [1926.1417(a)]

Whenever there is a concern as to safety, the Operator must have the authority to stop and refuse to handle loads until a qualified person has determined that safety has been assured. [1926.1418]

Personal fall arrest system components must be used in personal fall arrest and fall restraint systems and must conform to the criteria in 1926.502(d) except that 1926.502(d)(15) does not apply to components used in personal fall arrest and fall restraint systems. Either body belts or body harnesses must be used in personal fall arrest and fall restraint systems. [1926.1423(d)]

Train each employee assigned to work on or near the equipment (“Authorized Personnel”) in how to recognize struck-by and pinch / crush hazard areas posed by the rotating superstructure. [1926.1424(a)(2)(i)]

The use of equipment to hoist employees is prohibited except where the employer demonstrates that the erection, use, and dismantling of conventional means of reaching the work area, such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform, or scaffold, would be more hazardous, or is not possible because of the project’s structural design or worksite conditions. This paragraph does not apply to work covered by subpart R (Steel Erection) of this part. [1926.1431(a)]

All safety devices and operational aids required shall be installed and operational.

The employer of the signal person must ensure that each signal person meets the Qualification Requirements.

Demolition

All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled, outside the building line before demolition work is started. In each case, any utility company, which is involved, shall be notified in advance. [1926.850(c)]

It shall also be determined if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property. When the presence of any such substances is apparent or suspected, testing and purging shall be performed and the hazard eliminated before demolition is started. [1926.850(e)]

No workers shall be permitted in any area, which can be adversely affected by demolition operations, when balling or clamming is being performed. Only those workers necessary for the performance of the operations shall be permitted in this area at any other time. [1926.859(a)]

During demolition, continuing inspections by a competent person shall be made as the work progresses to detect hazards resulting from weakened or deteriorated floors, or walls, or loosened material. No employee shall be permitted to work where such hazards exist until they are corrected by shoring, bracing, or other effective means. [1926.859(g)]

Drinking Water

An adequate supply of potable water shall be provided in all places of employment. [1926.51(a)(1)]

Potable water containers shall be capable of being tightly closed and be equipped with a tap. [1926.51(a)(2)]

The common drinking cup is prohibited. Cup dispensers and disposable cups shall be provided. [1926.51(a)(4)]

A sanitary container for unused cups and a receptacle for used cups shall be provided. [1926.51(a)(5)]

Electrical - General

These sections apply to installations, both temporary and permanent, used on the job site. [1926.402(a)]

All electrical conductors and equipment shall be approved. [1926.403(a)]

The employers shall ensure that electrical equipment is free from recognized hazards that are likely to cause death or serious harm to employees. [1926.403(b)]

Splices must be soldered wire connections with insulation equal to the cable. [1926.403(e)]

All 120-volt, single phase, 15- and 20- ampere receptacles must be protected by G.F.C.I. [1926.404(b)(1)(ii)]

Temporary lights shall not be suspended by their cords. [1926.405(a)(2)(ii)(F)]

Flexible cords and cables shall be protected from damage. [1926.405(a)(2)(ii)(I)]

All extension cords must be 3 - wire type, protected from damage, and not fastened with staples, hung from nails or suspended from wires. [1926.405(a)(2)(ii)(J)] & [1926.416(e)(2)]

No employee may work in proximity to any electric power circuit that may be contacted during the course of work, unless protected against electric shock by de-energizing circuit and grounding it or by guarding with effective insulation. [1926.416(a)(1)]

Worn or frayed electrical cords or cables shall not be used. [1926.416(e)(1)]

Cables passing through work areas will be covered or elevated to protect from damage. Boxes with covers for the purpose of disconnecting must be securely and rigidly fastened to mounting surface.

All extension cords shall be inspected daily, prior to use, for damage or defects.

No cord or tool with a damaged ground plug shall be used.

Only qualified electricians are allowed to make electrical repairs on equipment, tools, etc.

Employee / Subcontractor Conduct

No “catcalling” and/or any form of sexual harassment will be tolerated.

Any employee caught stealing anything, will be terminated.

All employees of this company and all subcontractor employees are required to follow all of our client’s safety rules and regulations.

All employees of this company and all subcontractor employees shall follow all federal, state and local laws and regulations at all times on company projects, company property and/or during company business hours.

Excavation and Trenching

No employee of this company is allowed to commence work in or on an excavation without a competent person on site.

The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations, that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation. [1926.651(b)(1)]

When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by safe and acceptable means. While the excavation is open, underground installation shall be protected, supported or removed as necessary to safeguard employees. [1926.651(b)(3)&(b)(4)]

Each employee in an excavation shall be protected from cave-ins by an adequate protective system except when:

- Excavations are made entirely in stable rock; or excavations are less than five feet in depth and examination of the ground by a competent person provided no indication of a potential cave-in. [1926.652(a)(1)(i) & (a)(1)(ii)]

Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied and/or transmitted to the system. [1926.652(a)(2)]

A copy of the tabulated data for excavation protective systems must be maintained at the job site during construction. [1926.652(c)(3)(iii)]

Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least two feet from the edge of the excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary. [1926.651(j)(2)]

Daily inspections of excavations, the adjacent areas and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by a competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard- increasing occurrence. These inspections are only required when employee exposure is anticipated. [1926.651(k)(1)]

Where a competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety. [1926.651(k)(2)]

A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are four feet or more in depth so as to require no more than 25-feet of lateral travel for employees. [1926.651(c)(2)]

Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard guardrails shall be provided. [1926.651(l)] & [1926.501(b)(7)]

The Competent Person must ensure that all necessary safety equipment and PPE, including rescue equipment, is on-site prior to entrance into an excavation.

No employee of this company is allowed to work in excavations alone. A spotter is required to help protect the employee and / or call for help in the event of a cave-in.

Excavations over 20’-0” must be engineered by an registered engineer prior to excavation.

Explosives and Blasting

No employee of this company is allowed to enter into explosives and blasting areas.

Eye and Face Protection

Eye and face protection must be worn when machines or operations present potential eye or face injury. [1926.102(a)(1)]

Eye and face protective equipment shall meet all requirements of ANSI Z 87.1-1968, “Practice of Occupational and Educational Eye and Face Protection”. [1926.102(a)(2)]

Goggles will be worn over any employee owned prescription glasses that do not meet industrial safety standards. [1926.102(a)(3)]

Employees involved in welding operations must wear filter lenses or plates of the proper shade number. [1926.102(b)(1)]

Employees exposed to laser beams shall be furnished suitable laser safety goggles, which will protect for the specific wavelength of the laser and be optical density (O.D.) adequate for the energy involved. [1926.102(b)(2)]

Eye protection, in the form of safety glasses, shall be worn at all times while employees are on the jobsite.

Fall Protection

Where employees are exposed to falling 6 feet or more from an unprotected side or edge, the employer must select and use a guardrail system, safety net system, or a personal fall arrest system to protect the worker from falls. [1926.501(b)(1)]

A personal fall arrest system consists of an anchorage, connectors, a body harness and may include a lanyard, a deceleration device, lifeline or a suitable combination of these. [1926.500 (b)] & [1926.502(d)]

Each employee in a hoist area shall be protected from falling 6 feet or more by guardrail systems or personal fall arrest systems. If guardrail systems (or chain gate or guardrail) or portions thereof must be removed to facilitate hoisting operations, as during the landing of materials, and a worker must lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee must be protected by a personal fall arrest system. [1926.501(b)(3)]

Personal fall arrest systems, covers, or guardrail systems must be erected around holes (including skylights) that are more than 6 feet above lower levels. [1926.501(b)(4)]

Each employee using ramps, runways, and other walkways shall be protected from falling 6 feet or more by guardrail systems. [1926.501(b)(6)]

Each employee at the edge of an excavation 6 feet deep or more shall be protected from falling by guardrail systems, fences, barricades, or covers. Where walkways are provided to permit employees to cross over excavations, guardrails are required on the walkway if it is 6 feet or more above the excavation. [1926.501(b)(7)]

Fire Protection

A fire protection program is to be followed throughout phases of the construction and demolition work involved. It shall provide for effective fire fighting equipment to be available without delay, and designed to effectively meet all fire hazards as they occur. [1926.150(a)(1)]

Fire fighting equipment shall be conspicuously located and readily accessible at all times, and periodically inspected and maintained in operating condition. [1926.150(a)(2) through (a)(4)] Report any inoperative or missing equipment to your supervisor.

First Aid

The employer shall insure the availability of medical personnel for advice and consultation on matters of occupational health. [1926.50(a)]

Provisions shall be made prior to commencement of the project for prompt medical attention in case of serious injury. [1926.50(b)]

In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid. [1926.50(c)]

First aid supplies shall be easily accessible when required. [1926.50(d)(1)]

The contents of the first aid kit shall be placed in a weatherproof container with individual sealed packages for each type of item, and shall be checked by the employer before being sent out on each job and at least weekly on each job to ensure that the expended items are replaced. [1926.50(d)(2)]

Proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service, shall be provided. [1926.50(e)]

In areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances shall be conspicuously posted. [1926.50(f)]

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use. [1926.50(g)]

Flag Personnel

When signs, signals, and barricades do not provide necessary protection on or adjacent to a highway or street, flag personnel or other appropriate traffic controls shall be provided. [1926.200] & [1926.201]

Flag personnel shall wear highly visible garments while flagging. Warning garments worn at night will have reflector material. [1926.200] & [1926.201] & [1926.651(d)]

Always follow state D.O.T. requirements and MUTCD Manual.

Flammable and Combustible Liquids

No more than 25 gallons shall be stored in a room outside of an approved storage cabinet. [1926.152(b)(1)]

Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. [1926.152(a)(1)] & [1926.155(L)]

Post conspicuous and legible signs prohibiting smoking in service and refueling areas. [1926.152(g)(9)]

All containers must be labeled with appropriate hazardous warnings. Keep flammable liquids in closed containers.

No smoking within 25’ of any fuel storage and/or fueling operations.

Foot Protection

Employees shall wear work shoes or work boots that give ankle support and have a hard sole on the job site.

No sneakers, tennis shoes or open toed shoes are permitted on the job site.

Additional toe protection shall be used when required.

Forklift Safety

The employer shall certify that each operator has been trained and evaluated as required by 1910.178(L)(6). [1926.602(d)]

Employees shall have adequate training and proper authorization prior to operation

Forklift extensions should always be close to the ground when driving forklift un-loaded.

When forklift is being used to move material, be cautious of overhead objects such as lights, power lines, etc.

Never speed or turn too quickly. When forklift is not in use the brake should be set and the machine in park.

Always use caution and watch out for people around corners. Always blow the horn when going through a doorway or around a corner.

Only one person is allowed on forklift at a time.

Gases, Vapors, Fumes, Dusts, and Mists

Exposure to toxic gases, vapors, fumes, dusts, and mists at a concentration above those specified in the “Threshold Limit Values of Airborne Contaminants for 1970” of the ACGIH, shall be avoided. (American Conference of Government Industrial Hygienists) [1926.55(a)]

When engineering and administrative controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed. Any equipment and technical measures used for this purpose must first be approved for each particular use by a competent industrial hygienist or other technically qualified person. [1926.55(b)]

Hand Protection

Employees should be aware of hand hazards such as pinch points, sharp objects, hot objects, etc. and wear appropriate gloves to protect hands and lower arms.

Hand Tools

Employers shall not issue or permit the use of unsafe hand tools. [1926.301(a)]

Wrenches shall not be used when jaws are sprung to the point slippage occurs. Keep impact tools free of mushroomed heads. Keep wooden tool handles free of splinters or cracks and assure a tight connection between the tool head and the handle. [1926.301(b), (c) & (d)]

Electric - power operated tools shall either be approved double insulated or be properly grounded, and used with ground fault circuit interrupters. [1926.302(a) & 1926.404(b)(1)]

Hard Hats

Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock or burns, shall be protected by protective helmets. [1926.100]

Hard hats shall be worn at all times on the job site and shall be worn correctly.

Hard hats shall be worn at all times when off equipment and/or out of vehicles.

Hearing Protection

When engineering or administrative controls fail to reduce sound levels within the limits of Table D-2, ear protective devices shall be provided and used. [1926.52(b) & 1926.101(a)]

In all cases where sound levels exceed the values shown in Table D-2 of the Safety and Health Standards, a continuing, effective hearing conservation program shall be administered. [1926.52(d)(1)]

Table D-2 Permissible Noise Exposures

Duration Per Day, Hours	Sound Level DBA Slow Response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

Plain cotton is not an acceptable protective device. [1926.101(c)]

Heating Devices, Temporary

When heating devices are used, fresh air shall be supplied to maintain the safety and health of employees. [1926.154(a)(1)]

Heat Stress

Employees are encouraged to drink plenty of water during work days.

During work in hot environments, workers should use the lightest weight or “breathable” protective garments that give adequate protection.

Heavy and minimal work activities should be alternated.

Housekeeping / Clean-up

Clean up everyday all areas, including but not limited to, job site, vehicles, shop, office, equipment, tools, etc.

Scrap lumber and other debris will be kept clear from work areas at all times. [1926.25(a)]

Remove combustible scrap and debris at regular intervals. [1926.25(b)]

Containers will be provided for collection and separation of all refuse. Covers are required on containers used for flammable or harmful substances. [1926.25(c)]

Nails shall be withdrawn from used lumber. [1926.250(b)(8)(i)]

Whenever materials and/or trash are dropped more than 20 feet, an enclosed chute shall be used. [1926.252(a)]

At the end of each phase of work, return all tools and excess material to proper storage. Clean up all debris before moving on to the next phase. Each employee is responsible for keeping their work areas clean.

All vehicles and/or equipment must be free of loose debris, dirt, mud, etc., before operation on public roads.

Ladders

Job-made ladders will be constructed for their intended use and/or load. Rungs and/or cleats will be uniformly spaced, no more than 12 inches, apart. [1926.1053(a)(3)(i) & (a)(3)(ii)]

Place portable ladders on a substantial base at a 4-1 pitch, have clear access at top and bottom, extend a minimum of 36 inches above landing or, where not practical, provide grab rails. Secure against movement while in use. [1926.1053(b)(1) thru (b)(7)]

Portable metal ladders may not be used for electrical work or where they may contact electrical conductors. [1926.1053(b)(12)]

Portable and fixed ladders with broken or missing rungs or steps, broken or split side rails, or with other faulty or defective construction are prohibited. When ladders with such defects are discovered, withdraw them from service immediately. [1926.1053(b)(16)]

All employees working in a trench, four feet or more in depth, must be within 25 feet of a ladder, ramp, or stairs. [1926.651(c)(2)]

Under no circumstances will an employee use anything other than a ladder, scaffold or ramp to enter and exit excavations over four feet in depth. These methods will also be wholly within a protective system if the excavation is over five feet in depth. If a ramp is used, the slope shall be flat enough for employees to enter and exit in an upright position.

No ladders shall be used in a horizontal position as platforms, runways, or scaffolds. Extension ladders must be retracted before transporting.

All ladders must be secure. Always face ladders when going up or down.

Materials and tools should be hoisted up or down ladders with a rope, cable or other safe hoisting methods.

Never use the top or the top step of a stepladder.

A ladder inspection program should be utilized to ensure all ladders are inspected at least 4 times per year by a competent person. This inspection is a visual inspection to ensure the ladder is in proper working condition.

Lasers

Only qualified and trained employees shall be assigned to install, adjust and operate laser equipment. [1926.54(a)]

“Laser in Use” signs shall be posted at all times lasers are in operation. [1926.54(d)]

Lighting

Construction area, ramps, walkways, corridors, offices, shops, sheds and storage areas shall be adequately lighted. [1926.56(a) & (b)]

Additional lighting and maintenance of lighting shall be provided as necessary, including but not limited to stairways, aisle ways, and entry / exit areas.

Liquefied Petroleum Gas

Each system shall have containers, valves, connectors, manifold valve assemblies, and regulators of an approved type. [1926.153(a)(1)]

All cylinders shall meet DOT specifications. [1926.153(a)(2)]

Every container and vaporizer shall be provided with one or more approved safety relief valves or devices. [1926.153(d)(1)]
Containers shall be placed upright on firm foundations or otherwise firmly secured. [1926.153(g) & (h)(11)]

Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas in the event of flame failure. [1926.153(h)(8)]

Storage of LPG within buildings is prohibited. [1926.153(j)]

Storage locations shall have at least one approved portable fire extinguisher, rated not less than 20-b:c. [1926.153(L)]

Lock Out / Tag Out

Controls that are to be deactivated during the course of work on energized or de-energized equipment or circuits shall be tagged. [1926.417(a)]

Equipment or circuits that are de-energized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized. [1926.417(b)]

Tags shall be placed to identify plainly the equipment or circuits being worked on. [1926.417(c)]

Manual Lifting

Employees should be prepared for lifting task assigned and use legs to lift, instead of back or obtain assistance.

Recommended lifting procedures include:

- Stand close to the load;
- Firmly grasp the object to be lifted;
- While holding load close to the body, bend knees and lift with legs;
- Keep back as straight as possible;
- Do not twist torso while carrying the load and place the load using the same technique;
- Use any required PPE

Motor Vehicles and Construction Equipment

Check all vehicles in use at the beginning of each workday to assure all parts, equipment and accessories affecting safe operation are in proper operating condition and free from defects. All defects shall be corrected before placing vehicle in service. [1926.601(b)(14)]

No employee shall use any motor vehicle, earthmoving, or compacting equipment having an obstructed view to the rear unless:

- Vehicle has a reverse signal alarm distinguishable from the surrounding noise level, or
- Vehicle is backed up only when an observer signals it is safe to do so. [1926.601(b)(4)]

Willful destruction of company property (such as cutting back-up alarm wires or seatbelts) shall result in immediate dismissal.

Heavy machinery, equipment, or parts thereof, which are suspended or held aloft will be substantially blocked to prevent falling or shifting work under or between them. [1926.600(a)(3)(i)]

Employees shall maintain eye contact with operators of all types of vehicles or equipment. Before entering the site, locate all moving equipment and/or potential sources and routes of moving equipment. This shall be determined and precautions taken at that time to ensure employees on the ground do not come into physical contact with moving equipment. Ensure that all back-up alarms are functioning and/or spotters and/or mirrors are in place and in use.

Personal Protective Equipment

The employer is responsible for requiring the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions, or where the need is indicated for using such equipment to reduce the hazards to the employees. [1926.28(a)]

Where employees provide their own protective equipment, the employer shall be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment. [1926.95(b)]

Employees working over or near water, where the danger of drowning exists, shall be provided with U.S. Coast Guard-approved life jackets or buoyant work vests. [1926.106(a)]

Employees are required to wear hard hats, safety glasses, and reflective vests at all times while on construction job sites. This PPE is the minimum requirement and may be supplemented by additional equipment as required by work activities, environment, or client policies.

All employees are required to wear the appropriate personal protective equipment when required, by any and all rules and regulations set forth by our clients and/or any federal, state or local rules and regulations.

For clarity, “when required” includes, but is not limited to:

- when required by OSHA
- when required by work task
- when required by posted signage
- when required by client

Powder - Actuated Tools

Only trained employees shall operate powder – actuated tools. [1926.302(e)(1)]

Power Tools

Electric power operated tools shall be of the approved double-insulated type or grounded in accordance with subpart K of this part. [1926.302(a)(1)]

Proper power tools shall be identified as associated with tasks to be performed.

Power tools must be unplugged (Or de-energized) when not in specific use.

Power tools must be used only for the intended purpose.

Power tools should be inspected at least 4 times per year to ensure they are being used in proper working condition; the inspection should include both a visual inspection and continuity test.

Power Transmission, Mechanical

Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed to contact by employees or otherwise constitute a hazard. No equipment may be used without guards in place. [1926.300(b)(2)]

Protection of the Public

All company personnel are charged with aiding in the protection of the public including, as your job description dictates, installation and maintenance of signs, signals, lights, fences, guardrails, ramps, temporary sidewalks, barricades, overhead protection, etc. as may be necessary.

Always give the public the “right of way”.

Respiratory Protection

In emergencies, when engineering or administrative controls are not effective in maintaining acceptable atmospheres, appropriate respiratory protective equipment shall be provided by the employer and shall be used. [1926.103] & [1910.134]

Respiratory protective devices, shall be approved by the National Institute for Occupational Safety and Health or acceptable to the U.S. Department of Labor for the specific contaminant to which the employee is exposed. [1926.103] & [1910.134]

Respiratory protective devices shall be appropriate for the hazardous material involved and the extent and nature of the work requirements and conditions. [1926.103] & [1910.134]

Employees required to use respiratory protective devices, shall be thoroughly trained in their use. [1926.103] & [1910.134]

Respiratory protective equipment shall be inspected regularly and maintained in good condition. [1926.103] & [1910.134]

Rules for Drivers of Vehicles

No employee shall operate vehicles without adequate training and proper authorization.

Drivers must not take chances. To arrive safely is more important than to arrive on time.

At all times be cautious of other drivers on the road.

Display a positive company image while driving any vehicle.

Positively no tailgating. Maintain a proper distance between you and all other drivers.

Drivers should also refer to Part 2, in the section titled “Motor Vehicles and Construction Equipment.”

Obey all speed limits and observe extreme caution in school zones.

Each employee who drives a vehicle must have a valid driver’s license for that type of vehicle. Prior to being hired to operate that vehicle, your license will be checked by the management of the Company. It is the employee’s responsibility to maintain a valid license thereafter.

When pulling a trailer, compressor, tack wagon, or other unit, always hook up safety chains and put a pin through the hitch.

Anyone pulling a trailer or piece of equipment is responsible for checking for proper tags, tires, lights, signals, mirrors, fuel, etc.

All accidents must be reported to the office within 1 hour.

If an accident occurs, the driver must follow the procedures as outlined in the Substance Abuse Program.

No unauthorized “Riders” in vehicles.

Rules for Operators

No employee shall operate equipment without adequate training & proper authorization.

Operators shall not operate any equipment that is not in safe working order.

Operators shall inspect their equipment prior to beginning work to ensure the equipment is in safe condition.

Operators will also refer to Part 2, in the section titled “Motor Vehicles and Construction Equipment”.

All accidents must be reported to the office within 1 hour.

If an accident occurs, the operator must follow the procedures as outlined in the Substance Abuse Program.

No “Riders” on equipment.

No employee shall ride any piece of equipment in any fashion or ride on anything attached to a piece of equipment such as a pipe or other equipment. If an employee is on or in a piece of motorized movable equipment, it shall be equipped with a seat (if intended for sit-down operation) and a seat belt and the seat belt shall be worn snugly.

All forklift operators require specific training prior to operating the equipment.

Saws

Portable, power-driven circular saws will be equipped with guards above and below the base plate or shoe. The lower guard will cover the saw to depth of teeth, except for minimum arc required to allow proper retraction and contact with the work, and will automatically return to covering position when blade is removed from the work. [1926.304(d)]

Radial saws will have an upper guard, which completely encloses upper half of saw blade. The sides of the lower exposed portion of blade will be guarded by a device that will automatically adjust to the thickness of and remain in contact with material being cut. Radial saws will be installed so the cutting head will return to starting position when released by operator. [1926.304(g)]

All swing or cut-off saws will be provided with a hood that will completely enclose the upper half of the saw.

All portions of band saw blades will be enclosed or guarded, except for working portion of blades between bottom of guide rolls and table.

Scaffolds

Scaffold means any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage) used for supporting employees or materials or both. [1926.450(b)]

Each scaffold and scaffold component shall support, without failure, its own weight and at least 4 times the maximum intended load applied or transmitted to it. Scaffolds shall be designed by a qualified person and constructed and loaded in accordance with such design. Scaffolds and scaffold components shall not be loaded in excess of their maximum intended loads or rated capacities, whichever is less. [1926.451(a)(1)]

The scaffold platform shall be planked or decked as fully as possible with the space between the platform and uprights not more than 1 inch wide. When side brackets or odd shaped structures result in a wider opening between the platform and the uprights, the space shall not exceed 9.5 inches. The platform shall not deflect more than 1/60 of the span when loaded. [1926.451(b)(1) & (f)(16)]

The work area for each scaffold platform and the walkway shall be at least 18 inches wide. [1926.451(b)(2)]

Access must be provided when the scaffold platforms are more than 2 feet above or below a point of access. Crossbraces shall not be used as a means of access. [1926.451(e)(1) & (e)(8)]

A competent person shall inspect scaffolds, scaffold components, and ropes on suspended scaffolds before each work shift and after any occurrence that could affect the structural integrity. The competent person also must ensure that prompt corrective action is taken. [1926.451(f)(3) & (d)(10)]

Fall protection - such as a guardrail and/or a personal fall arrest systems - must be provided for each employee working on a scaffold more than 10 feet above a lower level. [1926.451(g)(1)]

The employer shall have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. [1926.451(g)(2)]

Stilts may be used on a large area scaffold. [1926.452(y)(1)] (A large area scaffold is a pole, tube and coupler, systems or fabricated frame scaffold erected over substantially the entire work area.)

