



SAFETY AND HEALTH MANUAL

January 2024

TABLE OF CONTENTS

PART 1 GENERAL SAFETY AND HEALTH MANUAL-----	1.1
Policy Statement-----	1.2
Goal and Purpose-----	1.2
Objectives-----	1.2
Overview of Safety and Health Manual-----	1.2
Responsibilities-----	1.3
Management-----	1.3
Safety Coordinator-----	1.3
Safety Administrator-----	1.3
Project Managers-----	1.4
Project Managers and Superintendents-----	1.4
Superintendents / Managing Foremen-----	1.4
Drivers-----	1.5
Operators-----	1.5
Employees-----	1.5
Subcontractors, Vendors and Suppliers-----	1.5
Architects, Engineers, Owners, and Visitors-----	1.6
Safety and Health Procedures-----	1.7
Accountability-----	1.7
Enforcement Discipline Procedures-----	1.7
Bidding / Estimating-----	1.8
Pre - Planning-----	1.8
Employee Participation-----	1.8
Site Safety Inspections-----	1.8
Accident Investigation and Accident Prevention-----	1.8
Personal Protective Equipment (PPE)-----	1.8
Newly Hired and Re-Hired Employee Orientation-----	1.8
Safety Training-----	1.9
Company Wide Safety Training-----	1.9
Project Managers and Superintendents Safety Training-----	1.9
On-Site Safety Training-----	1.9
Weekly Safety Training-----	1.9
Specialized and/or Specific Safety Training-----	1.9
Technical Support-----	1.9
Documentation-----	1.9
Emergency and First Aid-----	1.10
Emergency Procedures-----	1.10
Fire-----	1.10
First Aid-----	1.10
Accident Reporting and Record Keeping-----	1.11
Modified - Work Program-----	1.11
Subcontractor Selection-----	1.11
Safety and Health Manual Revision-----	1.11
Safety Bulletin Board-----	1.11
Distribution of the Safety and Health Manual-----	1.11

PART 2 CONSTRUCTION JOB SITE SPECIFIC SAFETY RULES----- 2.1

Abrasive Grinding -----	2.2
Access / Egress -----	2.2
Aerial Lifts -----	2.2
Air Tools -----	2.2
Clothing -----	2.3
Compressed Air, use of -----	2.3
Compressed Gas Cylinders -----	2.3
Concrete and Masonry Construction -----	2.4
Confined Spaces -----	2.4
Cranes -----	2.5
Demolition -----	2.6
Drinking Water -----	2.6
Electrical - General -----	2.6
Employee / Subcontractor Conduct -----	2.7
Excavation and Trenching -----	2.7
Explosives and Blasting -----	2.8
Eye and Face Protection -----	2.8
Fall Protection -----	2.8
Fire Protection -----	2.8
First Aid -----	2.9
Flag Personnel -----	2.9
Flammable and Combustible Liquids -----	2.9
Foot Protection -----	2.9
Forklift Safety -----	2.10
Gases, Vapors, Fumes, Dusts, and Mists -----	2.10
Hand Protection -----	2.10
Hand Tools -----	2.10
Hard Hats -----	2.10
Hearing Protection -----	2.11
Heating Devices, Temporary -----	2.11
Heat Stress -----	2.11
Housekeeping / Clean-up-----	2.11
Ladders -----	2.12
Lasers -----	2.12
Lighting -----	2.12
Liquefied Petroleum Gas -----	2.12
Lock Out / Tag Out -----	2.13
Manual Lifting -----	2.13
Motor Vehicles and Construction Equipment -----	2.13
Personal Protective Equipment -----	2.13
Powder - Actuated Tools -----	2.13
Power Transmission, Mechanical -----	2.14
Protection of the Public -----	2.14
Respiratory Protection -----	2.14
Rules for Drivers of Vehicles -----	2.14
Rules for Operators -----	2.15
Saws -----	2.15
Scaffolds -----	2.15
Scissor Lifts -----	2.16
Signs -----	2.16
Smoking Policy -----	2.16
Steel Erection -----	2.16
Storage -----	2.17
Toilets -----	2.17
Washing Facilities -----	2.17
Welding, Cutting and Heating -----	2.17
Wire Ropes, Chains, Ropes, and other Rigging Equipment -----	2.18
Working / Walking under Suspended Loads -----	2.18

PART 3 SHOP / YARD / OFFICE SPECIFIC SAFETY RULES-----	3.1
Abrasive Grinding -----	3.2
Access / Egress -----	3.2
Aerial Lifts -----	3.2
Air Tools -----	3.2
Clothing -----	3.3
Compressed Air, use of -----	3.3
Compressed Gas Cylinders -----	3.3
Confined Spaces -----	3.3
Cranes and Hoist -----	3.3
Drinking Water -----	3.4
Electrical - General -----	3.4
Employee Conduct -----	3.4
Exit Routes and Signage-----	3.4
Eye and Face Protection -----	3.5
Fall Protection -----	3.5
Fire Protection -----	3.5
First Aid -----	3.6
Flammable and Combustible Liquids -----	3.6
Foot Protection -----	3.6
Forklift Safety -----	3.7
Gases, Vapors, Fumes, Dusts, and Mists -----	3.7
Hand Tools -----	3.7
Hard Hats -----	3.7
Hearing Protection -----	3.7
Housekeeping / Clean-up-----	3.7
Ladders -----	3.8
Lasers -----	3.8
Lighting -----	3.8
Liquefied Petroleum Gas -----	3.9
Lock Out / Tag Out -----	3.9
Manual Lifting -----	3.9
Office Safety -----	3.9
Personal Protective Equipment -----	3.10
Respiratory Protection -----	3.10
Scaffolds -----	3.10
Scissor Lifts -----	3.11
Smoking Policy -----	3.11
Storage -----	3.11
Toilets -----	3.11
Washing Facilities -----	3.11
Welding, Cutting, Heating and Brazing-----	3.11
Wire Ropes, Chains, Ropes, and other Rigging Equipment -----	3.13

PART 4 SPECIFIC SAFETY AND HEALTH POLICIES, PROGRAMS AND PLANS-----	4.1
Substance Abuse Policy-----	4.2
Hazard Communication Program-----	4.4
Heat Illness Prevention Program-----	4.6
Fall Protection Policy-----	4.11
Excavation and Trenching Program-----	4.13
Confined Space Plan-----	4.14
Respirator Policy-----	4.17
Silica Safety Policy-----	4.20
Lock Out / Tag Out Program-----	4.22
Vehicle Safety Policy-----	4.24
Cell Phone and Electronic Device Policy-----	4.27
Jobsite Start-Up Program-----	4.29
Equipment Operator Safety Program-----	4.39
Crane Safety Program-----	4.41
Process Safety Management Program-----	4.44
Isocyanates Safety Policy-----	4.45
Ammonia Safety Policy-----	4.48
Hydroblaster Safety Policy-----	4.51
Workers Compensation Insurance Poster-----	4.56

PART 5 EMPLOYEE SAFETY ORIENTATION PACKAGE

PART 6 COMPANY SAFETY FORMS

PART 7 SAFETY DATA SHEETS (SDS)

SAFETY MANUAL REVIEW AND UPDATE LOG

Manual Approved and Implemented	January 2014
Review and Update	January 2015
Review and Update	January 2016
Review and Update	January 2017
Review and Update	January 2018
Review and Update	January 2019
Review and Update	January 2020
Review and Update	January 2021
Review and Update	January 2022
Review and Update	January 2023
Review and Update	November 2023
Review and Update	January 2024
Next Review and Update	January 2025

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 thru 7 are sections to back-up and support the overall management and documentation of the Company Safety Program.

Policy Statement

John Plott Company, Inc. (from this point forward referred to as “John Plott Co., Inc.” or “JPC” or the “company”) has a moral and business obligation to provide a safe work environment for its employees, subcontractors, clients, 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 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 John Plott Co., Inc. 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 follow federal, state, and local safety and health regulations.

To follow our clients' safety and health rules and regulations.

Achieve our goals of ... zero bodily injuries.
 ... zero lost time accidents.
 ... zero property damages.
 ... zero OSHA violations.
 ... zero DOT 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 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, Superintendents, Managing Foremen, 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 Coordinator

The Safety Coordinator is responsible for the complete administration of John Plott Co., Inc. Safety Manual, and the following items.

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

Safety Administrator

The Safety Administrator is responsible to provide complete support to the Safety Coordinator and the complete Safety Program and 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 healthy 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 with protection from company operations.

Project Managers and Superintendents

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

- a) Project Managers and Superintendents are responsible for pre - planning the job site(s).
- b) Project Managers and Superintendents are responsible for reviewing all Accident Reports.
- c) Project Managers and Superintendents are responsible for seeing that preventative measures are taken to ensure that accidents do not occur.
- d) Project Managers and Superintendents are responsible for issuing verbal warnings and written warnings when safety and health rules, regulations or company policies are violated and submitting reports for review to the Safety Coordinator.

Superintendents / Managing Foremen

Superintendents / Managing Foremen are responsible for maintaining safe and healthful working conditions on their job site(s).

- a) Superintendents / Managing Foremen are responsible for carrying out the planning of the Project Managers and making the Project Managers aware of any new hazards that may arise.
- b) Superintendents / Managing Foremen will continually conduct (at least daily) inspections of job site(s) material or equipment. Superintendent / Managing Foremen 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. Superintendents / Managing Foremen must have the authority to take prompt corrective measures to eliminate or control hazards and correct unsafe behavior.
- c) Superintendents / Managing Foremen 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 Coordinator.
- d) Superintendents / Managing Foremen will ensure personnel protective equipment is available and is being used correctly. Training on PPE is provided on the job site.
- e) Superintendents / Managing Foremen are responsible for filling out Accident Reports within 24 hours of the accident.
- f) Superintendents / Managing Foremen are responsible for having the appropriate up-to-date SDS sheets on the job site.
- g) Superintendents / Managing Foremen are responsible for all weekly safety training. All weekly safety training shall be documented and maintained at each job site or Main Office.
- h) Superintendents / Managing Foremen are responsible for ensuring all safety rules and regulations are adhered to on the job site, by ALL employees, workers, visitors, subcontractors, etc.
- i) Superintendents / Managing Foremen are responsible for submitting Accident Reports and reviewing all accidents with the Safety Coordinator.

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 shall not work in areas with exposures to the following:
 - Anhydrous Ammonia
 - Asbestos
 - Benzene
 - Cadmium
 - Hexavalent Chromium
 - Hydro Blasting
 - Inorganic Arsenic
 - Isocyanates
 - Lead
 - Mold

Subcontractors, Vendors and Suppliers

All subcontractors, vendors and suppliers shall meet or exceed all published, posted and OSHA safety rules.

All subcontractors, vendors and suppliers are required to provide a competent person and/or adequate supervision to perform all activities for John Plott Co., Inc. in the safest manner possible.

The John Plott Co., Inc. Safety Manual and the OSHA standards are the minimum requirements.

Architects, Engineers, Owners, and Visitors

Architects, Engineers, Owners, Visitors and/or third parties hired directly by the preceding parties or those otherwise not named shall abide by all safety rules.

All parties who enter a work zone / job site or an area of safety hazards around a work zone in or near a John Plott Co., Inc. job site may be required to complete a safety training session and/or orientation, at discretion of John Plott Co., Inc. management, and provide John Plott Co., Inc. a certificate of insurance, in line with the same requirements as a subcontractor as outlined in this safety manual or the contract for the project, whichever offers more protection toward John Plott Co., Inc. and the owner of the project. Such certificate of insurance shall name John Plott Co., Inc., and the project owner as an additional insured.

All parties must also sign a waiver that acknowledges their ability to physically and mentally enter and maneuver around the worksite, as well as their competency to recognize the hazards around them and avoid the same.

By executing this waiver, said parties also acknowledge that the owner, John Plott Co., Inc., nor its employees shall serve as a competent person for them, and they shall provide their own competent person for all activities in or around the worksite.

This is a minimum standard and some situations may require additional measures, including documentation of applicable training, based upon the safety requirements for a project at the sole discretion of John Plott Co., Inc.

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

Accountability

Project Managers, Superintendents and Managing Foremen are accountable for improving the safety performance of personnel under their supervision.

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 Coordinator, 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 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 Discipline Procedures

Project Managers, Superintendents, Managing Foremen, 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 discipline procedures.

A verbal warning, or

A verbal warning with an explanation, counseling, or additional training, or

A written warning and management review of conduct, or

A written warning and being subjected to suspension without pay, or

A written warning, subject to immediate termination of employment.

Exceptions:

1. If an employee commits a gross violation of the Safety and Health Manual 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 will be investigated to prevent future mishaps.

- a) All accidents must be reported to the Main Office within 1 hour.
- b) An Accident Report must be filled out for each accident by the Supervisor of the employee involved in the accident.
- c) All accidents will be reviewed by the Safety Coordinator 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 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.

Newly Hired and Re-Hired Employee Orientation

The Safety and Health Manual will be reviewed with all newly hired and/or re-hired employees prior to beginning work. Newly 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.

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 a periodic basis, or as deemed necessary by the Safety Coordinator. These safety training meetings will cover company wide safety and health topics as well as OSHA required safety training.

Project Managers and Superintendents Safety Training

Project Managers and Superintendents 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 to identify hazards, 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 Safety Coordinator deems necessary.

Weekly Safety Training

Superintendents and Managing Foremen are responsible for weekly safety training on-site specific safety and health hazards.

Superintendents and Managing Foremen 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, Superintendents and Managing Foremen are required to file all appropriate documentation in a timely manner with the Safety Coordinator.

Emergency and First Aid

The Superintendent and Managing Foremen, with the aid of the Safety Coordinator, will determine the emergency phone numbers for each job site.

Superintendents and Managing Foremen 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

Superintendents and Managing Foremen 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.
- 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 an 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 Coordinator of emergency within 1 (one) hour.

Fire

In the event of a fire the procedures are:

- Use a fire extinguisher to put out small fires.
- Evacuate the work area.
- Call fire department / 911.
- Always meet at the designated location.
- Notify the Safety Coordinator 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, the Superintendent or Managing Foremen 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 Superintendent or Managing Foremen 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 Superintendent or Managing Foremen, 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 Coordinator of any first aid uses or occurrences.

Please see Job Site Start-Up Procedures in Part 4 Company Specific Safety and Health Policies, Programs, and Plans for further details and requirements.

Accident Reporting and Record Keeping

- All accidents must be reported to the Main Office within 1 hour.
- All eye, neck, back and knee accidents / injuries require immediate medical attention.
- All Accident Reports must be completed and turned in to the Main Office within 24 hours of the 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, John Plott Co., Inc. 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.

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 Coordinator or a copy is available at the Main Office. In addition, Project Managers, Superintendents and Managing Foremen will have up-to-date copies of the Safety and Health Manual.

PART 2

CONSTRUCTION JOB SITE SPECIFIC SAFETY RULES

Part 2 Construction Job Site 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 tasks.

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)]

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 an aerial lift.

Aerial lift load limits shall not be exceeded.

Aerial lifts must remain a minimum of 10 feet away from overhead power lines.

Aerial lift controls are tested before use.

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 air equipment must be inspected prior to use.

Compressed air safety valves are required to be tested, prior to use.

Air receivers shall be equipped with indicating pressure gauges.

Air receiver is to be drained frequently.

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)]

- The contents of compressed gas cylinders shall be clearly identified.
- Manufactures safety precautions shall be taken when a cylinder cap cannot be removed.
- Compressed gas cylinders must be visually inspected, prior to use.
- Compressed gas cylinders regulators must be visually inspected, prior to use.
- Always use appropriate tools to open and close cylinder valves.
- Compressed gas cylinders are stored in well ventilated areas.
- Compressed gas cylinder storage areas shall be designated and labeled for full and empty cylinders.
- Training is provided for proper use, handling, and storage of compressed gas cylinders, prior to use.
- Ensure proper handling of leaking compressed gas cylinders.
- Ensure proper marking of compressed gas cylinders that are no longer needed.
- Inspect hoses and/or connections of compressed gas cylinders, prior to use.

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 a 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)]

Confined Spaces

All employees required to enter 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)]

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)]

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)]

Employers must ensure that the operators of cranes have qualifications 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.

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

Prior to permitting employees to start demolition operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed. [1926.850(a)]

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)]

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 it with effective insulation. [1926.416(a)(1)]

Workspaces, walkways, and similar locations shall be kept clear of cords. [1926.416(b)(2)]

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

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

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

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)]

Utility companies or owners shall be contacted within established customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of actual excavation. When utility companies or owners cannot respond to a request to locate underground utility installations within 24 hours (unless a longer period is required by state or local law), or cannot establish the exact location of these installations, the company may proceed, provided the company does so with caution, and provided detection equipment or other acceptable means to locate utility installations are used. [1926.651(b)(2)]

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)]

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)]

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)]

Excavations over 20'-0" must be engineered by a registered engineer prior to excavation.

Explosives and Blasting

Permits must be obtained prior to blasting.

Only authorized and qualified persons shall be permitted to handle and use explosives. [1926.900(a)]

Explosive material shall be stored in approved facilities required under the applicable provisions of the Bureau of Alcohol, Tobacco, and Firearms regulations contained in 27 CFR Part 55, Commerce in Explosives.

Smoking and open flames shall not be permitted within 50 feet of explosives and detonator storage magazines. [1926.904(c)]

Procedures that permit safe and efficient loading shall be established before loading is started. [1926.905(a)]

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 with 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)]

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 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 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 a 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 the 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.

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

Hard Hats shall be worn correctly.

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

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 workdays.

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.

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.

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

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)]

Containers shall be placed upright on firm foundations or otherwise firmly secured. [1926.153(g) & (h)(11)]

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.

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)]

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)]

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 the client.

Powder - Actuated Tools

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

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. 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.

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

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.

Any and all accidents, incidents or near misses 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".

Any and all accidents, incidents or near misses 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.

No texting, talking on cell phones, using earphones, or listening to music while operating any 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 the 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)]

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 the 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. [1926.451(b)(1) & (f)(16)]

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)]

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.

Never disable reverse alarm beeper on lift.

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 a lift on uneven surfaces.

Use extreme caution 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 will be followed.

Smoking is only allowed in designated areas.

Steel Erection

Before authorizing the commencement of steel erection, the controlling contractor shall ensure that the steel erector is provided with written notifications to approve the start of steel erection. [1926.752(a) & (b)]

The operator shall be responsible for those operations under the operator's direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle loads until safety has been assured. [1926.753(c)(1)(iv)]

The controlling contractor shall bar other construction processes below steel erection unless overhead protection for the employees below is provided. [1926.759(b)]

Employees engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 15 feet (4.6 m) above a lower level shall be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems, or fall restraint systems. [1926.760(a)(1)]

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)]

The employer shall provide special training to employees engaged in the following activities: multiple lift rigging, connector procedures and CDZ procedures. [1926.761(c)]

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 will 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)]

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)]

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]

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

Rigging equipment for material handling shall be inspected prior to use on each shift and as necessary during its use to ensure that it is safe. Defective rigging equipment shall be removed from service. [1926.251(a)(1)]

All rigging equipment must:

- Have permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load. [1926.251(a)(2)(i)]
- Not be used without affixed, legible identification markings, required by paragraph (a)(2)(i) of this section. [1926.251(a)(2)(iii)]

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”.

Hooks used with cranes and rigging equipment should have safety latches.

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 tasks.

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)]

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.

Aerial lift load limits shall not be exceeded.

Aerial lifts must remain a minimum of 10 feet away from overhead power lines.

Aerial lift controls are tested before use.

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 air equipment must be inspected prior to use.

Compressed air safety valves are required to be tested, prior to use.

Air receivers shall be equipped with indicating pressure gauges.

Air receiver is to be drained frequently.

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)]

- The contents of compressed gas cylinders shall be clearly identified.
- Manufactures safety precautions shall be taken when a cylinder cap cannot be removed.
- Compressed gas cylinders must be visually inspected, prior to use.
- Compressed gas cylinders regulators must be visually inspected, prior to use.
- Always use appropriate tools to open and close cylinder valves.
- Compressed gas cylinders are stored in well ventilated areas.
- Compressed gas cylinder storage areas shall be designated and labeled for full and empty cylinders.
- Training is provided for the proper use, handling, and storage of compressed gas cylinders, prior to use.
- Ensure proper handling of leaking compressed gas cylinders.
- Ensure proper marking of compressed gas cylinders that are no longer needed.
- Inspect hoses and/or connections of compressed gas cylinders, prior to use.

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 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 with 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)]

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)]

The storage of flammable or combustible liquids in containers or portable tanks shall comply with subdivisions (iii) through (v) of this subparagraph. [1910.106(d)(5)(ii)]

Storage shall be prohibited except that which is required for maintenance and operation of building and operation of equipment. [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 a forklift is being used to move material, be cautious of overhead objects such as conduit, lights, etc.

Never speed or turn too quickly. When the 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)

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 every day all areas, including but not limited to, vehicles, shops, 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 $\frac{1}{4}$ 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 if 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 extends 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)]

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 handrails on stairways. Get help if necessary.

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

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 a 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 handrails 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)]

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 a lift on uneven surfaces.

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

Smoking Policy

No smoking around flammable or explosive areas.

Clients and customers smoking policies will 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 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 tasks.

Please refer to Part 2 (OSHA 1926) and Part 3 (OSHA 1910) for Specific Safety and Health rules and regulations.

John Plott Co., Inc.

SUBSTANCE ABUSE POLICY

Purpose of the Policy

John Plott Co., Inc maintains a Drug and Alcohol Policy to help guarantee employees, contractors, and customers a safe workplace, to comply with federal and Alabama law, and to meet the demands of our customers and insurers who may require us to drug test. All employees need to recognize that any unlawful drug use, even off-duty, can affect performance and the safety of others. Any questions should be directed to the Designated Employer Representative (DER) or the Alternate DER.

Our Rules about Drug Use

John Plott Co., Inc as a condition of initial and continued employment, requires all employees to report to work and perform their duties without **any** unlawfully used drugs in their system. We also will not tolerate employees using, possessing, manufacturing, distributing, or making arrangements to distribute unlawfully used drugs while at work or on Company or project property, including vehicles. All testing information is considered confidential and released to the Company the DERs and Company's Worker's Compensation Adjusters and Trust Fund Manager and as otherwise allowed by law and this Policy. We prohibit outside conduct, which is unlawful, or affects your work, our relationship with the government or our customers, or reflects badly on the Company. Although properly using medication is not prohibited, you must consult with your supervisor or Company physician when you are legitimately taking medication which may affect your work. You must maintain any prescription medication in the original container labeled with the name of the employee and the prescribing physician. You may not take another individual's medication.

Our Rules about Alcohol Use

Employees shall not consume or possess alcohol during work hours, including at lunch or breaks, or while on Company or project property, including vehicles, except when approved by senior management. Employees will also be subject to discipline, including discharge, where they are in any way affected by alcohol, while on duty or on Company or project property. An employee who tests positive for alcohol while on duty or on Company or project property will be presumed to have violated this rule. Under **no** circumstances may an employee operate a Company or personal vehicle during work while leaving work or a Company function where he or she are in any way affected by alcohol.

When We Will Test

1. All **new hires** must test negative in a confirmed urinalysis drug test.
2. All employees are subject to urinalysis drug testing **and/or** blood alcohol testing wherever management has **reasonable suspicion** to believe that an employee has drugs or alcohol in his system or has otherwise violated the Company's drug and alcohol rules, or has displayed acts or patterns of performance, behavior, absenteeism, accidents, safety violations or near misses that **could** indicate drug or alcohol use.
3. The Company will drug test all employees who contributed to an accident in which management estimates **property damage** of any value may have occurred.
4. The Company will drug test all employees who suffer a workplace injury or illness necessitating more than minimal onsite first aid attention. Pursuant to Section 25-5-51 of the Alabama code, the Company will follow Part 40 of Chapter 49 of the Code of Federal Regulations and a positive drug test result will establish a conclusive presumption of impairment resulting from the use of illegal drugs. Pursuant to the Alabama Code, **workers' compensation payments will be denied for an accident caused by impairment**. Compensation shall also be denied where an employee refuses to submit to or cooperate with a blood or urine test following an accident.

5. Employees who operate vehicles on the streets which weigh in excess of 26,000 pounds will also be tested as required by the Federal Highway Administration and state Motor Carrier Safety Regulations, including recertification physical examinations.
6. All hire-backs will be re-tested like new employees.
7. The Company will periodically randomly draw employee social security numbers to select employees for urinalysis drug testing.
8. The Company will drug test employees wherever required by government regulations, such as the Motor Carrier regulations covering certain drivers, or property owner or general contractor demands.

If you receive a positive test result, you should report to the Company's Medical Review Officer (MRO) any legitimate medication which may have caused a positive test result.

What if You Refuse

Refusal to submit for drug testing is a serious violation of Company policy and is considered willful misconduct and will subject you to denial of worker's compensation benefits (Alabama Code 25-5-51) if the test is post-accident, and subject you to immediate discharge. The use of an adulterant (something added to a specimen to attempt to hide drug use) is considered a refusal to test and a violation of the Policy. The same would be true if you attempted to substitute a specimen or refused to follow the collector's instructions in the case of an observed collection. Additionally, any employee who fails to report an on-the-job accident by days end and seeks medical treatment from a medical provider not designated by the Company, will be classified as refusing to submit to post-accident testing.

What if You Fail to Follow Safety Guidelines

Often times, impairment from drugs or alcohol will cause an employee to fail to adhere to safety guidelines and other commonsense safe working practices. Failure to wear a seatbelt, failure to use Company provided or required safety equipment, failure to follow safety guidelines, failure to pre-duty report that you are taking an impairing effect medication, or removal (or disabling) of safety guard will be considered willful misconduct and may disqualify you from receiving worker's compensation benefits. (Alabama Code 25-5-31).

Education

The Company will provide information to employees regarding the dangers associated with drug and alcohol abuse, the Company's rules, and available public sources of rehabilitation and counseling.

Rehabilitation

Anyone who needs help for drug or alcohol problems should immediately seek assistance and quit abusing drugs and alcohol before he or she is caught in violation of the policy. Any questions should be directed to the DER, or in his or her absence the Alternate DER.

Searches

Although, we are not implementing random search programs, we continue to reserve the right to search at any time, desks, cabinets, toolboxes, vehicles, including personal vehicles brought on Company or project property, bags, or any other property at the Company, a project site, or in vehicles, with or without notice.

Discipline

Violation of these rules, including by testing positive, will subject employees to discipline, including immediate discharge. Refusal to cooperate with the Company in any test, search or investigation will result in discipline, including immediate discharge and/or removal from client host site. As explained above under "Testing," a refusal to cooperate or positive result after an accident may result in a loss of workers' compensation benefits.

John Plott Co., Inc.

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 Hazard Communication

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 measures 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) 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 personal 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.

John Plott Co., Inc.

HEAT ILLNESS PREVENTION PROGRAM

PURPOSE

This Heat Stress Prevention Program has been developed to provide John Plott Co., Inc. 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.
- John Plott Co., Inc. 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 John Plott Co., Inc., directly or through the employee's supervisor, symptoms, or signs of heat illness in themselves, or in co-workers.
- John Plott Co., Inc. 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

- Supervisors will be provided with a copy of this program and training documents prior to assignment of employees working in environments where heat exposure may occur.
- Supervisors will be provided with the procedures to follow to implement the provisions of this program.
- Supervisors will be provided with 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 (NON-CAL / OSHA STANDARD)

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

A 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 Responsibilities

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 Coordinator will periodically review this program for compliance with all applicable regulatory standards. The Safety Coordinator has overall accountability, responsibility, and authority to implement, manage and maintain this program. Any revisions, changes or updates will be provided to employees.

FEEDBACK

Employees are encouraged to inform John Plott Co., Inc. of any hazards or unsafe conditions on any project without fear of retribution, retaliation, reprisal, or punishment.

John Plott Co., Inc. 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 life 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.

John Plott Co., Inc.

FALL PROTECTION POLICY

Purpose

This Fall Protection Policy is designed to provide guidance for all John Plott Co., Inc. 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 the Fall Protection Policy is to provide maximum protection against falls.

The management of John Plott Co., Inc. 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 consider actual results related to this goal. Management, estimating, and scheduling personnel shall be accountable for pre-planning, 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. Weekly 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
 - Window openings
- D. All exterior skin installation including, but not limited to, roofing, stone, masonry, waterproofing, and glazing.
- E. Excavation / Trenching

John Plott Co., Inc.

EXCAVATION AND TRENCHING PROGRAM

Introduction

John Plott Co., Inc. incorporates the following Excavation and Trenching Program to follow during day-to-day operations. The OSHA requirements for a “Competent Person” are met by the designated trained employees of John Plott Co., Inc.

Purpose

Excavation and Trenching safety problems can be avoided by hazard awareness and recognition by employees on the worksite. John Plott Co., Inc. provides the opportunity for designated employees to attend “Competent Person” training to understand the potential for a cave-in of a trench, and methods to protect employees from a cave-in.

Policy

John Plott Co., Inc. takes the position that cave-ins are preventable, and through training of employees in hazard recognition, a safe and efficient method to provide a safe work site is devised prior to excavation and maintained throughout the length of the job.

Scope

The Excavation and Trenching Safety Program of John Plott Co., Inc. involves the orientation of current employees, and all newly hired employees to recognize hazards associated with excavation and trench work, and the proper methods of providing protection to employees working within the excavation or trench.

Items included in this Program are:

- A. Safety Orientation
- B. “Competent Person” Training
- C. Refresher Training (if required)
- D. Soils Analysis Review
- E. Use of Protective Systems Review

Responsibilities

- A. John Plott Co., Inc. provides training in safe methods of excavation and trenching and will determine the employees who have the authority to supervise any type of excavation work.
- B. The “Competent Person” has the training required by OSHA to recognize potential hazards in excavation work, and has the authority to take corrective action, including but not limited to, stopping the work, directing the employees to exit the excavation, and providing safe procedures.
- C. Employees of John Plott Co., Inc. are capable of recognizing potential unsafe conditions and reporting such conditions to the “Competent Person” or the Safety Coordinator immediately.
- D. Subcontractors performing work for John Plott Co., Inc. shall have a Competent Person available on the worksite and shall employ the safe methods of protecting employees that are required by OSHA.

Procedures

- A. General Information
Excavating and Trenching is one of the most dangerous types of work / activity in the construction industry. To prevent illness or death to employees, John Plott Co., Inc. provides several methods of protection that are available to the “Competent Person”. These items are utilized when excavations are made in depths greater than 5 feet, and at locations anywhere site conditions may warrant a protection system.
- B. Regulatory Requirements

John Plott Co., Inc.

CONFINED SPACE PLAN

This written plan is required for all employers with employees under its direction who will enter a confined 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 job site, 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, the 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 the task at hand.
- Ensure Confined Space work zone has barriers or barricades in place.
- Have safety "attendant" in place at all times.
- Wear a full body harness with lifeline attached when necessary for work that generates toxic fumes.
- Take frequent breaks and come out for fresh air.

Emergency Procedures for Injured Person in a Confined Space

- 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 personnel 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. Many workers that die in a confined space area are attempting to rescue other workers.

Note: Please refer to OSHA standards 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 the 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 lifeline attached at all times working in the confined space.

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.

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 workers inside the confined space wear full body harness with a lifeline 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 workers. If a self-contained breathing apparatus is worn, proper training will be required for workers, including the safety "attendant".

Confined Space Entry Team

The Confined Space team is to follow OSHA rules and Confined Space responsibilities.

- A. Entrant
 - Entrants of the confined space shall be trained in the Confined Space Plan.
 - Entrants shall follow the directions of Entry Supervisors and Attendants.
 - Entrants shall only do the work task at hand while in a Confined Space.
- B. Attendant
 - Attendants shall be trained in the Confined Space Plan.
 - Attendants shall constantly monitor workers in the Confined Space.
 - Attendants shall be within voice and/or radio contact with all workers inside the confined space.
 - Attendants should not leave the position for any reason while an employee is in a Confined Space.
 - Attendants 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.
 - Attendants shall not perform any other duties other than to monitor the employees working inside the Confined Space.
 - Attendants shall have a fire extinguisher on hand.
 - Attendants shall be highly distinguishable from the other workers in the area.
- C. Entry Supervisor
 - Entry Supervisors shall be trained in the Confined Space Plan.
 - Entry Supervisors shall supervise Confined Space operations.
 - Entry Supervisors identified on the entry permit shall sign the entry permit to authorize the entry before entry begins.
 - Entry Supervisors shall terminate entry and cancel the entry permit when: the entry operations covered by the entry permit have been completed; or a condition that is not allowed under the entry permit arises in or near the permit space.

John Plott Co., Inc.

RESPIRATOR POLICY

Introduction

Occasionally a few employees of John Plott Co., Inc. may be asked to enter into work areas where they will need to wear respirators for protection. Respirators protect employees from contaminated dust, fog, fumes, mist, gases, smoke, sprays, and vapors. When possible, John Plott Co., Inc. 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 John Plott Co., Inc. 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 John Plott Co., Inc. 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

John Plott Co., Inc. 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 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

John Plott Co., Inc. 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

Employees assigned to tasks requiring the 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 exposure is 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 exposure 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.

John Plott Co., Inc.

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. A Silica Compliance Flow Chart is also included in Safety Forms for assistance.

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:

John Plott Co., Inc. 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 John Plott Co., Inc. 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 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, or equivalent controls as specified by manufacturer, to capture the dust before it is released into the exhausted air.
8. John Plott Co., Inc. 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 OSHA 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 than 1% crystalline silica in it. As an alternative, garnet, slag, and steel grit and shot may be suitable substitutes.

Housekeeping measures, including sweeping compound, use of water, etc. shall be put in place to limit employee exposure to respirable crystalline silica.

Employees must be provided with training in this policy.

Applicable records (e.g., air sampling, medical surveillance) must be maintained.

If an employee is required to use a respirator due to silica exposure for more than 30 days, the employee must be offered 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.

A copy of the written exposure control plan is available to all employees.

This policy shall be reviewed and updated as necessary at least once per year.

John Plott Co., Inc.

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 device(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 an 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.

John Plott Co., Inc.

VEHICLE SAFETY POLICY

Employees of John Plott Co., Inc. are required to adhere to the following guidelines when operating any vehicle leased, rented, borrowed, or owned by John Plott Co., Inc. 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 John Plott Co., Inc.
- All drivers must submit a copy of their driver's license to the John Plott Co., Inc. so that a driver's Motor Vehicle Record may be reviewed for motor vehicle history.
- Motor vehicle records will be reviewed at least once 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 John Plott Co., Inc.
- The Shop Foremen **and** the Driver of the vehicle are responsible to ensure that maintenance of Company vehicle and cleanliness of Company vehicle and the safety of the Company vehicle are maintained at all times.
- Any vehicle repair or maintenance expense in excess of \$100.00 for any single expenditure or in the aggregate for any quarter must be approved in advance by your supervisor.
- A Supervisor's Report of Accident for Vehicles must be completed and sent to the main office 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 personal use are to be driven only by the approved driver who is responsible for the vehicle. Company drivers who are on the approved driver's list may request to have a spouse placed on the approved drivers list by submitting the required information to obtain an MVR report. Other family members and friends shall not operate a company vehicle.
- Operating a company vehicle while under the influence of alcohol, drugs, etc. shall result in immediate termination of employment.
- Employees who use an auto allowance and/or mileage reimbursement in lieu of a John Plott Co., Inc. company provided vehicle shall provide proof of auto insurance and limits for review and approval by John Plott Co., Inc.
- Any and all accidents, incidents or near misses must be reported to the office within 1 hour.
- Failure to follow any of the policies listed above may be grounds for termination of driving privileges or dismissal from employment.

John Plott Co., Inc.

VEHICLE SAFETY POLICY & DRIVER GUIDELINES

The following additional safety measures are required by our Insurance Carrier to be added as supplemental requirements to our Personal Policy and Safety Manual regarding vehicle safety.

Employees of John Plott Co., Inc. are required to adhere to the following guidelines when operating any vehicle owned, leased, rented, or borrowed by John Plott Co., Inc. or when operating a personal vehicle for company business.

Failure to follow any of the following policies or guidelines may be grounds for termination of driving privileges or dismissal from employment.

- Operating a company vehicle under the influence of alcohol or drugs shall result in immediate termination of employment.
- Cell phone texting while driving is strictly prohibited.
- Seat belt usage is mandatory for all occupants including back seat occupants.
- Only approved drivers are allowed to operate company vehicles.
- All drivers must submit a copy of their driver's license so that a driver's motor vehicle record may be reviewed for a history of violations and accidents. MVR's will be reviewed at least annually and depending on violations and accident history a driver employee can be subject to a range of disciplinary actions including reprimand, required additional drive training, suspension of driving privileges, or termination of employment.

Driver Guidelines

All Designated drivers for John Plott Co., Inc. shall comply with the following guidelines:

1. No Driver shall have had any major violation within the previous three (3) years.
2. A major violation is defined as follows:
 - a. Driving under the influence of alcohol or drugs
 - b. Reckless driving
 - c. Leaving the scene of an accident
 - d. Speeding over 25 MPH of posted limit
3. All drivers shall have less than a maximum of two (2) moving violations in the past three (3) years in combination with one (1) at fault accident.
4. All drivers shall have less than a maximum of three (3) moving violations in the past three (3) years with no at fault accident.
5. No driver shall have more than a maximum of two (2) at fault accidents in the past three (3) years with no moving violations.

A supervisor's report of accidents for vehicles must be completed and sent to the main office 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.

Company vehicles driven for personal use are to be driven only by the approved driver who is responsible for the vehicle. No other person, including family members, is allowed to operate a company vehicle.

Employees who use an auto allowance and/or mileage reimbursement in lieu of a company provided vehicle shall provide proof of auto liability insurance and limits for review and approval.

Any and all accidents or incidents must be reported to the office within one (1) hour.

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.

Additional time and care should be taken any time when in reverse or backing up a vehicle to check, double check and to make sure no obstacles, pedestrians, equipment, or other vehicles are in the way to assure it is safe to back up before proceeding.

Positively NO road rage regardless of who is at fault.

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

I, the undersigned, hereby acknowledge that I have read and reviewed the foregoing guidelines and hereby agree to comply with same and shall immediately notify any matters that are inconsistent with these guidelines to John Plott Co., Inc.

John Plott Co., Inc.

MOBILE PHONE AND ELECTRONIC DEVICE POLICY

Policy Statement

All employees of John Plott Co., Inc. 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.
- Supervisors 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 to the 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 scheduled 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 against John Plott Co., Inc. policy to use a handheld 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 against John Plott Co., Inc. policy to text while driving ANY vehicle.

It is against Federal Law and against John Plott Co., Inc. 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 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.
- Pull off the road to a safe place such as a parking lot to make necessary calls.
- 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 only with hands-free equipment.
- Never look up phone numbers 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 may only use personal cell phones for emergency purposes.

John Plott Co., Inc.

JOB SITE START-UP PROGRAM

This program consists of best practices for start-up of all projects, whether in controlled access areas on permanent projects or on mobile projects. John Plott Co., Inc. personnel should determine their designated work zones/areas and must always be aware of specific client requirements that may supersede the programs and procedures listed on the following pages.

JOB SITE SAFETY SURVEY

Review the plans and site for any potential unsafe conditions. This review should include a thorough review of deep excavations, unprotected openings, perimeter and interior fall hazards, access to the site by non-employees and visitors, means and methods of construction, and specified materials, as well as any other potentially unsafe conditions. Safety procedures, including scheduled inspections, should be developed for each potentially unsafe condition identified.

Some items to consider for the job site safety survey:

- Emergency routes (written and visual maps)
- Muster points / Locations
- Location of Fire Stations
- Location of Clinics and/or Hospitals
- Emergency phone numbers (*verify 9-1-1 is available*)
- Perimeter site security fence
- Traffic control requirements
- Designated area for parking vehicles (out of the way of work area)
- Storm water control
- Overhead / underground power and utility lines
- Means and methods of monitoring the weather
- After-hours contact information
- Etc.

EMERGENCY PLAN

Establish emergency procedures for all conditions such as:

- Injuries
- Fatalities
- Fires
- Explosions
- Collapse
- Gas Release
- Hazardous Material Exposures
- TORNADOS / Hurricanes
- Violence in the workplace
- Bomb Threats
- Electrical emergencies

These procedures should be developed in conjunction with the local police, local fire and local rescue authorities. All site management personnel should be trained and/or educated on their role during emergency procedures.

In the event of any emergency, notify your supervisor and the main office immediately. No public statements are to be made by any employee.

JOB SITE BULLETIN BOARD

Establish a job site bulletin board and place in plain view of all employees. It is essential that the following information be posted for the duration of the job site:

- Occupational Safety and Health Poster
- Equal Employment Opportunity Commission Poster
- Company EEO Poster or Policy
- Wage and Hour Division, U.S. Department of Labor Poster
- Panel of Physicians
- Bill of Rights
- OSHA 300 Form
- Any Other State or Local Government Posting Requirements
- Emergency Action / Evacuation Plans / Muster locations
- Emergency phone numbers

Other recommended items for the job site bulletin board are SDS listings, safety posters, and any pertinent job site safety information, updated copy of Company Safety Manual.

JOB SITE SIGNS

The following signs should be posted on the job site (*see next two pages for templates*):

- Posted Safety Rules
- All vehicles are subject to search
- Alcohol & Substance Abuse
- No Trespassing
- Proper PPE Required Beyond This Point
- All Visitors Must Sign in at the Office
- No Firearms, Drugs, or Alcohol Allowed on Job Site
- Job Site Speed Limits
- Site Specific Hazards
- After-Hour Emergency Contact Information

The following signs should be placed inside the job site office (trailer):

- OSHA 300A Form
- Emergency Telephone Numbers (at every telephone)
- Panel of Physicians
- Emergency Plan for various emergencies

Remember that posters, signs, training, and other communications needs to be done in a manner and/or language that the employee can understand.

John Plott Co., Inc.

CONSTRUCTION JOB SITE SAFETY RULES

1. Access to this site is restricted to employees and those authorized by John Plott Co., Inc.
2. Use and/or possession of intoxicants, alcohol or drugs are strictly prohibited.
3. Hard hats shall be worn by all employees on the construction job site at all times.
4. Hard soled shoes are required. No tennis shoes.
5. Long pants and shirts with 4" minimum sleeves are required at all times.
6. Eye protection, ear protection and respiratory protection devices will be worn when required.
7. Full body harness, shock-absorbing lanyards, or other fall protection measures will be utilized when working at unprotected heights.
8. No glass containers allowed onsite.
9. No texting, music, radios, tape decks, or earphones allowed on the construction job site.
10. Only authorized personnel are permitted to operate equipment and/or vehicles.
11. All machinery must have operable backup alarms at all times.
12. No riders on machinery or equipment. Seat belt use is required at all times. No riding in back of pick-up bed.
13. No one shall enter a trench or excavation unless it is properly sloped, shielded, or shored.
14. Only trained, qualified operators will use powder-actuated tools.
15. All ladders will be secured. Always face ladders while going up or down.
16. Safety barriers should be maintained at all times in all excavations, openings, manholes, etc.
17. Flammable liquids must be kept in approved containers.
18. Be alert for chemical safety hazards on the job site.
19. A complete first aid kit is available in the job site.
20. Report all accidents, unsafe conditions and/or practices to your supervisor or John Plott Co., Inc. immediately.

EMERGENCY INFORMATION TELEPHONE NUMBERS

DOCTOR: _____

AMBULANCE: _____

HOSPITAL: _____

SHERIFF: _____

FIRE DEPT: _____

JOB SITE PHONE #: _____

JOB SITE ADDRESS: _____

OTHER: _____

FIRST AID KIT

A first aid kit must be established to meet OSHA standards.

The 1st Aid Kits should be kept in the job office (trailer).

Any items considered to be medicine shall NOT be included.

The following are examples of medicine:

- Aspirin or Pain Relievers
- Pre-cramp Tablets
- Decongestants or Cold Tablets
- Antacids
- Cough Medicine
- Etc.

Only materials to be used in first aid treatment should be stored in the 1st Aid Kit.

Anyone removing supplies from the first aid kit should document on the "First Aid Log" what was used and by whom. All non-serious injuries not resulting in treatment by a physician should also be entered on the "First Aid Log". A copy of this form is included in this manual.

All job sites and offices of John Plott Co., Inc. shall have at least one person adequately trained in 1st Aid / CPR.

Each sub-contractor is to provide 1st Aid Kits and 1st Aid training for their employees.

JOB SITE EMERGENCY PLAN FOR TORNADOS / HURRICANES

Tornado / Hurricane procedures should follow a series of steps based on information obtained through emergency services and news reports. TORNADOS / HURRICANES typically have advance notice prior to impact. Thus, precautions should be planned and staged accordingly. The key to Tornado / Hurricane planning is communication. The following general steps should be followed at the onset of a Tornado / Hurricane Warning.

INITIAL PLANNING

- Notify all John Plott Co., Inc. personnel, subcontractors, vendors, suppliers, etc. of the possibility of a Tornado / Hurricane.
- Have means and methods of monitoring weather.
- Notify the main office.
- Notify the owner, architect, and other consultants.
- Contact police / fire departments to determine if area is to be evacuated.
- Establish a Tornado / Hurricane Coordination Center (site office) and designate a person as Tornado / Hurricane Supervisor (superintendent or job site manager).
- Notify all persons of control center numbers, radio channels, and supervisor's name.
- Designate a muster point / location for emergencies.

STORM PREPARATION

- Provide storm gear to personnel if necessary.
- Secure all building premises and tie down all loose objects.
- Secure site offices and tie down all objects.
- Secure all equipment.
- Secure or remove all vital records.
- Protect all glass panes or objects.
- Determine if shut down of electrical is necessary.
- Evacuate all personnel.
- Designate a safe area in the event of a storm.