When a guardrail system is used, the guardrail height shall be equal to the height of the stilts and any alterations to the stilts shall be approved by the manufacturer. [1926.452(y)(2)]

The superintendent is responsible for coordinating delivery and setup of the scaffold.

Scissor Lifts

Employees shall have adequate training and proper authorization prior to operation.

All modifications to any scissor lift, must have written approval from the manufacturer. Never disable reverse alarm beeper on lift.

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 any other device as a work platform.

Never remove lift guardrails while lift is in operation. Always latch guardrail chain while lift is in operation.

Always advise other workers on lift prior to changing height or position and do not exit a lift until it has reached its lowest position.

Use extreme caution when operating lift on uneven surfaces and to avoid head injuries from objects above when raising lift.

Signs

For the protection of all, signs such as “No Smoking”, “Laser in Use”, “Keep Out”, “Eye Protection Required”, “Out of Order – Do Not Use” and “Authorized Personnel” will be posted as needed.

Employees will obey these signs and directions.

Smoking Policy

No smoking around flammable or explosive areas.

Clients and customers smoking policies shall be followed.

Smoking is only allowed in designated areas.

Steel Erection

The employer shall provide a training program for all employees exposed to fall hazards. The program shall include training and instruction in CFR 29 Part 1926 Subpart M. [1926.761(b) & (b)(1) thru (b)(5)]

All employees requited to enter into areas of steel erection shall have received the appropriate training to be able to recognize any and all hazards they may be exposed to and to protect themselves from such hazards.

Storage

All materials stored in tiers will be secured to prevent sliding, falling or collapse. [1926.250(a)(1)]

Aisles and passageways will be kept clear and in good repair. [1926.250(a)(3)]

Weeds and grass in outside storage areas shall be kept under control. [1926.151(c)(3)]

Stored materials may not obstruct exits. [1926.151(d)(1)]

Materials will be stored with due regard to fire characteristics. [1926.151(d)(2)]

Flammable liquids must be kept in approved containers. [1926.152(a)(1)]

Toilets

Toilets shall be provided by the company according to the following minimums:

- 20 or fewer persons – one facility
- 20 or more persons – one toilet seat and one urinal per 40 persons
- 200 or more persons – one toilet seat and one urinal per 50 persons [1926.51(c)(1)]

Washing Facilities

The employer shall provide adequate washing facilities for employees engaged in operations involving harmful substances. [1926.51(f)]

Washing facilities shall be in near proximity to the worksite and shall be so equipped as to enable employees to remove all harmful substances. [1926.51(f)]

Welding, Cutting and Heating

Employers shall instruct employees in the safe means of arc welding and cutting equipment. [1926.351(d)]

When practical, objects to be welded, cut, or heated shall be moved to a designated safe location or, if the objects to be welded, cut or heated cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place, or otherwise protected. [1926.352(a)]

Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention shall be taken in areas where welding or other “hot work” is being done. No welding, cutting or heating will be done where application of flammable paints, or presence of other flammable compounds, or heavy dust concentrations, creates a fire hazard. Equip torches with anti-flashback devices.

All arc welding and cutting cables shall be completely insulated and be capable of handling the maximum current requirements for the job. There shall be no repairs or splices within 10 feet of the electrode holder, except where splices are insulated, equal to the insulation of the cable. Defective cable shall be repaired or replaced. [1926.351(b)(1) & (b)(2)]

Fuel gas and oxygen hose shall be easily distinguishable and shall not be interchangeable. Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective. [1926.350(f)(1) & (f)(3)]

General mechanical or local exhaust ventilation or air line respirators shall be provided, as required, when welding, cutting or heating:

- zinc, lead, cadmium, mercury, or beryllium bearing, based or coated material in enclosed spaces
- stainless steel with inert-gas equipment
- in confined spaces or
- where an unusual condition can cause an unsafe accumulation of contaminants [1926.353(b)(1),(c)(1) through (c)(2) & (d)(1)(iv)]

Arc welding and cutting operations will be shielded by non - combustible or flameproof shields to protect employees from direct arc rays. When electrode holders are left unattended, electrodes will be removed and holder will be placed or protected so they cannot make electrical contact. All arc welding and cutting cables will be completely insulated. Defective cable will be repaired or replaced. [1926.351]

Remove electrodes from unattended electrode holders. [1926.351(d)(1)]

Welding electrode stubs shall be collected in metal containers and not dropped on walking / working surfaces.

Torches shall be lighted ONLY by friction lighters or other approved devices. [1926.350(g)(3)] Cigarette lighters and/or matches are NOT approved lighting devices!

Wire Ropes, Chains, Ropes and other Rigging Equipment

Wire ropes, chains, ropes and other rigging equipment will be inspected prior to use and as necessary during use to assure their safety. Remove defective rigging equipment from service immediately. [1926.251(a)(1)]

Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods or other such attachments will not be used in rigging “systems”. [1926.251(b)(3)]

When U-bolts are used for eye splices, the U-bolt will be applied so the “U” section is in contact with dead end of rope. [1926.251(c)(5)(i)] Never “saddle a dead horse”.

Working / Walking under Suspended Loads

Employees shall NOT work / walk under any suspended load. [1926.701(e)(1) & (2)]

Plan your work and train your crew prior to performing activities with cranes and rigging.

PART 3

SHOP / YARD / OFFICE SPECIFIC SAFETY RULES

Part 3 Shop / Yard / Office Specific Safety Rules is a section of specific safety rules and regulations (OSHA 1910) for the Shop, Yard or Office. Please refer to Part 4 Specific Safety and Health Policies, Programs and Plans for additional safety policies and in-depth, detailed procedures on certain safety issues and work task.

Abrasive Grinding

Machine guarding. Abrasive wheels shall be used only on machines provided with safety guards as defined in the following paragraphs of this section. [1910.215(a)(1)]

The safety guard shall cover the entire spindle end nut, and flange projections. [1910.215(a)(2)]

On offhand grinding machines, work rests shall be used to support the work. They shall be of rigid construction and designed to be adjustable to allow for wheel wear. Work rests shall be kept adjusted closely to the wheel with a maximum opening of one-eighth inch. [1910.215(a)(4)]

The angular exposure of the grinding periphery and sides for safety guards used on machines known as bench and floor stands should not exceed 90 degrees or one-fourth of the periphery. [1910.215(b)(3)]

Immediately before mounting, all wheels shall be closely inspected by the user (ring test) to make sure they have not been damaged in transit, storage or other-wise. The spindle speed of the machine shall be checked to be certain that it does not exceed the maximum operating speed marked on the wheel. [1910.215(d)(1)]

Always leave wheel in working condition for next user.

Access / Egress

Do not jump on or off equipment and/or vehicles.

Keep all equipment, vehicles, footwear, access areas, etc., clean at all times.

Use only safe means of access / egress to and from work areas.

Aerial Lifts

Lift controls shall be tested each day prior to use. [1910.67(c)(2)(i)]

Only trained persons shall operate aerial lifts. [1910.67(c)(2)(ii)]

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. [1910.67(c)(2)(iv)]

A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift. [1910.67(c)(2)(v)]

Never remove the guardrail while the aerial lift is in use. Always use the safety chain while the aerial lift is in use.

Never disconnect the back up alarm on an aerial lift.

Never dismount the aerial lift until it is all the way down.

Always alert other employees on the aerial lift prior to changing the height or the position of the aerial lift.

Use extreme caution when using the aerial lift on uneven surfaces

Use extreme caution to avoid head injuries from overhead objects when lifting aerial lift

Air Tools

Pneumatic power tools shall have a tool retainer installed on each piece of utilization equipment which, without such a retainer, may eject the tool. [1910.243(b)(1)]

Hose and hose connections used for conducting compressed air to utilization equipment shall be designed for the pressure and service to which they are subject. [1910.243(b)(2)]

Clothing

All clothing shall be maintained in good shape and worn correctly.

No clothing shall be worn at work that has excessive holes.

No clothing shall be excessively loose, no “hanging” clothes, no “baggy” pants, etc.

Compressed Air, use of

Compressed air used for cleaning purposes may not exceed 30 psi, and then only in conjunction with effective chip guarding and personal protective equipment. [1910.242(b)]

The use of compressed air to clean off yourself or other workers is not allowed.

Compressed Gas Cylinders

Oxygen and fuel gas cylinders (inside storage), shall be separated 20-feet. [1910.253(b)(2)(ii)]

Cylinder valves will be closed when work is finished and when cylinders are empty or being moved. [1910.253(b)(2)(iii)]

Put valve protection caps in place before compressed gas cylinders are transported, moved or stored. [1910.253(b)(2)(iv)]

Keep cylinders at a safe distance, or shield from welding or cutting operations and place where they cannot become part of an electrical circuit. [1910.253(b)(5)(ii)(J)]

Confined Spaces

The employer shall evaluate the workplace to determine if any spaces are permit-required confined spaces. [1910.146(c)(1)]

Note: Proper application of the decision flow chart in Appendix A to 1910.146 would facilitate compliance with this requirement.

If the workplace contains permit spaces, the employer shall inform exposed employees, by posting signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces. [1910.146(c)(2)]

All employees required to enter into confined or enclosed spaces must be instructed as to the nature of the hazards involved, the necessary precautions to be taken, and in the use of required protective and emergency equipment. The employer shall comply with any specific regulations that apply to work in dangerous or potentially dangerous areas. Confined or enclosed spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines and open top spaces more than 4 feet deep, such as pits, tubs, vaults, and vessels.

Only trained and authorized employees are allowed to work in and around confined spaces.

All entrants, attendants or entry supervisors must be fully trained in confined space entry / exit procedures and trained in the 1910.146 OSHA standards.

Cranes and Hoist

All manufacturer specifications and limitations must be adhered to. [1910.179]

All equipment shall be inspected, by a competent person, prior to use. [1910.179(j)(1)(i)

Drinking Water

An adequate supply of potable water shall be provided in all places of employment. [1910.141(b)(1)(i)]

Potable water containers shall be capable of being tightly closed and be equipped with a tap. [1910.141(b)(1)(iii)]

The common drinking cup is prohibited. [1910.141(b)(1)(vi)]

Electrical - General

Electrical equipment may not be used unless the manufacturer's name, trademark or other descriptive marking by which the organization responsible for the product may be identified. [1910.303(e)]

Portable cord and plug connected equipment and flexible cord sets (extension cords) shall be visually inspected before each use on any shift for external defects. [1910.334(a)(2)(i)]

No cord or tool with a damaged ground plug shall be used. [1910.334(a)(2)(ii)]

All extension cords shall be inspected daily, prior to use, for damage or defects.

Workspaces, walkways and similar locations shall be kept clear of cords.

No cord or tool with a damaged ground plug shall be used. Worn or frayed cables may not be used.

Only qualified electricians are allowed to make electrical repairs on equipment, tools, etc.

Employee Conduct

No "catcalling" and/or any form of sexual harassment will be tolerated.

Willful destruction of company property, may result in immediate dismissal.

Any employee caught stealing anything, will be terminated.

Exit Routes and Signage

At least two exits routes must be available in a workplace to permit prompt evacuation of employees and other building occupants during an emergency. [1910.36(b)(1)]

Exits shall be clearly marked and free of obstructions. [1910.37(a)(3)]

For the protection of all, signs such as "No Smoking", "Laser in Use", "Keep Out", "Eye Protection Required", "Out of Order – Do Not Use" and "Authorized Personnel" will be posted as needed.

Employees will obey these signs and directions.

Eye and Face Protection

Eye and face protection shall be worn when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. [1910.133(a)(1)]

Goggles will be worn over any employee owned prescription glasses that do not meet industrial safety standards. [1910.133(a)(3]

Employees involved in welding operations must wear filter lenses or plates of the proper shade number. [1910.133(a)(5)]

Eye and face protective equipment shall meet all requirements of ANSI Z 87.1-1968, “Practice of Occupational and Educational Eye and Face Protection”. [1910.133(b)(1)]

Employees exposed to laser beams shall be furnished suitable laser safety goggles, which will protect for the specific wavelength of the laser and be optical density (O.D.) adequate for the energy involved.

Fall Protection

Every open sided floor or platform 4 feet or more above adjacent floor or ground level shall be guarded by a standard railing. [1910.23(c)(1)]

Regardless of height, open-sided floors, walkways, platforms, or runways above or adjacent to dangerous equipment, pickling or galvanizing tanks, degreasing units, and similar hazards shall be guarded with a standard railing and toe board. [1910.23(c)(3)]

Every flight of stairs having four or more risers shall be equipped with standard stair railings or standard stair handrails as specified in paragraphs (d)(1)(i) through (v) of this section, the width of the stair to be measured clear of all obstructions except handrails. [1910.23(d)(1)]

A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches nominal from upper surface of top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail and the floor, platform, runway, or ramp. The ends of the rail shall not overhang the terminal posts except where such overhang does not constitute a projection hazard. [1910.23(e)(1)]

A stair railing shall be of construction similar to a standard railing but the vertical height shall be not more than 34 inches nor less than 30 inches from upper surface of top rail to surface of tread in line with face of riser at forward edge of tread. [1910.23(e)(2)]

Fire Protection

The employer shall maintain and inspect, at least annually, firefighting equipment to assure the safe operational condition of the equipment. [1910.156(d)]

The employer shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury. [1910.157(c)(1)]

The employer shall distribute portable fire extinguishers for use by employees on Class A & Class D fires so that the travel distance for employee to any extinguishers is 75 feet or less. [1910.157(d)(2)] & [1910.157(d)(6)] and a Class B & Class C fire so that the travel is 50 feet or less. [1910.157(d)(4)] & [1910.157(d)(5)]

First Aid

The employer shall insure the availability of medical personnel for advice and consultation on matters of occupational health. [1910.151(a)]

In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid. [1910.151(b)]

First aid supplies shall be easily accessible when required. [1910.151(b)]

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use. [1910.151(c)]

The contents of the first aid kit shall be placed in a weatherproof container with individual sealed packages for each type of item, and shall be checked by the employer at least weekly to ensure that the expended items are replaced.

Proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service, shall be provided.

In areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances shall be conspicuously posted.

Flammable and Combustible Liquids

This paragraph shall apply only to the storage of flammable or combustible liquids in drums or other containers (including flammable aerosols) not exceeding 60 gallons individual capacity and those portable tanks not exceeding 660 gallons individual capacity. [1910.106(d)(1)(i)]

Only approved containers and portable tanks shall be used. Metal containers and portable tanks meeting the requirements of and containing products authorized by chapter I, title 49 of the Code of Federal Regulations (regulations issued by the Hazardous Materials Regulations Board, Department of Transportation), shall be deemed to be acceptable. [1910.106(d)(2)(i)]

Flammable or combustible liquids, including stock for sale, shall not be stored so as to limit use of exits, stairways, or areas normally used for the safe egress of people. [1910.106(d)(5)(i)]

Storage shall be prohibited except that which is required for maintenance and operation of building and operation of equipment. Such storage shall be kept in closed metal containers stored in a storage cabinet or in safety cans or in an inside storage room not having a door that opens into that portion of the building used by the public. [1910.106(d)(5)(iii)]

Suitable fire control devices, such as small hose or portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored. [1910.106(d)(7)(i)]

Foot Protection

Employees shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where employee’s feet are exposed to electrical hazards. [1910.136(a)]

No sneakers, tennis shoes or open toed shoes are permitted in the shop / yard areas.

Forklift Safety

The employer shall certify that each operator has been trained and evaluated as required by 1910.178(L)(6).

Employees shall have adequate training and proper authorization prior to operation

Forklift extensions should always be no more than two inches off the floor when driving forklift un-loaded.

When forklift is being used to move material, be cautious of overhead objects such as conduit, lights, etc.

Never speed or turn too quickly. When forklift is not in use the brake should be set and the machine in park.

Always use caution and watch out for people around corners. Always blow the horn when going through a doorway or around a corner.

Only one person is allowed on forklift at a time.

Gases, Vapors, Fumes, Dusts, and Mists

Exposure to toxic gases, vapors, fumes, dusts, and mists at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the ACGIH, shall be avoided. (American Conference of Government Industrial Hygienists)

When engineering and administrative controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed. Any equipment and technical measures used for this purpose must first be approved for each particular use by a competent industrial hygienist or other technically qualified person.

Hand Tools

Employers shall not issue or permit the use of unsafe hand tools. [1910.242(a)]

Hard Hats

The employer shall ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects. [1910.135(a)(1)]

Hard hats shall be worn according to the manufacturer's recommendations.

Hearing Protection

When engineering or administrative controls fail to reduce sound levels within the limits of Table G-16, ear protective devices shall be provided and used. [1910.95(a)]

In all cases where sound levels exceed the values shown in the Safety and Health Standards, a continuing, effective hearing conservation program shall be administered. [1910.95(c)(1)]

Housekeeping / Clean-up

General Requirements

All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition. [1910.22(a)(1)]

Clean up everyday all areas, including but not limited to, vehicles, shop, office, equipment, tools, etc.

Trash and debris will be kept clear from work areas at all times.

Containers will be provided for collection and separation of all trash.

At the end of each phase of work, return all tools and excess material to proper storage. Clean up all debris before moving on to the next phase. Each employee, is responsible for keeping their work areas clean.

Aisles and Passageways

Where mechanical handling equipment is used sufficient safe clearance shall be allowed for aisles, at loading docks, through doorways and whenever turns or passage must be made. Aisles and passageways shall be kept clear and in good repairs, with no obstruction across or in aisles that could create a hazard. [1910.22(b)(1)]

Handling Materials

Where mechanical handling equipment is used sufficient safe clearance shall be allowed for aisles, at loading docks, through doorways and whenever turns or passage must be made. Aisles and passageways shall be kept clear and in good repair, with no obstruction across or in aisles that could create a hazard. Permanent aisles and passageways shall be appropriately marked. [1910.176(c)]

Ladders

Ladders must be maintained in good usable condition at all times. [1910.26(c)(2)(iv)]

A simple rule for setting up a ladder at the proper angle is to place the base a distance from the vertical wall equal to ¼ the working length of the ladder. [1910.26(c)(3)(i)]

No ladders shall be used in a horizontal position as platforms, runways, or scaffolds. Extension ladders must be retracted before transporting. [1910.26(c)(3)(vii)]

All ladders must be secured top and bottom. Always face ladders when going up or down. [1910.26(c)(3)(v)]

Portable ladders shall have nonconductive side-rails of they are used where the employee or the ladder could contact exposed energized parts. [1910.333(c)(7)]

Never use the top or the top step of a stepladder. [1910.25(d)(2)(xii)]

No ladder should be used to gain access to a roof unless the top of the ladder shall extend at least 3 feet above the point of support, at eave, gutter or roof line. [1910.25(d)(2)(xv)]

Materials and tools should be hoisted up or down ladders with a rope, cable or other safe hoisting methods.

Lasers

Only qualified and trained employees shall be assigned to install, adjust and operate laser equipment.

“Laser in Use” signs shall be posted at all times lasers are in operation.

Lighting

Each exit route must be adequately lighted so that an employee with normal vision can see along the exit route. [1910.37(b)(1)]

Additional lighting if needed and maintenance of lighting shall be provided at stairways, aisle ways, walkways and entry / exit areas of all work areas.

Liquefied Petroleum Gas

Containers, and first stage regulating equipment if used, shall be located outside of buildings, except under one or more of the following. [1910.110(b)(6)(i)(a)] through [1910.110(b)(6)(i)(ix)] & [1910.110(6)(i)]

Engines on vehicles shall be shut down while fueling if the fueling operation involves venting to the atmosphere. [1910.110(e)(2)(v)]

All cylinders shall meet DOT specifications. [1910.110(e)(3)(ii)]

No more than two LP-Gas containers shall be used on an industrial truck for motor fuel purposes. [1910.110(e)(13)(ii)]

Lock Out / Tag Out

Controls that are to be deactivated during the course of work on energized or de-energized equipment or circuits shall be tagged. [1910.147]

Equipment or circuits that are de-energized shall be rendered inoperative and shall have tags attached at all points where such equipment or circuits can be energized. [1910.147]

Tags shall be placed to identify plainly the equipment or circuits being worked on. [1910.147]

Manual Lifting

Employees should be prepared for lifting task assigned and use legs to lift, instead of back or obtain assistance.

Office Safety

Office work is generally considered relatively safe, however, conditions and unsafe practices occur that can and do cause accidents.

Exercise care in lifting office machines, filing cases, ledgers, boxes, and bundles of office supplies. All persons lifting any material should observe proper lifting positions so as to lift with the leg muscles rather than putting unnecessary strain on the back. Large boxes or bundles of supplies should be moved by hand truck or unpacked and handled in smaller loads.

Bulky objects should not be carried in such a way as to obstruct the view ahead or interfere with free use of hand rails on stairways. Get help if necessary.

Liquids spilled on floors shall be cleaned up immediately. Loose objects, such as paper clips, pencils, and other small objects, should be kept off the floors.

Extension cords to office machines should be located in such a manner as to eliminate tripping hazards.

Desk and file cabinet drawers should be kept closed except when being used. Open only one drawer at the time to avoid tipping the cabinet.

Use an adequate stepladder to reach objects on overhead shelves.

Walk … do not run … in hallways or up and down stairways. Always use hand rails and “grabrails” on stairways.

Pointed objects, such as knives, and scissors, should not be carried in the pocket with the point exposed. Letter openers, knives, blades, and scissors should be used with care and properly stored when not in use.

Gummed strips on envelopes should be moistened with a device. Use letter openers to open envelopes and avoid sliding hands along the edge of paper.

Keep fingers clear when using stapling machines. Keep fingers away from the cutting edge of paper cutters. Never leave a hand operated cutter blade in the raised position.

Defective electrical cords or connections on office machines shall be removed from service until repaired.

Extreme care should be used with all temporary portable heaters, in the office areas.

Personal Protective Equipment

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices and protective shields and barriers, shall be provided, used and maintained in a sanitary and reliable condition whenever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact. [1910.132(a)]

Defective or damaged personal protective equipment shall not be used. [1910.132(e)]

The employer is responsible for requiring the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions, or where the need is indicated for using such equipment to reduce the hazards to the employees.

Respiratory Protection

Employees required to use respiratory protective devices, shall be thoroughly trained in their use. [1910.134]

When engineering or administrative controls are not effective in maintaining acceptable atmospheres, appropriate respiratory protective equipment shall be provided by the employer and shall be used. [1910.134(a)(1)]

Respiratory protective devices, shall be approved by the National Institute for Occupational Safety and Health or acceptable to the U.S. Department of Labor for the specific contaminant to which the employee is exposed. [1910.134]

The employer shall select and provide an appropriate respirator based on the respirator hazard to which the worker is exposed and workplace and user factors that affect respirator performance and reliability. [1910.134(d)(1)(i)]

The employer shall select a NIOSH – certified respirator. [1910.134(d)(1)(ii)]

The employer shall provide a medical evaluation to determine the employee's ability to use a respirator. [1910.134(e)(1)]

Respiratory protective equipment shall be cleaned and maintained in good condition. [1910.134(h)(1)(i)]

Rules for Drivers of Vehicles

No employee shall operate vehicles without adequate training and proper authorization.

Drivers must not take chances. To arrive safely is more important than to arrive on time.

At all times be cautious of other drivers on the road.

Display a positive company image while driving any vehicle.

Positively no tailgating. Maintain a proper distance between you and all other drivers.

Obey all speed limits and observe extreme caution in school zones.

Each employee who drives a vehicle must have a valid driver's license for that type of vehicle. Prior to being hired to operate that vehicle, your license will be checked by the management of the Company. It is the employee's responsibility to maintain a valid license thereafter.

When pulling a trailer, compressor, tack wagon, or other unit, always hook up safety chains and put a pin through the hitch.

Anyone pulling a trailer is responsible for checking for proper tags, tires, lights, signals, mirrors, fuel, etc.

All accidents must be reported to the office within 1 hour.

If an accident occurs, the driver must follow the procedures as outlined in the Substance Abuse Program.

No unauthorized “Riders” in vehicles.

Rules for Operators

No employee shall operate equipment without adequate training & proper authorization.

Operators shall not operate any equipment that is not in safe working order.

Operators shall inspect their equipment prior to beginning work to ensure the equipment is in safe condition.

All accidents must be reported to the office within 1 hour.

If an accident occurs, the operator must follow the procedures as outlined in the Substance Abuse Program.

No “Riders” on equipment.

No employee shall ride any piece of equipment in any fashion or ride on anything attached to a piece of equipment such as a pipe or other equipment. If an employee is on or in a piece of motorized movable equipment, it shall be equipped with a seat (if intended for sit-down operation) and a seat belt and the seat belt shall be worn snugly.

All forklift operators require specific training prior to operating the equipment.

Scaffolds

Scaffold means any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage) used for supporting employees or material or both.