RETURN TO JOB SITE- RESUME OPERATIONS

- Return only after approval by authorities.
- Perform inventory / evaluation of damages, take pictures, and videotape if extensive.
- Instruct subcontractors to return.
- Notify main office of damage.
- Notify the owner of the extent of damage.
- Notify / respond to insurance carriers, if necessary.
- Begin cleanup and restoration, if possible.
- Evaluate / track cost to restore to normal operations.

JOB SITE EMERGENCY PLAN FOR FIRE OR INJURED PERSON

- JOB SITE EMERGENCY PERSONNEL TO ASSIGNED STATIONS.
- EVERYONE TO THE ASSIGNED EMERGENCY RADIO CHANNEL, IF APPLICABLE.
- SAFETY PERSONS/SUPERINTENDENT TO ACCIDENT LOCATION.
- CALL 911 OR LOCAL EMERGENCY NUMBER.
- REPORT TO 911:
 - JOB SITE LOCATION
 - TYPE OF EMERGENCY (INJURED PERSON, FIRE, ETC.)
 - NUMBER OF PEOPLE INJURED
 - TYPE OF INJURY
 - EMERGENCY RESPONSE UNIT REQUIRED
 - ANY SPECIAL CONDITIONS
 - STAY ON PHONE UNTIL RESPONSE UNIT ARRIVES
- CALL FOR INJURED PERSON BASKET ("MAN BASKET") IF NEEDED.
- ASSIST EMERGENCY RESPONSE PERSONNEL IN EVACUATION OF INJURED PERSON.

JOB SITE FIRE EVACUATION PLAN

- NOTIFY THE SUPERVISOR OF LOCATION OF FIRE SO THAT 911 CAN BE CALLED.
- EVERYONE EVACUATE BUILDING / JOB SITE IN AN ORDERLY MANNER AND REASSEMBLE IN DESIGNATED LOCATION.
- ALL SUPERVISORS ARE RESPONSIBLE FOR THE LOCATION AND NUMBER OF EMPLOYEES AT ALL TIMES.
- ALL THE PERSONNEL WILL BE ACCOUNTED FOR TO ENSURE THAT EVERYONE HAS EVACUATED THE AREA.

John Plott Co., Inc.

EQUIPMENT OPERATOR SAFETY PROGRAM

Employees of John Plott Co., Inc. are required to adhere to the following guidelines when operating any equipment leased, rented, borrowed, or owned by John Plott Co., Inc. Equipment to include forklifts, ATVs, scrapers, loaders, crawler or wheel tractors, bulldozers, off-highway trucks, graders, agricultural and industrial tractors, and similar equipment.

EARTHMOVING EQUIPMENT

- No employee shall operate equipment without adequate training & proper authorization.
- Operators will refer to Part 2, in the section titled "Motor Vehicles and Construction Equipment".
- Operators shall not operate any heavy 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. Specifically, the inspections will include the seatbelt, brake system, emergency brake system, audible alarm system and any rollover protective structures.
- 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 Policy.
- No "Riders" on equipment.
- No employee shall ride any piece of equipment in any fashion (as in a bucket or on the headache ball) 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.
- No operator shall be under the influence of drugs, prescription or illegal or under the influence of alcohol.
- The use of a spotter or "stop log" must be used when backfilling an excavation.
- No person is allowed in the cab of a vehicle being loaded by earthmoving equipment.
- No smoking during refueling or in battery charging stations.
- No use of electronic devices while operating earthmoving equipment.

FORKLIFTS

- All forklift operators require specific training prior to operating the equipment.
- Employees will be adequately trained and certified prior to operating a forklift. Training will be performed by a qualified instructor and documented. The training program will include classroom and/or computer instruction, practical training by the instructor, followed by an operational test of each employee by the instructor. Each trained employee shall carry a card documenting the forklift training on their person while operating a forklift.
- Employees will be trained to the operating instructions, controls, capacity, refueling and load stability and be authorized prior to operating a forklift.
- Training by a qualified instructor will include formal instruction, practical training, and operator evaluation of the workplace. Refresher training will be conducted when unsafe operations are observed – after an accident, different types of vehicles, change in conditions and at least every 3 years.
- Operators will be re-evaluated every three (3) years. However, mandatory refresher training shall be provided when unsafe operations by an operator are observed, after an accident, if operation of a different vehicle type is necessary, or changes in operating or workplace conditions occur.
- When driving the forklift without a load the forks should be no more than 2 inches from the floor.
- When forklifts are used to move material be careful with overhead objects such as lights, etc.
- Never drive fast or turn fast. When forklifts are not in use put the forklift in the Park position and engage the parking brake.
- Always be careful and use caution with people around corners. Blow your horn when approaching a corner.
- Qualified Operator will inspect the equipment daily or before each use.
- When unloading or loading a trailer, the operator must verify the trailer wheels are chocked, supports are in place, and dock plates or dock locks are engaged prior to loading / unloading.
- No operator of John Plott Co., Inc. shall move or cause to be moved construction equipment or vehicles upon any access roadway or grade unless the access roadway or grade is constructed and maintained to accommodate safely the movement of the equipment and vehicles involved.
- No operator shall be under the influence of drugs, prescription or illegal or under the influence of alcohol.
- The use of a spotter must be used when vision is restricted.
- No person is allowed in the cab of a vehicle loaded by a forklift.
- No smoking during refueling or in battery charging stations.
- No use of electronic devices while operating forklifts.
- No employee is allowed under suspended loads.

John Plott Co., Inc.

CRANE SAFETY PROGRAM

Introduction

The safe operation and proper maintenance of cranes on the site shall be the overall responsibility of each contractor. Each contractor shall also be held accountable for compliance with OSHA crane regulations for all cranes on the site.

Special Provisions

2. Crane 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").
3. The A / D Director and the A / D crew members must understand:
 - A. The manufacturer assembly / disassembly procedures to follow during assembly / disassembly.
 - B. Their tasks prior to commencing A / D activities.
 - C. The hazards associated with their tasks.
 - D. The hazardous positions / locations they need to avoid.
 - E. Rated capacity limits for loads must not be exceeded for any A / D equipment.
 - F. The A / D Director has the responsibility to address the hazards associated with the task.
4. Upon completion of assembly, the equipment must be inspected by the A / D Director to assure that it is configured in accordance with the manufacturer equipment criteria.
5. If repair / adjustment is required, the qualified person must determine if the repair / adjustment meets manufacturer equipment criteria (where applicable and available). The qualified person must determine if a registered professional engineer (RPE) is needed to develop criteria for the repair / adjustment. If an RPE is not needed, the employer must ensure that the criteria are developed by the qualified person. If an RPE is needed, the employer must ensure that they are developed by an RPE. The inspection must include functional testing of the repaired / adjusted parts and other components that may be affected by the repair / adjustment.
6. All documents produced from the annual inspection must be available, during the applicable document retention period, to all persons who conduct inspections.
7. Each Contractor shall designate a competent person who must begin a visual inspection prior to each shift, which must be completed before or during that shift. See the OSHA standard for a comprehensive list of inspections. As a part of the contractor's job site inspection program, such inspections shall be documented. Defective equipment shall be removed from service and repaired.
8. Each Contractor supplying the equipment shall inspect each crane monthly and the information documented by the employer conducting the inspection. See the OSHA standard for information of what must be documented. Defective equipment shall be removed from service and repaired.
9. Loads shall not be passed or suspended over persons.
10. A tag or restraint line must be used if necessary to prevent rotation of the load that would be hazardous.
11. Work zone safety / work area controls for employee safety shall be identified, installed, and maintained around the swing radius of the rotating superstructure (whether permanently or temporarily mounted).
12. Work zone safety / work area controls for employee safety shall be identified, installed, and maintained around other hazardous locations.

Employer Responsibilities

1. The employer shall personally talk to crane operators on the job. An operator will be used only after the employer has:
 - Ensured that the operator is certified or qualified on the type of equipment to be operated for the type of work being performed.
 - Employees have been instructed to avoid overhead and suspended crane loads.
 - All above ground electrical lines are flagged, de-energized, or insulated by the local electrical power company.
 - Ensure ground preparations necessary to meet all OSHA requirements.
2. Each crane operator will be specifically assigned the responsibility for safe operations and shall be given written instructions as applicable. These responsibilities shall include:
 - Verification of a current “annual inspection” certification for the crane.
 - Verification that manufacturer’s rated load capacities, recommended operating speeds, and special warnings or instructions are posted on the crane and visible from the operator’s station.
3. Each crane operator shall conduct a daily inspection of the following minimum requirements:
 - Control mechanisms for maladjustments interfering with proper operation.
 - Control and drive mechanisms for apparent excessive wear of components and contamination by lubricants, water, or other foreign matter.
 - Air, hydraulic, and other pressurized lines for deterioration or leakage, particularly those which flex in normal operation.
 - Hydraulic systems for proper fluid level.
 - Hooks and latches for deformation, cracks, excessive wear, or damage such as from chemicals or heat.
 - Wire rope reeving for compliance with the manufacturer’s specifications.
 - Wire rope.
 - Electrical apparatus for malfunctioning, signs of apparent excessive deterioration, dirt, or moisture accumulation.
 - Operator cab windows for significant cracks, breaks, or other deficiencies that would hamper the operators view.
 - Rails, rail clamps and supporting surfaces when the equipment is rail traveling.
 - Safety devices and operational aids for proper operation.
 - Ground conditions around the equipment for proper support.
 - Fire Extinguisher in crane cab.
 - Installation and maintenance of swing radius protection.
 - Hand signal charts for the type of crane used are posted.
4. Each crane operator shall:
 - Assure that routine maintenance is performed, as well as necessary repairs.
 - Assure that signaling and communications are adequate. This includes making sure that correct hand signals are used by personnel at materials loading and receiving areas. Where conditions require, radio communications will be with a secure clear channel for the crane.
 - Have the authority to stop and refuse to handle loads until a qualified person has determined that safety has been assured.
 - Job supervisory personnel cannot over-ride this refusal.
 - The weight of all auxiliary handling devices such as hoist blocks, headache balls, hooks and rigging shall be considered as part of the total load. The weight of all items added to the load at the site must be determined and added to the total weight.
 - Confirm that adequate clearance exists between operating areas and nearby structures, especially power lines.
5. Each crane operator shall ensure that good housekeeping is maintained in his or her equipment.

Contractor / Subcontractor Responsibilities

Making sure that rigging equipment is in good condition and provided with safety devices as applicable. This includes such things as:

- Safety latches on hoisting hooks.
- Chains, wire rope, slings, etc., are free from defects and conform with standard load ratings for work being done.
- Eye splices conform to safety standards.

Employee Training

Each Contractor shall ensure that all employees involved in crane activities receive comprehensive training as to their responsibilities.

This shall include A / D Directors, Operators, Riggers, and Signal Persons.

Each Contractor shall assure that all employees who may be exposed to fall hazards while on or being hoisted by equipment covered in this subpart receive training and certification of training must be documented including requirements of companies fall protection policy.

Outriggers

“Blocking” shall always be used under outrigger floats to prevent deflection or sinking. Outriggers shall always be fully extended.

Only rigid, tightly spaced blocking shall be used under outrigger floats.

Recordkeeping

All records pertaining to crane inspections shall be kept on site with the crane.

If, during any safety inspection, the operator or supervisor cannot produce the required crane inspection and certification sheets, the crane shall be shut down and inspected.

The crane operations and maintenance manual shall be located on each crane.

John Plott Co., Inc.

PROCESS SAFETY MANAGEMENT PROGRAM

Purpose

This Process Safety Management Program is designed to provide guidance for all John Plott Co., Inc. job sites to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. This program ensures all John Plott Co., Inc. employees are trained to properly perform their job functions in a safe manner.

Training

Employees and supervisors shall not be permitted to participate in field activities until they have been trained at the level required by their job functions and responsibilities.

John Plott Co., Inc. will file and maintain the training records of all employees. The records will include the type of training, sign in sheets, and dates of the training.

Training shall cover all of the following topics:

- The names of personnel and alternates who are responsible for site safety and health.
- Safety, health, and other hazards present on the site including potential fire, explosive, and toxic release hazards.
- Use of personal protective equipment.
- Work practices, which will minimize the risks of hazards, must be followed during operations such as lockout / tagout, confined space entry, opening process equipment or piping and control over entrance to facility.
- The safe use of engineering controls and equipment on the site.
- Medical surveillance requirements, including the recognition of symptoms and signs, which might indicate overexposure to hazards.
- The contents of the site-specific safety and health plan required pursuant to the provisions.
- The procedural steps for the identification of a new or unique hazard arising from any work onsite, including notification of the host employer of such.
- Work process limitations and hindrances, including but not limited to hot work permits, confined space entry permits, etc. Hot work and confined space work shall not be performed until the host client provides the necessary permit.
- Accident, incident and near miss reporting procedures, including the immediate reporting of such to John Plott Co., Inc., and host client supervisors.
- The protection of confidentiality of any host client work processes, trade secret information or any other sensitive documentation or data.

John Plott Co., Inc.

ISOCYANATES SAFETY POLICY

Purpose

To ensure our employees know the hazards and how to work with isocyanates safely and how to respond to exposure.

Scope

This program sets forth accepted practices for isocyanates. This program applies to all employees of John Plott Co., Inc., temporary employees, and any contractors working for John Plott Co., Inc. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers John Plott Co., Inc. employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Key Responsibilities

Managers and Supervisors

- Shall ensure all employees who are to be assigned to work at locations where isocyanates are known to be present or suspected to be present in any concentration, have been trained in isocyanates safety.
- That each employee has been provided with a copy of this program.

Employees

- Employees are responsible to comply with this program.

Procedures

Description

Isocyanates are a family of highly reactive, low molecular weight chemicals. They are widely used in the manufacture of flexible and rigid foams, fibers, coatings such as paints and varnishes, and elastomers and are increasingly used in the automobile industry, auto body repair, and building insulation materials. Spray-on polyurethane products containing isocyanates have been developed for a wide range of retail, commercial and industrial uses to protect cement, wood, fiberglass, steel, and aluminum, including protective coatings for truck beds, trailers, boats, foundations, and decks.

Hazard Assessment

Preventing exposure to isocyanates is a critical step in eliminating the health hazard. Engineering controls such as closed systems and ventilation should be the principal method for minimizing isocyanate exposure in the workplace. Other controls, such as worker isolation and use of personal protective equipment such as respirators and personal protective clothing to prevent dermal exposures may also be necessary. Early recognition of sensitization and prompt and strict elimination of exposures is essential to reduce the risk of long-term or permanent respiratory problems for workers who have become sensitized.

Assessments are conducted on areas of potential exposure to isocyanates and ensure occupational / permissible exposure limits are not exceeded. Assessments shall be conducted to determine the presence of isocyanates and the measures and/or controls to be set in place, to prevent employees from being exposed beyond the OEL / PEL, prior to work commencing.

Health Hazards

Isocyanates are powerful irritants to the mucous membranes of the eyes and gastrointestinal and respiratory tracts. Direct skin contact can also cause marked inflammation. Isocyanates can also sensitize workers, making them subject to severe asthma attacks if they are exposed again. There is evidence that both respiratory and dermal exposures can lead to sensitization. Death from severe asthma in some sensitized subjects has been reported. Workers potentially exposed to isocyanates who experience persistent or recurring eye irritation, nasal congestion, dry or sore throat, cold-like symptoms, cough, shortness of breath, wheezing, or chest tightness should report this to John Plott Co., Inc.

- The hazards and health effects associated with isocyanates are communicated to employees.
- The potential hazard and health effects associated with isocyanates shall be communicated to employees.

These include irritation of the eyes, nose, and throat; respiratory sensitization; cough, pulmonary secretions, chest pain, dyspnea (breathing difficulty) or asthma.

Ensure Safety Data Sheets are reviewed for chemicals containing isocyanates and employees read the SDS before use or possible exposure.

Personal Protective Equipment

- Adequate personal protective clothing will be provided to workers exposed to isocyanates.
- Adequate personal protective equipment shall be provided to prevent contamination of an employee's personal clothing, skin, eyes / face (i.e., gloves, coveralls, protective eyewear, etc.).
- Respiratory protective equipment must be worn when the airborne concentration of isocyanates cannot be reduced below its occupational / permissible exposure limit.
- The concentration of isocyanates in the air to which employees will be exposed must be considered. When selecting a respirator for protection against substances that have TWA PEL or Ceiling Limits, John Plott Co., Inc. must not only consider if exposure levels may be reached or exceeded during routine operations but also if they may be exceeded during reasonably foreseeable emergency situations. John Plott Co., Inc. must then select a respirator that would provide adequate protection against these levels.
- Paragraph 1910.134(d)(1)(i) states, "the employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and the workplace and user factors that affect respirator performance and reliability."

Exposure Limitation

Employees must not be exposed to an airborne concentration of isocyanates that exceeds the occupational / permissible exposure limits (OEL / PEL). All necessary measures and procedures shall be taken, by means of engineering controls, work practices and hygiene facilities and practices, to ensure that a worker's airborne exposure to isocyanates does not exceed a 0.005 TWA or 0.02 ppm ceiling.

Ensure proper housekeeping is maintained to prevent accumulation of isocyanates on surfaces and equipment in the work / process area, outside of the work / process area and in eating and break areas.

Provisions of a Medical Surveillance Program

The medical surveillance program includes general medical examinations prior to placement, annually thereafter and upon exit. General recommendations for an isocyanates medical surveillance program include:

- Preplacement, annual and exit general medical examinations with:
 - Special emphasis is on the respiratory tract.
 - Medical history includes extensive work history, history of pre-existing respiratory conditions such as asthma, and smoking history.
 - Spirometry.
- Workers with a history of respiratory conditions should be informed of the potential for increased health risks associated with exposure to isocyanates.
- Isocyanate-sensitized individuals should be assigned to work in areas where exposure to isocyanates is not expected.

Training Employees on the Hazards of Isocyanates

All personnel should have an overview of the health hazards of isocyanates, hazard assessment, PPE, medical surveillance, and this safety procedure.

Training shall be documented.

John Plott Co., Inc.

AMMONIA SAFETY POLICY

Purpose

The purpose of this procedure is to advise employees in areas where ammonia is being used and to supply on an awareness level basis about the properties and hazards of ammonia, general guidelines, and training requirements.

Scope

This procedure applies to John Plott Co., Inc. operations where employees whose work activities may involve working with or around ammonia. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers John Plott Co., Inc. employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Responsibilities

Managers and Supervisors

- In coordination with the Safety Coordinator, develop and implement ammonia awareness training.
- Ensure personnel are aware of work that has the potential of exposure to ammonia.
- Identify possible locations where ammonia in the workplace may be used.
- Inform the Safety Coordinator of upcoming work involving ammonia, allowing the Safety Coordinator to provide any necessary monitoring or other required actions.
- Ensure employees comply with the ammonia awareness requirements.

Safety Coordinator

- Coordinate annual ammonia awareness training activities.

Employees

- Comply with the ammonia awareness requirements and direct any questions or concerns to the Safety Coordinator.
- Attend required annual training.

Procedures

Characteristics of Ammonia

Appearance

Ammonia is a colorless gas under normal conditions. It can be a liquid under pressure. It has a pungent, suffocating odor.

Description

Ammonia refers to solutions that are 50% ammonia or greater, ammonia anhydrous, and ammonia anhydrous liquefied, unless otherwise specified. Ammonia is a toxic gas or liquid that, when concentrated, is corrosive to tissues upon contact. Exposure to ammonia in sufficient quantities can be fatal. One of the highest production-volume chemicals in the U.S., concentrated ammonia is used in manufacturing, refrigeration, and agriculture (as a fertilizer). Household ammonia is much less concentrated; it rarely causes burns, but it does cause irritation. The lowest level at which humans can detect the odor of ammonia (odor threshold) generally provides sufficient warning of exposure; however, persons with prolonged exposure to ammonia will lose their ability to detect the odor (olfactory fatigue). Ammonia commonly exists as part of a solution.

Health Effects

Some of the potential health effects of ammonia such as burning of the eyes, temporary blindness, coughing, chest pain, etc. Exposure of the eyes to ammonia may cause burning, tearing, temporary blindness and severe eye damage. Exposure of the skin to ammonia may cause severe burns and blistering. Exposure of the respiratory tract (mouth, nose, and throat) to ammonia may cause runny nose, coughing, chest pain, severe breathing difficulties, severe burns, and death.

Possible ways employees may be exposed to ammonia during their job functions. Some examples may include, but not limited to:

- Working on/near industrial refrigeration machinery rooms, equipment and/or piping
- Working in petroleum refineries
- Working with/near agricultural fertilizer.

Methods of Dissemination

- Indoor Air: Ammonia can be released into indoor air as a liquid spray (aerosol) or as a vapor.
- Water: Ammonia can be used to contaminate water.
- Food: Ammonia is unlikely to contaminate food due to unpalatable qualities rendered to food.
- Outdoor Air: Ammonia can be released into outdoor air as a liquid spray (aerosol) or as a vapor.
- Agricultural: If ammonia is released into the air as a liquid spray (aerosol), it has the potential to contaminate agricultural products. If ammonia is released as a vapor, it is highly unlikely to contaminate agricultural products.

Routes of Exposure

Ammonia can cause harm if inhaled and/or if it comes into contact with the eyes or skin. High concentrations of ammonia gas, liquid ammonia and solutions of ammonia can cause harm if inhaled or if they come into contact with eyes or skin.

Pre-Job Planning for Ammonia Related Work

Pre-job planning or a site assessment will be conducted prior to starting work and the assessment will be documented. Documented planning will be conducted for those operations involving potential ammonia exposure, and this includes anytime an active purge is being applied to a system in or around equipment associated with work.

Some planning or assessment elements include:

- All proposed work requires a job site visit by the requestor and a unit operator to identify special precautions, equipment status and personal safety equipment requirements.
- The permit must clearly identify all hazards and special personal protective equipment requirements.
- Appropriate signage will be utilized and adhered to. Appropriate signage will include adequate warning as seen below.



Personal Protective Equipment

John Plott Co., Inc. employees will use impervious clothing, gloves and/or face shields if there is a possibility of skin contact with liquid ammonia or vessels containing liquid ammonia. Employees will be provided with and required to use impervious clothing, gloves, face shields and other appropriate protective clothing necessary to prevent any possibility of skin contact with liquid anhydrous ammonia or aqueous solutions of ammonia containing more than 10% by weight of ammonia. Similar precautions should be taken to prevent the skin from becoming frozen from contact with vessels containing liquid anhydrous ammonia.

Training

Employees will be aware of the provisions of site specific contingency/emergency plans. Employees will be aware of owners' contingency plans and provisions. Employees must be informed where ammonia is used in the host facility and aware of additional plant safety rules.

John Plott Co., Inc. shall provide training for all affected employees including any John Plott Co., Inc. employee working with or near ammonia and the training shall emphasize:

- The characteristics of ammonia.
- The hazards of ammonia.
- Proper PPE.
- Owner client requirements.

Documentation of Training

Ammonia awareness training shall be documented including dates of training, location of training, employee name and trainer name.

John Plott Co., Inc.

HYDRO-BLASTING SAFETY POLICY

Purpose

This program outlines the minimum requirements that will be met by John Plott Co., Inc. and subcontractors when performing high-pressure water cleaning (HPWC).

Responsibilities

Management

- Provide proper equipment and procedures.
- Provide safety training for all operators of HP Water systems.
- Perform periodic inspections and audits.

Supervisors

- Oversee all operations involving use of high-pressure water.
- Ensure equipment is safe prior to use.
- Allow only qualified employees to operate equipment.
- Ensure areas are safe for passers-by.

Subcontractors

- Ensure all equipment meets the requirements of this program.
- Provide subcontractor employees with certification training.
- Maintain records of maintenance and training.
- Provide safety controls at all work sites.

Definitions

High-pressure water cleaning: The use of high-pressure water, with or without the addition of other liquids or solid particles, to remove unwanted matter from various surfaces.

High-pressure water cleaning systems: Water delivery systems, which have nozzles or other openings whose function is to increase the speed of liquids. Solid particles or additional chemicals may also be introduced, but the exit in all cases will be a free stream. The system includes pumps (pressure reducing devices) and the hoses, lances, nozzles, valves, and safety devices as well as any heating elements or injection systems attached thereto.

High-pressure water cutting: The use of high-pressure water, with or without the addition of other liquids or solid particles, to penetrate into surfaces of a material for the purpose of cutting that material.

Line moling: An operation using a self-propelled jet nozzle (mole) and a high-pressure hose to clean the inside of piping systems.

Dump valve: A device that immediately shuts down the high-pressure water stream if the operator loses control. Used in tube lancing and line moling water cleaning methods.

Lance: A rigid metal tube used to extend the nozzle from the end of a hose.

Safety

High-pressure water cleaning is normally performed using jet streams that can have a velocity greater than that of a 45-caliber bullet and do as much damage. Therefore, extreme caution and strict compliance with procedures must be used to prevent the jet stream from striking the operator, other employees, or delicate equipment. No portion of the body must ever be placed in front of the water jet. These jets of water can easily puncture and tear the skin or penetrate deeper causing infection or serious internal damage. Horseplay with such equipment is strictly forbidden. Violators will be disciplined and subject to immediate termination.

Personal Protective Equipment

Personnel performing high-pressure water cleaning that are exposed to water spray or reflected material will wear a raincoat, rubber pants, safety glasses, hardhat with face shield, rubber boots, and gloves. Hearing protection will also be worn. These do NOT provide protection from the jet but do protect against hazards encountered while performing the work.

The following identifies at a minimum the personal protective equipment that will be issued to employees performing high-pressure water cleaning outside of the required hardhat and safety glasses with side shields:

Face shields – Clear shield nine inches deep by fifteen and one-half inches wide by 0.60 thick (ANSI Z87.1-1979 or equivalent).

Rain Suit – Made of nylon fabric coated with Neoprene on both sides.

Gloves – Made of Neoprene, rubber, and PVC with rough wet grip finish.

Rubber steel-toed boots – Knee length with ribbed steel shanks and heavy tread soles for nonslip traction (ANSI Z41.1-1967 or equivalent).

Metatarsal Guards – Designed to be worn with lace-type steel toe boots.

When cleaning equipment that could possibly be contaminated with hazardous chemicals, appropriate additional protection specified by the project management/safety will be worn by the operator as well as other employees who may be affected.

When tube lancing or "shotgunning", boots provided with steel toecaps and metatarsal protection will be worn.

NOTE: At operating pressures over 5,000 psi and above, employees are required to wear protective suits made of Kevlar.

Procedures

The High-Pressure Water Cleaning Job Qualification form and permit must be completed prior to performing any high-pressure water cleaning to determine if there are alternative methods for performing the task that is less hazardous.

- The HPWC system will be depressurized when:
- Not in use.
- Unauthorized or inadequately protected personnel enter the barricaded area.
- Replacement or repairs are made to the system.
- Recommended practices are violated.

Any incident, near miss, or abnormal occurrence, will be immediately reported to the responsible supervisor and an investigation conducted.

Any objects to be cleaned shall never be held manually.

The Hydro-blasting gun should be a minimum of 66 inches.

A cleaning crew will be composed of at least two operators. Each crew member will be in view of another crew member at all times.

All Hydro-blasting operations must be completed from a stable working surface.

Operators will not operate equipment for more than eight (8) consecutive hours in any sixteen (16) hour period.

The team members should rotate their duties during the job to minimize fatigue to the operator holding the tools.

The equipment operator nearest the high-pressure nozzle must always have a means of immediately reducing pressure or interrupting the flow to the nozzle.

When the hose drop exceeds ten (10) feet, the hose will be securely tied off to a rigid support with a fiber rope to limit the pull due to the hose weight. Bend radius limits (as identified by the manufacturer) must be maintained.

At least one control valve or switch will control each high-pressure tool. An employee will operate only one high-pressure lance, mole, or shotgun at one time.

At least one control valve or switch will control each high-pressure tool. An employee will operate only one high-pressure lance, mole, or shotgun at one time.

The area around the job, pump and hoses will be barricaded a minimum of fifteen (15) feet and signs stating **"DANGER – HIGH-PRESSURE WATER CLEANING"** must be placed at the perimeters. Barricades may be of rope, tape, barrels, etc. as long as they give an effective warning and are highly visible.

If the job is above ground level, barricades may be required below. Warning signs should be placed along those portions of the high-pressure water hose, which are outside the barricades. When line moling, all pipe openings will be properly barricaded.

A high-pressure cleaning hose will be positioned and handled to minimize bends and turns. Sharp bends and turns can result in hose failure.

High-pressure hose connections will have safety cables, chains, or equivalent bridging at each joint.

High-pressure water cleaning equipment must be designed and maintained to achieve a minimum safety factor of three to one (3:1) against maximum allowable working pressure.

The Hydro-blasting system should never be operated at a pressure that exceeds the limits of any of its components.

Hose data, i.e., manufacturer's symbol, serial number, working and test pressure, and certified rating, which will provide a safety factor of 3 to 1 against burst will be recorded and retained in the project's central files.

The supervisor responsible for the job will fill out the High-Pressure Water Cleaning Equipment Checklist form before starting each job.

The pressure must be removed from the system before tightening or loosening fittings.

When the hose is pressurized, personnel must not handle the hose within one foot of the hose-to-hose connections.

Back Thrust

Reactive back thrust forces from the high-pressure water jets physically stress the operator and affect operator control. Sound footing conditions must be established and maintained during cleaning.

Back thrust forces result from water leaving the nozzle at a high velocity. During manual shotgun cleaning operations, back thrust can be calculated from the equation below.

Back Thrust (lb) – $0.052 Q \sqrt{P}$

Where: Q-Flow Rate in U.S. gallons/minute

P – Jet Pressure Measured in PSI

For determining GPM, use the equation:

$$Q = \frac{29.9(K) D^2 \sqrt{P}}{1.48}$$

Where K – 0.09 constant

Operators of the shotgun-type equipment will not be required to withstand a back thrust or more than one-third (1/3) of their body weight.

If the area to be blasted is in a confined space or the operator must climb to an elevated position such as on a ladder or scaffolding, it is required that a safety harness be used. Railings or other protection should be provided.

Equipment Setup, Inspections and Testing

An automatic relief device will be installed on the high-pressure side of the pump set to relieve at no higher than the maximum allowable working pressure of the lowest-rated component in the high-pressure system and will be tested annually. Documentation will be maintained on the test results.

Prior to starting the job, a visual inspection of the high-pressure components (including rupture disk pressure rating) should be performed and documented. Hose with exposed or damaged wire braid will be removed from high-pressure service. The assembled high-pressure water cleaning components will be SLOWLY pressurized to the maximum operating pressure to verify the integrity of the system.

A hose inspection and testing program (per manufacturer's guidelines) will be conducted at least quarterly. The inspection test will be conducted at 1 ½ time the maximum operating pressure and will be observed and documented by personnel responsible for the site procedure.

Hose failures usually occur near fittings due to bending stresses during use and handling. Pressurized hoses will NOT be handled within one foot of hose-to-hose connections. Hose-to-tool connections, which are in frequent contact with the operator, must be shielded by a shroud to protect the operator. These shrouds must have sufficient rigidity to resist bending to a radius smaller than those recommended by the hose manufacturers.

Maintenance

Competent (designated in writing) employees will conduct servicing in accordance with the manufacturer's servicing requirements.

- The following items will be overhauled and inspected for proper functioning at the manufacturer's recommended intervals:
- Pressure relief valve
- Bursting discs (if used)
- Pressure control valves
- Hand or foot operated dump control valve or the dry shut-off valve
- Dry shut-off valve or dump systems
- Changeover valve

Tools

When maintaining or assembling high-pressure water cleaning systems, the correct size tool **MUST** be used. The use of adjustable tools having serrated gripping jaws (i.e., pipe wrenches), which can damage equipment, will **NOT** be used.

NOTE: Only manufacturer's parts may be used for repairs to equipment. The manufacturer's equipment will not be altered or modified under any circumstances.

High-Pressure Water Cleaning Methods

Lancing, line moling and shotgunning are the basic high-pressure water cleaning methods. Different variations of each method are available and increasing with new technology. Rotating nozzle assemblies, rotating lances and orbital nozzles are some variations available at this time.

Rotating equipment such as lances and nozzle tips must be guarded to prevent contact and injury to operating personnel. Loose clothing, which can be caught in rotating equipment, is **NOT** permitted.

Tube Lancing

Tube lancing is a repetitive operation using a rigid or flexible lance to clean the inside of tube bundles.

High-pressure water flow to the lance will be actuated through a fail-safe, contact-type switch, or foot-operated dump valve which, when released by the lance operator, interrupts pressure at the lance. The valve or switch must have a guard to prevent inadvertent actuation. Use of foot-operated dump valve is required.

A hand-held deflector or guard will be installed on the lance to prevent the high-pressure stream from contacting the operator's hand if the lance is accidentally withdrawn from a tube while activated. The inside diameter of the deflector or guard will be less than the outside diameter of the jet nozzle so that the nozzle cannot inadvertently slip through the guard and contact the operator.

An easily visible marker will be affixed two feet from the nozzle end of the lance to indicate nozzle location, as the lance is being inserted or withdrawn from the tube.

NOTE: Pressure will be applied to the nozzle only when the lance is two feet inside the tube.

The back end of the tube or shell will be shrouded to guard personnel from the jet stream, discharged contaminants, and ejected nozzles.

Anti-Reversal Device must be used and must be at least 2 times the diameter of the pipe.

Line Moling

Line moling is an operation using a self-propelled nozzle (mole) and a high-pressure hose to clean the inside of piping systems.

High-pressure water to the mole will be controlled by a fail-safe, contact-type switch, or foot-operated dump valve switch, when released by the operator nearest the mole, interrupts flow to the mole. The valve or switch will have a guard to prevent inadvertent actuation. Use of a foot-operated dump valve is required.

To prevent mole reversal within the line, the length of the hose end coupling, mole tip and any rigid pipe extensions will be 2 times the inside diameter of the pipe being cleaned.

Anti-Reversal Device must be used and must be at least 2 times the diameter of the pipe.

The mole hose will be marked two feet from the mole to indicate mole location when the hole location is inserted.

WHEN AN ACCIDENT OCCURS YOU ARE REQUIRED TO:

1. Report the accident by calling the 24/7 Triage Hot Line @ 855-660-5200 or 1-888-967-5222
2. CompTRUSTAGC utilizes the Carlisle Medical prescription program. If you have any questions/problems, call 1-800-553-1783.
3. Make sure a post accident drug test is administered. If you have questions/problems obtaining a drug test, call Safety First 1-800-245-1150.
4. Claims administered by Millennium Risk Managers. If you have any questions, call 205-451-0812 or you may fax or email the First Report of Injury to 205-777-6097 or foi@mrmlc.com.
5. Use an AlaMed provider listed below if there is one located in the area where the injury occurred.

However, the facilities that are in bold print are our preferred providers.

JANUARY 2024

SCAN QR
CODE TO
DOWNLOAD
ACCIDENT
POSTER



ALABASTER

American Family Care, 120 Colonial Promenade Parkway – (205) 605-0495
Shelby Baptist Medical Center, 1000 1st Street North – (205) 620-8100

ALBANYVILLE

Med-Assist Walk-in Care, 3442 US Highway 431 – (256) 593-1234
CarePlus Medical, 8914 US Highway 31, 256-279-7200
Doctors Med Care, 604 Smith Road – (256) 891-1460
Marshall Co. Occupational Medicine, 3442 US Highway 431 – (256) 840-3399

ALEXANDER CITY

Main Street Urgent Care, 2508 Hwy 280 – (205) 545-5090
Russell Hospital, 3316 Highway 280 – (256) 329-7104

ANDALUSIA

Covington Family Care, 508 East Three Notch Street – (877) 592-9888
Vyas & Vyas, 109 Medical Park Dr. Suite B – (334) 222-6041

ANNISTON

Center For Occupational Health, The Tyler Center, 731 Leighton Avenue, Ste 407 – (256) 741-6464

Northeast Alabama Regional, 400 East 10th Street – (256) 235-5121

ATHENS

Medical East, 15243 Greenfield Dr. – (256) 771-0994
Athens-Limestone Hospital, 700 West Market Street – (256) 233-9151

AUBURN

Alabama Occupational Medicine, 2515 E. Glenn Ave., Suite 106 – (334) 821-7788
Auburn Urgent Care, 1650 South College Street – (334) 821-3221
The Hughston Clinic, 161 East University Drive – (334) 826-2091

BAY MINETTE

Infirmiry Health Urgent Care, 108-C McMeans Ave. – (251) 937-7100
North Baldwin Infirmiry, 1815 Hand Ave. – (251) 937-5521

BESSEMER

Brookwood Baptist Occupational Medicine, 4760 Eastern Valley Rd, Ste 102 (205) 969-8818

Middle Creek Urgent Care, 4810 Bell Hill Road – (205) 267-6774
St. Vincent's Primary Care, 2910 Morgan Road, Suite 100 – (205) 403-2020

BIRMINGHAM

AlaComp, 114 Wildwood Parkway (205) 876-2667
Brookwood Occ. Health Clinic, 110 Oxmoor Court – (205) 945-0773
Brookwood Baptist Primary Care Network Vestavia, 200 Montgomery Highway, Suite 225 – (205) 871-7746
St. Vincent's Occ. Health Clinic, One Lakeshore Drive, Suite 301 – (205) 930-2910
The Work Place Occupational Health Clinic, 1201 11th Ave. South, Suite 100 – (205) 930-7000

Brookwood Medical Center, 2010 Brookwood Medical Center Drive – (205) 877-1000
St. Vincent's Hospital, 810 St. Vincent's Drive – (205) 939-7100

St. Vincent's East, 50 Medical Park Drive E – (205) 838-3450
Baptist Princeton Emergency Dept., 701 Princeton Avenue SW – (205) 783-3500
Baptist Health Centers, LLC, 200 Montgomery Highway, Ste 125 – (205) 978-4352

BOAZ

Marshall Medical Center South, 2505 US Highway 431 – (256) 593-8310

CENTRE

Main Street Urgent Care, 1925 West Main St. – (256) 677-4552
Cherokee Medical Center, 400 Northwood Dr. – (256) 927-5531

CALERA

American Family Care, 72 Hwy 304 – (205) 319-8000

Brookwood Baptist Health Center, 206 Hwy 304 – (205) 668-0626

CULLMAN

Alabama Specialty Clinic, 1908 Cherokee Avenue – (256) 736-1460
Cullman Regional Medical Center, 1912 Ala. Highway 157 – (256) 737-2000

DADEVILLE

Lake Martin Family Medicine/Ivy Creek Healthcare, 301 Mariarden Road, 256-825-7871

Medical Park Family Care, 1034 South Tallassee Street – (256) 825-9900

DAPHNE

Infirmiry Occupational Health, 27961 US Hwy 98, Ste. 25 – (251) 625-8222
American Family Care, 6631 Park Dr. – (251) 626-5700

Eastern Shore Urgent Care, 29710 Urgent Care Dr. – (251) 626-3782

DECATUR

Occupational Health Group of Decatur, 1615 Kathy Lane SW (256) 973-4325
Decatur Medical Associates, 2828 Highway 31 South – (256) 353-2000

American Family Care, 2604 Hwy. 31 South – (256) 445-3100

DEMOPOLIS

Dr. Dismukes, 202 Highway 80 East – (334) 289-0499

DOTHAN

Primcare of Dothan, 4126 West Main Street – (334) 793-2120
All South Urgent Care, 1052 Ross Clark Circle – (334) 699-3600

Southeast Alabama Medical Center, 1108 Ross Clark Circle – (334) 793-8100

EUFAULA

Main Street Urgent Care, 1026 S. Eufaula Ave. – (334) 689-4025
Medical Center Barbour, 820 West Washington Street – (334) 688-7000

FAIRHOPE

Bay Medical Family Practice, 405 N Section Street – (251) 990-8860
Thomas Hospital, 750 Morphy Avenue – (251) 990-1150

FAYETTE

Fayette Medical Center, 1653 Temple Avenue North – (205) 932-1175

FLOMATON

Floaton Medical Center, 174 Highway 113 – (251) 296-2456



Carlisle Medical
Making A Difference[®]

WORKERS' COMPENSATION
PRESCRIPTION DRUG
PROGRAM

(EXAMPLE DRUG CARD)

CompTRUSTAGC
Managing Your Risk

FLORENCE

Occupational Health Center, 2129 Helton Dr. – (256) 760-1977

Med Plus, 2908 Mall Road – (256) 767-2702

Express MED, 970 Cox Creek Parkway – (256) 760-1655

North Alabama Medical Center, 1701 Veterans Dr. – 256-629-1000

FOLEY

Coastal Health, 915 West Laurel Avenue – (251) 943-5440

South Baldwin Regional Medical Ctr., 1613 N McKenzie St. – (251) 949-3400

Fort Payne Express MED, 970 Cox Creek Parkway – (256) 760-1655

Dekalb Reg. Medical Ctr., 200 Medical Center Drive SW – (256) 845-3150

GADSDEN

Doctors Care, 307 E Meighan Blvd., Gadsden, AL 35903 – 256-543-2273

Riverview Physical Medicine, 200 West Meighan Blvd. Ste. E – (256) 547-6522

Riverview Regional Medical Center, 600 South 3rd Street – (256) 543-5390

Gadsden Regional Med Center, 1007 Goodyear Avenue – (256) 494-4000

GREENVILLE

American Family Care, 101 Paul Stabler Dr. – (334) 382-0734

RMC - HCA of Greenville (Regional Medical Center - Healthcare Authority of Greenville), 29 LV Stabler Drive – (334) 382-2671

GROVE HILL

Grove Hill Memorial Hospital, 295 South Jackson Street – (251) 275-3191

GUNTERSVILLE

Lakeside Clinic, 7938 Hwy 69 – (256) 571-8460

Marshall Medical Center North, 8000 Ala Highway 69 – (256) 571-8000

HALEYVILLE

Family Medical Associates, 42320 Highway 195 – (205) 486-8899

HARTSELLE

Hartselle Family Medicine, 615 Mymatt St SW, Suite E – (256) 773-2979

HOMEWOOD

St. Vincent's Urgent Care, 1944 28th Avenue South – (205) 408-2366

HUNTSVILLE

Occupational Health Group, 1104 Monroe Street SW – (256) 265-7000

Crestwood Workers Care, 7736 Madison Blvd., Suite 1 – (256) 830-8930

Huntsville Hospital, 101 Silvery Road – (256) 265-1000

JACKSONVILLE

Doctors Med Care of Jacksonville, 1505 Pelham Road S Suite 2 – (256) 435-7300

JASPER

Walker Baptist Medical Center, 3400 Highway 78 East – (205) 387-4000

LINCOLN

BHC, Lincoln, 47344 Hwy 78 – (205) 763-7488

LIVERNE

Crenshaw Community Hospital, 101 Hospital Circle – (334) 335-3374

MCCALLA

Brookwood Baptist Occ. Medicine, 4760 Eastern Valley Road – (205) 969-8818

MILLBROOK

Ivy Creek Healthcare, 4081 Alabama Hwy 14 - 334-285-3222

MOBILE

Occupational Health Center, 2050 Michigan Ave. – (251) 434-6770

Infirmiry Occupational Health, 305 North Water Street – (251) 433-3781

Mobile Infirmiry, 5 Mobile Infirmiry Circle – (251) 435-2620

Greater Mobile Urgent Care, 4402 Old Shell Rd – (251) 633-0123

MONTGOMERY

OurMed, 9188 East Parkway – (334) 801-9100

Family & Industrial Health Services, LLC, 4725 Mobile Hwy. (334) 281-3665

Baptist Medical Center South, 2105 East South Boulevard (334) 288-2100

Jackson Hospital, 1725 Pine Street – (334) 293-8000

MOULTON

Lawrence Medical Center, 202 Hospital Street – (256) 974-2255

MUSCLE SHOALS

Med Plus, 108 Avalon Avenue – (256) 389-9300

Shoals Hospital, 201 Avalon Avenue – (256) 386-1626

NORTHPORT

DCH Center for Occ. Health, 701 University Blvd E, DCH Medical Tower 1, Ste. 211 (205) 333-4300

Northport Urgent Care, 2810 Lurleen B. Wallace Boulevard (205) 333-7670

Northport Medical Center, 2700 Hospital Drive – (205) 333-4565

ONEONTA

BHC Oneonta, 150 Gilbreath Dr., Suite 201 – (205) 274-8198

Main Street Family Urgent Care, 2022 2nd Ave. E – (205) 625-3650

St. Vincent's - Blount, 150 Gilbreath Drive – (205) 274-3300

OPELIKA

Auburn Urgent Care, 2638 Enterprise Drive – (334) 749-9191

American Family Care, 2544 Enterprise Drive – (334) 528-9050

OXFORD

Dr. Keel & Associates, 1612 Highway 78 East, Suite 100 – (256) 835-4756

PELHAM

Med Help, 3143 Pelham Parkway, Suite 100 – (205) 620-2270

American Family Care, 2970 Pelham Parkway – (205) 621-6411

Baptist Health Center Pelham, 30 Racquet Club Parkway – (205) 620-1085

PELL CITY

American Family Care, 20 Hazelwood Dr. – (205) 338-8008

St. Vincent's St. Clair, 7063 Veterans Parkway – (205) 338-3301

PRATTVILLE

AFC PriMed, 1965 Cobbs Ford Rd. – (334) 361-7054

Prattville Baptist Hospital, 124 South Memorial Drive – (334) 361-4239

RED BAY

Medical Clinic of Red Bay, 209 Hospital Road – (256) 356-9511

Neighbors Family Medical Clinic, 219 Hospital Road – (256) 356-9537

RUSSELLVILLE

Urgent Care, 13150 Hwy 43, Ste 10 – (256) 331-2092

Russellville Hospital, 15155 Highway 43 – (256) 332-1611

SARALAND

IMC-Northside Clinic, 95 Shell St. – (251) 675-4733

SCOTTSBORO

Highlands Occupational, 102 Micah Way, Suite 1107 – (256) 218-3860

SELMA

Selma Urgent Care, 1025 Medical Center Pkwy – (334) 875-8833

Vaughan Regional Medical Ctr, 1015 Medical Center Parkway (334) 418-4150

SNEAD

BHC-Snead, 180 Medical Street – (205) 466-7114

SYLACAUGA

Coosa Valley Medical Center, 315 West Hickory St. – (256) 401-4000

Craddock Health Center, 209 West Spring Street, Ste. 200 – (256) 249-1100

TALLADEGA

Main Street Urgent Care, 837 Battle Street E – (256) 649-8134

Citizens Baptist Medical Center, 604 Stone Avenue – (256) 761-4525

THOMASVILLE

Family Medical Center, 1415 Moseley Drive – (334) 636-9613

TROY

Pike Internal Medicine, 1350 Hwy 231 South, Suite B, Troy, AL – 334-566-1270

Southern Health Associates, 801 South Franklin Ave. – (334) 566-9800

Troy Regional Medical Center, 1330 Highway 231 South – (334) 670-5000

TRUSSVILLE

Orthopedic Urgent Care, 1801 Gadsden Hwy. – 205-228-7600

St. Vincent's Occ. Health Clinic, 7201 Happy Hollow Road, (Deerfoot Parkway) (205) 508-6235

TUSCALOOSA

Emergi-Care Clinic, P.C., 1601 University Blvd. E – (205) 349-2273

DCH Center for Occupational Health, 701 University Boulevard E, DCH Medical Tower 1, Ste. 211 – (205) 333-4300

Med Center South, 5005 Oscar Baxter Drive – (205) 343-2225

DCH Regional Medical Center, 809 University Boulevard E – (205) 759-7122

VALLEY

Main Street Urgent Care, 3306 20th Ave – (334) 756-0305

WINFIELD

Winfield Family Occ. Medicine, 191 Carraway Dr., Ste. A – (205) 487-1586

OUT OF STATE - GEORGIA

Occupational Medicine of Columbus, 7301 Northlake Dr. – 706-221-1600

NOTICE:

Alabama law and recent court decisions make it mandatory that you report an accident/injury that you sustain on this job within 5 days, or workers' compensation MAY be denied by the workers' compensation adjuster.