Scaffolds shall be furnished and erected in accordance with this standard for persons engaged in work that cannot be done safely from the ground or from solid construction, except that ladders used for such work shall conform to. [1910.25] & [1910.26] & [1910.28(a)(1)]

Fall protection – such as a guardrail and/or a personal fall arrest systems – must be provided for each employee working on a scaffold more than 10 feet above a lower level. [1910.28(b)(15)]

Scissor Lifts

Employees shall have adequate training and proper authorization prior to operation.

All modifications to any scissor lift, must have written approval from the manufacturer.

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 any other device as a work platform.

Never remove lift guardrails while lift is in operation.

Always latch guardrail chain while lift is in operation.

Do not exit a lift until it has reached its lowest position.

Always advise other workers on lift prior to changing height or position.

Use extreme caution when operating lift on uneven surfaces.

Use extreme caution to avoid head injuries from objects above when raising lift.

Smoking Policy

No smoking around flammable or explosive areas.

Clients and customers smoking policies shall be followed.

Smoking is only allowed in designated areas.

Storage

Aisles and passageways will be kept clear and in good repair. [1910.176(a)]

All materials stored in tiers will be secured to prevent sliding, falling or collapse. [1910.176(b)]

Materials will be stored with due regard to fire characteristics, Weeds and grass in outside storage areas shall be kept under control. [1910.176(c)]

Toilets

Toilets shall be provided in all places of employment in accordance with table J-1. [1910.141(c)(1)(i)]

Washing Facilities

The employer shall provide adequate washing facilities for employees engaged in operations where hazardous substances may be harmful to employees. Such facilities shall be in near proximity to the worksite; in areas where exposures are below permissible exposure limits and which are under controls of the employer; and shall be so equipped as to enable employees to remove hazardous substances from themselves. [1910.120(n)(6)]

Welding, Cutting, Heating and Brazing

Employers shall instruct employees in the safe use of welding equipment.

All workers shall follow the requirements set forth in the OSHA standards in accordance with welding, cutting and brazing. [1910.252] thru [1910.255]

If the object to be welded or cut cannot readily be moved, all movable hazards in the vicinity shall be taken to a safe place. [1910.252(a)(1)(i)]

Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention shall be taken in areas where welding or other “hot work” is being done. No welding, cutting or heating will be done where application of flammable paints, or presence of other flammable compounds, or heavy dust concentrations, creates a fire hazard. Equip torches with anti-flashback devices. See fire prevention precautions. [1910.252(a)(2)(xv)]

Cylinders shall be kept away from radiators and other sources of heat. [1910.253(b)(2)(i)]

Inside of buildings, cylinders shall be stored in a well-protected, ventilated, dry location, at least 20 feet from highly combustible materials such as oil or excelsior. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways. Assigned storage spaces shall be located where cylinders will not be knocked over or damaged by passing or falling objects, or subject to tampering by unauthorized persons. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards. [1910.253(b)(2)(ii)]

Valve protection caps, where a cylinder is designed to accept a cap, shall always be in place, hand tight, except when cylinders are in use or connected for use. [1910.253(b)(2)(iv)]

Employees exposed to the hazards created by welding, cutting, or brazing operations shall be protected by personal protective equipment in accordance with the requirements of [1910.132]. Appropriate protective clothing required for any welding operation will vary with the size, nature and location of the work to be performed. [1910.252(b)(3)]

Oxygen cylinders shall not be stored near highly combustible material, especially oil and grease; or near reserve stocks of carbide and acetylene or other fuel gas cylinders, or near any other substance likely to cause or accelerate fire; or in an acetylene generator compartment. [1910.253(b)(4)(i)]

Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour. [1910.253(b)(4)(iii)]

Unless cylinders are secured in a special truck, regulators shall be removed and valve-protection caps, when provided for, shall be put in place before cylinders are moved. [1910.253(b)(5)]

Welding equipment shall be chosen for safe application to the work to be done as specified in paragraph (b) of this section. [1910.254(a)(1)]

Workmen designated to operate arc welding equipment shall have been properly instructed and qualified to operate such equipment as specified in paragraph (d) of this section. [1910.254(a)(3)]

Printed rules and instructions covering operation of equipment supplied by the manufacturers shall be strictly followed. [1910.254(d)(6)]

Electrode holders when not in use shall be so placed that they cannot make electrical contact with persons, conducting objects, fuel or compressed gas tanks. [1910.254(d)(7)]

Cables with splices within 10 feet of the holder shall not be used. The welder should not coil or loop welding electrode cable around parts of his body. [1910.254(d)(8)]

The operator should report any equipment defect or safety hazard to his supervisor and the use of the equipment shall be discontinued until its safety has been assured. Repairs shall be made only by qualified personnel. [1910.254(d)(9)(i)]

Cables with damaged insulation or exposed bare conductors shall be replaced. Joining lengths of work and electrode cables shall be done by the use of connecting means specifically intended for the purpose. The connecting means shall have insulation adequate for the service conditions. [1910.254(d)(9)(iii)]

General mechanical or local exhaust ventilation or air line respirators shall be provided, as required, when welding, cutting or heating:

- zinc, lead, cadmium, mercury, or beryllium bearing, based or coated material in enclosed spaces
- stainless steel with inert-gas equipment
- in confined spaces or
- where an unusual condition can cause an unsafe accumulation of contaminants

Welding electrode stubs shall be collected in metal containers and not dropped on the floor or other walking / working surface.

Torches shall be lighted ONLY by friction lighters or other approved devices. Cigarette lighters and/or matches are NOT approved lighting devices!

Wire Ropes, Chains, Ropes and other Rigging Equipment

Wire ropes, chains, ropes and other rigging equipment will be inspected prior to use and as necessary during use to assure their safety. Remove defective rigging equipment from service immediately. [1910.184]

Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods or other such attachments will not be used in rigging “systems”.

When U-bolts are used for eye splices, the U-bolt will be applied so the “U” section is in contact with dead end of rope. Never “saddle a dead horse”.

PART 4

SPECIFIC SAFETY AND HEALTH POLICIES, PROGRAMS AND PLANS

Part 4 Specific Safety and Health Policies, Programs and Plans is a section of additional safety policies and in-depth, detailed procedures on certain safety issues and work task. Please refer to Part 2 and Part 3 for Specific Safety and Health rules and regulations (OSHA 1926 & 1910).

Miller Mechanical
SUBSTANCE ABUSE POLICY

Miller Mechanical
HAZARD COMMUNICATION PROGRAM

The Hazard Communication Program has been developed by the company in accordance with OSHA Regulations 1926.21 and 1926.59 and 1910.1200. Employees will be trained under the guidelines of the program.

Any questions or comments regarding the Hazard Communication Program should be directed to the supervisor and/or Management.

Chemical Inventory

Hazardous chemicals are inventoried by the office on a regular basis. Any new chemicals brought to the work site by the Company will be included on the hazardous chemical inventory list.

Container Labeling

All chemicals on-site are used from an original container or a temporary container, only in small quantities for immediate use. Any chemical left after work is completed must be returned to the original container, if it is not returned to the original container it must be labeled. No unmarked containers of any size are to be left in the work area unattended.

The Company will rely on the manufacturer's applied labels whenever possible, and will ensure that these labels are not removed or if damaged are replaced. Each container will be labeled with the identity of the hazardous chemical and any appropriate hazard warnings.

Safety Data Sheets (SDS)

The Company will have an up-to-date copy of the safety data sheets (SDS). Each SDS will be in English and shall contain:

a) The name of the chemical.
b) The physical hazards.
c) The health hazards.
d) The primary route of entry.
e) The OSHA permissible exposure limit.
f) Any general precautions for safe handling.
g) The date of preparation or the date of the last change to the SDS.
h) The name, address and telephone number of the chemical manufacturer.

SDS are kept at the office and are accessible to all employees. Job specific SDS will be readily available to the employees working on specific job sites. If an employee cannot locate an SDS sheet contact the office.

Supervisors are responsible for having the appropriate up-to-date SDS available to employees.

Employee Training in Haz Com

General

Employees are trained to work safely with hazardous chemicals. Employee training will include:

a) Methods that may be used to detect a release of hazardous chemicals in the workplace.
b) Physical and health hazards associated with chemicals.
c) Protective measure to be taken.
d) Safe work practices, emergency response and use of personnel protective equipment.
e) Information on the Hazardous Communication Standard.
f) Labeling and warning systems.
g) The employees Right to Know.
h) And an understanding of the Safety Data Sheet (SDS).
i) Global Harmonization
j) Pictograms

On - Site Training

Supervisors are responsible for site specific hazardous chemical training. Training includes:

a) Types of chemicals on the job site.
b) Hazards created by chemicals on the job site.
c) First aid and emergency procedures, when exposed to specific chemicals.
d) Using appropriate personnel protective equipment for hazardous chemical handling.

Hazards of Non - Routine Tasks

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

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

Multi - Employer Workplaces

Other on - site employers are required to adhere to the provisions of the Hazard Communication Standard.

The Company will provide to other employers on multi - employer job sites, copies of SDS on hazardous chemicals that are used by the Company. Those employers will be responsible for providing their employees with the information necessary to prevent exposure to the Company’s hazardous chemicals.

Employers working on the job site with the Company will provide the Company with SDS on each hazardous chemical that they use on the job site. The Company is responsible for providing its employees with the information necessary to prevent exposure to the other employer’s hazardous chemicals.

Hazardous Material Handling Procedures

- All hazardous materials and substances must be ordered through purchasing.
- Purchasing must obtain SDS sheets for new chemicals, materials or products not listed on the divisions' hazardous materials list.
- Designated safety representative is responsible to maintain, gather and pass out SDS sheets.
- Purchasing must make sure safety representative receive copies of SDS sheets for all new chemicals.
- Any MMCE employee authorized to purchase a chemical is responsible for reviewing product SDS sheets and for training employees using chemical.
- SDS should be reviewed annually and updated whenever the manufacturer changes the forms.
- Old forms should be retained until all the material for which it applies has been used or removed from the workplace.
- Provide proper training and equipment for handling hazardous materials and substances.
- All hazardous materials, substances, chemicals must be ordered by an authorized person through purchasing and received by the authorized personnel.
- Safety office will keep the master SDS book current. (Right To Know (SDS) book will contain a copy of facility HAZCOM written program).
- Purchasing shall request SDS on each chemical substance ordered.
- Any authorized person who orders a chemical is responsible to review the SDS sheet from employees who use that chemical.
- Each division must develop a master chemical inventory list.
- Safety Representative is responsible for reviewing the master chemical inventory list and obtaining the most current SDS sheet.
- Safety Representative is responsible for HAZCOM training for each new employee.

Miller Mechanical
BLOODBORNE PATHOGENS POLICY

PURPOSE AND SCOPE

The purpose of this procedure is to establish guidelines to protect the employees of Miller Mechanical from exposure to blood or other potentially infectious material during treatment of injured workers or clean-up at the scene of a job-related injury.

This procedure applies to all Miller Mechanical employees who will render first aid treatment to injured workers on a Miller Mechanical project. It also applies to those employees who may have to clean up any area where a job-related injury involving blood or other potentially infectious material is present.

DEFINITIONS APPLICABLE TO THIS PROCEDURE

1. Blood means human blood, human blood components and products made from human blood

2. Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause diseases in humans. These pathogens include, but are not limited to, Hepatitis (HBV) & Human Immunodeficiency Virus (HIV-"Aids")

3. Contaminated means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

4. Decontamination means 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.

5. Engineering controls means equipment that is designed to isolate or remove the bloodborne pathogen hazard from the workplace.

6. Exposure Incident means a specific eye, mouth or other mucus membrane, non-intact skin or contact with blood or other potentially infectious material from the performance of an employee's collateral first-aid or clean-up duties.

7. HBV means the Hepatitis B Virus; causes inflammation of the liver and may lead to long term liver damage including cirrhosis and cancer.

8. HCV means the Hepatitis C Virus; causes inflammation of the liver and may lead to long term liver damage including cirrhosis and cancer.

9. HIV means the Human Immunodeficiency Virus; causes inflammation of the liver and may lead to long term liver damage including cirrhosis and cancer.

10. Occupational exposure means reasonably anticipated (including the potential for contact as well as contact with blood or OPIM) skin, eye, mucous membrane, non-intact skin contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

11. Other Potentially Infectious Material means, for the purpose of this procedure, any fluid excreted from the human body.

12. Personal Protective Equipment (PPE) means specialized clothing or equipment (gloves, masks, goggles, etc.) worn by employees for protection from a hazard. General work clothes not intended to function as protection against a hazard are not considered to be personal protective equipment.

13. Universal Precautions means an approach to infection control. According to the concept of Universal Precautions, all human body fluids are treated as if they are known to be infectious for Hepatitis, HIV or other bloodborne pathogens.

PROCEDURE – METHODS OF COMPLIANCE

1. General

Universal precautions shall be observed to prevent contact with blood or other potentially infections materials. For the purpose of this procedure, all body fluids are to be considered "Other Potentially Infectious Materials."

2. First-Aid Treatment

a. No Miller Mechanical employee shall provide first-aid treatment where there is the potential for exposure to blood or other potentially infectious material unless proper protective equipment is worn.

b. Immediately, or as soon as possible after the first-aid treatment is rendered, the first-aid provider shall thoroughly wash his/her hands and any other skin exposed with soap and water. In the absence of soap and water, the employee shall use an antiseptic hand cleaner in conjunction with a clean cloth, paper towel or antiseptic towelette to clean hands and other exposed areas of the body. Washing with soap and water shall be done as soon as feasible.

c. Immediately, or as soon as possible after use, contaminated gloves, gauze sponges, etc. shall be placed in biohazard disposal bags. Biohazard disposal bags are to be placed in each first-aid kit.

d. Immediately, or as soon as possible after the treatment of any injury involving blood or other potentially infectious material, the provider of first-aid shall notify the Miller Mechanical Human Resources. It is mandatory that this notification be made within the same day as the occurrence. The first-aid provider shall also complete an Exposure Incident Form and forward immediately to Human Resources.

3. First-aid Kits

a. All Miller Mechanical job-site kits shall be equipped with the appropriate personal protective equipment (latex gloves, eye protection, masks, etc.) to protect employees from hazards associated with bloodborne pathogens.

b. All materials used for treatment of injuries shall be replaced in the first-aid kit immediately or as soon as possible.

c. It shall be the responsibility of the Miller Mechanical project superintendent to routinely inspect, inventory and ensure that the first-aid kit is adequately stocked.

d. In addition to first-aid supplies, personal protective equipment and Bio-Medical bags, each first-aid kit shall contain a bottle of undiluted bleach. This bleach shall be diluted to a 1:10 solution with water and used for decontamination.

4. Housekeeping

a. All materials used in the treatment of injuries, which are contaminated with blood or other potentially infectious material, shall not be disposed of in trash receptacles. Contaminated materials (latex gloves, sponges, etc.) shall be placed in the Bio-Medical disposal bags that are kept with the first-aid kits. These bags shall be transported to a nearby hospital for disposal.

b. Tools, clothing, counter tops or any other areas contaminated by blood or other potentially infections material shall be thoroughly cleaned with a 1:10 solution of bleach, then washed with soap and water. Materials contaminated by the clean-up process shall be placed in Bio-Medical bags for disposal.

c. Any employee involved in the clean-up process following an incident involving blood or other potentially infectious material shall wear, at a minimum, latex gloves for bloodborne pathogens.

5. Exposure Follow-up

a. Upon receipt of notification that through the treatment of an injured employee or worker, a possible exposure to blood or other potentially infectious material has occurred, Miller Mechanical shall:

(1) Determine if an exposure to blood or other potentially infectious material has occurred.
(2) Offer the exposed employee, if unvaccinated, a Hepatitis B inoculation within 24 hours of the exposure.
(3) Obtain a copy of the exposure notification form and maintain a file.
(4) If the exposed employee chooses not to avail him/herself of this inoculation, he/she shall be required to sign a form waiving this treatment. The signed declaration shall be maintained on file with the exposure notification form.

6. Training

a. All employees who routinely provide first-aid treatment to injured workers shall receive training in Universal Precautions, the guidelines contained in this procedure and the guidelines established by OSHA's Bloodborne Pathogens standards.

b. They shall be given a copy of this procedure and made aware of their right to receive, at no cost, post exposure inoculations of the Hepatitis B vaccine. They shall be made aware that should they decline this inoculation, they must sign a treatment waiver form, which will be kept on file.

c. All training shall be documented and maintained on file at the Miller Mechanical main and project management offices.

Miller Mechanical
EXPOSURE INCIDENT FORM

Location: _____ Date of Incident: _____

Name of
First-Aid Provider: _____

Name of
Injured Employee: _____

Nature of Injury (describe in detail)

_____

_____

_____

_____

Was personal protective equipment used? Yes No

Was contaminated material disposed of properly in Bio-Medical bags? Yes No

Was any other employee exposed to blood or OPIM? Yes No

If "*yes*," give names of those exposed:

_____

_____

Employee Signature_____ Date_____

Note: Miller Mechanical main office must be notified immediately by telephone when any incident occurs. This form shall be completed and forwarded to Miller Mechanical as soon as possible.

Miller Mechanical
EXPOSURE TREATMENT WAIVER

I, certify that as a result of providing first-aid to :

_____

on _____, a potential exposure to blood or another potentially infectious material occurred. I also certify that the management of Miller Mechanical has, within 24 hours of that exposure, offered me inoculations of the Hepatitis B vaccine. By my signature below, I waive my right to receive treatment through this vaccination.

Signature of first-aid provider_____

Date_____

Witness_____

Date_____

BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

The objectives of the Exposure Control Plan are to:

- Provide information on procedures and regulations regarding bloodborne pathogens;
- Protect employees from health hazards associated with bloodborne pathogens;
- Provide information on appropriate treatment and counseling to employees exposed to bloodborne pathogens.

Exposure Categories

OSHA has established three (3) exposure categories for protection against occupational exposure to infectious diseases including HBV and HIV infections. These categories are as follows:

Category I:
Tasks that involve exposure to human blood, body fluids, or tissues. All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with human blood, body fluids, or tissues, OR a potential for spills or splashes of them are Category I tasks. Use of appropriate personal protective equipment will be required for every employee engaged in Category I tasks.

Category II:
Tasks that involve no exposure to human blood, body fluids, or tissues but employment may require performing unplanned Category I tasks. The normal work routine involves no exposure to blood, body fluids, or tissues, BUT exposure or potential exposure may be required as a condition of employment. Appropriate personal protective equipment will be readily available to every employee engaged in Category II tasks.

Category III:
Tasks that involve no exposure to human blood, body fluids or tissues, AND Category I tasks are not a condition of employment. The normal work routine involves no exposure to human blood, body fluids or tissues (although situations may be imagined or hypothesized under which anyone, anywhere, might encounter potential exposure to body fluids). Persons who perform these duties are not called upon as part of their employment to perform or assist in emergency medical care or first aid or to be potentially exposed in some other way.

Category I job classifications:

None.

Category II job classifications shall include:

Safety and HR personnel who engage in collection of specimens for drug and alcohol testing.

Category III job classifications shall include:

Auto mechanics, HVAC Installers, Plumbers, Service Technicians and employees trained to render first aid or CPR.

Category III tasks and procedures that may result in occupational exposure;

1. Disposing of soiled tissues or other debris soiled with visible blood from classrooms, laboratories, hallways or offices.
2. Physical contact with other employees or visitors with
3. Provision of emergency first aid or CPR until professional help arrives.

Miller Mechanical
FALL PROTECTION POLICY

Purpose

This Fall Protection Policy is designed to provide guidance for all Miller Mechanical job sites for establishing procedures to identify, evaluate, and control falls from elevations at all times. This program focuses on orientation, training, and enforcement to ensure fall protection guidelines are implemented and adhered to by all project personnel. The purpose of Fall Protection Policy is to provide maximum protection against falls.

The management of Miller Mechanical has adopted a Fall Protection Policy to eliminate fall accidents in our operations. Management and supervision will be responsible and accountable for ensuring the success of the program by integrating this program into the company's operations.

Goal

The goal of this program is to eliminate all falls from elevations by identifying and managing fall exposures.

Responsibility

All levels of management and supervision are responsible for supporting and enforcing this program to ensure 100% compliance by all personnel. Management, estimating, scheduling, and project management personnel are responsible for pre-planning safety into the job by identifying and predicting potential fall exposures both during the preconstruction phase and during construction. Each discipline shall plan safety into the job with priorities placed on engineering solutions to the hazards.

Personal fall protection systems shall only be used as a backup method to primary fall protection systems, such as guardrails, or when there is no other feasible or practical means for safely accomplishing the work.

Accountability

All levels of management and supervision shall be accountable for the safety of job site personnel. Job site supervision is directly responsible for using the Fall Protection Policy as a means to control falls from elevations. Management teams shall have the goal of zero fall-related accidents for each job site. Measurement of performance will take into account actual results related to this goal. The direct costs of any accident will be charged to the cost of the job site involved. Management, estimating, and scheduling personnel shall be accountable for pre-planning, designing, budgeting, and scheduling Fall Protection into each job site.

Pre-Construction Planning

Pre-planning must begin during the pre-bid phase of each job site and continue.

1. Pre-Bid Phase:

    A. Management:
    Management shall review plans for job sites during the pre-bid phase to determine the nature and scope of Fall Protection needs, as well as any necessary design changes and engineering controls needed.

    B. Estimating:
    Estimating personnel must include the cost for Fall Protection into the bid / proposal. Input from management should be utilized as necessary. The cost of subcontract bids should include the cost of implementing an acceptable Fall Protection Policy.

    C. Contract Administration:
    The subcontract should include language requiring a Fall Protection Policy.

2. Pre-Startup:

   A. Management:
   The management team shall hold a review meeting prior to startup of any work on a job site. The purpose of the meeting shall be to review plans and to identify and evaluate all potential fall exposures in each phase of construction.

   B. Supervisors:
   The regular Fall Protection inspection must be incorporated into an overall Fall Protection Policy.

   C. Scheduling:
   Design changes, engineering controls, and installation of fall protection devices, i.e. anchorages, guardrails, etc., must be incorporated into the schedule to ensure completion in a timely manner.

Pre – Task Safety Analysis

Supervisors must analyze all elevated tasks prior to assigning work to determine all existing and potential fall protection needs and to ensure adequate fall protection systems are provided.

Employee Safety Training

Pre-task safety instruction must be given to each person assigned to work in elevated areas prior to commencing work activities. New hire safety orientation training must be conducted for all new hires immediately upon the beginning of employment. The orientation shall include the company's Fall Protection Policy, procedures, and work rules. Regular safety training will be held with all field crews. Fall Protection should be included in these training sessions on a regular basis or when an upcoming work assignment may involve unusual or non-routine fall exposures. Written documentation of all employees training shall be maintained.

Procedures

Fall protection systems shall include, but are not limited to; the following fall exposure areas:

   A. Building construction activities
      - Formwork
      - Reinforcing steel deliveries, rigging, erection
      - Concrete placement
      - Structural / miscellaneous steel erection
      - Precast concrete erection

   B. Scaffolding / Hoisting activities
      - Aerial lifts
      - Movable ladders
      - Crane erection / dismantling
      - Hoisting areas including platforms, docks, chutes

   C. Floor / Wall penetrations and exposures
      - Elevator shafts
      - Stairways
      - MEP shafts
      - Perimeter edges

   D. All exterior skin installation including, but not limited to, roofing, stone, masonry, waterproofing, and glazing

   E. Excavation / Trenching

Miller Mechanical
CONFINED SPACE PLAN

This written plan is required for all employers with employees under its direction who will enter a permit space.

This plan must be made available prior to and during entry operations for inspection by employees and their authorized representatives.

Prior to beginning work at a jobsite, a competent person must identify all confined spaces in which one or more employees may work and must identify each space that is a permit space.

If the workplace contains one or more permit spaces, the employer who identifies, or receives notice of, a permit space must:

- Inform exposed employees by posting danger signs or by any other equally effective means, of the existence and location of, and the danger posed by, each permit space;
- Inform, in a timely manner and in a manner other than posting, it employees' authorized representatives and the controlling contractor of the existence and location of, and the danger posed by, each permit space.

General Procedures for Entering a Confined Space Area

- Have adequate ventilation and lighting in place.
- Always check oxygen, explosive and toxic gas levels with certified testing equipment.
- Wear proper personal protective equipment necessary for task at hand.
- Have safety "attendant" in place at all times.
- Wear full body harness with lifeline attached when necessary for work that generates toxic fumes.
- Take frequent breaks and come up for fresh air.

Emergency Procedures for Injured Person

- Follow normal procedures for injured person and fire (call 911).
- Never enter without testing oxygen, explosive and toxic gas levels.
- Wear proper personal protective equipment.
- The man basket and/or full body harness shall be used for retrieval of the injured worker.
- Never enter the area without assistance and a safety "attendant" in place.
- If you are not sure of the situation, wait for the proper emergency medical personnel.