REPORTING RULES:

1. Report accident/injury to your supervisor/superintendent. NOT A FELLOW EMPLOYEE.
2. Give Date and time of the accident.
3. Give specific details—where, when, how and what happened.

Late reporting will be considered fraud and fraud is a crime. There is a \$500 reward for reporting workers' compensation fraud.

For

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.



EMPLOYEE SAFETY ORIENTATION PACKAGE

John Plott Co., Inc.
SAFETY PROGRAM
ACKNOWLEDGEMENT FORM

John Plott Co., Inc. 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.

My signature below certifies that I have this day reviewed the John Plott Co., Inc. Safety Manual.

The Safety Manual and Company Safety Rules were either read by me or reviewed with me by an employee of John Plott Co., Inc.

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

John Plott Co., Inc.

ACCIDENT REPORTING AND MEDICAL SERVICES

All accidents must be reported to the Main Office within 1 hour.

All eye, neck, back and knee accidents / injuries require immediate medical attention.

All Accident Reports must be completed and turned in to the Main Office within 24 hours of the accident.

John Plott Co., Inc. 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

John Plott Co., Inc.

CONSTRUCTION JOB SITE SAFETY RULES

1. Access to this site is restricted to employees and those authorized by John Plott Co., Inc.
2. Use and/or possession of intoxicants, alcohol or drugs are strictly prohibited.
3. Hard hats shall be worn by all employees on the construction job site at all times.
4. Hard soled shoes are required. No tennis shoes.
5. Long pants and shirts with 4" minimum sleeves are required at all times.
6. Eye protection, ear protection and respiratory protection devices will be worn when required.
7. Full body harness, shock-absorbing lanyards, or other fall protection measures will be utilized when working at unprotected heights.
8. No glass containers allowed onsite.
9. No texting, music, radios, tape decks, or earphones allowed on the construction job site.
10. Only authorized personnel are permitted to operate equipment and/or vehicles.
11. All machinery must have operable backup alarms at all times.
12. No riders on machinery or equipment. Seat belt use is required at all times. No riding in back of pick-up bed.
13. No one shall enter a trench or excavation unless it is properly sloped, shielded, or shored.
14. Only trained, qualified operators will use powder-actuated tools.
15. All ladders will be secured. Always face ladders while going up or down.
16. Safety barriers should be maintained at all times in all excavations, openings, manholes, etc.
17. Flammable liquids must be kept in approved containers.
18. Be alert for chemical safety hazards on the job site.
19. A complete first aid kit is available in the job site.
20. Report all accidents, unsafe conditions and/or practices to your supervisor or John Plott Co., Inc. immediately.

Signature

Date

John Plott Co., Inc.
EMPLOYEE CERTIFICATE OF AGREEMENT
WITH SUBSTANCE ABUSE POLICY

I have received and read the above Policy and agree to abide by the Company's Drug and Alcohol Testing Policy. In consideration for my employment, or employment application, I consent to submit to a drug or alcohol test when required by the Company.

I authorize any laboratory, medical provider, collector or law enforcement officer to release screening and test results to John Plott Co., Inc, Company DER, Alternate DER and its Medical Review Officer ("MRO") and I expressly authorize the Company, DERs and MRO to release any test-related information, including positive results, to the Company's Worker's compensation Adjusters and Trust Fund Manager, Alabama Department of Industrial Relations, or other court, government agency or party investigating or challenging my employment or the termination thereof, or in any proceeding I might initiate.

I understand that the Company may revise its drug and alcohol rules, without advance notice, and may begin testing employees at times, or reasons, other than the occasions explained above.

In consideration for hire or continued employment, I release any legal claims I may have against John Plott Co., Inc and its affiliates, officers and employees for requiring a drug and/or alcohol test and for any adverse employment action taken as a result of the test or its results except for claims of negligence against those who collect, test and analyze specimens.

I understand that this agreement in no way limits my or the Company's right to terminate employment at any time for any reason.

Print Name

Signature

Date

John Plott Co., Inc.

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, John Plott Co., Inc. 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 John Plott Co., Inc.

Signature

Date

John Plott Co., Inc.

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 the 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 the 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

John Plott Co., Inc.

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

John Plott Co., Inc.

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 exposure is 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 exposure 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

John Plott Co., Inc.

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

John Plott Co., Inc.

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

John Plott Co., Inc.

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 appliances 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 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 job site. Never use flat power cords on a job site.
- Always use GFCI electrical outlets and/or GFCI "pig-tails".

Signature

Date

John Plott Co., Inc.

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 / 811 ... to locate underground utilities prior to excavation / trenching.

Signature

Date

WHEN AN ACCIDENT OCCURS YOU ARE REQUIRED TO:

1. Report the accident by calling the 24/7 Triage Hot Line @ 855-660-5200 or 1-888-967-5222
2. CompTRUSTAGC utilizes the Carlisle Medical prescription program. If you have any questions/problems, call 1-800-553-1783.
3. Make sure a post accident drug test is administered. If you have questions/problems obtaining a drug test, call Safety First 1-800-245-1150.
4. Claims administered by Millennium Risk Managers. If you have any questions, call 205-451-0812 or you may fax or email the First Report of Injury to 205-777-6097 or foi@mrmm-lc.com.
5. Use an AlaMed provider listed below if there is one located in the area where the injury occurred.

However, the facilities that are in bold print are our preferred providers.

JANUARY 2024

SCAN QR
CODE TO
DOWNLOAD
ACCIDENT
POSTER

**ALABASTER**

American Family Care, 129 Colonial Promenade Parkway – (205) 605-0495
Shelby Baptist Medical Center, 1000 1st Street North – (205) 620-8100

ALBANYVILLE

Med-Assist Walk-in Care, 3442 US Highway 431 – (256) 593-1234
CarePlus Medical, 8914 US Highway 31, 256-279-7200
Doctors Med Care, 604 Smith Road – (256) 891-1460
Marshall Co. Occupational Medicine, 3442 US Highway 431 – (256) 840-3399

ALEXANDER CITY

Main Street Urgent Care, 2508 Hwy 280 – (205) 545-5090
Russell Hospital, 3316 Highway 280 – (256) 329-7104

ANDALUSIA

Covington Family Care, 508 East Three Notch Street – (877) 592-9888
Vyas & Vyas, 109 Medical Park Dr. Suite B – (334) 222-6041

ANNISTON

Center For Occupational Health, The Tyler Center, 731 Leighton Avenue,
Ste 407 – (256) 741-6464

Northeast Alabama Regional, 400 East 10th Street – (256) 235-5121

ATHENS

Medical East, 15243 Greenfield Dr. – (256) 771-0994
Athens-Limestone Hospital, 700 West Market Street – (256) 233-9151

AUBURN

Alabama Occupational Medicine, 2515 E. Glenn Ave., Suite 106 – (334) 821-7788
Auburn Urgent Care, 1650 South College Street – (334) 821-3221

The Hughton Clinic, 161 East University Drive – (334) 826-2091

BAY MINETTE

Infirmary Health Urgent Care, 108-C McMeans Ave. – (251) 937-7100
North Baldwin Infirmary, 1815 Hand Ave. – (251) 937-5521

BESSEMER

Brookwood Baptist Occupational Medicine, 4760 Eastern Valley Rd, Ste 102
(205) 969-8818

Middle Creek Urgent Care, 4810 Bell Hill Road – (205) 267-6774
St. Vincent's Primary Care, 2910 Morgan Road, Suite 100 – (205) 403-2020

BIRMINGHAM

AlaComp, 114 Wildwood Parkway (205) 876-2667

Brookwood Occ. Health Clinic, 110 Oxmoor Court – (205) 945-0773
Brookwood Baptist Primary Care Network Vestavia, 200 Montgomery Highway,
Suite 225 – (205) 871-7746

St. Vincent's Occ. Health Clinic, One Lakeshore Drive, Suite 301 – (205) 930-2910
The Work Place Occupational Health Clinic, 1201 11th Ave. South, Suite 100 –
(205) 930-7000

Brookwood Medical Center, 2010 Brookwood Medical Center Drive – (205) 877-1000
St. Vincent's Hospital, 810 St. Vincent's Drive – (205) 939-7100

St. Vincent's East, 50 Medical Park Drive E – (205) 838-3450
Baptist Princeton Emergency Dept., 701 Princeton Avenue SW – (205) 783-3500

Baptist Health Centers, LLC, 200 Montgomery Highway, Ste 125 – (205) 978-4352

BOAZ

Marshall Medical Center South, 2505 US Highway 431 – (256) 593-8310

CENTRE

Main Street Urgent Care, 1925 West Main St. – (256) 677-4552
Cherokee Medical Center, 400 Northwood Dr. – (256) 677-5531

CALERA

American Family Care, 72 Hwy 304 – (205) 319-8000

Brookwood Baptist Health Center, 206 Hwy 304 – (205) 668-0626

CULLMAN

Alabama Specialty Clinic, 1908 Cherokee Avenue – (256) 736-1460

Cullman Regional Medical Center, 1912 Ala. Highway 157 – (256) 737-2000

DADEVILLE

Lake Martin Family Medicine/Ivy Creek Healthcare, 301 Mariarden Road,
256-825-7871

Medical Park Family Care, 1034 South Tallassee Street – (256) 825-9900

DAPHNE

Infirmary Occupational Health, 27961 US Hwy 98, Ste. 25 – (251) 625-8222

American Family Care, 6631 Park Dr. – (251) 626-5700

Eastern Shore Urgent Care, 29710 Urgent Care Dr. – (251) 626-3782

DECATUR

Occupational Health Group of Decatur, 1615 Kathy Lane SW (256) 973-4325
Decatur Medical Associates, 2828 Highway 31 South – (256) 353-2000

American Family Care, 2804 Hwy 31 South – (256) 445-3100

DEMOPOLIS

Dr. Diemukes, 202 Highway 80 East – (334) 289-0499

DOTHAN

Primecare of Dothan, 4126 West Main Street – (334) 793-2120

All South Urgent Care, 1052 Ross Clark Circle – (334) 699-3600

Southeast Alabama Medical Center, 1108 Ross Clark Circle – (334) 793-8100

EUFAULA

Main Street Urgent Care, 1026 S. Eufaula Ave. – (334) 689-4025

Medical Center Barbour, 820 West Washington Street – (334) 688-7000

FAIRHOPE

Bay Medical Family Practice, 405 N Section Street – (251) 990-8860

Thomas Hospital, 750 Murphy Avenue – (251) 990-1150

FAYETTE

Fayette Medical Center, 1653 Temple Avenue North – (205) 932-1175

FLOMATON

Flomaton Medical Center, 174 Highway 113 – (251) 296-2456



Making A Difference[®]
WORKERS' COMPENSATION
PRESCRIPTION DRUG
PROGRAM

(EXAMPLE DRUG CARD)
CompTRUSTAGC
Managing Your Risk

FLORENCE

Occupational Health Center, 2129 Helton Dr. – (256) 760-1977

Med Plus, 2908 Mall Road – (256) 767-2702

Express MED, 970 Cox Creek Parkway – (256) 760-1655

North Alabama Medical Center, 1701 Veterans Dr. – 256-629-1000

FOLEY

Coastal Health, 915 West Laurel Avenue – (251) 943-5440

South Baldwin Regional Medical Ctr., 1613 N McKenzie St. – (251) 949-3400

FORT PAYNE

Dekalb Reg. Medical Ctr., 200 Medical Center Drive SW – (256) 845-3150

GADSDEN

Doctors Care, 307 E Meighan Blvd., Gadsden, AL 35903 – 256-543-2273

Riverview Physical Medicine, 200 West Meighan Blvd. Ste. E – (256) 547-6522

Riverview Regional Medical Center, 600 South 3rd Street – (256) 543-5390

Gadsden Regional Med Center, 1007 Goodyear Avenue – (256) 494-4000

GREENVILLE

American Family Care, 101 Paul Stabler Dr. – (334) 382-0734

RMC - HCA of Greenville (Regional Medical Center - Healthcare Authority
of Greenville), 29 LV Stabler Drive – (334) 382-2671

GROVE HILL

Grove Hill Memorial Hospital, 295 South Jackson Street – (251) 275-3191

GUNTERSVILLE

Lakeside Clinic, 7938 Hwy 69 – (256) 571-8460

Marshall Medical Center North, 8000 Ala Highway 69 – (256) 571-8000

HALEYVILLE

Family Medical Associates, 42320 Highway 195 – (205) 486-8899

HARTSELLE

Hartselle Family Medicine, 615 Mynatt St SW, Suite E – (256) 773-2979

HOMEWOOD

St. Vincent's Urgent Care, 1944 28th Avenue South – (205) 408-2366

HUNTSVILLE

Occupational Health Group, 1104 Monroe Street SW – (256) 265-7000

Crestwood Workers Care, 7736 Madison Blvd., Suite 1 – (256) 830-8930

Huntsville Hospital, 101 Silvey Road – (256) 265-1000

JACKSONVILLE

Doctors Med Care of Jacksonville, 1505 Pelham Road S Suite 2 –
(256) 435-7300

JASPER

Walker Baptist Medical Center, 3400 Highway 78 East – (205) 387-4000

LINCOLN

BHC, Lincoln, 47344 Hwy 78 – (205) 763-7848

LUVERNE

Crenshaw Community Hospital, 101 Hospital Circle – (334) 335-3374

MCCALLA

Brookwood Baptist Occ. Medicine, 4760 Eastern Valley Road – (205) 969-8818

MILLBROOK

Ivy Creek Healthcare, 4081 Alabama Hwy 14 – 334-285-3222

MOBILE

Occupational Health Center, 2050 Michigan Ave. – (251) 434-6770

Infirmary Occupational Health, 305 North Water Street – (251) 433-3781

Mobile Infirmary, 5 Mobile Infirmary Circle – (251) 435-2620

Greater Mobile Urgent Care, 4402 Old Shell Rd – (251) 633-0123

MONTGOMERY

OurMed, 9188 East Parkway – (334) 801-9100

Family & Industrial Health Services, LLC, 4725 Mobile Hwy.
(334) 281-3665

Baptist Medical Center South, 2105 East South Boulevard
(334) 288-2100

Jackson Hospital, 1725 Pine Street – (334) 293-8000

MOULTON

Lawrence Medical Center, 202 Hospital Street – (256) 974-2255

MUSCLE SHOALS

Med Plus, 108 Avalon Avenue – (256) 389-9300

Shoals Hospital, 201 Avalon Avenue – (256) 386-1626

NORTHPORT

DCH Center for Occ. Health, 701 University Blvd E, DCH Medical Tower 1,
Ste. 211 (205) 333-4300

Northport Urgent Care, 2810 Lurleen B. Wallace Boulevard
(205) 333-7670

Northport Medical Center, 2700 Hospital Drive – (205) 333-4565

ONEONTA

BHC Oneonta, 150 Gilbreath Dr., Suite 201 – (205) 274-8198

Main Street Family Urgent Care, 2022 2nd Ave. E – (205) 625-3650

St. Vincent's - Blount, 150 Gilbreath Drive – (205) 274-3300

OPELIKA

Auburn Urgent Care, 2638 Enterprise Drive – (334) 749-9191

American Family Care, 2544 Enterprise Drive – (334) 528-9050

OXFORD

Dr. Keel & Associates, 1612 Highway 78 East, Suite 100 – (256) 835-4756

PELHAM

Med Help, 3143 Pelham Parkway, Suite 100 – (205) 620-2270

American Family Care, 2970 Pelham Parkway – (205) 621-6411

Baptist Health Center Pelham, 30 Racquet Club Parkway – (205) 620-1085

PELL CITY

American Family Care, 20 Hazelwood Dr. – (205) 338-8008

St. Vincent's St. Clair, 7063 Veterans Parkway – (205) 338-3301

PRATTVILLE

AFC PriMed, 1965 Cobbs Ford Rd. – (334) 361-7054

Prattville Baptist Hospital, 124 South Memorial Drive – (334) 361-4239

RED BAY

Medical Clinic of Red Bay, 209 Hospital Road – (256) 356-9511

Neighbors Family Medical Clinic, 219 Hospital Road – (256) 356-9537

RUSSELLVILLE

Urgent Care, 13150 Hwy 43, Ste 10 – (256) 331-2092

Russellville Hospital, 15155 Highway 43 – (256) 332-1611

SARALAND

IMC-Northside Clinic, 95 Shell St. – (251) 675-4733

SCOTTSBORO

Highlands Occupational, 102 Micah Way, Suite 1107 – (256) 218-3860

SELMA

Selma Urgent Care, 1025 Medical Center Pkwy – (334) 875-8833

Vaughan Regional Medical Ctr, 1015 Medical Center Parkway
(334) 418-4150

SNEAD

BHC-Snead, 180 Medical Street – (205) 466-7114

SYLACAUGA

Coosa Valley Medical Center, 315 West Hickory St. – (256) 401-4000

Craddock Health Center, 209 West Spring Street, Ste. 200 – (256) 249-1100

TALLADEGA

Main Street Urgent Care, 837 Battle Street E – (256) 649-8134

Citizens Baptist Medical Center, 604 Stone Avenue – (256) 761-4525

THOMASVILLE

Family Medical Center, 1415 Moseley Drive – (334) 636-9613

TROY

Pike Internal Medicine, 1350 Hwy 231 South, Suite B, Troy, AL – 334-566-1270

Southern Health Associates, 801 South Franklin Ave. – (334) 566-9800

Troy Regional Medical Center, 1330 Highway 231 South – (334) 670-5000

TRUSSVILLE

Orthopedic Urgent Care, 1801 Gadsden Hwy. – 205-228-7600

St. Vincent's Occ. Health Clinic, 7201 Happy Hollow Road, (Deerfoot Parkway)
(205) 508-6235

TUSCALOOSA

Emergi-Care Clinic, P.C., 1601 University Blvd. E – (205) 349-2273

DCH Center for Occupational Health, 701 University Boulevard E,
DCH Medical Tower 1, Ste. 211 – (205) 333-4300

Med Center South, 5005 Oscar Baxter Drive – (205) 343-2225

DCH Regional Medical Center, 809 University Boulevard E – (205) 759-7122

VALLEY

Main Street Urgent Care, 3306 20th Ave – (334) 756-0305

WINFIELD

Winfield Family Occ Medicine, 191 Carraway Dr., Ste. A – (205) 487-1586

OUT OF STATE - GEORGIA

Occupational Medicine of Columbus, 7301 Northlake Dr. – 706-221-1600

NOTICE:

Alabama law and recent court decisions
make it mandatory that you report an accident/injury
that you sustain on this job within 5 days,
or workers' compensation MAY be denied by the
workers' compensation adjuster.

REPORTING RULES:

1. Report accident/injury to your supervisor/superintendent.
NOT A FELLOW EMPLOYEE.
2. Give Date and time of the accident.
3. Give specific details—where, when, how and what happened.

**Late reporting will be considered fraud
and fraud is a crime.**

John Plott Co., Inc.

VEHICLE SAFETY POLICY & DRIVER GUIDELINES

The following additional safety measures are required by our Insurance Carrier to be added as supplemental requirements to our Personal Policy and Safety Manual regarding vehicle safety.

Employees of John Plott Company, Inc. are required to adhere to the following guidelines when operating any vehicle owned, leased, rented, or borrowed by John Plott Company, Inc. or when operating a personal vehicle for company business.

Failure to follow any of the following policies or guidelines may be grounds for termination of driving privileges or dismissal from employment.

- Operating a company vehicle under the influence of alcohol or drugs shall result in immediate termination of employment.
- Cell phone texting while driving is strictly prohibited.
- Seat belt usage is mandatory for all occupants including back seat occupants.
- Only approved drivers are allowed to operate company vehicles.
- All drivers must submit a copy of their driver's license so that a driver's motor vehicle record may be reviewed for a history of violations and accidents. MVR's will be reviewed at least annually and depending on violations and accident history a driver employee can be subject to a range of disciplinary actions including reprimand, required additional drive training, suspension of driving privileges, or termination of employment.

Driver Guidelines

All Designated drivers for John Plott Company, Inc. shall comply with the following guidelines:

1. No Driver shall have had any major violation within the previous three (3) years.
2. A major violation is defined as follows:
 - a. Driving under the influence of alcohol or drugs.
 - b. Reckless driving.
 - c. Leaving the scene of an accident.
 - d. Speeding over 25 MPH of posted limit.
3. All drivers shall have less than a maximum of two (2) moving violations in the past three (3) years in combination with one (1) at fault accident.
4. All drivers shall have less than a maximum of three (3) moving violations in the past three (3) years with no at fault accident.
5. No driver shall have more than a maximum of two (2) at fault accidents in the past three (3) years with no moving violations.

A supervisor's report of accidents for vehicles must be completed and sent to the main office 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.

Company vehicles driven for personal use are to be driven only by the approved driver who is responsible for the vehicle. No other person, including family members, is allowed to operate a company vehicle.

Employees who use an auto allowance and/or mileage reimbursement in lieu of a company provided vehicle shall provide proof of auto liability insurance and limits for review and approval.

Any and all accidents or incidents must be reported to the office within one (1) hour.

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.

Additional time and care should be taken any time when in reverse or backing up a vehicle to check, double check and to make sure no obstacles, pedestrians, equipment, or other vehicles are in the way to assure it is safe to back up before proceeding.