***Note: Over 60% of workers that die in a confined space area are attempting to rescue other workers.

***Note: Please refer to Part 1926 Subpart AA for specific safety rules and regulations for Confined Space Entry.

Confined Space Entry Plan

Before entering the confined space, make sure that there is adequate ventilation and lighting. Oxygen levels, explosive levels and toxic fume levels shall be tested, before entering and periodically while in the confined space. The proper personal protective equipment (safety glasses, hard hats, hard soled shoes, proper respirator required for task at hand, etc.) shall be worn AT ALL TIMES.

The safety “attendant” shall be in place at all times while work is being performed. If the safety “attendant” should leave his area for any reason, the alternate safety “attendant” shall be in place before work continues.

Anyone required to work in a confined space where welding, waterproofing, grinding of concrete, or any other related activity that generates toxic fumes will be required to wear a full body harness with life line attached AT ALL TIMES.

Before entering the confined space area, the following procedures must be reviewed and understood by each employee.

Atmosphere

The atmosphere must be tested each time before entering a confined space, especially during times when the task at hand creates toxic fumes and/or could cause an oxygen enriched or depleted environment.

A. The normal oxygen level is approximately 21%. The minimum oxygen level to enter a confined space without a self-contained breathing apparatus is 19.5%. If the oxygen level is greater than 23.5%, the environment is oxygen enriched, and flammables and combustibles burn more violently and can ignite more rapidly.

B. Only a trained, qualified person shall test the atmosphere for oxygen, explosives and gases. The following gases are typical gases that may be found in a confined space:

- Hydrogen sulfide
- Carbon monoxide
- Methane
- Carbon dioxide

C. Always test the bottom, middle, and top of the confined space area. Some gases are lighter or heavier and settle at different elevations.

Ventilation

Ventilation is the preferred method of eliminating atmospheric hazards over wearing respirators.

A. Ensure that there is adequate ventilation and lighting.

B. Maintain ventilation and lighting AT ALL TIMES.

C. NEVER use pure oxygen to ventilate an atmosphere.

D. If the oxygen level is below 19.5% rapid fatigue will be experienced.

E. If the oxygen level is above 23.5%, the atmosphere becomes extremely flammable and combustible. If a fire should develop, everything will burn or ignite rapidly.

Attendant

A. A safety “attendant” shall be within voice and/or radio contact with all workers inside the confined space AT ALL TIMES. The safety “attendant” should not leave his position for any reason while an employee is in a Confined Space.

B. The safety “attendant” shall be trained in the job site emergency plans for fire and/or injured person, as well as, have contact with the job site 911 contact person for an emergency.

C. The “safety attendant” shall not perform any other duties other than to monitor the workers inside the Confined Space.

D. The safety “attendant” shall have a fire extinguisher on hand at all times.

E. The safety “attendant” shall be highly distinguishable from the other workers in the area.

Respiratory Protection

A. The proper respirator must be worn to match the task at hand.

B. The workers must be properly trained in how to correctly wear and inspect the respirator they are required to wear, prior to use.

C. Any welding, cutting, brazing, painting, grinding, waterproofing, etc., which may produce toxic gases and/or deplete or enrich the oxygen levels in the confined space require that all workers inside the confined space wear full body harness with a life line attached in the event of an emergency with retrieval necessary. These operations may also create a combustible atmosphere, which will also require the full body harness with the lifeline attached.

D. If any operation causes an oxygen level of less than 19.5% and/or creates a combustible atmosphere where proper ventilation cannot increase the oxygen to acceptable levels, a self-contained breathing apparatus, may be required to be worn by all workers. If a self-contained breathing apparatus is worn, proper training will be required for all workers, including the safety “attendant”.

Confined Space Entry Team

A. “Entrant”

All workers / entrants of the confined space shall be thoroughly trained in the Confined Space Plan.

B. “Attendant”

All workers / entrants shall be constantly monitored by an attendant trained in the Confined Space Plan.

C. “Entry Supervisor”

Entry Supervisors shall supervise all Confined Space operations. Entry Supervisors shall be trained in the Confined Space Plan.

Miller Mechanical
RESPIRATOR POLICY

Introduction

Occasionally a few employees of Miller Mechanical may be asked to enter into work areas where they will need to wear respirators for protection. Respirators protect employees from contaminated dusts, fogs, fumes, mists, gases, smokes, sprays, and vapors. When possible, Miller Mechanical will take appropriate steps to eliminate such hazards by using proper engineering controls, such as enclosures, specialized ventilation, etc. However, when these steps and/or controls are not feasible, employees selected by Miller Mechanical may be required to use respirators.

Only specially trained and designated employees will be permitted to wear respirators. All activity involving employee use of respirators is strictly governed and regulated by this Written Respirator Policy. This Policy was prepared by Miller Mechanical to assist with complying with OSHA regulations 1926.103 & 1910.134.

Purpose of Respirator Use

As noted above, only a few specially trained employees will be asked to wear respirators … and then only in special situations. Any employees wearing respirators must always follow this Policy. Failure to follow this Policy could lead to termination of employment.

Training and Instruction for Employees

Both supervisors and employees will be trained in the Respirator Policy. These employees will attend individualized training sessions and will be required to review written material, view training videotapes, and/or participate in other training activities as directed by the Company.

The Company will keep records concerning their training. Specifically, Company records will show the names of employees attending the training, the dates and location of the training, and the identity of the trainer.

Training will provide employees an opportunity to:

- Handle the respirator
- Have the respirator properly fitted
- Test its face piece-to-face seal
- Wear the respirator in normal air for a long period to become familiar with it
- Wear the respirator in a test atmosphere

Each employee must receive fitting instructions, which include:

- How to wear the respirator
- How to adjust it
- How to determine proper respirator fit

Employees will also be trained and otherwise informed of the limits of respirators.

Inspection of Respirators

Miller Mechanical will conduct frequent inspections of respirators to make sure that the respirators are properly selected, used, cleaned, and otherwise maintained. Air cylinders must be fully charged according to manufacturer's instructions. Inspections must ensure that all regulators and warning devices are functioning properly, as they were designed.

Respirator inspections shall include the following:

- Check of tightness of all connections and face piece, headbands, valves, connecting tubes and canisters.
- Check of all rubber or elastic parts for pliability or deterioration
- Stretching all rubber or elastic parts with a massaging motion

Cleaning, Disinfection and Storage

All respirators must be regularly cleaned and disinfected. Employees must comply with the manufacturer's recommendations for cleaning and disinfection. Respirators used by more than one employee must be thoroughly cleaned after each use.

While not in use, respirators must be stored in a clean, convenient, and sanitary location. They are not to be left lying around the facility. Respirators must be kept away from dust, sunlight, heat, extreme cold, excessive moisture, and chemicals. Respirators used for emergency situations must be easily accessible at all times and stored in special compartments - not in toolboxes or lockers (unless stored in a carrying case).

All respirators must be routinely inspected during cleaning and disinfection. Any parts found to be worn, broken, or deteriorated must be promptly replaced. Any broken respirator must be tagged accordingly and taken out of service.

Respirators used for emergency situations will be automatically inspected after each use and once each month.

Employer Surveillance and Evaluation

Miller Mechanical will regularly survey the conditions of all work areas and will make an assessment of any employee exposure or stress. This surveillance shall be ongoing. Any evidence of employee exposure or stress shall be reported to upper management and the local health care professional involved with this Policy.

The Company will also conduct regular inspections of respirator procedures and practices. These inspections will help the Company evaluate the effectiveness of this Policy and ensure the safety of all affected employees.

Special Rules - Face Piece Seals

All masks and face pieces must make a proper, airtight seal. Respirators shall not be worn if it is not possible to obtain a proper seal. No beards, sideburns, or anything that projects under the face piece that could compromise a proper seal, are permitted.

Employees who need to use corrective lenses must be extremely careful to make sure that the glasses do not prevent a proper seal. Employees must not wear contact lenses in contaminated atmospheres.

Medical Evaluation of Participating Employees

Employee assigned to tasks requiring use of respirators must first pass a physical examination given by a physician. The examination will ensure that the employee is physically able to perform the related work and use the respirators. Each employee trained to use a respirator will have his or her physical ability and medical status reviewed by the physician at least once each year. These evaluations shall be documented and kept with other records from this Policy, such as training records.

29 CFR 1910.134 Appendix D
Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirators use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

- Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

- Keep track of your respirator so that you do not mistakenly use someone else’s respirator.

Miller Mechanical
LOCK OUT / TAG OUT PROGRAM

General

Lock Out / Tag Out is the preferred method of isolating machines or equipment from energy sources. The following simple procedure is provided for use in both lock out / tag out programs. This procedure may be used when there are limited numbers or types of machines or equipment or there is a single power source. For more complex systems, a more comprehensive procedure will need to be developed, documented, and utilized.

Purpose

This procedure establishes the minimum requirements for the lock out / tag out of energy isolating devices. It shall be used to ensure that the machine or equipment is isolated from all potentially hazardous energy and locked out or tagged out before employees perform any servicing or maintenance activities where the unexpected energization, start-up or release of stored energy could cause injury.

Responsibility

Appropriate employees shall be instructed in the safety significance and importance of the lock out / tag out procedure. Each new or transferred employee who is affected and other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lock out / tag out procedure.

Preparation for Lock Out or Tag Out

Make a survey to locate and identify all isolating devices to be certain which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked out or tagged out. More than one energy source (electrical, mechanical, or others) may be involved.

Sequence of Lock Out / Tag Out System Procedure

1. Notify all affected employees that a lock out / tag out system is going to be utilized and the reason therefore. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the hazards thereof.

2. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

3. Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy, such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc., must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.

4. Lock out / tag out the energy isolating devices with assigned individual lock(s) and/or tag(s).

5. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.

   CAUTION: Return operating control(s) to "neutral" or "off" position after the test.

6. The equipment is now locked out or tagged out.

Restoring the Machines and/or the Equipment to Normal Production Operations

1. After the servicing and/or maintenance is complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.

2. After all tools have been removed from the machine or equipment, guards have been reinstalled, and employees are in the clear, remove all lock out / tag out devices to restore energy to the machine or equipment.

Procedure involving more than one Person

In the preceding steps, if more than one individual is required to lock out / tag out equipment, each shall place his/her own personal lock out device / tag out device on the energy isolating devices(s). When an energy isolating device cannot accept multiple locks or tags, a multiple lock out / tag out device (hasp) may be used. If lock out is used, a single lock may be used to lock out the machine or equipment with the key being placed in a lock out box or cabinet, which allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lock out protection, that person will remove his/her lock from the box or cabinet.

Basic Rules for using Lock Out / Tag Out System Procedures

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 where it is locked out or tagged out.

Miller Mechanical
ENVIRONMENTAL PROGRAM

Environmental Program Statement

It is the responsibility of the Contractor to assure installation and maintenance of all erosion control and storm water methods that meet the federal, state and local EPA laws. All hazardous materials such as asbestos, lead base paint, silica, paint, fertilizers, pesticides and insecticides shall be stored and disposed of in such a manner so that no run off will occur to any state waters by what means are necessary.

There will be no on-site dump pits nor will there be any open air burning without permits obtained from the local Fire Marshall, prior to the activity.

Miller Mechanical
HEAT ILLNESS PREVENTION PROGRAM

Purpose

This Heat Stress Prevention Program has been developed to provide Conduit Constructor's workers with the training and equipment necessary to protect them from heat related exposures and illnesses.

Training

All employees who are or may be exposed to potential heat related illnesses will receive training on the following:

- The environmental and personal risk factors that cause heat related illnesses;
- Miller Mechanical procedures for identifying, evaluating and controlling exposures to the environmental and personal risk factors for heat illness;
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour under extreme conditions of work and heat;
- The importance of acclimatization;
- The different types of heat illness and the common signs and symptoms of heat illness;
- The importance of immediately reporting to Miller Mechanical, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.
- Miller Mechanical procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;
- Procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider;
- How to provide clear and precise directions to the work site.

Supervisor Responsibilities

- All supervisors will be provided a copy of this program and training documents prior to assignment of employees working in environments where heat exposures may occur.
- Supervisors will be provided the procedures to follow to implement the applicable provisions of this program.
- Supervisors will be provided the procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Provision of Water

Employees shall have access to potable water. Water shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking the entire shift for a total of 2 gallons per employee per 8-hour shift. Employees may begin the shift with smaller quantities of water if effective procedures for replenishment of water during the shift have been implemented to provide employees one quart or more per hour.

Access to Shade

Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. Shade areas can include trees, buildings, canopies, lean-tos, or other partial and/or temporary structures that are either ventilated or open to air movement. The interior of cars or trucks are not considered shade unless the vehicles are air conditioned or kept from heating up in the sun in some other way.

Heat Stress Disorders

Heat Rash (Prickly Heat)

Symptoms:
- Red blotches and extreme itchiness in areas persistently damp with sweat.
- Prickling sensation on the skin when sweating occurs.

Treatment:
- Cool environment.
- Cool shower.
- Thorough drying.

Heat rashes typically disappear in a few days after exposure. If the skin is not cleaned frequently enough the rash may become infected.

Heat Cramps

Symptoms:
- Loss of salt through excessive sweating.
- Cramping in back, legs and arms.

Treatment:
- Stretch and massage muscles.
- Replace salt by drinking commercially available carbohydrate / electrolyte replacement fluids.

Heat Exhaustion

Heat exhaustion occurs when the body can no longer keep blood flowing to supply vital organs and at the same time send blood to the skin to reduce body temperature.

Symptoms:
- Weakness.
- Difficulty continuing work.
- Headache.
- Breathlessness.
- Nausea or vomiting.
- Feeling faint or actually fainting.

Treatment:
- Call 911.
- Help the victim to cool off by:
- Resting in a cool place.
- Drinking cool water.
- Removing unnecessary clothing.
- Loosening clothing.
- Showering or sponging with cool water.

It takes 30 minutes to cool the body down once a worker becomes overheated and suffers heat exhaustion.

Heat Stroke

Heat stroke occurs when the body can no longer cool itself and body temperature rises to critical levels.

Symptoms:

- Confusion.
- Irrational behavior.
- Loss of consciousness.
- Convulsions.
- Lack of sweating.
- Hot, dry skin.
- Abnormally high body temperature.

Treatment:

- Call 911.
- Provide immediate, aggressive, general cooling.
- Immerse victim in tub of cool water or;
- Place in cool shower; or
- Spray with cool water from a hose; or
- Wrap victim in cool, wet sheets and fan rapidly.
- Transport victim to hospital.

Do not give anything by mouth to an unconscious victim.

Safe Work Procedures

Supervisors Responsibilities

Supervisors are responsible for performing the following:

- Give workers frequent breaks in a cool area away from heat.
- Adjust work practices as necessary when workers complain of heat stress.
- Oversee heat stress training and acclimatization for new workers and for workers who have been off the job for a period of time.
- Monitor the workplace to determine when hot conditions arise.
- Increase air movement by using fans where possible.
- Provide potable water in required quantities.
- Determine whether workers are drinking enough water.
- Make allowances for workers who must wear personal protective clothing (welders, etc.) and equipment that retains heat and restricts the evaporation of sweat.
- Schedule hot jobs for the cooler part of the day; schedule routine maintenance and repair work in hot areas for the cooler times of the day.
- Make available to all workers, cooling devices (hard hat liners/bibs/neck bands) to help rid bodies of excessive heat.

Workers

Workers are responsible for performing the following:

- Follow instructions and training for controlling heat stress.
- Be alert to symptoms in yourself and others.
- Determine if any prescription medications you're required to take can increase heat stress.
- Wear light, loose-fitting clothing that permits the evaporation of sweat.
- Wear light colored garments that absorb less heat from the sun.
- Drink small amounts of water – approximately 1 cup every 15 minutes.
- Avoid beverages such as tea or coffee.
- Avoid eating hot, heavy meals.
- Do not take salt tablets unless prescribed by a physician.
- Review Attachment 1 for additional information.

Program Review

The Safety Director will periodically review this program for compliance with all applicable regulatory standards. The Safety Director has the overall accountability, responsibility and authority to implement manage and maintain this program. Any revisions, changes or updates will be provided to all employees.

Feedback
Employees are encouraged to inform Conduit Constructors of any hazards or unsafe conditions on any project without fear of retribution, retaliation, reprisal or punishment. Conduit Constructors will conduct periodic safety audits, open employee meetings and anonymous employee suggestion polls to improve working conditions and policies.

Attachment 1

Heat Illness Prevention
Guidance for Workers

Awareness of heat illness symptoms can save your like or the life of a co-worker. The following provides valuable information concerning heat-related illnesses and preventative measures.

If you are coming back to work from an illness or an extended break or you are just starting a job working in the heat, it is important to be aware that you are more vulnerable to heat stress until your body has time to adjust. Let your employer know you are not used to the heat. It takes about 5-7 days for your body to adjust.

Drinking plenty of water frequently is vital for workers exposed to the heat. An individual may produce as much as 2 to 3 gallons of sweat per day. In order to replenish that fluid, you should drink 3 to 4 cups of water every hour starting at the beginning of your shift.

Taking your breaks in a cool shaded area and allowing time for recovery from the heat during the day are effective ways to avoid a heat-related illness.

Avoid or limit the use of alcohol and caffeine during periods of extreme heat. Both dehydrate the body.

If you or a co-worker start to feel symptoms such as nausea, dizziness, weakness or unusual fatigue, let your supervisor know and rest in a cool shaded area. If symptoms persist or worsen seek immediate medical attention.

Whenever possible, wear clothing that provides protection from the sun but allows airflow to the body. Protect your head and shade your eyes if working outdoors.

When working in the heat pay extra attention to your co-workers and be sure you know how to call for medical attention.

ASBESTOS SAFETY POLICY

It is the policy and intent of Miller Mechanical to provide a safe working environment for all Miller Mechanical employees and subcontractor or vendor employees, on each of Miller Mechanical jobsites and to ensure all employees and subcontractors comply with 29 CFR 1926.1101.

Asbestos is not as common of a construction material as it was years ago. Therefore, contact with asbestos containing materials will be generally during renovations of buildings that were built before the year 1975.

The typical areas where asbestos containing materials are found are:

- Plumbing and mechanical pipe insulation
- Floor and ceiling tile
- Floor and ceiling tile glues and adhesives
- Asbestos lined pipes, typically used in underground situations

These areas require special attention and demolition by authorized personnel only. The superintendent of each jobsite should contact Miller Mechanical if asbestos containing materials are detected in a building under construction, demolition, or renovation.

A survey of the jobsite for asbestos containing materials must be performed by an approved testing company prior to any work being performed on the jobsite. This is typically performed by the owner of the property, and a copy of the results, are forwarded to Miller Mechanical

The following is a list of precautions that should be followed when asbestos containing materials are found. An abatement contractor who is fully licensed and insured for asbestos removal shall remove asbestos.

1. A negative pressure environment must be placed around the asbestos containing material to prevent loose particles of asbestos from entering the atmosphere.
2. No sawing, cutting, chipping, grinding, or any other procedure that will cause loose particles of asbestos to enter the atmosphere is permitted.
3. Air purifying respirators, gloves, and disposable coveralls will be required for employees who are required to work with and remove asbestos containing materials.
4. When a quantity of asbestos containing material is to be removed, trash bags that are capable of being sealed airtight and marked **ASBESTOS CONTAINING MATERIAL** must be used. The trash bags must be taken to an approved landfill.
5. Employees are to be provided a hand-washing station and an area to change clothes before entering the work area. An area must be provided for breaks. There shall be **NO SMOKING OR EATING** in work areas.
6. Proper training of employees that are to work with asbestos containing material is to be performed by the superintendent or a competent person before the work begins.
7. Negative pressure fans containing HEPA filters shall be used in large areas to ensure that there are no asbestos particles leaving the containment area.
8. HEPA filters shall be used in all vacuum cleaners that are used to collect loose materials, and the contents of the vacuum cleaners are to be disposed of in sealed and clearly marked trash bags.

LEAD EXPOSURE PROTECTION POLICY

Purpose

The following pages describe the procedures and precautions to be adopted on all jobsites in which employees could receive significant exposures to lead dust or fumes. Lead fumes are generated from welding or cutting on steel, girders, or other metals coated with lead based paint, soldering to join copper pipe, radiator repair, construction activities with fume exposures in aluminum, brass, or bronze foundries, electronics or battery plants, and glass and ceramic facilities. Lead dusts are commonly associated with the disturbance of contaminated ground, sandblasting or abrasive action on surfaces with lead paint, demolition of interior walls painted with lead paint, and decontamination of certain manufacturing operations.

Policy

1. Prior to any demolition or retrofit, all work areas will be surveyed by a competent person to determine existing and predictable lead hazards. It is the responsibility of the overall superintendent of each jobsite to ensure that the survey is conducted.
2. Appropriate material samples will be taken and sent to an approved laboratory to determine the lead content in each material under question. Paints, coatings, and alloys with lead in concentration of 0.4% or more shall be considered a lead source.
3. Where a potential exposure to lead dust exists, spray-misting equipment shall be used for dust control.
4. In an enclosed area, during welding or cutting on surfaces with lead containing paints, local exhaust ventilation will be used to remove the fumes. The ventilation shall be evaluated periodically to maintain its effectiveness. If local exhaust is not possible, then the paint will be stripped away from the surface to be welded or cut to a distance of 12" on each side of the cut or welding point. Proper respiratory protection and other PPE must be provided to the employee doing the scraping.
5. In an open-air setting, for welding and cutting on lead-contaminated surfaces, respiratory protection is mandatory with respirators approved by NIOSH.
6. Each employee and subcontractor on a Miller Mechanical project must comply with the 29 CFR Part 1926.62.

Initial Determination

1. For potential lead exposures that cannot be eliminated through engineering means, personal air samples shall be conducted to determine the extent of exposure. The samples shall be for a complete shift and represent each potentially exposed job classification in each work area for the shift with the highest potential exposure. Until sample results are available, workers in the immediate area shall be required to wear respirators according to each established exposure or activity below:

Half mask air purifying respirators	**Powered air purifying respirators**	**Supplied air respirators**
Moderate	*High*	*Extreme*
Manual demolition structures / walls	Lead in mortar: burning	Abrasive blasting
Manual scraping	Lead in paint: tool cleaning	Welding
Manual sanding	Cleanup spent abrasives	Cutting
Heat gun applications	Abrasive blasting enclosure:	Torch burning
Power tool clean with dust collector		
Spray painting		

2. Until sampling results are available, employees shall be provided with appropriate protective clothing, suitable change areas, hand-washing facilities, and blood sampling for analysis of blood lead and zinc protoporphyrin (ZPP) levels.

Negative Results

1. If the initial personnel samples on each exposed job category show that the airborne lead concentrations are below 30 micrograms per cubic meter (Ug/M3), the result is negative. A written record must be documented that shows:
    a. Date
    b. Location
    c. Job activity
    d. Name
    e. Social security number
    f. The name of the person who made this determination should also be included.
    g. No further testing is required unless the nature of the activity changes.

2. All surfaces shall be kept free of accumulations of lead dust or fumes. Vacuums with HEPA filters shall be used for cleanup. Compressed air cleaning is prohibited.

3. Hand washing facilities will be provided. Where showers are not available, employees will be required to wash their hands and face at the end of a work shift, and before taking breaks, eating, smoking, etc. If disposable coveralls and foot protectors are provided, they will be disposed of in approved containers before the employee leaves the work area.

Action Level

1. Within five days, each employee will be notified in writing of the test results that represent that employee's exposure. Records of air monitoring and medical evaluation tests shall be kept for five years.

2. If any samples show job categories above the 30 ug/m³ action level but below the 50 ug/m³ permissible exposure limit (PEL), follow-up samples must be taken at least every six months on each employee classification which has a potential lead exposure.

3. Initial medical examinations, including lead and zinc ZPP blood level tests, are required for anyone who must work in an area or activity in which the airborne concentration of lead exceeds the 30 ug/m³ action limit. If the test results show blood lead concentrations greater than 40 ug/dL, additional blood tests shall be conducted every two months. For employees with exposures above the action level for any thirty days in a twelve month period, tests for lead and ZPP levels in the blood will also be conducted at two month intervals. Samples will be taken under the direction of a licensed physician and analyzed by an approved laboratory. Follow-up blood tests must be conducted within two weeks of notification for employees with blood concentrations greater than 50 ug/dL, and the employee will be removed from any work places with potential lead exposures.

4. Training in addition to that described in Section 4 under "Negative Results" will be provided and will include:
    a. The contents of the lead standard
    b. Specific nature of operations that could lead to lead overexposures
    c. Proper use of respirators
    d. Medical surveillance program Engineering controls
    e. Lead exposure control program
    f. Employees' right of access to records
    g. Suitable work practices

Exceeding the Permissible Exposure Limit (PEL)

1. If initial air test results show that employee exposure concentrations exceed the PEL, a written notice shall be provided to the employee advising him or her that the exposure was above the PEL and giving a description of the corrective action to be taken to bring concentrations within acceptable limits. Additional air tests must be conducted on at least a quarterly basis.

2. Engineering and work practice controls will be used to bring employee exposure concentrations below the PEL. When mechanical ventilation is used, the performance of the system shall be evaluated and documented on a daily basis.