Positively NO road rage regardless of who is at fault.

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

I, the undersigned, hereby acknowledge that I have read and reviewed the foregoing guidelines and hereby agree to comply with same and shall immediately notify any matters that are inconsistent with these guidelines to John Plott Co., Inc.

Signature

Date

John Plott Co., Inc.

EMPLOYEE SAFETY ORIENTATION

I have been verbally and visually orientated and/or trained to all John Plott Co., Inc. safety rules, regulations and/or policies. I have also been trained to the John Plott Co., Inc. Safety Manual.

These items include, but are not limited to:

- Safety Acknowledgement Form
- Construction Job Site Safety Rules
- Shop, Yard, and Office 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
- Mobile Phone and Electronic Device Safety
- Accident Reporting
- Safety Violation Warning System

Questions / Comments: _____

Signature

Date

PART 6

COMPANY SAFETY FORMS

John Plott Co., Inc.
COMPANY REPORT OF ACCIDENT

This form is to be used in conjunction with OSHA 301 Form

Job Site: _____

Job Site Number: _____

Date of Injury: _____

Name of Injured: _____

Age: _____

Employed By: _____

Last 4 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 the employee contribute to the accident? _____

Corrective action taken? _____

Signature

Supervisor Signature

John Plott Co., Inc.
SUBCONTRACTOR REPORT OF ACCIDENT

This form is to be used in conjunction with OSHA 301 Form

Job Site: _____

Job Site Number: _____

Date of Injury: _____

Name of Injured: _____

Age: _____

Employed By: _____

Last 4 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 the employee contribute to the accident? _____

Corrective action taken? _____

Signature

Supervisor Signature

John Plott Co., Inc.
VEHICLE ACCIDENT REPORT

Date: _____ Name: _____

State and City Accident Occurred: _____

Name of Injured Persons: _____

Make and Model of Company Vehicle: _____

Description of Damage to John Plott Co., Inc. Vehicle: _____

Description of Damage to Other Vehicles and/or Property: _____

Description of Accident: _____

Signature: _____

John Plott Co., Inc.

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: _____

- ☐ A verbal warning
- ☐ A verbal warning with an explanation, counseling, or additional training.
- ☐ A written warning and management review of conduct.
- ☐ A written warning and being subjected to suspension without pay.
- ☐ A written warning, subject to immediate termination of employment.

Action taken to correct safety warning: _____

Employee Signature

Date

Supervisor Signature

Date

John Plott Co., Inc.
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. <u>SPEECH</u> | 2. <u>AWARENESS</u> | 3. <u>BALANCE</u> | 4. <u>WALKING</u> |
| <input type="checkbox"/> Normal | <input type="checkbox"/> Normal | <input type="checkbox"/> Normal | <input type="checkbox"/> Normal |
| <input type="checkbox"/> Incoherent | <input type="checkbox"/> Confused | <input type="checkbox"/> Swaying | <input type="checkbox"/> Stumbling |
| <input type="checkbox"/> Confused | <input type="checkbox"/> Sleepy | <input type="checkbox"/> Staggering | <input type="checkbox"/> Swaying |
| <input type="checkbox"/> Slurred | <input type="checkbox"/> Paranoid | <input type="checkbox"/> Falling | <input type="checkbox"/> Arms Raised Forward |
| <input type="checkbox"/> Whispering | <input type="checkbox"/> Lack of Coordination | | <input type="checkbox"/> Falling |
| <input type="checkbox"/> Silent | | | <input type="checkbox"/> 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.

John Plott Co., Inc.

CONFINED SPACE

PRE-ENTRY CHECKLIST

Date: _____ Time: _____

Job Site Name: _____

Location on Job Site: _____

Purpose of Entry: _____

Job Supervisor / Entry Supervisor Name: _____

First Atmospheric Check:

Time _____	Oxygen _____	%
	Explosive _____	% L.F.L.
	Toxic – H ₂ S _____	PPM
	Toxic – CO _____	PPM

	N/A	YES	NO
Hazard Source Isolation:			
Pumps or lines blinded, disconnected, or blocked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventilation:			
Mechanical Ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural Ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Atmospheric Check after Isolation and/or Ventilation:

Time _____	Oxygen _____	%
	Explosive _____	% L.F.L.
	Toxic – H ₂ S _____	PPM
	Toxic – CO _____	PPM

Communication Procedures: _____

Rescue Procedures: _____

	N/A	YES	NO
Entry, Attendants, and Supervisor persons:			
Successfully completed required training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is training current?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equipment:

Atmospheric gas monitor – pre-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety harnesses for entry persons / attendants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifelines and hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE & protective clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All electric equipment non-sparking tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	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?	<input type="checkbox"/>	<input type="checkbox"/>
Does your knowledge of other discharges indicate this area is likely to remain free of dangerous air contaminants while occupied?	<input type="checkbox"/>	<input type="checkbox"/>
Are you trained in operation of the gas monitor to be used?	<input type="checkbox"/>	<input type="checkbox"/>
Has a gas monitor functional test been performed before monitor is used?	<input type="checkbox"/>	<input type="checkbox"/>
Was the atmosphere of the confined space tested prior to entry?	<input type="checkbox"/>	<input type="checkbox"/>
Did the atmosphere check as acceptable (no alarms given)?	<input type="checkbox"/>	<input type="checkbox"/>
Will the atmosphere be regularly monitored while the space is occupied?	<input type="checkbox"/>	<input type="checkbox"/>
Has the inside of the space been visually inspected and free of hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Has the outside of the space been visually inspected and free of hazards?	<input type="checkbox"/>	<input type="checkbox"/>

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 job site, during the duration of entry. Return job site copy to office.

Additional Information _____

Entry Supervisor Printed Name

Entry Supervisor Signature

John Plott Co., Inc. CONFINED SPACE ENTRY PERMIT

In accordance with CFR 1926.1206

ENTRY PERMIT VALID FOR ONLY 8 HOURS.

Date: _____ Duration: _____ to _____

Job Site Name: _____

Location on Job Site: _____

Purpose of Entry: _____

Authorized Entrants Name(s): _____

Attendant Name: _____

Entry Supervisor Name: _____

Communication Procedures: _____

Rescue Procedures: _____

Hazards of the Confined Space: _____

Method used to Eliminate or Control Hazards: _____

Equipment:

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

N/A YES NO

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

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 job site, during the duration of entry. Return job site copy to office.

Additional Information _____

Entry Supervisor Printed Name

Entry Supervisor Signature

John Plott Co., Inc.

SILICA EXPOSURE CONTROL PLAN

Competent Person: _____

Date: _____

Title: _____

Job Site Location: _____

Employees Exposed: _____

Exposure Time: ☐ Less than 4 hours

☐ Greater than 4 hours

Task Location: ☐ Indoors

☐ Outdoors

Description of Task(s): _____

TOOLS:

☐ _____ ☐ _____

☐ _____ ☐ _____

WORK PRACTICES:

- Use the Drill, Vacuum and Water Delivery System controls according to manufacturer's instructions for reducing dust emissions.
- Check shrouds and hoses to make sure they are not damaged before starting work.
- Make sure the hoses do not become kinked or bent while working.
- Use switch on vacuum to activate filter cleaning at the frequency recommended by the manufacturer.
- Replace vacuum bags as needed to prevent overfilling and replace water as needed.
- If visible dust increases, check controls and adjust as needed.

RESPIRATORY PROTECTION

Use respirator with APF of 10 the entire time the task is being performed indoors for more than a four (4) hour shift.

ASSIGNED PROTECTION FACTOR

APF 10 N95 or N100 Filtering Facepiece, or ½ Mask Elastomeric Respirator with particulate filter.

See the written respiratory protection program for information on selection, training, and fit testing requirements, in addition to proper use instructions for respirators (for example, being clean shaven when using a respirator that seals against the face).

HOUSEKEEPING

- Dust containing silica on work surfaces and equipment must be cleaned up using wet methods.
or a HEPA-filtered vacuum.
- Do not use compressed air or dry sweeping for removing dust and debris containing silica from work surfaces.
- Dispose of used vacuum bags in a container and keep the container sealed.

PROCEDURES USED TO RESTRICT ACCESS TO WORK AREAS

- Coordinate the work with affected trades so that only employees who are engaged in the tasks are in the area.
- Barricade the area restricting access to authorized employees only.
- Provide adequate signage to warn unauthorized individuals of the hazard.

USING ENGINEERING CONTROL METHODS FROM TABLE 1

Refer to Table 1 in Safety Forms for specific engineering control methods designed to reduce or Eliminate Exposure and keep respirable crystalline silica dust levels below Action Level and Permissible Exposure Limit (PEL).

John Plott Co., Inc.
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

John Plott Co., Inc.

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 any 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

John Plott Co., Inc.

FORKLIFT CHECKLIST

Date: _____

☐ M ☐ T ☐ W ☐ Th ☐ F

Operator: _____

Make: _____

Model #: _____

Equipment Type: _____

VISUAL INSPECTION	GOOD	OK	BAD	Need Repair / Missing	N/A
Back up Alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Batteries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Boom Angle indicator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Boom Sections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Brake Fluid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Brake Parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Cab R.O.P.S.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Control Labels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Control Levers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Cooling System Fluid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Coupling Devices & Connectors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Data Plate / Load Lifting Chart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Engine Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Fire Extinguisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Gauges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Hand Grabs & Steps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Horn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Hose Connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Hydraulic Oil / Cylinders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Lifting Chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Lights / Turn Signals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
LPG Tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Safety Decals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Seatbelts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Steering, Forward / Reverse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Tires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Transmission Fluid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Windshield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Windshield Wipers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

OPERATOR SAFETY
PPE: _____
Certification: _____
Authorized Comments: _____

Signature _____

Date _____

John Plott Co., Inc.
COMPETENT PERSON
EXCAVATION INSPECTION

Date: _____ Time: _____

Job Site Name: _____

Location on Job Site: _____

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 _____

John Plott Co., Inc. SAFETY PROGRAM ACKNOWLEDGEMENT FORM

For Subcontractors, Vendors, Architects, Engineers, Owners, Visitors and/or Third Parties

My signature below certifies that I understand OSHA Safety & Health Regulations and that I understand John Plott Co., Inc. has an active Safety Program and that I agree to follow these rules, regulations, and programs while on John Plott Co., Inc. work sites. I will report all unsafe conditions or practices observed on the work site.

I understand that any violation of the John Plott Co., Inc. Safety Program or refusal to comply with the OSHA Safety & Health Regulations are grounds for removal from John Plott Co., Inc. work site.

I understand that all Subcontractor Employees, Vendors, Architects, Engineers, Owners, Visitors and/or Third Parties hired directly by the preceding parties or those otherwise not named are required to follow OSHA Safety and Health Regulations and John Plott Co., Inc. Safety Program as a minimum, at all times on the work site.

- Report all injuries, accidents and/or incidents to John Plott Co., Inc. immediately.
- All Subcontractor employees must wear appropriate safe, construction clothing while on the work site. (Hard soled shoes, long pants, full shirts with a minimum of 4" sleeves, etc.)
- The proper Personal Protective Equipment must be provided and used when required. Hard hats are required at all times on John Plott Co., Inc. 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 John Plott Co., Inc. work sites.
- All electrical cords must be maintained in a good, safe condition.
- All employees on John Plott Co., Inc. work sites must attend safety training at least once per week. Notes from safety training and attendance must be documented.
- At John Plott Co. discretion, all parties entering a JPC job site, or surrounding area subject to associated safety hazards, may be required to participate in a safety orientation and sign a waiver certifying understanding of all John Plott Co. Safety Program rules and their ability to recognize safety hazards.
- 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 ensure employee knowledge of the location of SDS sheets.
- Each Subcontractor and/or other parties listed above 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 Company _____

Print Person's Name _____

Person's Signature

Date

John Plott Co., Inc.

Site Specific Safety Plan

Date Submitted: _____

Name of Project: _____

Project Address: _____

General

Our company safety manual has been written specifically for and tailored to John Plott Co., Inc.

The John Plott Co., Inc. safety manual addresses 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. John Plott Co., Inc.'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. John Plott Co., Inc. personnel and John Plott Co., Inc. 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 John Plott Co., Inc. personnel.
7. On site accidents and injuries are reported within one hour to the John Plott Co., Inc.
8. Required posters and safety signage will be available at the general contractor office or at John Plott Co., Inc. field office or John Plott Co., Inc. main office.
9. General SDS, company safety manual and site specific plan will be available at GC field office and company job truck.
10. John Plott Co., Inc. has an active substance abuse policy in effect.
11. Safety violations are issued based on company enforcement disciplinary policy.
12. John Plott Co., Inc. subcontractors and vendors are required to follow the John Plott Co., Inc. Safety Manual and John Plott Co., Inc. 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 John Plott Co., Inc. Manager

Printed Name of John Plott Co., Inc. Manager

Date

John Plott Co., Inc.

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 or OSHA 1910 code, then the OSHA 1926 or OSHA 1910 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
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. Fall protection equipment, 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

SILICA COMPLIANCE FLOWCHART

Follow the flowchart to stay in compliance with OSHA’s new silica rule

Action level (AL):
25 µg/m³, 8-hour time-weighted average (TWA)

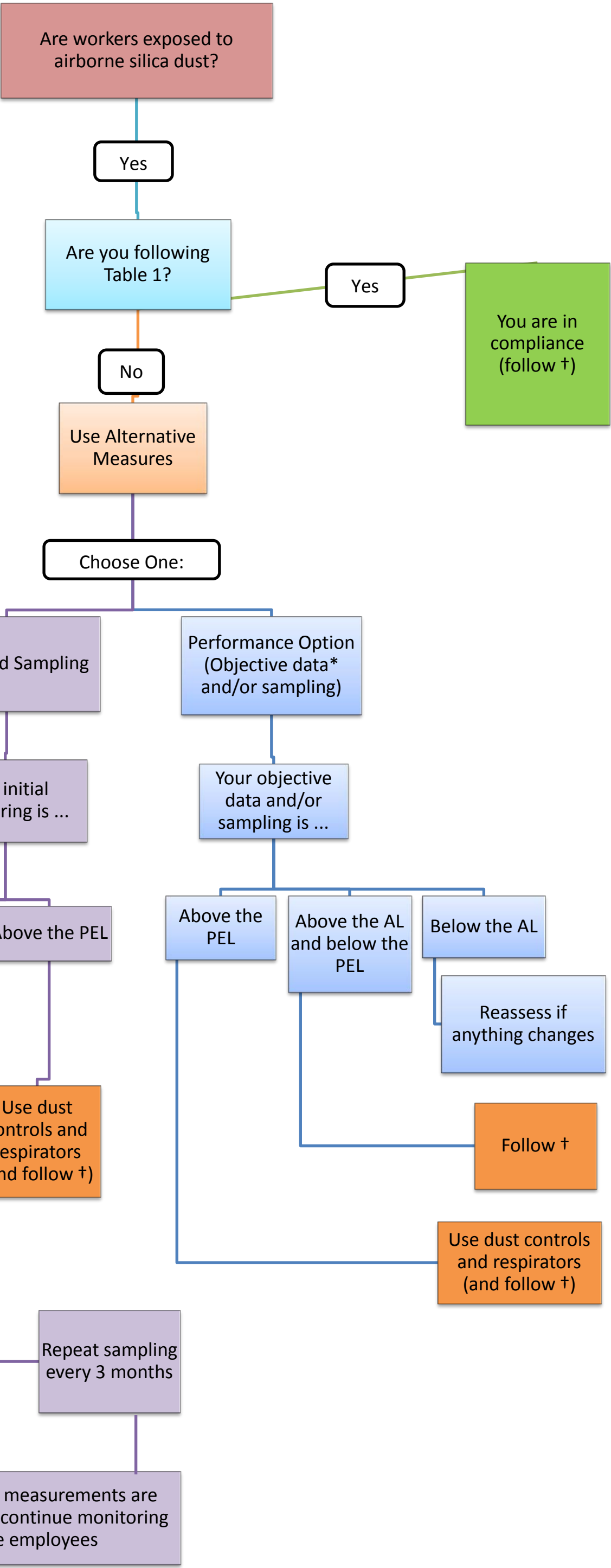
Permissible exposure limit (PEL): 50 µg/m³, 8-hour TWA

Prohibited Actions (unless infeasible):

- Dry sweeping
- Compressed air for cleaning
- Dry brushing

†Mandatory actions (when exposure is above the AL or following Table 1):

- Establish a written exposure control plan
- Designate a competent person
- Offer medical surveillance
- Train workers
- Keep records



*Objective Data: Information from industry-wide surveys demonstrating employee exposure to respirable crystalline silica associated with a process, task or activity. The data must reflect workplace conditions resembling work practices and environmental conditions in the employer’s current operations.

Table 1: Specified Exposure Control Methods for Silica in Construction

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor	
		≤ 4 hrs / shift	> 4 hrs / shift
Stationary Masonry Saw	Use saw equipped with an integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
Handheld Power Saws (any blade diameter)	Use saw equipped with an integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions - When used outdoors - When used indoors or in enclosed area	None APF 10	APF 10 APF 10
Handheld power saws for cutting fiber cement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only: Use saw equipped with commercially available dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency	None	None
Walk behind Saws	Use saw equipped with an integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions - When used outdoors - When used indoors or in enclosed area	None APF 10	None APF 10
Drivable Saws	For tasks performed outdoors only: Use saw equipped with an integrated water delivery system that continuously feeds water to the blade Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
Rig Mounted Core Saws or Drills	Use tool equipped with an integrated water delivery system that supplies water to cutting surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions	None	None
Handheld and Stand Mounted Drills (including impact and rotary hammer drills)	Used drill equipped with commercially available shroud or cowl with dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter cleaning mechanism Use a HEPA filtered vacuum when cleaning holes	None	None
Dowel Drilling Rigs for Concrete	For tasks performed outdoors only: Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism. Use a HEPA filtered vacuum when cleaning holes	APF 10	APF 10
Vehicle Mounted Drilling Rigs for Rock and Concrete	Use dust collection system with close capture hood or shroud around drill bit with a low flow water spray to wet the dust at the discharge point from the dust collector OR Operate from within an enclosed cab and use water from dust suppression on drill bit	None None	None None
Jackhammers and Handheld Power Chipping Tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact: - When used outdoors - When used indoors or in enclosed area OR Use tool equipped with commercially available shroud and dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter cleaning mechanism: - When used outdoors - When used indoors or in enclosed area	None APF 10 None APF 10	APF 10 APF 10 APF 10 APF 10
Handheld Grinders for Mortar Removal (i.e. tuckpointing)	Use grinder equipped with commercially available shroud and dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide 25 cubic feet per minute (cfm) or greater airflow per inch of wheel diameter and have a filter with 99% efficiency or greater and a cyclonic pre-separator or filter cleaning mechanism	APF 10	APF 25

Table 1: Specified Exposure Control Methods for Silica in Construction

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor	
		≤ 4 hrs / shift	> 4 hrs / shift
Handheld Grinders for uses other than Mortar Removal	For tasks performed outdoors only: Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions OR Use grinder equipped with commercially available shroud and dust collection system Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide 25 cubic feet per minute (cfm) or greater airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter cleaning mechanism - When used outdoors - When used indoors or in enclosed area	None None None	None None APF 10
Walk Behind Milling Machines and Floor Grinders	Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions OR Use machine equipped with a dust collection system recommended by the manufacturer Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter cleaning mechanism: When used indoors or in an enclosed area, use a HEPA filtered vacuum to remove loose dust in between passes	None None	None None
Small Drivable Milling Machines (less than 1/2 lane)	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant Operate and maintain machine to minimize dust emissions	None	None
Large Drivable Milling Machines (1/2 lane and larger)	For cuts of any depth on asphalt only: Use machine equipped with an exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust Operate and maintain machine to minimize dust emissions For cuts of four inches in depth or less on any substrate: Use machine equipped with an exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust Operate and maintain machine to minimize dust emissions OR Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant Operate and maintain machine to minimize dust emissions	None None None	None None None
Crushing Machines	Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g. hoppers, conveyors, sieves / sizing or vibrating components, and discharge points) Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions Use a ventilated booth that provides fresh, climate controlled air to the operator, or a remote control station	None	None
Heavy Equipment and Utility Vehicles used to Abrade or Fracture Silica Containing Materials (i.e. hoe ramming, rock ripping) or Used During Demolition Activities Involving Silica Containing Materials	Operate equipment from within an enclosed cab. When employees outside of the cab are engaged in the task, apply water and / or dust suppression as necessary to minimize dust emissions	None	None
Heavy Equipment and Utility Vehicles for Tasks Such as Grading and Excavating But Not Including: Demolition, Abrading, or Fracturing Silica Containing Materials	Apply water and / or dust suppressants as necessary to minimize dust emissions OR When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab	None None	None None

APF 10	N95 or N100 Filtering Facepiece Respirator, or 1/2 Mask Elastomeric Respirator with particulate filter
APF 25	Powered Air Purifying Respirator with particulate filter, or Supplied Air Respirator with hood

John Plott Company, Inc.

DAILY EQUIPMENT INSPECTION AND TIME CARD

Equipment Inspection shall be performed prior to operation of any piece of equipment

DATE: _____ Time of Inspection: _____

JOB #: _____

OPERATOR: _____ EQ. # _____ MODEL: _____

Shift Start Time: _____ Shift End Time: _____

Hour Meter Start: _____ Hour Meter End: _____

Check	ok	Not ok	Check	ok	Not ok
Lights/Turn			Mirrors		
Back Up Alarm			Glass		
Fire Extinguishers			Wipers		
Horn			Coolant		
Air Pressure			Oil level		
Controls			Oil Pressure		
Brakes			Hydraulic Fluid		
Steering			Tires		
Undercarriage			Tire Pressure		
Seatbelts			Doors and Latches		
Cutting Edges/Teeth			Fuel Level		

Are there any other repairs needed or additional problems? _____

Daily Work Description: _____

Was there any Damage to equipment? _____

Load Count _____

Operator Signature: _____

By signing, I hereby state that I have completed a safe and responsible work shift.

RETURN TO SUPERVISOR AT END OF SHIFT

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 your 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, then the SDS must indicate that no information was found. Blank spaces are not permitted. If you find a blank space on an SDS, contact your supervisor.

Your company must have an 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 an 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 I – 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 will boil.
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. 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 will change 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 firefighting agents are water fog, foam, alcohol foam, carbon dioxide, and dry chemicals. 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 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 indicated 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

Common Chemical List

1. Ready Mix Concrete
2. Grease
3. Diesel Fuel (on and Off Road)
4. Gasoline
5. Hydraulic Oil
6. Pipe Lube

Note:

A complete chemical inventory and SDS inventory is available from your supervisor, at the main office or on our company website at www.jplott.com.