3. For locations or activities for which respiratory protection is mandatory, the use of respirators will conform to the company's respiratory protection program, including the provisions for selection, medical evaluation, fit testing, maintenance, and training.

4. Where employees are subject to airborne lead concentrations in excess of the PEL or where they may come into contact with lead compounds that could cause skin or eye irritation, employees will be required to wear protective clothing such as coveralls, hats, protective footwear, and/or face shields or goggles. Protective clothing shall be cleaned and provided on at least a weekly basis.

5. Food, beverage, and tobacco products are not allowed in areas where airborne lead exposures exceed the PEL. Clean change areas are to be provided, including separate lockers for work clothing and street clothing, shower facilities, and lead free eating facilities. Employees are required to wash both hands and face prior to eating, drinking, smoking, or applying cosmetics. No employees from high lead concentration areas may enter an eating facility unless, surface lead dust has been removed by vacuuming or other cleaning method that collects lead dust. Adequate hand-washing facilities will be provided.

6. The requirements for blood tests and ZPP are the same as in under "Action Level".

7. The training requirements are the same as those in under “Action Level".

8. Warning signs must be posted in areas where the PEL is being exceeded. The signs will read:

WARNING!
LEAD WORK AREA
POISON
NO SMOKING OR EATING
NO ADMITTANCE WITHOUT AUTHORIZATION

9. Regulated areas will be established and roped off. Non-essential workers will be routed around these areas.

Exposure Control

1. The following controls will be used to keep airborne lead concentrations below the action level of 30 ug/m³3:

Activity	Control
Soft demolition / interior walls (lead based paint)	Mist drywall prior to sawing or breaking
Area cleanup lead contaminated dust	HEPA vacuum
Welding or cutting – coatings with lead (enclosed space)	Local exhaust ventilation or clean metal for four inches
Welding or cutting – coatings with lead (open air)	Respiratory protection or clean metal for four inches
Abrasive blasting / lead coatings	Supplied air respirators
Spray painting / lead content	Use paint with no lead content

2. For each activity in which lead is emitted, a description will be provided including:
   a. The activity
   b. The nature of the lead source
   c. Equipment in use
   d. Engineering and other controls
   e. Crew size
   f. Work practices and procedures
   g. Maintenance practices
   h. Any engineering plans or studies used to select the controls should also be documented.

3. Frequent and regular inspections will be provided at the jobsites by a competent person.

4. Copies of all air monitoring tests, which identify airborne lead concentrations will be attached to this program.

5. A detailed schedule of equipment procurement, construction contracts, and other plans for implementation of the protection program will also be attached.

HEXAVALENT CHROMIUM SAFETY POLICY

Policy Statement

Hexavalent chromium [Cr(VI)] compounds are widely used in the chemical industry as ingredients and catalysts in pigments, metal plating and chemical synthesis. Hexa-chrom can also be found in the construction industry through welding on stainless steel or on hexachrom painted surfaces. The major health effects include lung cancer, nasal septum and skin ulcerations and contact dermatitis. The purpose of this policy is to prevent employee exposure to hexavalent chromium compounds during construction activities. Each contractor working on a Miller Mechanical project must comply with 29 CFR Part 1926, Construction Industry Regulations, Subpart Z – Section 1126, Chromium (VI), in addition to the following guidelines.

Procedures

1. Permissible Exposure Limit (PEL)

    a) Since this construction activity is limited to specialty work, Miller Mechanical will direct the Subcontractor to provide specific Job Hazard Analysis (JHA's) and Pre-Task Planning (PTP) meetings to address potential exposure.
    b) The Employer must ensure that no employee is exposed to an airborne concentration Cr(VI) in excess of 5 micrograms per cubic meter of air (5 ug/m3) calculated as an 8-hour time-weighted average (TWA).
    c) Engineering controls will be the preferred method to achieve the Permissible Exposure Limit (PEL).

2. Exposure Determination

    a) The subcontractor must determine the 8-hour TWA exposure for each employee exposed to Cr(VI). This may be accomplished using two options; scheduled or performance-oriented monitoring.
    b) Scheduled Monitoring
        - The subcontractor must perform initial monitoring to determine the 8hour TWA for each employee on the basis of a sufficient number of personal breathing zone samples.
        - If the subcontractor does representative sampling, it must be conducted on the employee(s) expected to receive the highest exposure.
        - If the monitoring indicates that employee exposures are below the action level (1/2 the PEL or 2.5 ug/m3) and this is confirmed by another monitoring seven days later the employer may discontinue monitoring.
        - If the monitoring indicates that employee exposures are at or above the action level, the subcontractor must perform periodic monitoring at least every six months or above the PEL must repeat every three months.
    c) Performance Option
        - The employer shall determine a TWA exposure for each employee based on any combination of air monitoring data or objective data sufficient to characterize employee exposure.

3. Methods of Compliance

    - As stated previously, engineering and work practice controls must be used to reduce and maintain employee exposure to Cr(VI) to or below the PEL.
    - If feasible engineering and work practice controls are insufficient to reduce exposure below the PEL, then respiratory protection must be used.
    - The subcontractor will not be allowed to rotate employees to different jobs to achieve compliance with the PEL.

4. Respiratory Protection

    a) Respiratory protection use must comply with Miller Mechanical Respiratory Protection Program.
    b) The subcontractor must provide respiratory protection in the following circumstances:
        - Periods necessary to install or implement feasible engineering or work practice controls.
        - Work operations where an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce the PEL.
        - Emergencies

5. Protective Work Clothing and Equipment

    - Where there may be a hazard to the skin or eyes from exposure to Cr(VI) the subcontractor must provide, at no cost, protective clothing or equipment to the employee.
    - The subcontractor must ensure that the employees remove all clothing and equipment that may be contaminated with Cr(VI) when the work is complete or at the end of the shift.
    - The subcontractor must ensure that chromium-contaminated clothing is not removed from the workplace.
    - When contaminated protective clothing or equipment is removed for laundering or cleaning, the subcontractor must ensure that it is stored and transported in impermeable bags or containers.
    - The subcontractor must inform any person who launders or cleans clothing or equipment of the potential effects of exposure to Cr(VI) and that the clothing or equipment should be laundered or cleaned in a manner that minimizes skin or eye contact.

6. Hygiene Areas and Practices

    - Where protective clothing and equipment is required, the subcontractor must provide change rooms that comply with 29 CFR 1926.51.
    - Where skin contact may occur, the subcontractor must provide hand washing facilities that comply with 29 CFR 1926.51

7. Medical Surveillance

    The subcontractor must make medical surveillance available, at no cost, to employees who meet the following criteria:
    - Those who are or may be occupationally exposed to Cr(VI) at or above the action level for 30 or more days a year.
    - Those who are experiencing signs or symptoms of adverse health effects associated with Cr(VI) exposure.
    - Those exposed in an emergency.

8. Communication of Chromium

    - Must follow the same communication of hazardous chemicals highlighted in Miller Mechanical Hazard Communication Program.

9. Recordkeeping
    a) The subcontractor must maintain the following data records;

    - Air monitoring
    - Historical monitoring
    - Objective data
    - Medical surveillance

Roles and Responsibilities

Miller Mechanical management conducts inspections of the workplace for compliance with this policy.

1. Discuss policy applications during project orientations and pre-planning meetings with subcontractors.
2. Conduct pre-planning meetings and require the use of Job Hazard Analysis (JHA) and Pre-Task Planning (PTP) meetings.

Subcontractor Management will comply with and furnish materials necessary to meet the requirements of Miller Mechanical policy.

- Attend and participate in any and all project orientations, pre-planning meetings, JHA discussions and PTP meetings.
- Subcontractors' employees attend and participate in any and all project orientations, pre-planning meetings, JHA discussions and PTP meetings.
- Subcontractors' employees will comply with this policy.

SILICA SAFETY POLICY

Policy Statement

Exposure to silica can lead to silicosis, a serious and sometimes fatal respiratory disease. Silicosis develops from being exposed to and breathing in silica dust. Excessive amounts of silica dust may be generated during activities such as: sandblasting, rock drilling, roof bolting, foundry work, stonecutting, drilling, quarrying, brick / block / concrete cutting, gunite operations, lead-based paint encapsulate applications, asphalt paving, cement products manufacturing, demolition operations, hammering, and chipping and sweeping concrete or masonry.

The following policy is designed to protect employees who may come into contact with silica during the course of their work.

This policy is designed for Miller Mechanical Construction Employees. Subcontractors must be required to submit and have approved by Miller Mechanical, their company's Silica Exposure Prevention Program prior to start of work.

Procedures

In order to determine whether a product contains silica, the SDS must be obtained and evaluated. In the event silica is present in products on-site, the following safe working procedures shall be followed to eliminate or control silica dust exposure:

Miller Mechanical will always try to follow Table T-1 from OSHA's Silica standard when possible. When this is not possible, the following procedures will be executed:

1. Always wet the dry materials and surfaces before cutting, chipping, grinding, sanding, sweeping or cleaning. This engineering control shall be used to the greatest extent feasible, so that airborne concentrations of silica are minimized.
2. Engineering controls must be considered as a primary means to eliminate the hazard, whenever feasible.
3. Industrial hygiene exposure monitoring must be conducted in order to confirm that the engineering and administrative controls in place are effective and whether personal protective equipment (PPE) is or is not required.
4. If PPE is required, refer to Miller Mechanical Respiratory Protection Program for specific guidelines.
5. After working with products that contain silica, each individual will be required to thoroughly wash their hands before eating, drinking or smoking. Eating, drinking or smoking near silica or in a silica-regulated areas is strictly prohibited.
6. The Project Safety Orientation should include information on potential areas for exposure and the hazards of silica exposure.
7. Use power tools with built-in high-efficient particulate air (HEPA) dust extraction units to capture the dust before it is released into the exhausted air.
8. Miller Mechanical will not allow the use of any compound used for abrasive cleaning that contains more than 1% silica. Employee sampling must be conducted to verify that concentrations released from the media being finished does not exceed allowable OHSA PEL's. For abrasive blasting, replace silica sand with less toxic materials. The National Institute for Occupational Safety and Health highly discourages the use of sand or any abrasive with more that 1% crystalline silica in it. As an alternative, garnet, slag and steel grit and shot may be suitable substitutes.

If an employee is required to use a respirator due to silica exposure for more than 30 days, the employee must receive a medical evaluation including chest x-ray exam to establish a medical baseline.

All subcontractors are to supply any exposure monitoring, testing, or engineering information regarding silica exposure in their operations prior to beginning work. An example may be the masonry contractor using brick / block saws and associated experience data that the subcontractor has obtained.

NUISANCE DUST POLICY

Nuisance dust is generally created by normal construction activities and should be controlled or contained within the construction area.

- When working within an office / public environment, special precautions need to be taken to protect the quality of air by all possible means. Some examples are increasing the outside air flow to the Air Handlers, adding additional filters on return air diffusers, creating negative pressure environments, using HEPA vacuums and negative pressure fans to filter the environment.

- When working with cleaners and solvents needed for cleanup, always read all SDS before using in a controlled air environment, which could affect surrounding personnel.

- Always contact the employer of surrounding employees with a schedule of work activities and coordinate any special activities that may affect the quality of air near them.

- Always ask surrounding employers if any of their employees have medical conditions, which may be triggered by nuisance dust, fumes, mist, etc. from construction activity. These employees need to be relocated as far away from construction activities as possible. Asthma, allergies or bronchitis type medical conditions may be affected with even the smallest amount of dust or fumes entered into the environment.

- Always contact Miller Mechanical when nuisance dust conditions may occur around the general public, prior to beginning construction.

- Workers required to work around nuisance dust environments may be given NIOSH HEPA 95+ respirators or required to wear proper respirators per company policy and respirator program.

Miller Mechanical
VEHICLE SAFETY POLICY

Employees of Miller Mechanical are required to adhere to the following guidelines when operating any vehicle leased, rented, borrowed or owned by Miller Mechanical or when operating a personal vehicle for company business.

- All drivers will be held accountable for safe operation and maintenance of company vehicles and for the safe operation of a personal vehicle for company business.
- Only approved drivers may operate company vehicles. Drivers of personal vehicles on company business must also be approved by Miller Mechanical
- All drivers must submit a copy of their driver's license to the Miller Mechanical so that a driver's Motor Vehicle Record may be reviewed for motor vehicle history.
- Motor vehicle records will be reviewed 2-times each year. If at this time, there are excessive violations or accidents found, driving privileges of company vehicles may be revoked for a period of time to be determined by Miller Mechanical.
- The driver of a company vehicle must maintain a maintenance logbook. The logbook should include the date, work performed on the vehicle, and the mileage shown on the odometer at the time the work was performed. This includes oil and filter changes, tire rotations / replacements, brake replacement, body and engine work etc. The logbook is maintained at the office.
- Any vehicle repair or maintenance expense in excess of $500.00 for any single expenditure or in the aggregate for any quarter must be approved in advance by management.
- Only qualified company vehicle mechanics or approved service facilities are permitted to perform maintenance on company vehicles.
- A Supervisor's Report of Accident for Vehicles must be completed and sent to the main office (HR and Management) whenever an accident has occurred involving any company vehicle. This report is to be completed by the supervisor responsible for the vehicle no matter who is at fault. A copy of the police report should be attached, along with the estimates from the repair shop.
- Company vehicles driven for business use ONLY. No personal use of company vehicles unless authorized by CEO.
- Operating a company vehicle while under the influence of alcohol, drugs, etc. is prohibited and shall result in immediate termination of employment.
- Employees who use the auto allowance and/or mileage reimbursement in lieu of a company provided vehicle shall provide proof of auto insurance and limits for review and approval by Miller Mechanical.
- Employees who are charged with moving traffic violations while driving will be solely responsible for all penalties that result from such actions.
- Failure to follow any of the policies listed above may be grounds for termination of driving privileges or dismissal from employment.
- As referenced in the following Cell Phone and Electronic Device Policy, texting while operating any vehicle is strictly prohibited.

Miller Mechanical
CELL PHONE AND ELECTRONIC DEVICE POLICY

Policy Statement

All employees of Miller Mechanical are required to adhere to the following guidelines while using a personal mobile phone or company mobile phone while at work or conducting any company business. For purposes of this policy, the term “cell phone” or “mobile phone” is defined as any handheld electronic device with the ability to receive and/or transmit voice, text or data messages without a cable connection.

Purpose

The purpose of this policy is to provide guidelines for the use of cell phones or data devices for company business. In addition, this policy is designed to provide guidance to employees regarding the proper use of cellular devices (phones, PDA’s, etc.) for voice or data communication; to ensure that the use of cellular technology for company business is correctly authorized and appropriate.

Management Responsibility

- Supervisors are responsible for educating subordinates about appropriate cellular telephone procedures and monitoring their usage.
- The Manager will review this policy with any employee that is issued a cell phone.
- Management will review monthly cellular telephone bills of responsible employees to determine appropriate usage.
- Management will ensure employees are aware of the importance of protecting confidential and sensitive information held while using a cell phone.

Employee Responsibility

- Employees assigned company supplied cell phones are responsible for compliance with all regulations and policies.
- Employees using company cell phones are responsible for securing them. Losses shall be reported immediately to the appropriate Supervisor.
- Employees may be held liable for lost, stolen, or damaged cell phone equipment or accessories.
- Employees will not store any customer or confidential information on their cell phones.
- Non-exempt employees must have prior approval before using their cell phones for wireless handheld devices for business purposes after regularly schedules work hours.
- Misuse or abuse of this policy may result in disciplinary action, up to and including dismissal from service.

General Use at Work

While at work, employees should limit mobile phone use to company business. Employees should restrict personal calls, regardless of the phone being used to while at lunch or while on scheduled breaks. Excessive personal phone calls are counterproductive and distracting to other workers.

Construction Sites

Mobile phones shall not be used while on constructions sites if the use of the mobile phone creates an unsafe condition. Examples include but are not limited to:

- Working from heights
- Working near heavy equipment
- Working in roadways

While Driving

It is illegal in most states and against Miller Mechanical policy to use a hand held mobile phone while driving if you are a novice driver, a bus driver or if you are driving a vehicle which requires a CDL.

It is illegal in most states and against Miller Mechanical policy to text while driving ANY vehicle.

It is against Federal Law and against Miller Mechanical policy to use any mobile or cellular device while driving a vehicle which requires a CDL unless the device is 100% hand free.

Safe Use Guidelines

Employees must follow the guidelines outlined below to insure the safe use of all cell phone equipment.

- Employees should refrain from using of cell phones when driving.
- Allow incoming calls to go to voice mail whenever possible.
- Check voice mail and return calls only when the vehicle is off the road.
- Do not text message while driving a vehicle.
- Pull off the road to a safe place such as a parking lot to make necessary calls or use computer.
- Always dial the phone when the vehicle is not moving.
- Suspend cell phone usage during hazardous driving situations, such as heavy traffic or bad weather.
- Never take notes while driving.
- Keep any necessary conversations as brief as possible while on the road.
- Use speed dialing or voice dialing as much as possible.
- Use the phone with hands-free equipment.
- Never look up phone number or other information while driving.
- Refrain from conducting stressful conversations while driving.
- Employees are prohibited from texting while operating a vehicle on company business.
- Safe driving is always important, and must take priority over cell phone conversations.
- Employees who are charged with traffic violations resulting from the use of their cell phones while driving will be solely responsible for all penalties that result from such actions.

Other Restrictions

Employees must adhere to all federal, state, or local rules and regulations regarding the use of cell phones while driving. Accordingly, employees must not use cell phones if such conduct is prohibited by federal, state, or local laws, regulations or other ordinances.

The use of personal cell phones while at work may present a hazard or distraction to the user and or coworkers. This policy is meant to ensure that cell phone use while at work is both safe and does not disrupt business operations. Unless otherwise authorized, employees many only use personal cell phones for emergency purposes, while at work.

MILLER MECHANICAL
Contractors & Engineers, LLC

MILLER MECHANICAL CONTRACTORS AND ENGINEERS, LLC

DRUG FREE WORKPLACE PROGRAM

1976 Airport Industrial Park Drive, Marietta GA 30060-9203 * Phone 770-952-3864 * Toll Free (800) 446-6583 * Fax 770-952-0299

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MILLER MECHANICAL
Contractors & Engineers, LLC

November 1, 2004

To: All employees

The illegal use of drugs and the abuse of alcohol are problems that invade the workplace, endangering the health and safety of the abusers and those who work around them. Miller Mechanical Contractors and Engineers, LLC is committed to creating and maintaining a workplace free of substance abuse without jeopardizing valued employees' job security.

To address this problem, MMC&E has developed a policy regarding the illegal use of drugs and the abuse of alcohol that we believe best serves the interests of all employees. Our policy formally and clearly states that the illegal use of drugs or abuse of alcohol or prescription drugs will not be tolerated. As a means of maintaining our policy, we are implementing pre-employment and active employee drug testing. This testing will begin 60 days from the date of this notice. This policy was designed with two basic objectives in mind: (1) employees deserve a work environment that is free from the effects of illegal drug use or alcohol abuse and the problems associated with such, and (2) MMC&E has a responsibility to maintain a healthy and safe workplace.

To assist us in providing a safe and healthy workplace, we maintain a resources file of information of various means of employee assistance in our community, including but not limited to drug and alcohol abuse programs. Employees are encouraged to use this resource file, which is located in the Human Resource Department. In addition, as requested, we will distribute this information to employees for their confidential use.

An employee whose conduct violates MMC&E's Substance Abuse Policy will be disciplined up to and including termination.

I believe it is important that we all work together to make MMC&E a drug-free workplace and a safe, rewarding place to work.

Sincerely,

Joseph E. (Eddie) Miller
President

1976 Airport Industrial Park Drive, Marietta GA 30060-9203 * Phone 770-952-3864 * Toll Free (800) 446-6583 * Fax 770-952-0299

MILLER MECHANICAL CONTRACTORS & ENGINEERS, LLC
DRUG FREE WORKPLACE PROGRAM

I. POLICY STATEMENT

Miller Mechanical Contractors and Engineers, LLC (MMC&E) encourages a drug free workplace. It is our desire to minimize the opportunity for abuse, on the job of controlled substances, illegal drugs and over the counter medications that may affect the work we perform or the safety of our employees.

The MMC&E drug-free workplace program is certified by the Georgia Workers' Compensation Board in accordance with Title 34, Chapter 9, Article 11 of the Official Code of Georgia Annotated.

This Drug Free Workplace program outlines MMC&E's policy for use and possession of drugs on company property while on the job. Clear communication of and strict adherence to the program's guidelines and procedures are essential.

II. PROGRAM GOALS

The primary goal of this program is to maintain a safe workplace by maintaining a commitment to a drug free work environment.

MMC&E in general will adhere to the Department of Transportation; Federal Motor Carrier Safety Regulations regarding drug and alcohol use by/for commercial drivers. This program is designed to conform closely to these standards. MMC&E may at its sole discretion, implement components to its program that exceeds DOT regulations. (See DOT Regulations in 49CFR parts 40)

All employees must follow the requirements of this program. Violations of this program may result in disciplinary action up to and including termination.

III. PROGRAM RESPONSIBILITIES

Everyone shares in the responsibility to make MMC&E a safe and drug free workplace. To avoid confusion or misunderstanding, specific program responsibilities are outlined as follows:

A. Employees

Employees are required to:

1. Read, understand and follow the requirements contained in this program;
2. Participate in organization-sponsored activities or programs designed to minimize the likelihood of use of controlled substances while employed or engaged in activities on behalf of MMC&E.
3. Submit to periodic and post accident drug/alcohol testing.

4. Sign the drug/alcohol testing consent form and acknowledgement of receipt and understanding of this program.

B. Managers

Managers are responsible:

1. Read, understand and enforce the requirements of this program.
2. Demonstrate commitment to the program through participation in company driven initiatives.
3. Educate employees on the provisions of this plan.

IV. DEFINITIONS

Alcohol:

- Any alcohol product or substance including beer, wine, liquors and medications containing alcohol in concentrations capable of producing intoxication or which may inhibit reaction time, response time, or cause drowsiness to a degree which creates an unsafe condition when performing a safety sensitive function.

Applicant:

- An applicant who has participated in the interview process and is/has participated in a pre-employment drug screening.

Controlled substances:

- Any drug requiring a physician prescription or is defined as an illegal controlled substance by federal law enforcement. An illegal controlled substance includes: Cannabis, cocaine, crack, PCP, methamphetamines, ecstasy, opiates, LSD, peyote, or other illegally obtained medication requiring a physician prescription for which the user is not the patient or intended recipient of the drug.

Drug Screening Thresholds:

- The following tables detail the laboratory testing limits for specific illegal drugs.
- Applicants who test at or above the levels for **(Cannabis only, THC)** in the underlying tables are banned from employment with MMC&E in any capacity, for a minimum of 30 days. Applicants may re-test at anytime after 30 days at their own expense. Applicants who re-test at or above the thresholds in the tables below are banned from employment with MMC&E in any capacity for a minimum of 1 year. These applicants may reapply after one year and resubmit to drug testing at their own expense.
- Applicants who test at or above the thresholds in the tables below for any substance other than Cannabis/marijuana are banned from employment with MMC&E in any capacity for a minimum of 1 year. These applicants may reapply after one year and resubmit to drug testing at their own expense.

	INITIAL TEST CUTOFF LEVELS (ng/ml)
Marijuana metabolites	50
Cocaine metabolites	300
Opiate metabolites	2000
Phencyclidine	25
Amphetamines	1000
Ecstasy	trace

- Confirmatory tests: All positive tests will be confirmed as positive using gas chromatography/mass spectrometry. (GC/MS) procedures. The confirmatory test cutoff levels are:

	Confirmatory test cutoff levels (ng/ml)
Marijuana metabolites	15
Cocaine metabolites (Benzoylecgonine)	150
Opiates: Morphine, Codeine	2000 2000
6-Acetylmorphine (test for 6-AM when morphine concentration exceeds 2,000	10

ng/ml)	
Phencyclidine	25
Amphetamines: Amphetamine Methamphetamine (Specimen must also contain amphetamine at a concentration greater than or equal to 200 ng/ml	500 500

Employees:

- Any person, who is employed by MMC&E in a capacity other than contractually.

Medical Review Officer (MRO):

- An independent third party medical professional, competent and knowledgeable of the procedures and protocols for drug sample collection, analysis, and results reporting. The MRO monitors and administers the results of positive tests for candidates and employees.

Over the Counter Medications:

- Any non-prescription medication including holistic medications that may alter alertness, or reaction times of individuals.

Pre-employment testing:

- Initial drug testing protocol for candidates. All pre-employment tests shall conform to the DOT protocol for pre-employment testing. (See above thresholds.)

Post Accident testing:

- All employees, regardless of employment status or position must submit to a post accident drug test whenever he/she is involved in a work related accident event. All post accident drug tests will include at a minimum, the screening protocols outlined by the DOT for post accident drug testing.
- Employees engaged in an auto accident that involves any of the following events are also required to submit to a post accident alcohol test.

  - Fatality
  - Serious injuring requiring ambulatory transport from the scene
  - Tow away of any vehicle because its operation is not possible
  - Receipt of citation for serious moving violation

Behavioral observations may include:

- The odor of alcohol on the employee's breath;
- Erratic behavior;
- Unsteady gait, etc.

An employee reporting to work visibly impaired will be deemed unable to properly perform required duties and will not be allowed to work. If possible, the employee's supervisor will first seek another supervisor's opinion to confirm the employee's status. Next the supervisor will consult privately with the employee to determine the cause of the observation, including whether substance abuse has occurred. If, in the opinion of the supervisor, the employee is considered impaired, the employee will be taken or sent to a drug screening facility (accompanied by the supervisor or another employee if

necessary). A drug test will be given. An employee who appears to be impaired will not be allowed to drive

Reasonable Suspicion Testing:

- Management may request employee(s) to submit to drug testing whenever management has reasonable suspicion that drug use is occurring at the workplace. Reasonable suspicion must meet the definitions as defined by the Dept. of Transportation.

Safety Sensitive Function:

- Performance of a job function which results in exposure to the general public or which may expose others to risk of harm; i.e. operation of a motor vehicle, operation of mechanized construction equipment including power tools, sawzalls, open flame soldering or brazing torches, bobcats, forklifts, high-lifts or other powered equipment.

Secured Company Collection Site:

- Samples collected at company locations must be done so in a private and secure manner including:
  - Secure site so foreign substances or water may not contaminate samples.
  - Secure from intrusion by outsiders during the collection process.

Sub-Contractors:

- Sub-contractors with signed agreements and proof of insurance including workers compensation, general liability and auto liability are not considered MMC&E employees. Sub-contractors may be required to conform to the requirements of this program as a condition of their contractual agreement with MMC&E.

V. Procedures

Applicant Procedures:

Applicants will be required to submit voluntarily to a urinalysis test at a laboratory chosen by MMC&E, and by signing a consent agreement will release MMC&E from liability.

All applicants will undergo drug testing using DOT approved sample collection procedures prior to reporting for duty. These procedures include:

- Sample collection at a secure site (testing laboratory or medical office, sample collection at a secured company location with collection performed by a qualified individual)
- Maintenance of chain of custody documentation of collected samples

Applicants who have undergone sample collection may report to work on a conditional basis pending results of lab analysis. Results of sampling must be returned to MMC&E within 3 working days or the employee must be suspended without pay until results are returned. The drug testing functions, which may be performed while the applicant is fulfilling a conditional work assignment, are:

- Analysis performed by a certified testing laboratory
- Positive initial tests confirmed by GC/MS
- Confirmation of positive results to the applicant by the company's medical review officer

Employee Procedures:

All employees who undergo drug testing for any reason including post accident testing will undergo drug testing at an approved laboratory collection site which shall use DOT approved sample collection procedures. These procedures include:

- Sample collection at a secure site (testing laboratory or medical office, sample collection at a secured company location with collection performed by a qualified individual)
- Maintenance of chain of custody documentation of collected samples

At Management's discretion employees who have undergone testing and are awaiting the results of the analysis may be allowed to report for duty, but may not return to any function defined as a safety sensitive function (see above) until such time as the results are received by the company and are deemed to be below thresholds as defined in the table above.

- Analysis performed by a certified testing laboratory
- Positive initial tests confirmed by GC/MS
- Confirmation of positive results to the prospective employee by the company's medical review officer.

Employees who have undergone testing and receive a confirmed positive result for any substance in the tables above will be terminated.

It is a violation of company policy for any employee to use prescription drugs illegally, i.e., to use prescription that have not been legally obtained or in a manner or for a purpose other than as prescribed. (However, nothing in this policy precludes the appropriate use of legally prescribed medications.)

Employees with CDLs who, post accident, test positive for alcohol at concentrations meeting or exceeding 0.02 but less than 0.04 shall be suspended from driving subject to investigation and shall be subject to disciplinary action up to and including termination.

Employees with CDLs who, post accident, test positive for alcohol at concentrations meeting or exceeding 0.04 will be terminated.

Any employees who, post accident, tests positive for alcohol at concentrations meeting or exceeding 0.04 shall be suspended from driving subject to investigation and shall be subject to disciplinary action up to and including termination.

Employees who, post accident, test positive for alcohol at concentrations exceeding 0.08 shall be terminated.

VI. MILLER MECHANICAL CONTRACTORS AND ENGINEERS, LLC

Drug and Alcohol Testing Consent and Acknowledgement of Company Policy and Program

I_____have read and understand MMC&Es policy and program for achieving and maintaining a drug free workplace.

I consent to submit to drug and/or alcohol testing at my employer's expense, at the dates and times requested by my employer. I acknowledge that giving this consent includes consent for the following testing purpose:

- Periodic
- Post accident
- Position change (transfer or job change)
- Reasonable suspicion
- Random

I understand that my refusal to sign this consent or to adhere to the company's policies, or submit to testing may result in disciplinary action up to and including termination.

Employee Signature_____

Date_____

Witness_____

VII. Employee Assistance Resource Information

The company offers resource information on various means of employee assistance in our community, including but not limited to drug and alcohol abuse programs. Employees are encouraged to use this resource file, which is located in the Human Resource office. In addition, we will distribute this information to employees (upon request) for their confidential use.

VI. MILLER MECHANICAL CONTRACTORS AND ENGINEERS, LLC

Drug and Alcohol Testing Consent and Acknowledgement of Company Policy and Program

I_____have read and understand MMC&Es policy and program for achieving and maintaining a drug free workplace.

I consent to submit to drug and/or alcohol testing at my employer's expense, at the dates and times requested by my employer. I acknowledge that giving this consent includes consent for the following testing purpose:

- Periodic
- Post accident
- Position change (transfer or job change)
- Reasonable suspicion
- Random

I understand that my refusal to sign this consent or to adhere to the company's policies, or submit to testing may result in disciplinary action up to and including termination.

Employee Signature_____

Date_____

Witness_____

FORKLIFT SAFETY

I. POLICY STATEMENT

Ensure all powered industrial trucks are maintained and operated in such a manner to minimize opportunity of personal injury and/or damage to property or materials.

II. PROGRAM GOALS

- Only authorized and certified employees are allowed to operate powered industrial trucks.
- Prevent injury or loss of life.
- Prevent damage to materials and/or property and equipment.

TAB12

III. PROGRAM RESPONSIBILITIES

ntenance of this program is the responsibility of MMCE. Safety and Risk Management.

The jobsite superintendents are responsible for the successful implementation and maintenance of this program at all jobsites for which he/she is responsible.

- Safety representative will certify all ITO's.
- Safety representative will ensure all ITO's are re-certified at least every three years or as need arises.
- Supervisor will ensure only certified employees operate powered industrial trucks (PIT).
- Supervisor will ensure all PIT are inspected and maintained.
- Supervisor will tag out damaged PIT for repair.
- Employees will only operate PIT for which they are certified.
- Certified operators must perform daily pre-use inspection.
- Certified operators must report any damaged or inoperable safety equipment.

I. PROGRAM RESPONSIBILITIES – (Continued)

- CO must follow all safety rules and procedures.
- Post accident drug testing is required.

IV. DEFINITIONS

- **Certified operator** – Employee who has been trained through CFE 1910.178 PIT training.
- **Industrial truck** – Any motorized/powered equipment used to lift or transport materials.
- PIT - Powered Industrial Truck
- ITO – Industrial Truck Operators

TAB12

V. PROCEDURES

- Operator will document pre use checklist. (Completed daily checklist to be kept on file for one year).
- Operator will utilize seat belts at all times when operating PIT.
- Before use operator will ensure all protection and back alarm are operational and fire extinguisher present.
- Operator will not lift loads greater than PIT's rated capacity.
- Operators will not exceed 5 mph or a "fast walk" during operation or PIT.
- Operators shall report all incidents resulting in injury or damage regardless of fault or severity to supervisor and/or safety director who will perform an accident investigation.
- Operators will follow proper battery recharging or refueling Procedure.

Forklift Daily Checklist		Forklift No.						
INSPECTOR:		FOR THE WEEK OF: -						
VISUALS	MON.	TUE.	WED.	THU.	FRI.	SAT.	SUN.	
Engine								
Crankcase oil								
Belts								
Wires								
Fuel line								
Components								
Fuel Tank								
LPG tank straps								
Gauges, Temperature								
Gauges, Hour								
Gauges, Speed								
Gauges, Battery								
Brake Fluid								
Hydraulic Fluid								
Hydraulic Lines								
Tires, Wheels, Rims								
Forks								
Mast Chains								
Body								
Lights, Head								
Lights, Tail								
Lights, Signal								
Lights, Warning								
Fire Extinguisher								
Seat								
Seat Belt								
Overhead Cage								
Operating Instructions								
Lifting Capacity								
OPERATIONAL								
Horn								
Back-Up Warning Device								
Steering								
Parking Brake								
Service Brake								
Gear Shift Lever								
Transmission								
Adjusted Seat								
Seat Safety Switch								
Mast Lift Up/Down								
Mast Tilt								
Mast Side/Squeeze								

OK = √	Not Applicable = N/A	Not OK = X

SIGNATURE OF INSPECTORS FOR EACH DAY:			
MON.	TUE.	WED.	THU.
FRI.	SAT.	SUN.	☐ SEE REVERSE

TAB12

Forklift Safety
Forklift Daily Checklist

TAB12

Employee Signature_____

Date_____

Witness_____

MMC&E, LLC. CUTTING, WELDING, AND BRAZING

TAB6

I. POLICY STATEMENT

- Protecting our employees and customers involves proactively pursuing loss prevention including fire prevention at locations where we perform work. (Structural fires caused by soldering of copper pipe and fittings can involve staggering costs as well as damage to our reputation and the potential for people to be injured or killed.)

- In order to minimize our exposure and potential for loss, we have developed the attached policies and procedures to prevent fire on our jobsites.

II. PROGRAM GOALS

- Protection of people, property and the environment while engaged in soldering or hot-work activities.

- The jobsite superintendents are responsible for the successful implementation and maintenance of this program at all jobsites for which he/she is responsible.

- All MMC&E LLC. Employees share responsibility for ensuring a safe work environment. Employees engaged directly or indirectly in installation or assembly of plumbing systems at any jobsite are responsible for ensuring the safe and effective performance of soldering operations. These guidelines, site assessment tools and work permits are the minimum guidelines for ensuring a safe work environment.

IV. DEFINITIONS

TAB6

- **Welding/Hot Work Procedures** - Any activity, which results in sparks, fire, molten slag, or hot material, which has the potential to cause fires or explosions.
- **Examples of Hot Work** - Cutting, brazing, soldering, thawing pipes, grinding and welding.

V. PROCEDURES

MMC&E LLC will ensure that all crews are properly equipped with appropriate tools and materials to assess, prepare and perform hot work. Crews are responsible for daily inspection and replacement of faulty or missing equipment. All crews should insure the proper working condition of all tools prior to leaving the yard location.

- CLASS ABC Fire extinguisher
- Heat Shield- must have at least one 6"x 9" flame and heat resistant pad
- Cool Gel- must have at least two squirt bottles of Cool Gel
- Caulk – must have at least one tube of METACAULK, SPECSEAL Firestop Sealant, Fire Temp CI, LCI Firestop or like Sealant, on your truck at all times
- Eye protection
- Hand protection (heat resistant gloves)
- Shop broom/hand broom
- Dustpan or pail

Proper Use of Equipment:

- Fire extinguisher- must be in the house and available for use within 5 feet of where you are working.
- Heat Shield- must be placed between joint being soldered and any material that may be scorched or burned during soldering.
- Cool Gel- must be applied to all material near the joint being soldered before soldering begins and again after soldering has been completed.

- Metacaulk- must be used to fill in cracks and holes through the wall in which you are soldering

- Eye protection must be worn and hand protection should be used if desired or appropriate.

TAB6

Proper Preparation of the worksite:

Each worksite must be inspected and approved for hot work prior to beginning any soldering, cutting or grinding. Foremen, lead-men or journeymen plumbers may inspect and approve an area for work. At a minimum:

- All insulation and loose debris must be removed from the work area. The area within three feet of where the soldering/hot-work activity will take place should be swept clean and all debris, sawdust and loose materials removed. Crews should sweep up loose materials and dispose of them away from the area where work will be performed.

- All holes and cracks should be sealed with METACAULK, SPECSEAL Firestop Sealant, Fire Temp CI, LCI Firestop or like Sealant. Wall board, insulation wrap material and other wall and sub-flooring material should be inspected for loose or free hanging sections, holes, or openings where smoldering material may be present after performing work. These areas should be secured or sealed with METACAULK, SPECSEAL Firestop Sealant, Fire Temp CI, LCI Firestop or like Sealant. (If the area of loose material is too large, greater than 1 foot or a hole larger than 2" in diameter that cannot be filled, crews should notify the site foreman and wait for approval to begin before starting hot work.) See instructions for soldering inside of walls.

- Protect yourself and the work area from fire risk. Portable fire extinguishers and/or fire watch should be posted at the area before lighting your torch. (Extinguishers must be fully charged. Partially charged fire extinguishers are not permitted and should be returned to the shop following use)

- Torch Tip should be the appropriate size for the joint you are soldering. Soldering torches should be inspected and tips clean of debris or foreign material prior to lighting the torch. Inspect your fuel tank and ensure all fittings are tight prior to lighting. Employees should ensure they have a "safe zone" perimeter (1 arm length in all directions) before lighting the torch.

- The whole work area should be sprayed with Cool Gel. When ready to proceed, crews should wet an area with Cool Gel, no smaller than 1 foot in diameter around the area where soldering torches will be used. (Where heat shields are used, the area behind the heat shield and around its perimeter must be wet with Cool Gel.)

TAB6

- Heat Shield should be placed between the joint being soldered and material that may burn or scorch. Burning or scorching of wood or wallboard around the work area should not occur. If any scorching or burning occurs, work should be stopped and the area inspected for better application of the heat shield and wetting with Cool Gel.

- Heat Shield should be removed after soldering and Cool Gel applied to all material in the work area again. Reapply Cool-Gel to the entire area around where soldering took place. The area should be wet, but not saturated with Cool-Gel. If any smoldering material is observed spray the area directly with Cool-Gel until saturated. Extend the wet area around the smoldering area to form a perimeter barrier to prevent the spread of smoldering material.

- Soldering inside of a wall- the opening must extend 1 foot from the joint you are soldering in all directions. (If the opening does not extend one foot in all directions stop and seek direction from the site foreman.) If the opening extends in all directions, wet the interior of the area with Cool-Gel and install your heat shield behind the joint.

- When work is completed, do not leave the area for at least 30 minutes. Smoldering material and hot spots often will show signs of ignition within 30 minutes of completing work. You must re-inspect the area 30 minutes after finishing work to ensure there is no smoking or smoldering material.

- All workers should be aware of the nearest hose bib or water location on the jobsite.

- In the event that soldering activity results in burning material requiring the use of your fire extinguisher, you must do the following:

  1. Sound an alarm – alert others in the area that you have burning material requiring extinguishment with fire suppression equipment.
  2. If the area is small and fire spread is not yet occurring, follow the directions on your extinguisher and discharge your extinguisher at the base of the burning material and spread outwards until the fire is out. Do not attempt to extinguish a fire that has begun to spread or shows evidence that spreading is about to occur. Vacate the area immediately while sounding an alarm to others to vacate as well. Notify the site foreman and call or instruct them to call 911.

4. Notify others in the area that the fire is out. Do not leave the area. Hot spots may still be present and the fire could re-ignite. Wait a minimum of 30 minutes and sweep up the area around the fire. Re-spray the area of the fire with Cool-Gel until saturated. If the area remains cool and no evidence of fire is present. Notify the site foreman and proceed from the area. Inform your crew leader and complete an incident report immediately.

TAB6

Training:

All employees engaged in hot work or soldering activities are to receive training in proper soldering techniques according to the Copper Piping Institute. Training should be completed prior to performing work unless under the direction and supervision of a qualified licensed journeyman plumber.

- All employees will be trained to perform soldering using the new fire prevention procedures by their safety team leaders, or the designated company trainer.
- All trained employees will receive certification of training and must sign the course completion certificate in order to receive credit for the training.
- Training will be reviewed annually with each employee and documentation retained in their training file, or on hand at the location.

TAB6

Cutting, Welding and Brazing
Soldering/Hot-Work Site Inspection & Permit

Employee Signature_____

Date_____

Witness_____

TAB6

Soldering/Hot-work Site Inspection & Permit

This form must be completed and signed by the appropriate site person prior to and following work.

Location Address_____ Project Name_____

Date_____ Pre-inspection by:_____

Item number	Description	Pre-work Initial by foreman, lead-man or journeyman	Post-work Initial by foreman, lead-man or journeyman
1	All safety gear is available and on the truck prior to leaving and prior to returning to the shop.		
2	Area cleaned of debris and foreign material		
3	Insulation material, wall board, sub-floor and wall studs inspected for loose segments, holes or openings. Openings filled with Metacaulk or like caulk product		
4	Soldering torches inspected and appropriate for use for the job.		
5	Fire prevention gear is available in the work area		
6	Heat shields and Cool-gel is available in the work area and is/was used in accordance with procedures		
7	Post work fire inspection performed (minimum of 30 minutes after completion of work)		

Post Inspection by:_____

Date:_____

PART 5

EMPLOYEE SAFETY ORIENTATION PACKAGE

The Employee Safety Orientation Package is used to communicate and train employees to the Company Safety Rules, Regulations, Policies, Programs and Plans.

The Employee Safety Orientation Package is to be reviewed and signed by all employees upon implementation of this Safety and Health Manual.

The Employee Safety Orientation Package is to be reviewed and signed by all NEW employees upon hire, but BEFORE the start of work.

Miller Mechanical

EMPLOYEE SAFETY ORIENTATION PACKAGE

Miller Mechanical
SAFETY PROGRAM
ACKNOWLEDGEMENT FORM

Miller Mechanical has a moral and business obligation to provide a safe work environment for its employees, subcontractors and the public. It is, therefore, the Company's policy to abide by the Occupational Safety and Health Standards and to initiate and maintain appropriate practices and procedures that promote safety in the work environment.

My signature below certifies that I have this day reviewed the Miller Mechanical Safety Manual.

The Safety Manual and Company Safety Rules were either read by me or reviewed with me by an employee of Miller Mechanical

I agree to be guided by the safety instructions issued by my supervisors and will report to him all unsafe conditions or practices observed on the work site.

I understand that any violation of the safety rules or refusal to comply with an OSHA “Safety and Health Regulation” is grounds for dismissal.

Signature _____ Date _____

Miller Mechanical
ACCIDENT REPORTING AND MEDICAL SERVICES

All accidents must be reported to the Safety Officer or the main office within 1 hour.

All eye, neck, back and knee accidents / injuries require immediate medical attention, no matter how minor.

Accident reports must be 100% complete and turned in to Safety Officer within 24 hours of accident.

Miller Mechanical has a current Panel of Physicians for occupational injuries.

There are at least (6) physicians listed for various services.

Except under emergency conditions, I will obtain first aid treatment at the work site for all injuries and will report to the supervisor before leaving to obtain additional medical attention.

A list of physicians and medical facilities for the company are available at the work site and I fully understand that I must choose one of the named physicians or medical facilities for an on the job injury.

I further understand that if I seek medical treatment elsewhere other than the listed physicians or medical facilities for an on the job injury, I shall be responsible for my own medical bills.

Signature _____ Date _____

Miller Mechanical
CONSTRUCTION JOBSITE SAFETY RULES

1. Use and/or possession of intoxicants, alcohol or drugs are not allowed.

2. Hard hats and safety glasses shall be worn by all employees on the jobsite.

3. Long pants and shirt with 4” minimum sleeves are required at all times.

4. Hard sole shoes are required – no tennis shoes.

5. Ear protection and respiratory protection devices shall be worn when required. Reflective vests shall also be worn at all times while on site.

6. Only authorized personnel are permitted to operate equipment / vehicles.

7. No riders on machinery or equipment. Seat belt use is required at all times. Riding in the back of trucks is prohibited.

8. All machinery must have operable backup alarms at all times. Seat belts shall be used on all vehicles and equipment.

9. No one shall enter a trench or excavation unless it is properly sloped, shielded or shored.

10. Report all accidents, unsafe conditions / practices and emergencies to your supervisor immediately.

Signature _____ Date _____

Miller Mechanical
EMPLOYEE CERTIFICATE OF AGREEMENT
WITH SUBSTANCE ABUSE POLICY

I hereby consent to submit to specimen tests as shall be determined by Miller Mechanical in the selection process of applicants for employment, for the purpose of determining the drug content thereof.

I agree that Miller Mechanical may collect these specimens for these tests and may test them or forward them to a testing laboratory designated by the company for analysis.

I further agree to and hereby authorize the release of the results of said tests to the company.

I understand that it is the current use of illegal drugs that would prohibit me from being employed at this company.

I further agree to hold harmless the company and its agents (including the above named physician or clinic) from any liability arising in whole or part, out of the collection of specimens, testing, and use of the information from said testing in connection with the company's consideration of my application of employment.

I further agree that a reproduced copy of this pre-employment consent and release form shall have the same force and effect as the original.

I have carefully read the foregoing and fully understand its contents.

I acknowledge that my signing of this consent and release form is a voluntary act on my part and that I have not been coerced into signing this document by anyone.

I do hereby certify that I have received and read the Miller Mechanical Substance Abuse and Testing Policy.

I understand that if my performance indicates it is necessary, or in the case of random testing, I will submit to a substance abuse test.

I also understand that failure to comply with a substance abuse test request, or a positive result may lead to termination of employment and denial of unemployment benefits.

I understand that failure to submit to a substance abuse test, or a positive test result may affect my right to obtain workers' compensation benefits.

I further agree to and hereby authorize the release of the results of said tests to the company. Nothing in this consent form is to be construed as a contract between the parties.

_____
Print Name

_____ _____
Signature Date

Miller Mechanical
HAZARD COMMUNICATION
ACKNOWLEDGEMENT FORM

My signature below certifies that I have read and understand this certificate. I know that this company has an active Hazard Communication Safety Program. I understand that my responsibility is to observe and follow safe work guidelines when working with hazardous products. I further understand the following:

Most hazards will fall into five broad categories:

1. Flammables and combustibles
2. Compressed gases
3. Poisons
4. Corrosives
5. Irritants

A hazardous substance can endanger our well being in four ways:

1. Inhaled
2. Ingested
3. Absorbed
4. Injected

Safety Data Sheets (SDS) contain the following information:

1. How to properly handle and store
2. Outline spill clean up procedures
3. Medical and first aid procedures

I know where the SDS, emergency supplies, and emergency phone numbers are located.

I understand how to read, interpret and use the SDS.

I will, when working with hazardous products in containers, follow the guidelines outlined on labels which explain the dangers of the product and the proper way to use this product.

I also understand that the hazardous chemical list, Miller Mechanical Hazard Communication Program, and the SDS are available for my review upon request.

I agree to observe and follow safe work practices while working for Miller Mechanical.

_____ _____

Signature Date

Miller Mechanical
FIRE EXTINGUISHER SAFETY

- Four things needed to maintain a fire:

  1. Fuel
  2. Heat
  3. Oxygen
  4. Chain reaction

  Take away any one of the first three and the fire will be out.

- Stay upwind of a fire when using a fire extinguisher.

- Stay back 8 to 10 feet from a grease fire because the force of the pressure / powder from the fire extinguisher may cause the grease to splash.

- The main three classes of fire extinguisher ratings:

Class A	Wood, paper, plastic
Class B	Flammable liquids
Class C	Electrical

- **PASS** is the word used to train people properly to use a fire extinguisher.

  Pull the pin.
  Aim the extinguisher at base of fire.
  Squeeze the handle.
  Sweep extinguisher from side to side from outside towards center of fire.

- A 10lb. B.C. rated extinguisher should be within 50'-0" of any 5 gallons of fuel.

- A 20 lb. B.C. rated extinguisher should be within 25'-0" maximum 75'-0" of any Liquefied Petroleum Gas tanks or any other fuel tanks greater than 5 gallons capacity.

- All fires no matter how small must be reported immediately to supervisor.

- Mount fire extinguisher: Minimum of 48" from the floor, but no more than 60" off the floor

- The distance one should stand from the base of the fire is written on the fire extinguisher.
  For example: (2 ½ lb.) Minimum distance is 6' (20 lb.) minimum distance is 12'.

- Everyone should check the fire extinguisher in work area daily to make sure it has adequate pressure and that the pin is still in the proper place.

- Fire extinguishers shall be serviced at least once a year.

- At each testing, a maintenance tag will be placed on the extinguisher to show the inspection date.

Signature _____ Date _____

Miller Mechanical
EMERGENCY PLAN

1. An emergency plan is a set of rules or procedures to be followed by all personnel in the event of an emergency.

2. The emergency plan is maintained by the company and is implemented by the Supervisor. The emergency plan determines the proper access / egress of emergency equipment and/or personnel into or out of the area, in case of emergency.