Safety Data Sheet

Section 1. Identification

GHS product identifier:	Ready Mix Concrete
Other means of identification:	Concrete, Colored Concrete, Freshly Mixed Concrete
Relevant identified uses of the substance or mixture and uses advised against:	Ready Mix Concrete is used in the construction of various structures and objects.
Supplier's details:	Bama Concrete Products Bama Concrete Birmingham 1608 17 th Street Tuscaloosa, Al. 35401 205-345-6622
Emergency telephone number (24 hours):	205-799-2810

Section 2. Hazards Identification

GHS Classification:	CARCINOGENICITY – Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) – Category 2 SKIN CORROSION/IRRITATION – Category 1C SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1 SKIN SENSITIZATION – Category 1
----------------------------	--

GHS label elements

Hazard pictograms:



Signal word:	Danger
Hazard statements:	May cause cancer May cause damage to organs (lung) through prolonged or repeated exposure Causes severe skin burns and eye damage Causes serious eye irritation May cause an allergic skin reaction

Precautionary statements:	
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash any exposed body parts thoroughly after handling. Avoid breathing dust. Contaminated clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	If exposed or concerned: Get medical advice/attention if irritation or rash occurs. If on skin: Take off immediately all contaminated clothing. Rinse/wash skin with plenty of water/shower. Wash contaminated clothing before reuse. If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do.
Storage:	Restrict or control access to ready mix concrete (store locked up).
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazards not otherwise classified (HNOC):	None known
Supplemental Information:	Respirable Crystalline Silica (RCS) may cause cancer. Wet, freshly mixed concrete is not expected to pose respiratory concern. Ready Mix Concrete is comprised of cement, additives and a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). When set/cured Ready Mix Concrete is subjected to various natural or mechanical forces it may produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated

inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.

Section 3. Composition/information on ingredients

Substance/mixture: Ready Mix Concrete

CAS number/other identifiers

Ingredient name	%	CAS number
Aggregates	> 35	Varies
Portland Cement	> 25	65997-15-1
Ashes	0 – 25	Varies
Water	> 5	7732-18-5
Crystalline Silica (Quartz)	> 0.1	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to process variation. Portland Cement may contain trace (< 0.05%) amounts of chromium salts or compounds (including hexavalent chromium) or other metals (including nickel compounds) found to be hazardous or toxic in some chemical forms. These metals are present mostly as trace substitutions within the principal minerals. Other trace constituents may include potassium and sodium sulfate compounds. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye Contact:	If exposed or concerned: get medical attention. Do not allow individual to rub eyes. Flush eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. Other than washing with water, do not attempt to remove material from eyes. Remove contact lenses, if present and easy to do. Obtain medical attention for eye contact with wet concrete.
Inhalation:	Move exposed individual to fresh air. Dust in throat and nasal passages should clear naturally by coughing, sneezing and nasal discharge. Obtain medical attention if symptoms persist or develop later.
Skin Contact:	Wash affected areas with water and soap. Remove contaminated clothing and wash before reuse. If irritation persists or develops later, obtain medical attention.
Ingestion:	Ingestion is not a common route of occupational exposure. If swallowed and irritation or discomfort occurs, obtain medical attention.

Most important symptoms/effects, acute and delayed potential acute health effects

Eye contact:	Exposure to dust from dry ingredients or hardened cement can cause irritation and tearing of the eyes. Exposure to wet concrete may result in irritation or burns.
Inhalation:	Symptoms of exposure may include upper respiratory discomfort with coughing and sneezing. Inhalation may cause upper respiratory tract infection. A "rare" acute form of silicosis may develop from inhalation of extremely high concentrations of crystalline silica over a period of several months to five years.
Skin contact:	Ready Mix Concrete contains Portland Cement, which may contain trace amounts of hexavalent chromium and is linked with allergic sensitization reactions in some individuals. These reactions may lead to contact dermatitis and skin ulceration. Exposure to dust from dry ingredients or hardened cement can cause skin irritation, dermatitis and/or redness to the exposed skin. Wet concrete exhibits caustic, abrasive and dehydrating properties. Irritation or pain may be delayed for several hours and cannot be relied upon as an indication of exposure.
Ingestion:	Ingestion is not a common route of occupational exposure. If swallowed and irritation or discomfort occurs, obtain medical attention.

Over-exposure signs/symptoms

Notes to physician:	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
Specific treatments:	Not Applicable
Protection of first-aiders:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
General information:	Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media:	Not combustible. Use extinguishing agent appropriate for surrounding flammable materials
Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	Not combustible. Nonflammable. Spalling of hardened concrete may occur under conditions of intense heat.
Hazardous thermal decomposition Products:	Material is not combustible.
Special protective actions for fire-fighters:	Material is nonflammable. Use appropriate procedures for surrounding flammable materials.
Special protective equipment for fire-fighters:	Use protective equipment appropriate for surrounding materials. No specific precautions.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For response personnel:	Keep unprotected personnel out of the area. Do not dry sweep dusty material. All local and Federal laws governing waste disposal must be followed.
Environmental precautions:	Clean spilled material immediately. Contain spills and wash water to prevent run-off into public waterways. Remove wet concrete from roadways immediately. Do not dry sweep spilled dusty material.

Methods and materials for containment and cleaning up

Small spill:	Alkali resistant gloves, long sleeves, long pants and safety glasses should be used by clean up personnel for wet concrete releases.
Large spill:	Waterproof boots and goggles should be used. Eye protection and appropriate respirator protection should be used to protect clean up personnel against dust.

Section 7. Handling and storage

Precautions for safe handling

Protective measures:	Use personnel protective equipment to avoid direct contact with concrete. Remove contaminated clothes as soon as possible. Dust may be generated during handling or mixing dry powder or from cutting, breaking or crushing hardened material. Use wet cutting methods when possible.
Advice on general occupational hygiene:	Observe good industrial hygiene practices. Promptly remove dusty clothing and launder before reuse.
Conditions for safe storage, including any incompatibilities:	Store away from moisture, acids, and other incompatible materials. Store and use material in such a way as to prevent release to drains or waterways.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Particulates not otherwise classified (CAS SEQ250)	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m ³ . Form: Respirable particles TWA: 10 mg/m ³ . Form: Inhalable particles OSHA PEL (United States, 6/2010) PEL: 5 mg/m ³ . Form: Respirable fraction PEL: 15 mg/m ³ . Form: Total dust TWA: 5 mg/m ³ . Form: Respirable fraction TWA: 15 mg/m ³ . Form: Total dust
Portland Cement	ACGIH TLV (United States, 3/2012) TWA: 3 mg/m ³ . Form: Respirable dust TWA: 10 mg/m ³ . Form: Total dust OSHA PEL (United States, 6/2010) PEL: 5 mg/m ³ . Form: Respirable dust PEL: 15 mg/m ³ . Form: Total dust
Crystalline Silica (Quartz) (CAS 14808-60-7)	ACGIH TLV (United States, 3/2012) TWA: 0.025 mg/m ³ . Form: Respirable dust OSHA PEL (United States, 6/2010) TWA: 10 mg/m ³ . Form: Respirable dust TWA: 30 mg/m ³ . Form: Total dust

Appropriate engineering controls:	The use of ventilation or other engineering controls may be necessary to maintain airborne levels below any applicable limits. Under normal operations general ventilation should suffice.
Environmental exposure controls:	Use general ventilation, local exhaust and/or wet suppression methods to maintain exposures below allowable exposure limits.
Exposure guidelines:	OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Terms including "Particulates Not Otherwise Classified," "Particulates Not Otherwise Regulated," "Particulates Not Otherwise Specified," and "Inert or Nuisance Due" are often used interchangeably; however, the user should review each agency's terminology for differences in meanings.

Individual protection measures

Hygiene measures:	Use good personal hygiene practices. Do not consume or store food in the work area. Wash hands thoroughly before eating, drinking, or smoking.
Eye/face protection:	Safety glasses with side shields should be worn as minimum protection from dust. Dust goggles or full face protection should be worn when very dusty conditions are present or are anticipated.

Skin protection

Hand protection:	Use alkali resistant gloves to provide hand protection from concrete.
Body protection:	Clothing with long sleeves will provide protection. Waterproof boots high enough to prevent cement from entering should be worn when workers will be standing in wet concrete. Contaminated work clothing should be washed after use.
Other skin protection:	Clothing with long sleeves and long pants should be used to prevent contact with wet concrete.
Respiratory protection:	The need for respiratory protection should be evaluated by a qualified professional. The use of respirators for controlling exposures in excess of the PEL must comply with OSHA and MSHA requirements for medical surveillance, respiratory fit testing, repair and cleaning, and user

training. In dusty areas, air monitoring for dust and quartz should be conducted regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including but not limited to, wet suppression, ventilation, process enclosure, and enclosed employee work stations.

Section 9. Physical and chemical properties

Appearance

Physical State:	Flowable, granular mud-like material	Lower and Upper explosive flammable limits	No test data available
Color:	Gray	Vapor pressure:	No test data available
Odor:	None	Vapor density:	Not applicable
Odor threshold:	Not applicable	Relative density:	1.5-3.0
pH:	12-13 in water	Solubility:	Not applicable
Melting point:	Not applicable	Solubility in water:	Negligible
Boiling point:	Not applicable	Partition coefficient: n-octanol/water:	Not applicable
Flash point:	Not applicable	Auto-ignition temperature:	No test data available
Burning time:	Not applicable	Decomposition temperature:	No test data available
Burning rate:	Not applicable	SADT:	Not applicable
Evaporation Rate:	Not applicable	Viscosity:	Not applicable
Flammability (solid, gas):	No		

Section 10. Stability and reactivity

Reactivity:	Stable
Chemical Stability:	This material is considered stable under recommended handling and storage conditions.
Possibility of hazardous reactions:	Polymerization will not occur.
Conditions to avoid:	Keep dry until used. Avoid contact with incompatible compounds.
Incompatible materials:	Wet cement may react with acids, aluminum, ammonium salts, alkali and alkaline earth compounds.
Hazardous decomposition products:	None

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity:	Not reported to be acutely toxic.
Irritation/Corrosion:	Skin: May cause skin burns or skin ulcers. Eyes: May cause eye irritation or serious eye damage. Respiratory: Studies indicate an increased risk of lung cancer from chronic exposure to respirable crystalline silica. This effect was more pronounced in those with silicosis. Studies have also linked crystalline silica exposure with autoimmune diseases and kidney disorders.
Sensitization:	May cause sensitization due to the potential presence of trace amounts of hexavalent chromium.
Mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	See chart below.

Product/ingredient name	OSHA	IARC	ACGIH	NTP
Portland Cement	-	-	A4	-
Crystalline Silica (Quartz) CAS 14808-60-7	-	1	A2	Known to be a human carcinogen

Reproductive toxicity: Not expected to be a reproductive hazard.
Teratogenicity: Not expected to be a teratogenic hazard.

Specific target organ toxicity (single exposure)

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7	-	Inhalation	Not reported to have effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of Exposure	Target Organs
Crystalline Silica (Quartz) CAS 14808-60-7	-	Inhalation	May cause damage to organs (lung) through prolonged or repeated exposure.

Potential chronic health effects: General: Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and the thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.

Aspiration hazard: Due to the physical form of the product it is not an aspiration hazard.

Section 12. Ecological Information

Persistence and degradability: No available data.
Bioaccumulative potential: No available data.
Mobility in soil: No available data.
Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: Dispose of waste product and unused product in compliance with federal, state and local requirements. Used material which has become contaminated, may have significantly different characteristics based on the contaminant and should be evaluated accordingly. The product may be contaminated during use and it is the responsibility of the user to assess the appropriate disposal method in that situation.

Section 14. Transportation information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	-	-	-
Additional information	-	-	-

Special precautions for user: It is the responsibility of the transporting entity to follow all applicable laws, regulations, and rules regarding the transport of this material.

Section 15. Regulatory Information

U.S. Federal regulations:

OSHA Hazard Communication Standard, 29 CFR 1910.1200	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200
TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D):	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not listed
CERCLA Hazardous Substance List (40 CFR 302.4):	Not listed
Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPs):	Not regulated
Clean Air Act Section 112 (r) Accidental Release Prevention (40 CFR 68.130):	Not regulated
Safe Drinking Water Act (SDWA):	Not regulated

SARA 311/312

Composition/information on ingredients

Name	%	Fire Hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Crystalline Silica (Quartz)	>1	No	No	No	No	Yes

SARA 313

	Product name	CAS number	%
Form R-Report requirements	Crystalline Silica (Quartz)	14808-60-7	Not regulated

State regulations

California Prop. 65

WARNING: This product contains crystalline silica and chemicals (trace metals) known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Crystalline Silica (Quartz) CAS 14808-60-7	Yes	No	No	No

International regulations

Ingredient name	CAS #	TSCA	Canada	WHMIS	EEC
Portland Cement	65997-15-1	Yes	DSL	D2A	EINECS
Water	7732-18-5	Yes	DSL	-	EINECS
Crystalline Silica (Quartz)	14808-60-7	Yes	DSL	-	EINECS

WHMIS Classification:

D2A "Materials Causing Other Toxic Effects"



Section 16. Other Information

Date of issue: 06/01/2015

Version: 06/01/2015

Revised Section(s): N/Ap

Notice to reader

While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of ready mix concrete as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with ready mix concrete to produce ready mix concrete products. Users should review other relevant material safety data sheets before working with this ready mix concrete or working on ready mix concrete products.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY _____, except that the product shall conform to contracted specifications. The information provided herein was believed by the _____ to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists
CAS — Chemical Abstract Service
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act
CFR — Code of Federal Regulations
DOT — Department of Transportation
GHS — Globally Harmonized System
HEPA — High Efficiency Particulate Air
IATA — International Air Transport Association
IARC — International Agency for Research on Cancer
IMDG — International Maritime Dangerous Goods
NIOSH — National Institute of Occupational Safety and Health
NOEC — No Observed Effect Concentration
NTP — National Toxicology Program
OSHA — Occupational Safety and Health Administration
PEL — Permissible Exposure Limit
REL — Recommended Exposure Limit
RQ — Reportable Quantity
SARA — Superfund Amendments and Reauthorization Act
SDS — Safety Data Sheet
TLV — Threshold Limit Value
TPQ — Threshold Planning Quantity
TSCA — Toxic Substances Control Act
TWA — Time-Weighted Average
UN — United Nations

Safety Data Sheet



SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Chevron Ultra-Duty Grease EP NLGI 0, 1, 2

Product Use: Industrial Grease
Product Number(s): 238011, 238012, 238013

Company Identification
Chevron Products Company
a division of Chevron U.S.A. Inc.
6001 Bollinger Canyon Rd.
San Ramon, CA 94583
United States of America
www.chevronlubricants.com

Transportation Emergency Response
CHEMTREC: (800) 424-9300 or (703) 527-3887

Health Emergency
Chevron Emergency & Information Center: Located in the USA. International collect calls accepted.
(800) 231-0623 or (510) 231-0623

Product Information
email : lubemsds@chevron.com
Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION: Acute aquatic toxicant: Category 3. Chronic aquatic toxicant: Category 3.

Environmental Hazards: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

Prevention: Avoid release to the environment.

Disposal: Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 99 %weight
Distillates (petroleum), hydrotreated middle	64742-46-7	0 - 30 %weight
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4	1 - < 4 %weight
Hydroxyalkyl carboxylic acid	Confidential	< 1 %weight

Phosphoric acid ester, amine salt	Mixture	< 1 %weight
-----------------------------------	---------	-------------

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Most important symptoms and effects, both acute and delayed

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Skin contact may cause drying or defatting of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS: Not classified

Indication of any immediate medical attention and special treatment needed

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Phosphorus, Sulfur, Zinc, Lithium.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Clean up spills immediately, observing precautions in Exposure Controls/Personal Protection section. Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Keep out of the reach of children.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational

exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Agency	Form	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	--	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	--	5 mg/m3	--	--	--
Distillates (petroleum), hydrotreated middle	ACGIH	Inhalable fraction	5 mg/m3	--	--	--

Consult local authorities for appropriate values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Red

Physical State: Semi-solid

Odor: Petroleum odor

Odor Threshold: No data available

pH: Not Applicable

Vapor Pressure: No data available

Vapor Density (Air = 1): No data available

Initial Boiling Point: 260°C (500°F) (Minimum)

Solubility: Soluble in hydrocarbons; insoluble in water

Freezing Point: No data available

Melting Point: 165°C (329°F) (Minimum)

Density: No data available

Viscosity: 22 mm²/s @ 100°C (212°F) (Minimum)

Evaporation Rate: No data available

Decomposition temperature: No data available

Octanol/Water Partition Coefficient: No data available

FLAMMABLE PROPERTIES:

Flammability (solid, gas): No Data Available

Flashpoint: (Cleveland Open Cup) 204 °C (399 °F) (Minimum)

Autoignition: No data available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: Not applicable

Hazardous Decomposition Products: Alkyl Mercaptans (Elevated temperatures), Hydrogen Sulfide (Elevated temperatures)

Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for product components.

Skin Corrosion/Irritation: The skin irritation hazard is based on evaluation of data for product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.

Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.

Carcinogenicity: The hazard evaluation is based on data for components or a similar material.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is expected to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

The product has not been tested. The statement has been derived from the properties of the individual components.

MOBILITY

No data available.

PERSISTENCE AND DEGRADABILITY

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Octanol/Water Partition Coefficient: No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: NOT REGULATED AS HAZARDOUS MATERIAL UNDER 49 CFR

IMO/IMDG Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES: Not applicable

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	05=MA RTK
01-2A=IARC Group 2A	06=NJ RTK
01-2B=IARC Group 2B	07=PA RTK
02=NTP Carcinogen	08-1=TSCA 5(e)
03=EPCRA 313	08-2=TSCA 12(b)
04=CA Proposition 65	

The following components of this material are found on the regulatory lists indicated.

Distillates (petroleum), hydrotreated middle	01-1, 02, 05, 07
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	03, 06, 07

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan).

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Grease)

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: SECTION 01 - Product Use information was modified.
SECTION 03 - Composition information was modified.
SECTION 04 - First Aid - Skin information was modified.
SECTION 04 - Immediate Health Effects - Skin information was modified.
SECTION 05 - Special hazards arising from the substance or mixture information was modified.
SECTION 07 - Precautionary Measures information was modified.
SECTION 08 - Occupational Exposure Limit Table information was modified.
SECTION 08 - Skin Protection information was modified.
SECTION 09 - Physical/Chemical Properties information was deleted.
SECTION 09 - Physical/Chemical Properties information was modified.
SECTION 15 - Chemical Inventories information was modified.
SECTION 15 - Regulatory Information information was added.
SECTION 15 - Regulatory Information information was modified.
SECTION 16 - HMIS Rating information was modified.

Revision Date: November 15, 2021

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



SAFETY DATA SHEET

1. Identification

Product identifier	DIESEL FUELS
Other means of identification	
SDS number	102-GHS
Synonyms	Diesel Fuels All Grades, Diesel Fuel No.2, Fuel Oil No.2, High Sulfur Diesel Fuel, Low Sulfur Diesel Fuel, Ultra Low Sulfur Diesel Fuel, CARB (California Air Resource Board) Diesel Fuel, Off-Road Diesel Fuel, Dyed Diesel Fuel, X Grade Diesel Fuel, X-1 Diesel Fuel, R5 ULSD, B5 ULS D See section 16 for complete information.
Recommended use	Motor Fuel Refinery feedstock.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593
General Assistance	CorpHSE@valero.com
E-Mail	Industrial Hygienist
Contact Person	24 Hour Emergency 866-565-5220
Emergency Telephone	1-800-424-9300 (CHEMTREC USA)

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. May be fatal if swallowed and enters airways.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.

Response	If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
Storage	Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Fuels, diesel, no. 2	68476-34-6	85 - 100
Biodiesel - Fatty acid methyl esters	67762-38-3	0 - 10
Fuels, diesel, C9-18-alkane branched and linear	1159170-26-9	0 - 5
n-Nonane	111-84-2	1 - 3
Octane (All isomers)	111-65-9	1 - 2
Hexane (Other isomers)	96-14-0	0 - 1
Naphthalene	91-20-3	0 - 1
n-Heptane	142-82-5	0 - 1
n-Hexane	110-54-3	0 - 1

4. First-aid measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin contact	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. The toxicological properties of this material have not been fully investigated.
General information	If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
-------------------------------------	--

Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire-fighting equipment/instructions	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	<p>Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.</p> <p>Use non-sparking tools and explosion-proof equipment.</p> <p>Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.</p> <p>Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.</p> <p>Clean up in accordance with all applicable regulations.</p>
Environmental precautions	<p>If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew.</p> <p>Flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.</p>

7. Handling and storage

Precautions for safe handling	<p>Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.</p> <p>Wear personal protective equipment. Avoid breathing mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.</p>
--------------------------------------	--

Conditions for safe storage, including any incompatibilities

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm
Octane (All isomers) (CAS 111-65-9)	PEL	2350 mg/m3 500 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fuels, diesel, no. 2 (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Hexane (Other isomers) (CAS 96-14-0)	STEL	1000 ppm	
Naphthalene (CAS 91-20-3)	TWA	500 ppm	
	STEL	15 ppm	
n-Heptane (CAS 142-82-5)	TWA	10 ppm	
	STEL	500 ppm	
n-Hexane (CAS 110-54-3)	TWA	400 ppm	
	STEL	50 ppm	
n-Nonane (CAS 111-84-2)	TWA	200 ppm	
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Hexane (Other isomers) (CAS 96-14-0)	Ceiling	1800 mg/m3
		510 ppm
	TWA	350 mg/m3
		100 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm
n-Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3
		440 ppm
	TWA	350 mg/m3
		85 ppm
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3
		50 ppm
n-Nonane (CAS 111-84-2)	TWA	1050 mg/m3
		200 ppm
Octane (All isomers) (CAS 111-65-9)	Ceiling	1800 mg/m3
		385 ppm
	TWA	350 mg/m3
		75 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
	0.4 mg/l	2,5-Hexanedione, without hydrolysis		*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Fuels, diesel, no. 2 (CAS 68476-34-6) Can be absorbed through the skin.

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Skin protection

Hand protection Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Other Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.

Respiratory protection Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Liquid (may be dyed red).
Physical state	Liquid.
Form	Liquid.
Color	Clear. Straw.
Odor	Kerosene (strong).
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-60.07 °F (-51.15 °C) Estimated
Initial boiling point and boiling range	325 - 700 °F (162.78 - 371.11 °C)
Flash point	> 100.0 °F (> 37.8 °C) Closed Cup
Evaporation rate	0.02
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	0.4 %
Flammability limit - upper (%)	8 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mm Hg (20°C)
Vapor density	3 (Air = 1)
Relative density	0.82 - 0.87
Relative density temperature	60 °F (15.56 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	494.96 °F (257.2 °C)
Decomposition temperature	Not available.
Viscosity	2 - 4.5 mm ² /s

10. Stability and reactivity

Reactivity	Stable at normal conditions.
Chemical stability	Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	Harmful if inhaled. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.
Skin contact	Causes skin irritation.
Eye contact	May cause eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful: may cause lung damage if swallowed. The toxicological properties of this material have not been fully investigated.
----------------	--

Components	Species	Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)		
Acute		
Inhalation		
LC50	Rat	4.1 mg/l, 4 hours

Components	Species	Test Results
Naphthalene (CAS 91-20-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
<i>Oral</i>		
LD50	Rat	490 mg/kg
n-Heptane (CAS 142-82-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	103 mg/l, 4 Hours
n-Hexane (CAS 110-54-3)		
Acute		
<i>Oral</i>		
LD50	Rat	28710 mg/kg
n-Nonane (CAS 111-84-2)		
Acute		
<i>Inhalation</i>		
LC50	Rat	3200 mg/l, 4 Hours
Octane (All isomers) (CAS 111-65-9)		
Acute		
<i>Inhalation</i>		
LC50	Rat	118 mg/l, 4 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	<p>Suspected of causing cancer.</p> <p>International Agency for Research on Cancer (IARC): Whole diesel engine exhaust – IARC Group 1. Exposure may cause lung cancer and also noted a positive association with an increased risk of bladder cancer.</p> <p>Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.</p>	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Fuels, diesel, no. 2 (CAS 68476-34-6)	3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
NTP Report on Carcinogens		
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.	
Reproductive toxicity	<p>Suspected of damaging fertility or the unborn child.</p> <p>Napthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.</p>	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Blood. Liver. Thymus.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	<p>Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.</p>	

Further information

Symptoms may be delayed. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Toxicological properties of this material have not been fully investigated.