3. Supervisors will be directed to key locations, to assist in an emergency situation.

4. Each employee is expected to follow directions of supervisors and cooperate in any emergency action effort.

5. Personnel should evacuate the area in an orderly fashion, when instructed to do so by the supervisor.

6. If you become aware of an emergency situation or any injury, notify a supervisor immediately.

7. Notify supervisor of the location of emergency so that 911 can be called.

8. All personnel shall evacuate the area in an orderly manner and reassemble in the designated location.

9. All supervisors are responsible for knowing the location and number of employees at all times.

10. All personnel will be accounted for to ensure that everyone has evacuated the area.

11. Personnel are strictly forbidden to discuss project conditions, incidents, or emergencies with the owner, client, media, press or any person not associated with the emergency.

Signature _____ Date _____

Miller Mechanical

29 CFR 1910.134 Appendix D Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirators use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

- Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

- Keep track of your respirator so that you do not mistakenly use someone else’s respirator.

Signature _____ Date _____

Miller Mechanical
LADDER SAFETY

All ladders shall be inspected prior to use.

The use of ladders with broken or missing rungs, broken or split side rails, or other faulty or defective construction is prohibited.

Portable ladder feet shall be placed on a substantial base, on a 4 to 1 pitch and the area around the top and bottom of the ladder should be kept clear and clean at all times.

Ladders shall not be used in a horizontal position as platforms, runways, or scaffolds.

Portable ladders shall be tied, blocked or otherwise secured to prevent movement.

All ladders shall extend 36 inches above the landing.

Avoid the use of metal ladders when the possibility of contact with electrical power exists.

Always clean mud or greasy substances from shoes before climbing up ladder.

Always face the ladder and hold on with both hands, whether climbing up or down.

It is dangerous to reach out too far from a ladder in any direction, keep your “center of gravity” as close to the ladder as possible. Move the ladder, as the work requires. Never “walk” or “scoot” ladders while in use.

Never use the top or the top step of a step ladder.

Never use a step ladder as a straight ladder.

Signature _____ Date _____

Miller Mechanical
HOUSEKEEPING / CLEAN UP

No one should create hazards for other workers and employees by leaving objects like pipes, carts, boxes, barrels and other trash / debris in the access path, walkways and work areas.

Housekeeping is an important part of our daily work. With the cooperation of everyone we can keep all areas clean, neat, organized and free from tripping hazards.

A clean workplace reduces fire hazards.

Housekeeping should be part of your continuous and DAILY routine.

Follow these steps to help keep your work areas clean and organized:

- Always check / inspect your workplace DAILY.
- Dispose of wastepaper, cardboard, lunch and/or break trash, shipping material, scrap material, etc. into the appropriate container DAILY.
- Clean up anything that is spilled on the floor as soon as possible.
- Keep all aisles, access paths, walkways clear of obstruction…these areas are for people access, not material storage.
- Store all materials neatly and keep them away from traffic access areas and walkway access areas.
- Use nonflammable containers for disposing of scrap and waste substances.
- Always put tools back in their proper places. Tools left on the floor are a hazard!
- Know all locations of first aid and fire fighting equipment.

Take time to think SAFELY!

Signature _____ Date _____

Miller Mechanical
ELECTRICAL SAFETY

These regulations apply to electrical installations used on the job, both temporary and permanent installations:

- Extension cords used with portable electrical tools and appliance shall be of three-wire types. Grounds are never to be removed from the extension cords.
- Temporary lights shall be equipped with guards to prevent accidental breakage and/or accidental contact with the bulb.
- Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this means of suspension.
- Splices of any kind are not allowed. Electrical tape is not an equivalent replacement for the exterior sheathing.
- Electrical and extension cords or cables should not to be laid on floors, in walkways, etc., unless it is impractical to do otherwise. They should be suspended or secured in such a way as not to block or hang in walkways, hallways, doorways, or work areas.
- Panel boxes shall have a cover on them at all times, except when being serviced; and when a temporary cover is in place, it should be marked “DANGER - HIGH VOLTAGE" to denote live current.
- Minimum working distances established by OSHA will be followed by unqualified and qualified electricians and workers. The OSHA 1910 Book and OSHA 1926 Book are used and referenced for minimum working distances. De-energized parts not locked or tagged shall be treated as live parts.
- Conductive materials or conductive equipment, such as ducts and pipes shall be avoided. If work is required around conductive material or conductive equipment safe work practices such as those included in this Safety Manual and items listed in Lock-out / Tag-out Program shall be followed.
- Conductive clothing or jewelry shall not be worn when electrical hazards are present, unless the clothing or jewelry is rendered non-conductive by covering, wrapping or other insulation methods.

Use these basic safety procedures when using electrical extension cords:

- Visually inspect the cord for damaged and exposed conductors. If the cord is in damaged condition, don't use it.
- Inspect to make sure the ground prong is in good condition and the cord provides a satisfactory ground for the electrical tools being used.
- Don't drag cords over rough surfaces and don't use them to lift or pull materials. Don't string electrical cords through water or oil and grease. Also, don't hammer nails or staples into cords.
- Disconnect electrical cords at the receptacle. When not in use, the electrical cord should be rolled-up and stored.
- Only round cords that are rated for heavy duty use are allowed on the jobsite. Never use flat power cords on a jobsite.
- Always use GFCI electrical outlets and/or GFCI “pig-tails”.

_____ _____

Signature Date

Miller Mechanical
EXCAVATION & TRENCHING

For any and all trenches more than (5') five feet deep, classify the soil as Class "C", slope sides of trench or excavation 1.5 feet horizontal to 1.0 feet vertical.

If a COMPETENT PERSON classifies the soil as Type "A" or Type "B" other slopes can be used.

Other alternatives are to use shoring and/or trench boxes.

All slopes and/or excavations greater than (20') twenty feet deep, MUST be designed by a registered Professional Engineer.

A COMPETENT PERSON is one who has been trained and is capable of identifying existing and predictable hazards in the surrounding work areas, and/or working conditions that are unsanitary, hazardous, or dangerous and who has the authority to take prompt corrective measures to eliminate the hazard. Also, the competent person must have the authority to stop work if a hazard exists.

A competent person must inspect / check all trenches, adjacent areas, and any protective systems for possible cave-ins, failure of protective systems, hazardous conditions, etc.

Inspections MUST be performed DAILY before work begins and/or when any worker enters the area.

Inspections must be performed after any rainstorm, any hazard-increasing occurrence and/or any other change in conditions.

In trenches deeper than (4') four feet, locate means of an exit, such as ladders, steps or ramps so that they are no more than (25') twenty-five feet of travel from anyone in the trench.

Supervisors are required to call U-Locate … to locate utilities prior to excavation / trenching.

Signature _____ Date _____

Miller Mechanical
EMPLOYEE SAFETY ORIENTATION

I have been verbally and visually orientated and/or trained to all Miller Mechanical safety rules, regulations and/or policies. I have also been trained to the Miller Mechanical Safety Manual.

These items include, but are not limited to:

- Safety Acknowledgement Form
- Construction Jobsite Safety Rules
- Substance Abuse Policy
- Hazard Communication Program
- Safety Data Sheets
- Regular Safety Training
- Fire Extinguisher Safety
- Fall Protection Safety
- Emergency Plan
- Personal Protection Equipment (PPE)
- Ladder and Stair Safety
- Housekeeping / Clean-Up
- Electrical Safety
- Excavation and Trenching Safety
- Equipment Safety
- Crane and Rigging Safety
- Vehicle Safety
- Cell Phone and Electronic Device Safety
- Accident Reporting
- Safety Violation Warning System

Questions / Comments: _____

_____

_____

_____

_____

_____ _____

Signature Date

PART 6

COMPANY SAFETY FORMS

Miller Mechanical
COMPANY REPORT OF ACCIDENT

This form is to be used in conjunction with OSHA 301 Form

Jobsite:_____ Jobsite Number:_____

Date of Injury:_____ Name of Injured:_____

Age:_____ Employed By:_____

SS#:_____ Occupation:_____

Drug / Alcohol Test Performed? Yes_____ No_____

Description of Occurrence (Include location, time of day, related details, and resulting injuries.)

_____

_____

Witness:

Name:_____ Employed by:_____

Drug / Alcohol Test: Yes_____ No_____

Comments:_____

_____

_____

Did any unsafe conditions exist?_____

_____

Did employee contribute to accident?_____

_____

Corrective action taken?_____

_____

_____

_____

_____

_____

_____ _____

Signature Supervisor Signature

Miller Mechanical
SUBCONTRACTOR'S REPORT OF ACCIDENT

This form is to be used in conjunction with OSHA 301 Form

Jobsite:_____ Jobsite Number:_____

Date of Injury:_____ Name of Injured:_____

Age:_____ Employed By:_____

SS#:_____ Occupation:_____

Drug / Alcohol Test Performed? Yes_____ No_____

Description of Occurrence (Include location, time of day, related details, and resulting injuries.)

_____

_____

Witness:

Name:_____ Employed by:_____

Drug / Alcohol Test: Yes_____ No_____

Comments:_____

_____

_____

Did any unsafe conditions exist?_____

_____

Did employee contribute to accident?_____

_____

Corrective action taken?_____

_____

_____

_____

_____

_____

_____ _____

Signature Supervisor Signature

Miller Mechanical
VEHICLE ACCIDENT REPORT

Date: _____ Name: _____

State and City Accident Occurred: _____

Name of Injured Persons: _____

_____

Make and Model of Company Vehicle: _____

Description of Damage to Miller Mechanical Vehicle: _____

_____

_____

Description of Damage to Other Vehicles and/or Property: _____

Description of Accident: _____

_____

_____

_____

_____

_____

_____

Signature: _____

Miller Mechanical
SAFETY WARNING

On this date, _____ and time _____,

at this location _____

employee (name), _____

working for (company) _____

failed to comply with the safety rules and/or policies: _____

_____

_____

1st Offense - written warning

2nd Offense - written warning, subject to termination

3rd Offense - subject to termination

Action taken to correct safety warning: _____

_____

_____

_____ _____

Employee Signature Date

_____ _____

Supervisor Signature Date

Miller Mechanical
OBSERVED BEHAVIOR / FOR-CAUSE RECORDING FORM

Name of Employee Observed: _____

Location / Department: _____ Date: _____

Time of Observation: From: _____ AM _____ PM

To: _____ AM _____ PM

_____

_____

OBSERVED PERSONAL BEHAVIOR (check all appropriate items):

1. SPEECH
- ☐ Normal
- ☐ Incoherent
- ☐ Confused
- ☐ Slurred
- ☐ Whispering
- ☐ Silent

2. AWARENESS
- ☐ Normal
- ☐ Confused
- ☐ Sleepy
- ☐ Paranoid
- ☐ Lack of Coordination

3. BALANCE
- ☐ Normal
- ☐ Swaying
- ☐ Staggering
- ☐ Falling

4. WALKING
- ☐ Normal
- ☐ Stumbling
- ☐ Swaying
- ☐ Arms Raised Forward
- ☐ Falling
- ☐ Reaching

5. Description of other observed actions or behavior indicative of possible drug use: (Be specific and objective).

_____

_____

6. Description of action taken: _____

_____

7. Name / Title of Observing Management or Witnesses:

A. Print Name: Sign Name:

_____ _____

Title: _____ Date: _____

B. Print Name: Sign Name:

_____ _____

Title: _____ Date: _____

THIS FORM MUST BE PREPARED WHEN AN EMPLOYEE IS SUSPECTED OF DRUG USE.

Miller Mechanical
END OF THE WEEK EMPLOYEE INJURY STATEMENT

Job Name / Location_____

Superintendent_____

Circle One

I	have not	or	have	received any injury or been involved in any accident during the course of this week's work.
I	have not	or	have	witnessed any injury or accident during the course of this weeks work.

I am signing this form voluntarily for accident tracking purposes

_____
Print Name

_____ _____
Signature Date

CONFINED SPACE
PRE-ENTRY CHECKLIST

Date: _____ Time: _____

Jobsite Name: _____

Location on Jobsite: _____

Purpose of Entry: _____

_____

Job Supervisor / Entry Supervisor Name: _____

First Atmospheric Check:

Time _____

Oxygen _____ %
Explosive _____ % L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

	N/A	YES	NO
Hazard Source Isolation:			
Pumps or lines blinded, disconnected, or blocked	☐	☐	☐
Ventilation:			
Mechanical Ventilation	☐	☐	☐
Natural Ventilation	☐	☐	☐

Atmospheric Check after Isolation and/or Ventilation:

Time _____

Oxygen _____ %
Explosive _____ % L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Communication Procedures: _____

Rescue Procedures: _____

_____

_____

	N/A	YES	NO
Entry, Attendants, and Supervisor persons:			
Successfully completed required training?	☐	☐	☐
Is training current?	☐	☐	☐
Equipment:			
Atmospheric gas monitor – pre-tested?	☐	☐	☐
Safety harnesses for entry persons / attendants	☐	☐	☐
Lifelines and hoisting equipment	☐	☐	☐
Communication equipment	☐	☐	☐
PPE & protective clothing	☐	☐	☐
All electric equipment non-sparking tools	☐	☐	☐

	YES	NO
Did your survey of the surrounding area show it to be free of hazards such as drifting vapors from tanks, piping or sewers?	☐	☐
Does your knowledge of other discharges indicate this area is likely to remain free of dangerous air contaminants while occupied?	☐	☐
Are you trained in operation of the gas monitor to be used?	☐	☐
Has a gas monitor functional test been performed before monitor is used?	☐	☐
Was the atmosphere of the confined space tested prior to entry?	☐	☐
Did the atmosphere check as acceptable (no alarms given)?	☐	☐
Will the atmosphere be regularly monitored while the space is occupied?	☐	☐
Has the inside of the space been visually inspected and free of hazards?	☐	☐
Has the outside of the space been visually inspected and free of hazards?	☐	☐

If any of the above questions are answered “NO” … DO NOT enter. Contact your immediate supervisor.

Periodic Atmospheric Test:

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

I have reviewed the work task authorized by this pre-entry checklist and the information contained in this pre-entry checklist, is accurate.

Written safety instructions and safety procedures have been reviewed with entry / attendant persons.

Entry cannot be approved if any boxes are marked "NO", page 1 or 2. (If NO, proceed to Entry Permit)

By completing this pre-entry checklist, I have reclassified the entry to a NON-PERMIT required entry.

The checklist is to be kept at the jobsite, during duration of entry. Return job site copy to office following job completion.

Additional Information _____

_____

_____ _____

Entry Supervisor Printed Name Entry Supervisor Signature

CONFINED SPACE
ENTRY PERMIT

ENTRY PERMIT VALID FOR ONLY 8 HOURS.

Date: _____ Time: _____

Jobsite Name: _____

Location on Jobsite: _____

Purpose of Entry: _____

_____

Entrants Name: _____ _____

_____ _____

Attendant Name: _____

Entry Supervisor Name: _____

Communication Procedures: _____

Rescue Procedures: _____

_____

_____

Hazards of the Confined Space: _____

_____

Method used to Eliminate Hazards: _____

_____

Equipment:	N/A	YES	NO
Atmospheric gas monitor – pre-tested?	☐	☐	☐
Ventilation equipment	☐	☐	☐
Back-up power and/or back-up fuel	☐	☐	☐
Secure surrounding area	☐	☐	☐
Safety harnesses for entry persons / attendants	☐	☐	☐
Lifelines and hoisting equipment for rescue	☐	☐	☐
Communication equipment	☐	☐	☐
PPE & protective clothing	☐	☐	☐
Fire extinguishers	☐	☐	☐
All electric equipment non-sparking tools	☐	☐	☐
Burning and/or welding “Hot” Permit	☐	☐	☐

Acceptable Entry Conditions:		
	Oxygen	Above 19.5% Below 23.5%
	Lower Flammable Limit	Under 10%
	Carbon Monoxide	Under 35 ppm
	Hydrogen Sulfide	Under 10 ppm

First Atmospheric Test:

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Periodic Atmospheric Test:

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Time _____

Oxygen _____ %
Explosive _____% L.F.L.
Toxic – H2S _____ PPM
Toxic – CO _____ PPM

Instrument(s) used	Model / Type	Serial # or Unit #
_____	_____	_____
_____	_____	_____

Misc. Information / Comments: _____

_____

_____

I have reviewed the work task authorized by this Confined Space - Entry Permit and the information contained in this Confined Space - Entry Permit, is accurate.

Written safety instructions and safety procedures have been reviewed with entry / attendant persons.

By completing this Entry Permit, I authorize the work to be conducted in this Confined Space.

The Entry Permit is to be kept at the jobsite, during duration of entry. Return job site copy to office following job completion.

Additional Information _____

_____

_____ _____

Entry Supervisor Printed Name Entry Supervisor Signature

Miller Mechanical
WEEKLY SAFETY TRAINING

DATE:_____ NUMBER PERSONS ATTENDING: _____

JOB NAME: _____ JOB # _____

NAME OF PERSON
CONDUCTING TRAINING_____

REGULAR TOPICS INCLUDE: PPE Requirements, any job specific topics, incidents, etc.

MAIN TOPICS DISCUSSED: _____

ADDITIONAL TOPICS DISCUSSED: _____

_____

SUGGESTIONS OFFERED: _____

_____

_____ _____
Person Conducting Training Signature Date

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

_____ _____
Attendee Printed Name Attendee Signature

Miller Mechanical
Fall Protection Training

Date of Training

Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature
Attendee Printed Name	Attendee Signature

Instructor Printed Name	Instructor Signature

Miller Mechanical
SAFETY INSPECTION REPORT

DATE: _____

JOBSITE: _____

RECORD KEEPING

A.	Safety items posted?	YES	NO	N/A
B.	Safety Manual, Haz Com Program, SDS accessible to everyone?	YES	NO	N/A
C.	Weekly Tool Box Safety Training Session documented?	YES	NO	N/A
D.	All federal, state, local employment notices posted? Easily accessible?	YES	NO	N/A

COMMENTS: _____

_____

PERSONAL PROTECTIVE EQUIPMENT

A.	Hard hats, safety glasses, work clothes / boots - Worn by everyone?	YES	NO	N/A
B.	Fall harnesses, guardrails or other fall protection measure used by everyone?	YES	NO	N/A

COMMENTS: _____

_____

FLOOR OPENINGS, PLATFORMS, HOLES, RUNWAYS

A.	Guardrails, in place? In good condition? Properly secured / inspected?	YES	NO	N/A
B.	All floor openings covered correctly and marked?	YES	NO	N/A
C.	All materials safe distance from building perimeter and secured?	YES	NO	N/A

COMMENTS: _____

_____

FIRE PREVENTION

A.	Fire extinguishers in place? Inspected?	YES	NO	N/A
B.	Fire watch in use at welding operations?	YES	NO	N/A
C.	Flammable gases, liquids stored/used properly?	YES	NO	N/A

COMMENTS: _____

_____

PUBLIC AND PROPERTY PROTECTION

A.	Barricades, lights, and signs provided?	YES	NO	N/A

COMMENTS: _____

_____

ELECTRICAL TOOLS

A.	Properly guarded, grounded, GFCI in use?	YES	NO	N/A
B.	Extension cords in good condition?	YES	NO	N/A
C.	Inspected frequently? .	YES	NO	N/A
D.	Path to ground permanent and continuous?	YES	NO	N/A

COMMENTS: _____

_____

HOUSEKEEPING

A.	Work areas clean and materials stacked?	YES	NO	N/A
B.	Nails removed? Site free of trash and debris?	YES	NO	N/A

COMMENTS: _____

_____

FIRST AID

A.	Sufficient supplies? Easily accessible? Protected from dust and weather?	YES	NO	N/A

COMMENTS: _____

_____

LADDERS AND SCAFFOLDS

A.	Erected properly? Guardrails / toeboards in use?	YES	NO	N/A
B.	Work platforms fully decked? Secured?	YES	NO	N/A

COMMENTS: _____

_____

CRANES AND HOISTS

A.	Is the equipment in good condition, brakes, cables, etc.?	YES	NO	N/A
B.	Are the hoistway and swing radius areas adequately protected?	YES	NO	N/A
C.	Is the wire rope in good condition?	YES	NO	N/A
D.	Are the operating and signaling rules posted and followed?	YES	NO	N/A
E.	Are the load capacities posted? Log books up-to-date?	YES	NO	N/A

COMMENTS: _____

_____

TRENCHES AND EXCAVATIONS

A.	Easily accessible ladders or ramps?	YES	NO	N/A
B.	Sides properly shored, braced, or sloped?	YES	NO	N/A
C.	Spoils and equipment kept back safe distance from sides?	YES	NO	N/A
D.	Perimeter barricades in use and maintained?	YES	NO	N/A

COMMENTS: _____

_____

HAND TOOLS

A.	Are tools free of obvious physical damage?	YES	NO	N/A
B.	Are handles on tools in a good condition?	YES	NO	N/A
C.	Are tools cleaned and stored properly?	YES	NO	N/A
D.	Are meters in good condition and operating properly?	YES	NO	N/A

COMMENTS: _____

_____

_____ _____

Signature Date

Miller Mechanical
SAFETY INSPECTION REPORT

Are employees wearing hard hats?	YES	NO	N/A
Do employees have safety glasses available?	YES	NO	N/A
Are first aid kits available?	YES	NO	N/A
Are all employees aware of the emergency action plan?	YES	NO	N/A
Are all fall protection devices in order?	YES	NO	N/A
Is the walking / working area free from trip and fall hazards?	YES	NO	N/A
Are all SDS's available?	YES	NO	N/A
Is the work area's free of trash and debris?	YES	NO	N/A
Are fire extinguishers available in work areas?	YES	NO	N/A
Are all power tools maintained and in proper working order?	YES	NO	N/A
Is the OSHA poster available?	YES	NO	N/A
Are ladders set up and used properly?	YES	NO	N/A
Do all workers know where the Haz Com / SDS book is?	YES	NO	N/A
Are subcontractors following safety requirements?	YES	NO	N/A
Are all hand tools free from splits and cracks?	YES	NO	N/A
Are all employees trained in the use of special equipment?	YES	NO	N/A
Is all temporary power protected by an adequate GFCI?	YES	NO	N/A
Are extension cords in good condition?	YES	NO	N/A
Is the Lock Out / Tag Out program being utilized?	YES	NO	N/A

Additional Comments _____

_____

_____

_____

_____ _____

Signature Date

Miller Mechanical
COMPETENT PERSON
EXCAVATION DAILY INSPECTION

Date: _____ Time: _____

Jobsite Name: _____

Location on Jobsite: _____

Type of weather: _____ Temperature: AM_____ PM_____

Is the excavation less than 5 feet in depth?	YES	NO
Is 1.5 to 1 sloping of trench walls being used?	YES	NO
Have all open excavations and trenches been inspected?	YES	NO
Is an Engineered report being used?	YES	NO
Has the soil been classified (Types A____, B____, or C____)?	YES	NO
Are the slopes at proper angles (1.5 to 1, etc.)?	YES	NO
Is a trench box in use (the rated capacity is _____ psf)?	YES	NO
Is a shoring system in use (aluminum _____, or wood _____)	YES	NO
Have utility companies been notified by the “One-Call”?	YES	NO
Are ladders____, stairways_____, or ramps_____ in use?	YES	NO

If any of the above answers are “NO”, a possible hazardous condition exists and the minimum OSHA Standards must be used and complied with in full (unless a slope of 1.5 to 1 is excavated for the trench walls) in all cases.

Are spoil piles located too close to the trench?	YES	NO
Are surcharge loads too close to the trench?	YES	NO
Are there tension cracks along the trench?	YES	NO
Are there shrinkage cracks in the trench walls?	YES	NO
Has water accumulated in the trench?	YES	NO
Has any soil sloughed off or caved in since yesterday?	YES	NO
Is backfilling of the trench being delayed?	YES	NO
Is there a layered soil condition present?	YES	NO
Are other construction activities near the trench?	YES	NO
Is there any vehicular traffic near the trench?	YES	NO
Are there any trees, boulders, signs, poles, etc. in area?	YES	NO
Are subsurface conditions different than was anticipated?	YES	NO
Are there other utility lines near the trench?	YES	NO
Any fluid leakage detected in the aluminum shoring?	YES	NO
Do wood shores need to be tightened?	YES	NO
Can the trench be classified as a “confined space”?	YES	NO

If any of the above answers is “YES”, there is a changed condition which affects the soil classification and thereby affects employee safety. All work must cease until corrective action is taken and soil is reclassified.

Corrective Action Taken:_____

_____

Comments:_____

_____

Print Name_____ Signature_____

Miller Mechanical
SAFETY PROGRAM
SUBCONTRACTOR
ACKNOWLEDGEMENT FORM

My signature below certifies that I understand OSHA Safety & Health Regulations and that I understand Miller Mechanical has an active Safety Program and that I agree to follow these rules, regulations and programs while on Miller Mechanical work sites. I will report all unsafe conditions or practices observed on the work site.

I understand that any violation of the Miller Mechanical Safety Program or refusal to comply with the OSHA Safety & Health Regulations are grounds for removal from Miller Mechanical work site.

I understand that all Subcontractor employees, vendors, etc are required to follow OSHA Safety & Health Regulations and Miller Mechanical Safety Program as a minimum, at all times on the work site.

- Report all injuries, accidents and/or incidents to Miller Mechanical immediately.
- All Subcontractor employees must wear appropriate safe, construction clothing while on work site. (Hard soled shoes, long pants, full shirts with a minimum 4" sleeve, etc.)
- The proper Personal Protective Equipment, must be provided and used when required. Hard hats are required at all times on Miller Mechanical work sites.
- The work site, work area, storage areas, etc. will be kept clean and organized at all times. Subcontractors are responsible for continuous clean-up, daily clean-up, end of the activity clean-up, final clean-up, lunch / break area clean-up, etc.
- All tools (power and hand) and all equipment / vehicles must be in a good, clean, well maintained, safe condition to be on Miller Mechanical work sites.
- All electrical cords must be maintained in a good, safe condition.
- All employees on Miller Mechanical work sites must attend safety training at least once per week. Notes from safety training and attendance must be documented.
- Subcontractors must provide First Aid kits, medical services and emergency procedures for all its employees.
- Fresh, clean water and drinking cups must be provided for employees.
- Subcontractors must assure employee knowledge of the location of SDS sheets.
- Each Subcontractor must have a "Competent Person" onsite during construction activities. "Proof" of safety training and competency must be available at the work site.

Print Name of Subcontractor _____

Print Person's Name _____

Person's Signature _____ Date _____

ACCIDENT INVESTIGATION REPORT

TAB3

	DEPARTMENT/VEHICLE/BUILDING		
ON EMPLOYER'S PREMISES ☐ YES ☐ NO	DATE OF OCCURRENCE	TIME ☐ AM ☐ PM	DATE REPORTED

PERSONAL INJURY OR ILLNESS		PROPERTY DAMAGE	
		PROPERTY DAMAGE	
ION	AGE	ESTIMATED COSTS $	ACTUAL COSTS $
OF INJURY OR ILLNESS		NATURE OF DAMAGE	

DESCRIBE CLEARLY WHAT TOOK PLACE. INCLUDE THE MATERIALS, EQUIPMENT AND PEOPLE INVOLVED. IF VEHICLE ACCIDENT COMPLETE DIAGRAM ON REVERSE

USING THE GUIDE ON THE REVERSE PAGE, QUESTION (WHY-WHAT-WHERE-WHEN-WHO-HOW) EACH OPERATING FACTOR AND THE MANAGEMENT CONTROLS INVOLVED. DESCRIBE EACH MANAGEMENT DEFICIENCY CONTRIBUTING TO THE LOSS.

DESCRIBE WHICH CONTROLS REQUIRE ADDITIONAL ATTENTION AND WHAT ACTION HAS OR WILL BE TAKEN TO PREVENT RECURRENCE. PLACE X BY ITEMS COMPLETED.

MOTOR VEHICLE ACCIDENT: ☐ N/A ☐ PREVENTABLE ☐ NOT PREVENTABLE

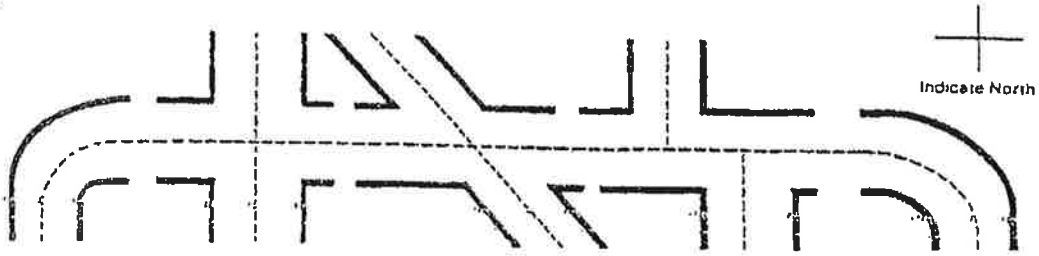
ATED BY	DATE	REVIEWED BY	DATE

nvest.doc

TAB3

MOTOR VEHICLE DIAGRAM

Complete the following diagram showing direction & positions of vehicles involved, designating clearly point of contact.



INSTRUCTIONS.

(1) Show vehicles and direction of travel

(2) Use solid line to show path of each vehicle before accident

(3) Give street names

YOUR VEH

OTHER VEH 1 2

dotted line after accident

TAB3

TAB3

PERATING FACTORS	MANAGEMENT CONTROLS	QUESTIONING GUIDE
PEOPLE	PLACEMENT	WHO WAS INVOLVED?
		What qualifications are necessary to perform the task?
		Who is most qualified?
	TRAINING	Why was this employee selected if not most qualified?
		What instructions or training were provided?
	ENFORCEMENT	What additional training is needed?
		What instructions or rules were not followed?
		What additional rules or enforcement action should be established?
EQUIPMENT	WORKSITE SETUP	WHAT EQUIPMENT WAS INVOLVED?
		Why was this equipment used?
		What equipment should be used?
		What guards were or were not used?
		Describe the jobsite setup of material and equipment?
		What additional jobsite setup controls are necessary?
	PURCHASING	How did the quality or hazards of the equipment contribute to the loss?
		What additional purchasing controls are necessary?
	MAINTENANCE	What maintenance problems were evident?
		When should maintenance be performed?
		How can maintenance be improved?
		What Personal Protective Equipment is provided?
		When should Personal Protective Equipment be used?
		What Personal Protective Equipment should be provided?
MATERIAL	DESIGN AND ARRANGEMENT	WHAT MATERIAL WAS INVOLVED?
		What design characteristics contributed to the loss?
		How should the material be designed?
		How was the material arranged, handled and used?
	PURCHASING	Where should the material be arranged?
		Why was this material being used?
		What material should be used?
ENVIRONMENT	DESIGN AND ARRANGEMENT	WHAT ENVIRONMENTAL FACTORS (BUILDING, NOISE, VAPOR, ILLUMINATION, ETC.) WERE INVOLVED?
		Why was it designed and arranged this way?
	PURCHASING	How should it be designed and arranged?
		What purchasing controls are necessary?
	HOUSEKEEPING	When should housekeeping be performed?
	MAINTENANCE	How should housekeeping be improved?
		What maintenance problems are evident?
		When should maintenance be performed?
		How should maintenance be improved?

Miller Mechanical
Guide to Address Fall Hazards
Construction Jobsites

Jobsite Name _____

Jobsite Location _____

Today's Date: _____

Plan Effective Dates: from_____ to _____

Name of Competent Person
preparing this Plan (print):_____

Criteria used to determine Fall Hazards as per Subpart M of CFR 29 Part 1926 (Construction):

		YES	NO
1.	Unprotected sides and edges over 6' above a lower level	_____	_____
2.	Leading edge over 6' above a lower level	_____	_____
3.	Hoist area over 6' above a lower level	_____	_____
4.	Holes and/or skylights over 6' above a lower level	_____	_____
5.	Work on formwork / reinforcing steel over 6' above lower level	_____	_____
6.	Ramps, runways, other walkways over 6' above lower level	_____	_____
7.	Working at edge or crossing over excavation over 6' deep	_____	_____
8.	Working above dangerous equipment less than 6' below	_____	_____
9.	Performing overhand brick laying or related work above 6'	_____	_____
10.	Roofing work on Low slope roof over 6' above lower level	_____	_____
11.	Roofing work on Steep roof over 6' above lower level	_____	_____
12.	Engaged in precast concrete erection work above 6'	_____	_____
13.	Engaged in residential work over 6' above a lower level	_____	_____
14.	Working on, at, above, or near wall opening over 6' above LL	_____	_____
15.	Any other walking / working surface above 6'	_____	_____

List any area where there was a "YES" response:

1. _____

   How do we address this hazard?_____

   _____

2. _____

How do we address this hazard? _____

_____

3. _____

How do we address this hazard? _____

_____

4. _____

How do we address this hazard? _____

_____

5. _____

How do we address this hazard? _____

_____

6. _____

How do we address this hazard? _____

_____

NOTE: Guardrail systems, safety net systems, or personal fall arrest systems must be considered first. Employees engaged in “leading edge activities”, “precast concrete erection activities” or “residential construction activities” … after proving it would be infeasible or more dangerous to consider one of those conventional three fall protection measures, may devise a fall protection plan that is adequate in preventing fall hazards.

Company policies:

Ladders: In addition to the rules covered in Subpart X and our Company Safety Manual, Miller Mechanical also requires personal fall protection for employees working on a stepladder or supported ladder within 10’ of an unprotected side, edge, or hoist area which is over 6’ above a lower level. A second employee will hold and steady the ladder until the personal fall arrest system is installed for the employee using the ladder, and likewise when the same is removed.

Scaffolds: In addition to the rules covered in Subpart L, Miller Mechanical also requires guard rail on all scaffolds on working surfaces over 10‘ above a lower level.

Boom lifts: Any and all employees in a boom lift will wear the proper personal fall protection devices which will be properly attached to a point in the basket so designated by the manufacturer.

Hoist areas: Where guardrail has to be taken down temporarily, it is the strict policy of Miller Mechanical to establish a controlled access zone with a safety monitor and with working personnel attached to either a tether or a retractable lifeline. When the guardrail system is reinstalled, either the superintendent or site safety person will inspect before removing the CAZ and safety monitor. Should any of this occur after or before the working hours of the superintendent or safety person, the CAZ will remain until clearance is given to remove it.

Holes: Holes over 2” in their least dimension must be covered, secured from moving, color coded and/or identified as a hole cover (“Hole Cover”). We will do this on any hole we create, and will inform the controlling contractor when our employees are exposed to such holes created by others and not properly covered, marked or guardrailed and toeboarded.

Harnesses: Only full body harnesses are allowed; no safety belts. Lanyards shall be 6’ or less in length and shall be made of synthetic fibers only. When using lanyards, a “shock absorber” shall be installed between the anchorage and the lanyard. When attaching the body harness to an anchorage using a retractable device, no shock absorber shall be used. Double locking snap hooks shall be utilized at all times. Snap hooks can only be attached to body harnesses or anchorages; never to another snap hook and never back to the same lanyard they are attached to.

Anchorages: Anchorage points for most applications will have a capacity of at least 5000# and 3000# for retractables. Most scaffold manufacturers are on record as saying the scaffold shall not be used as an anchorage for fall protection; we concur. All anchorages shall be inspected by a competent person before utilizing, and such inspection shall be documented. Manufacturer’s anchorages such as in an aerial lift need only be inspected at delivery and the before each use.

Inspections: Our designated competent person, _____, shall inspect body harnesses, lanyards, shock absorbers, life lines, retractables, rope grabs, and anchorages before each shift. Such inspections shall be documented and retained for six months past the completion of the project involved. For that purpose, each item will carry an identification number where practical.

_____ _____

Signature Date

Miller Mechanical
Site Specific Safety Plan
Construction Jobsites

Date Submitted: _____

Name of Project: _____

Project Address: _____

_____

General

Our company safety manual has been written specifically for and tailored to Miller Mechanical. The Miller Mechanical safety manual addresses most of the hazards anticipated on this project.

A copy of our current Safety Manual and Safety Data Sheets will be provided upon request.

Site Specific Safety

1. Miller Mechanical's "Site Specific Safety Plan" and general safety rules and regulations are implemented by our Project Managers

   _____
   Project Manager for this project

2. Identification of safety hazards, plan to address safety hazards and enforcement of safety rules and regulations will be conducted by our designated Supervisors / Competent Persons.

   _____
   Name of Supervisor / Competent Person for this project

3. Weekly Safety Training Sessions are conducted. These weekly safety training sessions will address specific safety rules and/or site specific safety issues on the project. Weekly safety training sessions are documented and available upon request.

4. Miller Mechanical personnel and Miller Mechanical subcontractors are required to attend and participate in weekly safety training sessions.

5. The use of the necessary and required PPE and the inspection of the necessary and required PPE will be conducted by the supervisors and workers on the project.

6. First Aid kits will be available to Miller Mechanical personnel.

7. On site accidents and injuries are reported within one hour to the Miller Mechanical.

8. Required posters and safety signage will be available at general contractor office and at Miller Mechanical branch office and Miller Mechanical main office.

9. General SDS, company safety manual and site specific plan will be available at GC field office and company job truck.

10. Miller Mechanical has an active substance abuse policy in effect.

11. Safety violations are issued based on company enforcement disciplinary policy.

12. Miller Mechanical subcontractors are required to follow Miller Mechanical Safety Manual and Miller Mechanical site specific safety plans, as a minimum.

13. Please see attached list of “hazard assessment” and “hazard abatement”.

Please contact me if you have any questions or additional needs.

Thank You,

_____

Signature of Miller Mechanical Manager

_____

Printed Name of Miller Mechanical Manager

_____

Date

Miller Mechanical

Project Name:

Project Address:

Plan Prepared By:

Note: This plan is a reasonable effort to identify possible hazards and risks associated with this site. It is not comprehensive in nature and does not encompass all hazards, preventions or remedies for listed hazards. In the event the information contained in this Hazard Assessment and Abatement plan conflicts with OSHA 1926 code, then the OSHA 1926 code will prevail.

Hazard / Risk	Assessment	Abatement
Head Injury	Impact, falling / flying objects and electrical can cause injuries to the head	Personnel will wear hard hats when required by hazard and/or when client requires the use of hard hats
Eye / Face Injury	Flying or falling foreign objects can cause eye and/or face injuries	Personnel shall wear eye and/or face protection during drilling, cutting, chipping, sanding, grinding and scraping type of activities
Hearing Injury	Personnel can be subjected to loud noises from tools, equipment and activities	Personnel shall wear hearing protection anytime sound levels are above 90 decibels or long term exposure to loud noises
Hand Injury	Hands can be injured, cut or punctured when handling tools and/or materials	Personnel shall wear gloves or other hand protection when handling abrasive, heavy or sharp materials
Back Injury	Improper lifting techniques or attempting to lift too much can cause back injury	Personnel should lift items while bending at the knees. Also, personnel should get assistance when lifting large or heavy items
Foot Injury	Foot injury can result from exposed nails, falling objects and uneven surfaces	Personnel should wear work boots with a good sole and ankle support. Steel toe work boots should be worn when required
General Body Injury	Bodily injury can result from operations, activities, environment and other personnel	Personnel shall wear appropriate PPE. Personnel shall wear good clothing, work boots, long pants and shirt with a 4" minimum sleeve
Respiratory Injury	Dust, gases and vapors can result in injuries to the respiratory system	Personnel are required to wear respiratory protection when required. Ventilation, wet cutting, etc. shall be used, if possible
Chemical Hazards	Chemical hazards are present on jobsites and can be created with incorrect handling or usage	Safety Data Sheets will be available at client facilities, in company truck or a company offices

Miller Mechanical

Project Name:

Project Address:

Plan Prepared By:

Note: This plan is a reasonable effort to identify possible hazards and risks associated with this site. It is not comprehensive in nature and does not encompass all hazards, preventions or remedies for listed hazards. In the event the information contained in this Hazard Assessment and Abatement plan conflicts with OSHA 1926 code, then the OSHA 1926 code will prevail.

Hazard / Risk	Assessment	Abatement
Slip / Trip / Falls	Slip, Trips and Falls usually result from lack of traction, poor housekeeping and improper storage	Works areas will be kept clean and clear of obstructions. Storage areas should be stacked neatly and with adequate access
Tool Hazards	Tools can create hazards with missing or damaged guards, cords or switches	Tools will be inspected to assure in safe operating condition, guards are in place, cords are in good shape, including ground prongs
Ladder Hazards	Improper use of extension ladders and step ladders can result in injuries	Personnel are required to be trained on ladder use and use proper ladders and proper ladder use techniques.
Fall from Elevations	Personnel can be injured from falls from elevations are a major source of accidents and injuries	Personnel shall never work from unprotected heights. Ladders, scissors lifts or aerial lifts shall be utilized.
Electrical Hazards	Personnel can be injured by electrical hazards of tools, equipment and building electrical systems	Personnel are reminded to wear appropriate PPE, not to work in proximity of energized electrical circuits or utilize Lock Out / Tag Out
Struck By Hazards	Personnel can be injured by being struck by falling, flying or moving objects, tools or equipment	Personnel are reminded to wear PPE, not work under suspended loads and to be aware of workplace surroundings
Caught In Between Hazards	Personnel can be injured by crushing or pinching between objects, walls or other equipment	Personnel are reminded to wear appropriate PPE, not to work in "pinch points" and to be aware of workplace surroundings

PART 7

SAFETY DATA SHEETS (SDS)

SAFETY DATA SHEET (SDS)

A Safety Data Sheet (SDS) is a fact sheet for a chemical which poses a physical or health hazard at you work site. SDS must be in English and contain the following information:

- Identity of the chemical (as used on the label)
- Physical hazards
- Health hazards
- Primary routes of entry
- Whether it is a carcinogen
- Precautions for safe handling and use
- Emergency and first aid procedures
- Date of preparation of last revision
- Name, address, and telephone number of manufacturer, importer, or other responsible party

If relevant information in one of the categories was unavailable at the time of preparation, the SDS must indicate that no information was found. Blank spaces are not permitted. If you find a blank space on a SDS, contact your supervisor.

Your company must have a SDS for each hazardous chemical it uses. Copies must be made readily available at your work sites. When you travel between work sites during the day, the SDS may be kept at a central location.

If there are workers from other companies at your work site, they must be made aware of the chemicals you use and the location of your SDS. They must do the same for you. All SDS can be at a central location and managed by the general contractor.

Labels and Labeling Requirements

Containers of hazardous chemicals must be labeled in English. Information may also be presented in other languages for non-English speaking employees, but English is required. It is required that labels contain the following information:

- Identity of the hazardous chemical
- Appropriate hazard warnings
- Name and address of the chemical manufacturer, importer, or other responsible party
- Pictograms

On individual stationary containers you may use signs, placards, batch tickets, or printed operating procedures in place of labels.

Where the chemical is intended only for the use of the employee marking the transfer during his or her work shift, the company is not required to label portable transfer vessels. If, however, that vessel or container is transferred for use on another work shift, it has to carry a label.

How to Read an SDS

An SDS must precede or accompany the initial shipment but does not have to be physically attached to it. If you receive subsequent shipments of the same item, a new SDS is not required to be sent to you unless the chemical make-up of the product changes.

To ensure proper record keeping and maintenance of SDS, you should:

- Make sure any employee who purchases supplies for your company is on the lookout for SDS.
- Include a request for a SDS and a label that meets the requirements of the Hazard Communications Standard on all purchase orders.
- Ask for a SDS for any material bearing a label indicating it is a hazard unless a SDS is already on file.
- To deal with the multi-employer situation, you may request information from other contractors on the site about hazardous substances and chemicals known to be at the site.

While SDS will appear in many different formats, they will contain essentially the same information. The information on a SDS is extremely technical in nature and should be used as a reference or as a backup to information on a label. A SDS tracking OSHA Form 174 would offer the following information:

SECTION 1 – IDENTIFICATION

1. Chemical name, as it appears on the label.
2. Manufacturer's name and address.
3. Emergency telephone number in the event of an emergency involving the substance.
4. Date prepared and the signature of the preparer.

SECTION II – HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

1. Hazardous Components: Contains the specific chemical identity, its formula, and any common names it is known by.
2. OSHA Permissible Exposure Limits (PEL): PEL is the permissible maximum amount of the chemical a person may be safely exposed to without harm.
3. American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV): TLV is the concentration of a chemical in the air that can be breathed for five consecutive eight-hour workdays by most persons without harmful effects. It is generally expressed in parts per million.
4. Other limits recommended: Any other recommended limitation on the use of the chemical by any agency, scientific group, or organization should be included.

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS

1. Boiling Point: The temperature at which a liquid boils.
2. Vapor Pressure (mm Hg): Vapor pressure measures a liquid's tendency to evaporate. The higher the pressure, the faster it will evaporate.
3. Vapor Density: Indicates the weight of an equal volume of air. If a vapor is heavier than air (vapor density greater than 1), it will sink to the ground. If it is lighter than air (vapor density less than 1), it will rise.
4. Solubility in Water: Indicates whether the chemical can mix with water in any ratio without separating.
5. Appearance and Odor: A brief description of the chemical's color and smell.
6. Specific Gravity: Ratio of the weight of the material to the weight of an equal volume of water. The specific gravity determines whether the material floats or sinks in water. Specific gravity values less than or equal to 1 indicate that water should not be used to extinguish a fire involving the substance unless the water comes from automatic sprinklers.
7. Melting Point: Indicates the temperature at which a solid changes to a liquid.
8. Evaporation Point (Butyl Acetate 1): Indicates the temperature at which a substance evaporates.

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

1. Flash Point: Indicates the lowest temperature at which a liquid gives off enough vapor to ignite in air when exposed to a flame.
2. Flammable Limits: Indicates the range of vapor concentrations which will explode when an ignition source is present.
3. Extinguishing Media: Materials suitable for putting out a fire involving the identified chemical. These fire fighting agents are: water fog, foam, alcohol foam, carbon dioxide, and dry chemical. The four classes of fire are:
   Class A – paper, wood, straw, cloth
   Class B – flammable and combustible liquids
   Class C – fire involving energized electrical equipment
   Class D – combustible metals
4. Special Fire Fighting Procedures: Indicates the chemical's special characteristics when it comes in contact with fire.
5. Unusual Fire and Explosion Hazards: Indicates any special types of hazards requiring attention. The description will indicate whether the chemical is difficult to extinguish, will re-ignite spontaneously, and how it reacts with water and other extinguishing agents.

SECTION V – REACTIVITY DATA

1. Stability: Indicates conditions that contribute to the stability or instability of a chemical when it is exposed to heat, pressure, or excessive shock during storage, use, misuse, or transport. Look to this section to identify specific conditions to be avoided.
2. Incompatibility (materials to avoid): Indicates various materials or conditions you must keep the chemical away from to avoid adverse reactions.
3. Hazardous Decomposition or By-products: Indicates gases or vapors which are released when the chemical is burned or decomposes.
4. Hazardous Polymerization: Polymerization is a chemical reaction when molecules of the chemical combine with molecules of another chemical to form a larger, different material. This reaction is accompanied by the release of large amounts of energy which can produce fire or other hazards. Polymerization can occur when the chemical comes in contact with certain plastics, rubber, or coatings.

SECTION VI – HEALTH HAZARD DATA

1. Route(s) of Entry: A chemical may enter the body either through inhalation, by contact with the skin or eyes, or by being swallowed.
2. Health Hazards: Indicates any long-term (chronic) or short-term (acute) effects on the human body.
3. Carcinogenetic: Indicates whether the chemical causes cancer.
4. Signs and Symptoms of Exposure: Indicates and describes the effects of exposure to the chemical and the most common resulting sensations.
5. Medical Conditions Severely Aggravated by Exposure: Indicates how the chemical will affect any pre-existing medical conditions.
6. Emergency and First Aid Procedures: Indicates first aid procedures to use in order to reduce the hazardous effects of the chemical. The techniques covered will deal only with inhalation of the chemical, and skin or eye contact with it.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING

1. Steps to be taken in case Material is Released or Spilled: Indicates precautions such as avoid breathing gases and vapors; avoid contact with liquids. This section also gives recommended techniques to use in controlling land or water spills.
2. Waste Disposal Methods: Indicates proper disposal of the chemical and contaminated materials.
3. Precautions to Take in Handling and Storage: Indicates safe handling and storage procedures to be taken to avoid hazardous reactions.
4. Other Precautions: Indicates special precautions to use in handling or disposing of the chemical.

SECTION VIII – CONTROL MEASURES

1. The measures indicates in this section should be taken whenever the chemical is handled or disposed of during normal use. They are not measures to be used solely during emergencies or accidental spills.
2. Respiratory Protection: If needed, specifies type of respirators required by OSHA when the chemical is used, even as a precautionary measure in non-emergency situations.
3. Ventilation: Indicates ventilating systems needed to prevent over-exposure to the chemical. “Local exhaust” ventilation is a system with high speed and low volume. “Mechanical (general) ventilation” is the regular ventilation system used to heat / cool an enclosed area in a permanent facility.
4. Protective Gloves: Indicates whether or not gloves must be worn when the chemical is handled. If gloves are required for skin protection, the type of material they should be made of will be indicated.
5. Eye Protection: Indicates appropriate eye protection, such as face shields, safety goggles or glasses.
6. Other Protective Clothing: Indicates protective equipment and the materials they should be made of to effectively prevent skin contact.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES
SECTION X – REACTIVITY AND STABILITY
SECTION XI – TOXICOLOGICAL INFORMATION
SECTION XII – ECOLOGICAL INFORMATION
SECTION XIII – DISPOSAL CONSIDERATIONS
SECTION XIV – TRANSPORT INFORMATION
SECTION XV – REGULATORY INFORMATION
SECTION XVI – OTHER INFORMATION

Insert SDS here …