12. Ecological information**Ecotoxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components		Species	Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)			
Aquatic			
Acute			
Crustacea	EL50	Daphnia magna	68 mg/l, 48 hours
Fish	LL50	Oncorhynchus mykiss	65 mg/l, 96 hours
Naphthalene (CAS 91-20-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	0.95 - 1.62 mg/l, 96 hours
n-Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	4924 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Partition coefficient n-octanol / water (log Kow)

Hexane (Other isomers) (CAS 96-14-0)	3.6
Octane (All isomers) (CAS 111-65-9)	5.18
n-Heptane (CAS 142-82-5)	4.66
n-Hexane (CAS 110-54-3)	3.9
n-Nonane (CAS 111-84-2)	5.46

Mobility in soil

Not available.

Other adverse effects

Not available.

13. Disposal considerations**Disposal instructions**

Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

Hazardous waste code

D001: Waste Flammable material with a flash point <140 °F

US RCRA Hazardous Waste U List: Reference

Naphthalene (CAS 91-20-3) U165

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Offer rinsed packaging material to local recycling facilities.

14. Transport information**DOT**

UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	Combustible Liquid
Subsidiary risk	-
Packing group	III

DIESEL FUELS

913579 Version #: 04 Revision date: 23-May-2014 Print date: 23-May-2014

Prepared by 3E Company

Environmental hazards

Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242

IATA

UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	Yes
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1202
UN proper shipping name	DIESEL FUEL
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	

Marine pollutant Yes

EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information

US federal regulations**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

n-Nonane (CAS 111-84-2) 1.0 % One-Time Export Notification only.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hexane (Other isomers) (CAS 96-14-0)	LISTED
Naphthalene (CAS 91-20-3)	LISTED
n-Heptane (CAS 142-82-5)	LISTED
n-Hexane (CAS 110-54-3)	LISTED
n-Nonane (CAS 111-84-2)	LISTED
Octane (All isomers) (CAS 111-65-9)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Naphthalene	91-20-3	0 - 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Naphthalene (CAS 91-20-3)

n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Hexane (Other isomers) (CAS 96-14-0)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. New Jersey Worker and Community Right-to-Know Act

Fuels, diesel, no. 2 (CAS 68476-34-6)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Fuels, diesel, no. 2 (CAS 68476-34-6)

Hexane (Other isomers) (CAS 96-14-0)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. Rhode Island RTK

Naphthalene (CAS 91-20-3)

n-Hexane (CAS 110-54-3)

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)

Toluene (CAS 108-88-3)

International Inventories

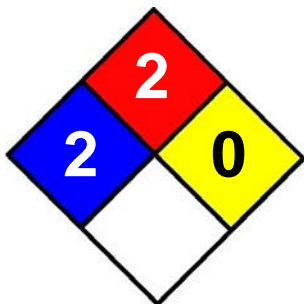
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	13-May-2013
Revision date	23-May-2014
Version #	04
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA Ratings	



Disclaimer

This material Safety Data Sheet (SDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.



SAFETY DATA SHEET

1. Identification

Product identifier	UNLEADED GASOLINE
Other means of identification	
SDS number	002-GHS
Synonyms	Regular/Premium/Midgrade - Unleaded Gasoline, RFG - Reformulated Unleaded Gasoline, Conventional Unleaded Gasoline, Oxygenated Unleaded Gasoline, Non-Oxygenated Unleaded Gasoline, CARB (California Air Resource Board) Unleaded Gasoline, RBOB - Reformulated Blendstock for Oxygenate Blending, CBOB - Conventional Blendstock for Oxygenate Blending, Petrol, Motor Fuel. See section 16 for complete information.
Recommended use	Motor Fuel Motor fuels.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593 CorpHSE@valero.com
General Assistance	Industrial Hygienist
E-Mail	24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)
Contact Person	
Emergency Telephone	

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word

Danger

Hazard statement

Extremely flammable liquid and vapor. Causes skin irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs (blood, liver, kidney) through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

Precautionary statement**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting// equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response

If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water fog for extinction. Collect spillage.

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

3. Composition/information on ingredients**Mixtures**

Chemical name	CAS number	%
Gasoline	86290-81-5	80-100
Toluene	108-88-3	0-30
Hexane (Other Isomers)	96-14-0	5-25
Xylene (o, m, p isomers)	1330-20-7	0-25
Octane (All isomers)	111-65-9	0-18.5
Ethanol	64-17-5	0-10
1,2,4, Trimethylbenzene	95-63-6	0-6
n-Heptane	142-82-5	1-5
Pentane	109-66-0	1-5
Cumene	98-82-8	0-5
Ethylbenzene	100-41-4	0-5
Benzene	71-43-2	0-4.9
n-Hexane	110-54-3	0-3
Cyclohexane	110-82-7	0-3

4. First-aid measures**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact

Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

UNLEADED GASOLINE

913457 Version #: 03 Revision date: 23-May-2014 Print date: 23-May-2014

Prepared by 3E Company

Indication of immediate medical attention and special treatment needed

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media

Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire-fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

Specific methods

Use water spray to cool unopened containers.

General fire hazards

Extremely flammable liquid and vapor. Containers may explode when heated.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Use non-sparking tools and explosion-proof equipment.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.

Environmental precautions

Gasoline may contain oxygenated blend products (Ethanol, etc.) that are soluble in water and therefore precautions should be taken to protect surface and groundwater sources from contamination. If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Extremely flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802.

7. Handling and storage

Precautions for safe handling

Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedings. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Cumene (CAS 98-82-8)	PEL	245 mg/m3 50 ppm
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3 300 ppm
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3 100 ppm
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm
Octane (All isomers) (CAS 111-65-9)	PEL	2350 mg/m3 500 ppm
Pentane (CAS 109-66-0)	PEL	2950 mg/m3 1000 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
	TWA	0.5 ppm
Cumene (CAS 98-82-8)	TWA	50 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Pentane (CAS 109-66-0)	TWA	600 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
Cumene (CAS 98-82-8)	TWA	245 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	TWA	1050 mg/m3
		300 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Hexane (Other Isomers) (CAS 96-14-0)	Ceiling	1800 mg/m3
		510 ppm
	TWA	350 mg/m3
		100 ppm
n-Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3
		440 ppm
	TWA	350 mg/m3
		85 ppm
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3
		50 ppm
Octane (All isomers) (CAS 111-65-9)	Ceiling	1800 mg/m3
		385 ppm
	TWA	350 mg/m3
		75 ppm
Pentane (CAS 109-66-0)	Ceiling	1800 mg/m3

UNLEADED GASOLINE

913457 Version #: 03 Revision date: 23-May-2014 Print date: 23-May-2014

Prepared by 3E Company

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Toluene (CAS 108-88-3)	TWA	610 ppm
		350 mg/m ³
	STEL	120 ppm
		560 mg/m ³
Xylene (o, m, p isomers) (CAS 1330-20-7)	TWA	150 ppm
		375 mg/m ³
	STEL	100 ppm
		655 mg/m ³
	TWA	150 ppm
		435 mg/m ³
		100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	0.7 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis		*
	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (o, m, p isomers) (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Cumene (CAS 98-82-8)	Skin designation applies.
Toluene (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

Cumene (CAS 98-82-8)	Can be absorbed through the skin.
----------------------	-----------------------------------

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Cumene (CAS 98-82-8)	Can be absorbed through the skin.
----------------------	-----------------------------------

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Cumene (CAS 98-82-8)	Can be absorbed through the skin.
----------------------	-----------------------------------

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.
Skin protection	
Hand protection	Avoid exposure - obtain special instructions before use. Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear chemical-resistant, impervious gloves. Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Light straw to red clear liquid with characteristic strong odor of gasoline.
Physical state	Liquid.
Form	Liquid.
Color	Light straw to red clear.
Odor	Characteristic Gasoline Odor (Strong).
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	44.01 °F (6.67 °C) May start to solidify at this temperature. This is based on data for the following ingredient: Cyclohexane. Weighted average: -91.9 deg C (-133.4 deg F)
Initial boiling point and boiling range	80.06 - 440.06 °F (26.7 - 226.7 °C)
Flash point	-40.0 °F (-40.0 °C) (closed cup)
Evaporation rate	10 - 11 BuAc
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.3 %
Flammability limit - upper (%)	7.1 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	60.8 - 101.3 kPa (20°C)
Vapor density	3 - 4 (Air=1)
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Very slightly soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 500 °F (> 260 °C)
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Flash point class	Flammable IA
VOC (Weight %)	100 %

10. Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	Swallowing or vomiting of the liquid may result in aspiration into the lungs.
Inhalation	In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing. May cause drowsiness or dizziness.
Skin contact	Causes skin irritation. Prolonged contact may cause dryness of the skin.
Eye contact	May cause eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.
---	--

Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
-----------------------	---

Components	Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 3160 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 2000 mg/l, 48 Hours
<i>Oral</i>		
LD50	Rat	6 g/kg
Benzene (CAS 71-43-2)		
Acute		
<i>Oral</i>		
LD50	Rat	3306 mg/kg
Cumene (CAS 98-82-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	2000 mg/l, 7 Hours
	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	1400 mg/kg
Cyclohexane (CAS 110-82-7)		
Acute		
<i>Oral</i>		
LD50	Rat	12705 mg/kg

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	30000 mg/m3
Ethylbenzene (CAS 100-41-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Oral</i>		
LD50	Rat	5.46 g/kg
n-Heptane (CAS 142-82-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	103 mg/l, 4 Hours
n-Hexane (CAS 110-54-3)		
Acute		
<i>Oral</i>		
LD50	Rat	28710 mg/kg
Octane (All isomers) (CAS 111-65-9)		
Acute		
<i>Inhalation</i>		
LC50	Rat	118 mg/l, 4 Hours
Pentane (CAS 109-66-0)		
Acute		
<i>Inhalation</i>		
LC50	Rat	364 mg/l, 4 Hours
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2.6 g/kg
Xylene (o, m, p isomers) (CAS 1330-20-7)		
Acute		
<i>Oral</i>		
LD50	Rat	4300 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met. This substance may have a potential for sensitization which may provoke an allergic reaction among sensitive individuals.	
Germ cell mutagenicity	May cause genetic defects. In in-vitro experiments, neither benzene, toluene nor xylene changed the number of sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes. However, toluene and xylene caused a significant cell growth inhibition which was not observed with benzene in the same concentrations. In in-vivo experiments, toluene changed the number of sister-chromatid exchanges (SCEs) in human lymphocytes. Toluene may cause heritable genetic damage.	

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Gasoline (CAS 86290-81-5)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (o, m, p isomers) (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.
-----------------------	-------------------------------

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer
-----------------------	--------

Reproductive toxicity	Suspected of damaging fertility or the unborn child. Benzene, xylene and toluene have demonstrated animal effects of reproductive toxicity. Animal studies of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo/fetotoxicity. Ethanol has demonstrated human effects of reproductive toxicity. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid exposure to women during early pregnancy. Avoid contact during pregnancy/while nursing.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Blood. Kidneys. Liver.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Repeated exposure of laboratory animals to high concentrations of gasoline vapors has caused kidney damage and cancer in rats and cancer in mice. Gasoline was evaluated for genetic activity in assays using microbial cells, cultured mammalian cells and rat bone marrow cells. The results were all negative so gasoline was considered nonmutagenic under these conditions. Overexposure to this product or its components has been suggested as a cause of liver abnormalities in laboratory animals and humans. Lifetime studies by the American Petroleum Institute have shown that kidney damage and kidney cancer can occur in male rats after prolonged inhalation exposures at elevated concentrations of total gasoline. Kidneys of mice and female rats were unaffected. The U.S. EPA Risk Assessment Forum has concluded that the male rat kidney tumor results are not relevant for humans. Total gasoline exposure also produced liver tumors in female mice only. The implication of these data for humans has not been determined.
Further information	Symptoms may be delayed.

12. Ecological information

Ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components		Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	7.19 - 8.28 mg/l, 96 hours
Benzene (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.2 - 11.7 mg/l, 96 hours
Cumene (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (Artemia sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	3.961 - 5.181 mg/l, 96 hours
		Striped bass (Morone saxatilis)	8.3 mg/l, 96 hours

Components		Species	Test Results
Ethanol (CAS 64-17-5)			
Aquatic			
Algae	EC50	Freshwater algae	275 mg/l, 72 Hours
		Marine water algae	1970 mg/l
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
		Freshwater fish	11200 mg/l, 96 Hours
Invertebrate	EC50	Freshwater invertebrate	5012 mg/l, 48 Hours
		Marine water invertebrate	857 mg/l, 48 Hours
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 - 4 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4 mg/l, 96 hours
n-Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	4924 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	6.86 - 8.48 mg/l, 96 hours
Xylene (o, m, p isomers) (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8 mg/l, 96 Hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Benzene (CAS 71-43-2)	2.13
Cumene (CAS 98-82-8)	3.66
Cyclohexane (CAS 110-82-7)	3.44
Ethanol (CAS 64-17-5)	-0.31
Ethylbenzene (CAS 100-41-4)	3.15
Hexane (Other Isomers) (CAS 96-14-0)	3.6
Octane (All isomers) (CAS 111-65-9)	5.18
Pentane (CAS 109-66-0)	3.39
Toluene (CAS 108-88-3)	2.73
Xylene (o, m, p isomers) (CAS 1330-20-7)	3.2
n-Heptane (CAS 142-82-5)	4.66
n-Hexane (CAS 110-54-3)	3.9

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

Hazardous waste code D001: Waste Flammable material with a flash point <140 °F
D018: Waste Benzene

US RCRA Hazardous Waste U List: Reference

Benzene (CAS 71-43-2)	U019
Cumene (CAS 98-82-8)	U055
Cyclohexane (CAS 110-82-7)	U056
Toluene (CAS 108-88-3)	U220
Xylene (o, m, p isomers) (CAS 1330-20-7)	U239

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	139, B33, B101, T8
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Environmental hazards	Yes
ERG Code	3H
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer
-----------------------	--------

Central nervous system
Blood
Aspiration
Skin
Eye
Respiratory tract irritation
Flammability

CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene (CAS 71-43-2)	LISTED
Cumene (CAS 98-82-8)	LISTED
Cyclohexane (CAS 110-82-7)	LISTED
Ethanol (CAS 64-17-5)	LISTED
Ethylbenzene (CAS 100-41-4)	LISTED
Gasoline (CAS 86290-81-5)	LISTED
Hexane (Other Isomers) (CAS 96-14-0)	LISTED
n-Heptane (CAS 142-82-5)	LISTED
n-Hexane (CAS 110-54-3)	LISTED
Octane (All isomers) (CAS 111-65-9)	LISTED
Pentane (CAS 109-66-0)	LISTED
Toluene (CAS 108-88-3)	LISTED
Xylene (o, m, p isomers) (CAS 1330-20-7)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Toluene	108-88-3	0-30
Xylene (o, m, p isomers)	1330-20-7	0-25
1,2,4, Trimethylbenzene	95-63-6	0-6
Cumene	98-82-8	0-5
Ethylbenzene	100-41-4	0-5
Benzene	71-43-2	0-4.9
n-Hexane	110-54-3	0-3
Cyclohexane	110-82-7	0-3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Ethylbenzene (CAS 100-41-4)
n-Hexane (CAS 110-54-3)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Pentane (CAS 109-66-0)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US. Massachusetts RTK - Substance List

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Hexane (Other Isomers) (CAS 96-14-0)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Gasoline (CAS 86290-81-5)
Hexane (Other Isomers) (CAS 96-14-0)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. Rhode Island RTK

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethylbenzene (CAS 100-41-4)
n-Hexane (CAS 110-54-3)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

International Inventories

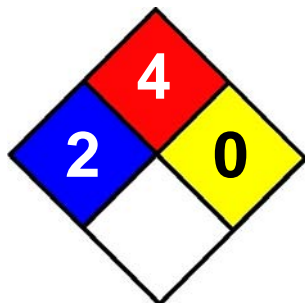
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	13-May-2013
Revision date	23-May-2014
Version #	03
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA Ratings	



References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
------------	--

Disclaimer	This material Safety Data Sheet (SDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.
------------	--

SAFETY DATA SHEET

Section 1. Identification

GHS product identifier : STARFIRE Mobile Equipment Fluid (MEF-3)

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Consumer products: lubricant oil Industrial applications: Lubricating Oil	
Uses advised against	Reason
Not available.	

Supplier's details : Coolants Plus Inc.
2570 Van Hook Ave
Hamilton, OH 45015
888-258-8723

Emergency telephone number (with hours of operation) : 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Clear. Pale color. Yellow.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: 216°C (420.8°F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.857
Solubility	: Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 53.1

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Section 11. Toxicological information

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.

Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})	: Not available.
--	------------------

Other adverse effects	: No known significant effects or critical hazards.
------------------------------	---

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
-------------------------	--

RCRA classification	: Not Regulated
----------------------------	-----------------

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Section 14. Transport information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) final test rules:** 4-methylpentan-2-one
TSCA 8(a) PAIR: naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
All components are listed or exempted.
Clean Water Act (CWA) 307: naphthalene; toluene; benzene; ethylbenzene
Clean Water Act (CWA) 311: naphthalene; toluene; benzene; ethylbenzene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED); MINERAL OIL (UNTREATED and MILDLY TREATED); MINERAL OIL (UNTREATED and MILDLY TREATED)

Pennsylvania : None of the components are listed.

California Prop. 65

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International lists

National inventory

Section 15. Regulatory information

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: All components are listed or exempted.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue/Date of revision : 01/02/2019

Version : 2

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



SAFETY DATA SHEET

Issue Date 18-Feb-2014

Revision Date: 2-Aug-2017

Version 3

1. IDENTIFICATION

GHS Product Identifier

Product Name

American Fastite Pipe Joint Lubricant

Other Means of Identification

SDS #

Chemical Formula

11-4 or 11-4R1

Other Information

Recommended Use of the Chemical and Restrictions on Use

Recommended Use

Lubricant

Details of the Supplier of the Safety Data Sheet

Supplier Address

JTM Products, Inc.
31025 Carter Street
Solon, OH 44139
Tel. 440-287-2302
800-229-6744
Fax. 440-287-3095

Emergency Telephone Number

Emergency Telephone

Chemtel 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

GHS classification

Hazard categories:

Skin Irritant 3

Eye irritation: Eye Irritant 2B

Label elements

Signal word: Warning

Hazard statements

H316 Causes mild skin irritation.
H320 Causes eye irritation.

Precautionary statements

P264 Wash skin thoroughly after handling.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Components

CAS No.	Chemical Name	Quantity
TSRN 0210	Proprietary Lubricity Enhancers	40 -50%
7732-18-5	Water	20-35%
68606-06-4 EINECS 271-723-9	Mixed sodium and potassium salts of tall oil (soap)	15-25%

Where range is displayed, the exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First Aid Measures**

Inhalation Move to fresh air. If symptoms persist, call a physician

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Drink plenty of water. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately

Skin Contact Wash off immediately with soap and water. If skin irritation persists, call a physician.

Most Important Symptoms and Effects, Both Acute and Delayed**Symptoms**

Direct contact with eyes may cause temporary irritation. Prolonged or repeated skin contact may cause irritation.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water. Water spray (fog). Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Use personal protective equipment. Keep people away from and upwind of spill/leak.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information

Methods and Material for Containment and Cleaning Up

Methods for Containment Dike to collect large liquid spills. Prevent leakage or spillage if safe to do so.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Place the bulk of any spilled material into properly labeled containers. Rinse any remaining material to sewage treatment facility. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Handling Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not take internally.

Conditions for Safe Storage, Including any Incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible Materials Strong oxidizing agents. Strong bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters****Appropriate Engineering Controls**

Engineering Controls Eyewash stations Showers Ventilation systems.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear approved safety goggles.

Skin and Body Protection Lightweight protective clothing. Chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Respiratory Protection No special protective equipment required. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

General Hygiene Considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

Control Parameters N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Paste		
Appearance	Off-White Paste	Odor	Bland
Color	Off-white	Odor threshold	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks – Method</u>
pH	≈9	5% solution
Melting point/freezing point	< 0° C/ < 32° F	
Boiling point/boiling range	> 104° C/ > 220° F	
Flash point	> 104° C/ > 220° F	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Not determined	

Flammability Limits in Air

Upper Flammability Limits	Not applicable
Lower Flammability Limits	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Specific Gravity	1.2
Water Solubility	Completely soluble
Solubility in other Solvents	Not determined
Partition Coefficient	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	None
Oxidizing Properties	None

Other Information

VOC Content (%) <5%

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to Avoid

Contact with incompatible material

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION**Information on Likely Route of Exposure****Product Information**

Inhalation	Not a likely route of exposure
Eye Contact	Causes eye irritation
Skin Contact	May cause mild skin irritation
Ingestion	Do not taste or swallow
Symptoms	Direct contact with eyes may cause temporary irritation. Prolonged or repeated contact may dry skin and cause irritation

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Numerical Measures of Toxicity – Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 22665 mg/kg; Acute toxicity estimate mg/kg mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Persistence and Degradability

No information available.

Mobility

Not Determined.

Other Adverse Effects

Not Determined.

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

Contaminated Packaging

Do not re-use empty containers. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA All ingredients appear on inventory

DSL/NDSL All components of this product are listed or are exempt

EINECS/ELINCS - *European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
/ not available (N.A.)

ENCS - *Japan Existing and New Chemical Substances/not available (N.A.)*

IECSC - *China Inventory of Existing Chemical Substances/not available (N.A.)*

KECL - *Korean Existing and Evaluated Chemical Substances/not available (N.A.)*

PICCS - *Philippines Inventory of Chemicals and Chemical Substances/not available (N.A.)*

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42): None known

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302): None Known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: Not applicable

U.S. EPA Label Information

EPA Pesticide Registration Number: Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 1	Flammability 0	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 1	Flammability 0	Physical Hazards 0	Personal Protection Not determined
Issuance Date	18-Feb-2014			
Revision Date	2-Aug-2017			
Revision Note	Section 2: Reclassified as hazardous, Section 3: CAS# for water corrected.			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet